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Contacts

EIA prepared this publication. You can request general information about the data in this report through [email](#).

You can contact the Office of Stakeholder Outreach and Communications customer inquiry line with questions about coal statistics at 202-586-8800 or by [email](#).

Preface

The *Annual Coal Report (ACR)* provides information about U.S. coal production, number of mines, productive capacity, recoverable reserves, employment, productivity, consumption, stocks, and prices to a wide audience, including Congress, federal and state agencies, the coal industry, and the general public. We publish this report to fulfill data collection and dissemination responsibilities under the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended.

Coal production, number of mines, 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*. Productive capacity, recoverable reserves, and prices are based on our Form EIA-7A, *Annual Survey of Coal Production and Preparation*. Consumption and stocks are based on our survey forms.

This report is our 45th annual report on the coal industry, and it continues the series formerly included in the *Minerals Yearbook*, which the U.S. Bureau of Mines previously published. All data for 2020 and previous years are final.

The Office of Energy Production, Conversion, & Delivery acknowledges the cooperation of the respondents in supplying the information published in the *Annual Coal Report*, and we appreciate 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

Publication changes

There are no publication changes in this issue of the *Annual Coal Report*.

Production

In 2020, U.S. coal production decreased 24.2% to 535.4 million short tons (MMst) from the 2019 level, while the number of producing mines also decreased to 552 mines from 669 mines in 2019. Coal production in basins east of the Mississippi river decreased 29.4% while production declined 20.4% in basins west of the Mississippi river.

The Appalachian region's coal production in 2020 was 138.5 MMst, a decrease of 28.3% from 2019. West Virginia's production decreased 27.9% to 67.2 MMst, Pennsylvania's production decreased 27.5% to 36.3 MMst, and Eastern Kentucky's production decreased 39.5% to 8.3 MMst.

Coal production in the Interior region was 90.5 MMst, a decrease of 29.1% from the 2019 level. Production in Illinois decreased 31.1% to 31.6 MMst, production in Indiana decreased 36.8% to 19.9 MMst, and production in Western Kentucky decreased 28.5% to 15.9 MMst. Production in the rest of the Interior region decreased 17.4% to 23.1 MMst, led by a production decrease in Texas of 15.6% to 19.7 MMst.

Coal production in the Western region in 2020 decreased 20.5% to 305.9 MMst. Production in Wyoming, the largest coal-producing state in the region, decreased by 21.1% to 218.6 MMst. Other large producing states in the basin include Montana, where production decreased by 23.3% to 26.4 MMst; Colorado, where production decreased by 21.9% to 10.1 MMst; and Utah, where production increased by 8.6% to 13.2 MMst.

Disposition of coal during 2020 totaled 540.1 MMst, of which 484.6 MMst was marketed as thermal coal and 55.5 MMst was marketed as metallurgical coal. Of the metallurgical coal dispositions, 42.0 MMst was exported, and 12.7 MMst was sold to domestic customers.

Productive capacity

Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies. In 2020, the collective productive capacity of U.S. coal mines decreased 7.6% to 933 MMst. Major producing states that reported a decrease in productive capacity include Kentucky (-26.3% to 39.3 MMst), Pennsylvania (-24.3% to 42.3 MMst), and West Virginia (-15.8% to 98.0 MMst). States with an increase in reported productive capacity include Virginia (+9.4% to 15.5 MMst) and Wyoming (+0.1% to 439.6 MMst).

The overall capacity utilization across all mines decreased to 57.2% in 2020 from 69.8% in 2019. Capacity utilization is measured as the ratio of annual production to the annual productive capacity of mines.

Recoverable reserves

Total U.S. recoverable coal reserves that are technologically and economically feasible to extract as reported by producers fell to 13,201 MMst at the end of 2020 from 14,151 MMst at the end of 2019. While declines were reported for most states, increases were reported for West Virginia and Virginia. Recoverable reserves increased 9.1% to 1,567 MMst and 1.7% to 178 MMst in West Virginia and Virginia, respectively.

Employment

The average number of employees at U.S. coal mines in 2020 decreased from 2019 by 10,645 to 42,159 employees. The average number of employees at underground mines decreased by 6,525 employees, and average employment at surface mines decreased by 4,072 employees.

Total U.S. productivity as measured by average production per employee hour increased by 3.0% to 6.12 short tons per employee hour. Average productivity increased 0.2% to 3.6 tons per employee hour at underground mines and increased 3.6% to 10.2 at surface mines during 2020, as compared with 2019.

Consumption

U.S. coal consumption in 2020 was 476.7 MMst, a decline of 18.7% from 2019. Coal consumption in the electric power sector decreased by 102.8 MMst to 435.8 MMst. Coal consumption in the industrial, coke, and commercial and institutional sectors was 40.9 MMst in 2020, a 17.3% decrease from the 2019 level.

Exports

Exports decreased by 24.7 MMst in 2020 to 69.1 MMst. Europe was the largest destination of U.S. exports, accounting for 22.2 MMst. Steam coal exports accounted for 27.1 MMst (39.2%) of the total, and metallurgical coal accounted for 42.0 MMst (60.8%).

Stocks

U.S. coal stocks in 2020 ended at 162.1 MMst, 2.1% lower than at the same time in 2019. Stocks in the electric power sector increased by 5.2 MMst to 133.7 MMst at the end of 2020. Coal stocks held by the other industrial, coke, and commercial sectors, as well as producers and distributors, decreased 8.8 MMst to 28.4 MMst at the end of 2020 compared with the end of 2019.

Sales price

The total average sales price of coal from U.S. mines in 2020 decreased by 12.9% from the 2019 level to \$31.41 per short ton. The average sales price of thermal coal in 2020 decreased by 9.4% from the 2019 level to \$24.93 per short ton, and the average sales price of metallurgical coal in 2020 decreased by 21.0% from the 2019 level to \$110.64 per short ton. The average sales price of coal from surface mines decreased by 8.0% to \$20.67, and it decreased by 15.1% from underground mines to \$49.80 per short ton. The average sales prices of coal by rank are as follows:

- Average sales price of bituminous coal was \$50.05 per short ton in 2020, a 15.1% decrease from the 2019 level
- Average sales price of subbituminous coal was \$14.43 per short ton in 2020, a 3% increase from the 2019 level
- Average sales price of lignite coal was \$22.16 per short ton in 2020, an 11.6% increase from the 2019 level
- Average sales price of anthracite coal was \$90.68 per short ton in 2020, an 11.3% decrease from the 2019 level

Table ES1. Coal Production, 1949-2020

(short tons)

Year	Rank				Mining Method		Location			Total ¹
	Bituminous Coal ¹	Subbituminous Coal	Lignite	Anthracite ¹	Underground	Surface ¹	East of Mississippi River ¹	West of Mississippi River ¹		
1949	437,868,000	-	-	42,702,000	358,854,000	121,716,000	444,199,000	36,371,000	480,570,000	
1950	516,311,000	-	-	44,077,000	421,000,000	139,388,000	524,374,000	36,014,000	560,388,000	
1951	533,665,000	-	-	42,670,000	442,184,000	134,151,000	541,703,000	34,632,000	576,335,000	
1952	466,841,000	-	-	40,583,000	381,173,000	126,251,000	474,755,000	32,669,000	507,424,000	
1953	457,290,000	-	-	30,949,000	367,444,000	120,795,000	457,652,000	30,587,000	488,239,000	
1954	391,706,000	-	-	29,083,000	305,964,000	114,825,000	395,413,000	25,376,000	420,789,000	
1955	464,633,000	-	-	26,205,000	357,964,000	132,874,000	464,218,000	26,620,000	490,838,000	
1956	500,874,000	-	-	28,900,000	380,829,000	148,945,000	504,001,000	25,773,000	529,774,000	
1957	492,704,000	-	-	25,338,000	373,565,000	144,477,000	493,377,000	24,665,000	518,042,000	
1958	410,446,000	-	-	21,171,000	297,583,000	134,034,000	411,315,000	20,302,000	431,617,000	
1959	412,028,000	-	-	20,649,000	292,849,000	139,828,000	412,351,000	20,326,000	432,677,000	
1960	415,512,000	-	-	18,817,000	292,584,000	141,745,000	413,033,000	21,296,000	434,329,000	
1961	402,977,000	-	-	17,446,000	279,551,000	140,872,000	398,642,000	21,781,000	420,423,000	
1962	422,149,000	-	-	16,894,000	287,939,000	151,104,000	417,629,000	21,414,000	439,043,000	
1963	458,928,000	-	-	18,267,000	308,971,000	168,224,000	453,485,000	23,710,000	477,195,000	
1964	486,998,000	-	-	17,184,000	327,697,000	176,485,000	478,494,000	25,688,000	504,182,000	
1965	512,088,000	-	-	14,866,000	337,958,000	188,996,000	499,529,000	27,425,000	526,954,000	
1966	533,881,000	-	-	12,941,000	342,612,000	204,210,000	518,773,000	28,049,000	546,822,000	
1967	552,626,000	-	-	12,256,000	352,391,000	212,491,000	535,973,000	28,909,000	564,882,000	
1968	545,245,000	-	-	11,461,000	346,592,000	210,114,000	526,991,000	29,715,000	556,706,000	
1969	547,172,000	8,321,000	5,012,000	10,473,000	349,238,000	221,740,000	537,677,000	33,301,000	570,978,000	
1970	578,469,000	16,423,000	8,040,000	9,729,000	340,530,000	272,131,000	567,758,000	44,903,000	612,661,000	
1971	521,344,000	22,151,000	8,697,000	8,727,000	277,175,000	283,744,000	509,925,000	50,994,000	560,919,000	
1972	556,842,000	27,547,000	10,997,000	7,106,000	305,046,000	297,446,000	538,157,000	64,335,000	602,492,000	
1973	543,532,000	33,933,000	14,273,000	6,830,000	300,080,000	298,488,000	522,131,000	76,437,000	598,568,000	
1974	545,689,000	42,240,000	15,477,000	6,617,000	277,966,000	332,057,000	518,118,000	91,905,000	610,023,000	
1975	577,522,000	51,099,000	19,817,000	6,203,000	293,467,000	361,174,000	543,707,000	110,934,000	654,641,000	
1976	588,364,000	64,841,000	25,480,000	6,228,000	295,464,000	389,449,000	548,831,000	136,082,000	684,913,000	
1977	580,991,000	82,115,000	28,238,000	5,861,000	266,591,000	430,614,000	533,267,000	163,938,000	697,205,000	
1978	534,020,000	96,757,000	34,350,000	5,037,000	242,772,000	427,392,000	487,178,000	182,986,000	670,164,000	
1979	612,279,000	121,475,000	42,545,000	4,835,000	320,891,000	460,243,000	559,704,000	221,430,000	781,134,000	
1980	628,769,000	147,715,000	47,160,000	6,056,000	337,508,000	492,192,000	578,688,000	251,012,000	829,700,000	
1981	607,986,000	159,693,000	50,673,000	5,423,000	316,496,000	507,279,000	553,862,000	269,914,000	823,775,000	
1982	620,166,000	160,946,000	52,411,000	4,589,000	339,152,000	498,960,000	564,259,000	273,853,000	838,112,000	
1983	568,609,000	151,044,000	58,349,000	4,089,000	300,379,000	481,713,000	507,395,000	274,696,000	782,091,000	
1984	649,489,000	179,200,000	63,070,000	4,161,735	352,050,000	543,870,000	587,620,000	308,301,000	895,920,767	
1985	613,851,000	192,657,000	72,422,000	4,708,375	350,800,000	532,838,000	558,730,000	324,908,000	883,638,117	
1986	620,059,000	189,610,000	76,354,000	4,291,951	360,438,000	529,877,000	564,427,000	325,887,000	890,314,708	
1987	636,609,000	200,165,000	78,427,000	3,560,459	372,874,000	545,888,000	581,929,000	336,833,000	918,762,162	
1988	638,105,000	223,504,000	85,101,000	3,554,509	382,156,000	568,109,000	579,565,000	370,700,000	950,265,278	
1989	659,771,000	231,171,000	86,439,000	3,347,996	393,835,000	586,893,000	599,015,000	381,714,000	980,728,790	
1990	693,206,000	244,274,000	88,090,000	3,506,247	424,546,000	604,529,000	630,218,000	398,858,000	1,029,075,527	
1991	650,700,000	255,325,000	86,514,000	3,445,080	407,225,000	588,759,000	591,294,000	404,690,000	995,983,881	
1992	651,842,000	252,158,000	90,062,000	3,482,861	407,239,000	590,306,000	588,575,000	408,970,000	997,544,933	
1993	576,652,000	274,901,000	89,549,000	4,322,263	351,053,000	594,371,000	516,219,000	429,205,000	945,424,286	
1994	640,260,000	300,517,000	88,081,000	4,646,032	399,103,000	634,401,000	566,289,000	467,216,000	1,033,504,293	
1995	613,764,679	327,997,855	86,499,740	4,711,498	396,249,022	636,724,750	544,245,706	488,728,066	1,032,973,772	
1996	630,741,292	340,290,580	88,055,815	4,767,826	409,848,871	654,006,642	563,667,655	500,187,858	1,063,855,513	
1997	653,827,506	345,071,099	86,341,244	4,691,939	420,657,474	669,274,314	579,369,281	510,562,507	1,089,931,788	
1998	640,586,262	385,930,397	85,766,784	5,251,724	417,727,882	699,807,285	570,575,604	546,959,563	1,117,535,167	
1999	601,731,551	406,714,233	87,217,912	4,767,752	391,789,870	708,641,558	529,594,228	570,837,200	1,100,431,428	
2000	574,275,630	409,203,124	85,560,584	4,572,223	373,658,726	699,952,835	507,517,246	566,094,315	1,073,611,561	
2001	611,291,051	434,414,339	80,043,399	1,940,017	380,626,833	747,061,973	528,777,761	598,911,045	1,127,688,806	
2002	572,103,243	438,353,294	82,459,406	1,367,118	357,384,967	736,898,094	492,915,076	601,367,985	1,094,283,061	
2003	541,475,747	442,618,093	86,366,464	1,292,269	352,784,686	718,967,887	469,246,727	602,505,846	1,071,752,573	

Year	Rank				Mining Method		Location		Total ¹
	Bituminous Coal ¹	Subbituminous Coal	Lignite	Anthracite ¹	Underground	Surface ¹	East of Mississippi River ¹	West of Mississippi River ¹	
2004	561,484,652	465,368,953	83,539,698	1,705,567	367,557,255	744,541,615	484,795,840	627,303,030	1,112,098,870
2005	571,177,133	474,675,461	83,941,728	1,703,777	368,611,500	762,886,599	493,801,042	637,697,057	1,131,498,099
2006	561,631,018	515,332,638	84,248,267	1,537,736	359,021,815	803,727,844	490,797,869	671,951,790	1,162,749,659
2007	542,757,594	523,724,347	78,584,915	1,568,489	351,789,934	794,845,411	478,161,383	668,473,962	1,146,635,345
2008	555,267,210	539,145,383	75,683,638	1,712,438	357,079,371	814,729,298	493,342,095	678,466,574	1,171,808,669
2009	504,101,778	496,421,871	72,478,549	1,921,194	332,061,582	742,861,810	449,593,554	625,329,838	1,074,923,392
2010	489,532,051	514,829,513	78,230,494	1,776,090	337,154,614	747,213,534	446,196,808	638,171,340	1,084,368,148
2011	525,995,943	486,295,739	81,101,129	2,234,725	345,605,509	750,022,027	456,446,210	639,181,326	1,095,627,536
2012	485,363,301	449,799,910	78,927,292	2,367,915	342,386,637	674,071,781	423,475,610	592,982,808	1,016,458,418
2013	471,182,631	434,287,168	77,228,703	2,143,277	341,684,553	643,157,226	407,340,833	577,500,946	984,841,779
2014	479,990,818	438,623,717	79,487,116	1,947,107	354,703,991	645,344,767	409,520,451	590,528,307	1,000,048,758
2015	404,426,770	419,514,932	70,857,085	2,141,776	306,821,302	590,119,261	348,977,735	547,962,828	896,940,563
2016	325,147,260	330,242,617	71,309,951	1,664,670	252,106,254	476,258,244	281,627,159	446,737,339	728,364,498
2017	353,519,714	351,502,385	67,674,760	1,912,498	273,128,860	501,480,497	304,429,935	470,179,422	774,609,357
2018	357,226,100	340,007,405	57,037,552	1,896,038	275,361,378	480,805,717	310,662,897	445,504,198	756,167,095
2019	338,954,766	311,551,673	53,191,887	2,610,937	267,372,934	438,936,329	296,045,637	410,263,626	706,309,263
2020	237,916,151	245,781,202	49,364,584	2,372,417	195,529,788	339,904,566	209,010,932	326,423,422	535,434,354

¹ Beginning in 2001, includes a small amount of refuse recovery.

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

Web Page: For related information, see <http://www.eia.gov/coal/>.

Sources: 1949-1975 Bureau of Mines, Minerals Yearbook, 'Coal Bituminous and Lignite' and 'Coal Pennsylvania Anthracite' chapters. 1976 U.S. Energy Information Administration (EIA), Energy Data Reports, Coal Bituminous and Lignite in 1976 and Coal Pennsylvania Anthracite 1976. 1977 and 1978 EIA, Energy Data Reports, Bituminous Coal and Lignite Production and Mine Operations 1977. 1978, Coal Pennsylvania Anthracite 1977. 1978, and Coal Production, annual reports. 1979 and 1980 EIA, Energy Data Reports, Weekly Coal Report and Coal Production, annual reports. 1981-1988 EIA, Weekly Coal Production and Coal Production, annual reports. 1989-2000 EIA, Coal Industry Annual, annual reports. 2001-2010 EIA, Annual Coal Report, annual reports. 2011 EIA, Quarterly Coal Report October-December 2011 (April 2012), Table 1. EIA, 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 ES2. Coal Mining Productivity, 1949-2020(Short Tons per Employee Hour)¹

Year	Mining Method		East of the Mississippi River			West of the Mississippi River			Total ²
	Underground	Surface ²	Underground	Surface ²	Total ²	Underground	Surface ²	Total ²	
1949	0.68	1.92	NA	NA	NA	NA	NA	NA	0.72
1950	0.72	1.96	NA	NA	NA	NA	NA	NA	0.76
1951	0.76	2.00	NA	NA	NA	NA	NA	NA	0.80
1952	0.80	2.10	NA	NA	NA	NA	NA	NA	0.84
1953	0.88	2.22	NA	NA	NA	NA	NA	NA	0.93
1954	1.00	2.48	NA	NA	NA	NA	NA	NA	1.08
1955	1.04	2.65	NA	NA	NA	NA	NA	NA	1.14
1956	1.08	2.67	NA	NA	NA	NA	NA	NA	1.19
1957	1.11	2.73	NA	NA	NA	NA	NA	NA	1.23
1958	1.17	2.73	NA	NA	NA	NA	NA	NA	1.31
1959	1.26	2.87	NA	NA	NA	NA	NA	NA	1.43
1960	1.33	2.91	NA	NA	NA	NA	NA	NA	1.52
1961	1.43	3.16	NA	NA	NA	NA	NA	NA	1.64
1962	1.50	3.40	NA	NA	NA	NA	NA	NA	1.74
1963	1.60	3.66	NA	NA	NA	NA	NA	NA	1.87
1964	1.72	3.76	NA	NA	NA	NA	NA	NA	1.99
1965	1.75	4.10	NA	NA	NA	NA	NA	NA	2.09
1966	1.83	4.28	NA	NA	NA	NA	NA	NA	2.23
1967	1.88	4.48	NA	NA	NA	NA	NA	NA	2.31
1968	1.93	4.33	NA	NA	NA	NA	NA	NA	2.35
1969	1.95	4.50	NA	NA	NA	NA	NA	NA	2.41
1970	1.72	4.53	NA	NA	NA	NA	NA	NA	2.30
1971	1.50	4.49	NA	NA	NA	NA	NA	NA	2.19
1972	1.49	4.54	NA	NA	NA	NA	NA	NA	2.18
1973	1.46	4.58	NA	NA	NA	NA	NA	NA	2.16
1974	1.41	4.74	NA	NA	NA	NA	NA	NA	2.31
1975	1.19	3.26	NA	NA	NA	NA	NA	NA	1.81
1976	1.14	3.25	NA	NA	NA	NA	NA	NA	1.78
1977	1.09	3.16	NA	NA	NA	NA	NA	NA	1.80
1978	1.04	3.03	NA	NA	NA	NA	NA	NA	1.77
1979	1.13	3.08	NA	NA	NA	NA	NA	NA	1.81
1980	1.20	3.21	NA	NA	NA	NA	NA	NA	1.93
1981	1.29	3.42	NA	NA	NA	NA	NA	NA	2.10
1982	1.37	3.36	NA	NA	NA	NA	NA	NA	2.11
1983	1.61	3.81	NA	NA	NA	NA	NA	NA	2.50
1984	1.72	4.03	1.69	2.56	1.98	2.49	8.15	7.07	2.64
1985	1.78	4.24	1.75	2.52	2.00	2.45	8.61	7.40	2.74
1986	2.00	4.60	1.96	2.75	2.21	2.80	9.02	7.90	3.01
1987	2.20	4.98	2.16	2.97	2.42	3.39	9.86	8.73	3.30
1988	2.38	5.32	2.32	2.99	2.54	3.55	10.73	9.38	3.55
1989	2.46	5.61	2.39	3.13	2.63	3.92	11.86	10.21	3.70
1990	2.54	5.94	2.46	3.32	2.73	4.01	12.26	10.41	3.83
1991	2.69	6.38	2.59	3.49	2.86	4.53	12.36	10.79	4.09
1992	2.93	6.59	2.82	3.61	3.07	4.85	12.49	11.03	4.36
1993	2.95	7.23	2.81	3.74	3.11	5.18	13.94	12.14	4.70
1994	3.19	7.67	3.02	3.85	3.28	5.93	15.19	13.22	4.98
1995	3.39	8.48	3.19	4.03	3.45	6.32	16.23	14.18	5.38
1996	3.57	9.05	3.36	4.25	3.63	7.03	17.89	15.66	5.69
1997	3.83	9.46	3.63	4.49	3.89	6.82	18.63	16.04	6.04
1998	3.90	9.58	3.69	4.31	3.89	6.76	18.82	16.27	6.20
1999	3.99	10.39	3.74	4.48	3.97	7.45	19.57	17.18	6.61
2000	4.15	11.01	3.89	4.82	4.18	7.66	20.04	17.62	6.99
2001	4.02	10.58	3.71	4.53	3.98	8.39	20.63	18.32	6.82
2002	3.98	10.36	3.67	4.22	3.86	7.80	20.67	18.06	6.80
2003	4.04	10.75	3.68	4.18	3.85	8.33	21.42	18.67	6.95
2004	3.96	10.55	3.59	3.95	3.72	8.22	22.04	19.00	6.80
2005	3.62	10.03	3.28	3.75	3.44	7.48	21.98	18.50	6.36

Year	Mining Method		East of the Mississippi River			West of the Mississippi River			Total ²
	Underground	Surface ²	Underground	Surface ²	Total ²	Underground	Surface ²	Total ²	
2006	3.37	10.18	3.06	3.74	3.29	6.62	22.26	18.33	6.26
2007	3.34	10.24	3.03	3.74	3.27	6.52	22.35	18.23	6.27
2008	3.15	9.81	2.87	3.58	3.12	6.07	21.85	17.77	5.96
2009	2.99	9.22	2.74	3.33	2.94	5.51	19.85	16.15	5.61
2010	2.89	9.46	2.66	3.24	2.84	5.54	20.25	16.60	5.55
2011	2.72	8.97	2.49	3.04	2.67	5.25	19.59	15.93	5.19
2012	2.84	8.97	2.58	2.99	2.70	5.65	18.15	15.03	5.19
2013	3.07	9.69	2.80	3.16	2.89	6.09	18.35	15.39	5.53
2014	3.35	10.42	3.07	3.27	3.12	6.47	18.86	15.96	5.95
2015	3.45	10.94	3.24	3.24	3.24	5.74	18.20	15.51	6.28
2016	3.83	10.73	3.68	3.22	3.57	5.18	16.54	14.20	6.61
2017	3.77	10.92	3.55	3.16	3.46	6.10	17.91	15.49	6.55
2018	3.68	10.36	3.50	3.07	3.40	5.64	17.38	14.92	6.24
2019	3.60	9.88	3.39	2.91	3.27	5.78	16.89	14.43	5.95
2020	3.60	10.24	3.43	2.78	3.28	5.09	16.37	13.71	6.12

NA=Not available.

1 Data through 1973 for bituminous coal, subbituminous coal, and lignite, and data through 1978 for anthracite, were originally reported in short tons per employee day these data were converted to short tons per employee hour by assuming an eight-hour day. Through 1997, other data were calculated by dividing total production by total labor hours worked by all mine employees except office workers; beginning in 1998, the calculation also includes office workers.

2 Beginning in 2001, includes a small amount of refuse recovery.

3 Through 1978, data for anthracite are not available by mining method, but are included in 'Total'.

Note: Web Page: For related information, see <http://www.eia.gov/coal/>.

Sources: 1949-1975 Bureau of Mines, Minerals Yearbook, 'Coal Bituminous and Lignite' and 'Coal Pennsylvania Anthracite' chapters. 1976 U.S. Energy Information Administration (EIA), Energy Data Reports, Coal Bituminous and Lignite in 1976 and Coal Pennsylvania Anthracite 1976. 1977 and 1978 EIA, Energy Data Reports, Bituminous Coal and Lignite Production and Mine Operations 1977. 1978 and Coal Pennsylvania Anthracite 1977. 1978. 1979 EIA, Energy Data Report, Coal Production 1979. 1980-1988 EIA, Coal Production, annual reports. 1989-2000 EIA, Coal Industry Annual, annual reports. 2001-2010 EIA, Annual Coal Report, annual reports. 2011 EIA, 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 ES-3 Coke Overview, 1949-2020

(Thousand Short Tons)

Year	Production	Trade			Stock Change ²	Consumption ³
		Imports	Exports	Net Imports ¹		
1949	63,637	279	548	-269	176	63,192
1950	72,718	438	398	40	-659	73,417
1951	79,331	162	1,027	-865	372	78,094
1952	68,254	313	792	-479	419	67,356
1953	78,837	157	520	-363	778	77,696
1954	59,662	116	388	-272	269	59,121
1955	75,302	126	531	-405	-1,248	76,145
1956	74,483	131	656	-525	634	73,324
1957	75,951	118	822	-704	814	74,433
1958	53,604	122	393	-271	675	52,658
1959	55,864	123	460	-337	859	54,668
1960	57,229	126	353	-227	56	56,946
1961	51,711	127	445	-318	-696	52,089
1962	51,910	142	364	-222	-135	51,823
1963	54,278	153	451	-298	-1,022	55,002
1964	62,145	103	524	-421	-913	62,637
1965	66,854	90	834	-744	731	65,379
1966	67,402	96	1,102	-1,006	376	66,020
1967	64,580	92	710	-618	2,390	61,572
1968	63,653	94	792	-698	517	62,438
1969	64,757	173	1,629	-1,456	-2,865	66,166
1970	66,525	153	2,478	-2,325	993	63,207
1971	57,436	174	1,509	-1,335	-588	56,689
1972	60,507	185	1,232	-1,047	-586	60,046
1973	64,325	1,094	1,395	-301	-1,741	65,765
1974	61,581	3,540	1,278	2,262	-249	64,092
1975	57,207	1,819	1,273	546	4,061	53,692
1976	58,333	1,311	1,315	-4	1,495	56,834
1977	53,509	1,829	1,241	588	-47	54,144
1978	49,009	5,722	693	5,029	-2,910	56,948
1979	52,943	3,974	1,440	2,534	1,651	53,826
1980	46,132	659	2,071	-1,412	3,442	41,278
1981	42,786	527	1,170	-643	-1,903	44,046
1982	28,115	120	993	-873	1,466	25,776
1983	25,808	35	665	-630	-4,672	29,850
1984	30,399	582	1,045	-463	199	29,737
1985	28,438	578	1,122	-544	-1,163	29,057
1986	24,917	329	1,004	-675	-486	24,728
1987	26,304	922	574	348	-1,002	27,654
1988	28,945	2,688	1,093	1,595	519	30,021
1989	28,045	2,311	1,085	1,226	337	28,934
1990	27,617	765	572	193	-1	27,811
1991	24,046	1,183	792	391	189	24,248
1992	23,410	2,098	702	1,396	-224	25,030
1993	23,182	2,155	1,062	1,093	-422	24,697
1994	22,686	3,338	986	2,352	-525	25,563
1995	23,749	3,820	1,358	2,462	366	25,845
1996	23,075	2,542	1,622	920	21	23,974
1997	22,116	3,139	1,266	1,873	-29	24,018
1998	20,041	3,834	1,129	2,705	-362	23,108
1999	20,016	3,224	898	2,326	-80	22,422
2000	20,808	3,781	1,146	2,635	201	23,242
2001	18,949	2,526	1,346	1,180	-73	20,202
2002	16,778	3,242	792	2,450	-375	19,603
2003	17,173	2,759	722	2,037	-227	19,436
2004	16,909	6,873	1,319	5,555	-28	22,492
2005	16,719	3,529	1,747	1,782	263	18,239

Year	Production	Trade			Stock Change ²	Consumption ³
		Imports	Exports	Net Imports ¹		
2006	16,404	4,068	1,616	2,451	71	18,784
2007	16,201	2,460	1,444	1,016	-52	17,270
2008	15,646	3,603	1,959	1,644	284	17,006
2009	11,143	347	1,307	-960	-140	10,323
2010	15,022	1,214	1,463	-249	-74	14,847
2011	15,420	1,418	970	448	43	15,825
2012	15,172	1,135	974	161	-139	15,472
2013	15,320	138	840	-703	266	14,351
2014	15,154	77	946	-869	-75	14,359
2015	13,755	140	857	-717	-90	13,128
2016	11,855	229	1,000	-772	-128	11,212
2017	12,948	58	1,212	-1,153	-21	11,815
2018	13,806	117	1,151	-1,034	-204	12,976
2019	12,870	116	967	-852	86	11,932
2020	10,353	162	683	-522	41	9,791

(s)=Less than 0.05 million short tons.

1 Net imports equal imports minus exports. Minus sign indicates exports are greater than imports.

2 Producer and distributor stocks at end of year. A negative value indicates a decrease in stocks; a positive value indicates an increase.

3 'Consumption' is calculated as the sum of production and imports minus exports and stock change.

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

Web Page: For related information, see <http://www.eia.gov/coal/>.

Sources: 1949-1975 Bureau of Mines, Minerals Yearbook, 'Coke and Coal Chemicals' chapter. 1976-1980 U.S. Energy Information Administration (EIA), Energy Data Report, Coke and Coal Chemicals, annual reports. 1981-2004 EIA, Quarterly Coal Report (QCR) October-December, quarterly reports. 2005 forward EIA, QCR October-December 2011 (April 2012), Table ES-2.

Table ES-4 Nominal²Coal Prices, 1949- 2020

(dollars per short ton)

Year	Bituminous	Subbituminous	Lignite ¹	Anthracite	Total
1949	4.90	*	2.37	8.90	5.24
1950	4.86	*	2.41	9.34	5.19
1951	4.94	*	2.44	9.94	5.29
1952	4.92	*	2.39	9.58	5.27
1953	4.94	*	2.38	9.87	5.23
1954	4.54	*	2.43	8.76	4.81
1955	4.51	*	2.38	8.00	4.69
1956	4.83	*	2.39	8.33	5.01
1957	5.09	*	2.35	9.11	5.28
1958	4.87	*	2.35	9.14	5.07
1959	4.79	*	2.25	8.55	4.95
1960	4.71	*	2.29	8.01	4.83
1961	4.60	*	2.24	8.26	4.73
1962	4.50	*	2.23	7.99	4.62
1963	4.40	*	2.17	8.64	4.55
1964	4.46	*	2.14	8.93	4.60
1965	4.45	*	2.13	8.51	4.55
1966	4.56	*	1.98	8.08	4.62
1967	4.64	*	1.92	8.15	4.69
1968	4.70	*	1.79	8.78	4.75
1969	5.02	*	1.86	9.91	5.08
1970	6.30	*	1.86	11.03	6.34
1971	7.13	*	1.93	12.08	7.15
1972	7.78	*	2.04	12.40	7.72
1973	8.71	*	2.09	13.65	8.59
1974	16.01	*	2.19	22.19	15.82
1975	19.79	*	3.17	32.26	19.35
1976	20.11	*	3.74	33.92	19.56
1977	20.59	*	4.03	34.86	19.95
1978	22.64	*	5.68	35.25	21.86
1979	27.31	9.55	6.48	41.06	23.75
1980	29.17	11.08	7.60	42.51	24.65
1981	31.51	12.18	8.85	44.28	26.40
1982	32.15	13.37	9.79	49.85	27.25
1983	31.11	13.03	9.91	52.29	25.98
1984	30.63	12.41	10.45	48.22	25.61
1985	30.78	12.57	10.68	45.80	25.20
1986	28.84	12.26	10.64	44.12	23.79
1987	28.19	11.32	10.85	43.65	23.07
1988	27.66	10.45	10.06	44.16	22.07
1989	27.40	10.16	9.91	42.93	21.82
1990	27.43	9.70	10.13	39.40	21.76
1991	27.49	9.68	10.89	36.34	21.49
1992	26.78	9.68	10.81	34.24	21.03
1993	26.15	9.33	11.11	32.94	19.85
1994	25.68	8.37	10.77	36.07	19.41
1995	25.56	8.10	10.83	39.78	18.83
1996	25.17	7.87	10.92	36.78	18.50
1997	24.64	7.42	10.91	35.12	18.14
1998	24.87	6.96	11.08	42.91	17.67
1999	23.92	6.87	11.04	35.13	16.63
2000	24.15	7.12	11.41	40.90	16.78
2001	25.67	7.00	13.29	47.67	17.58
2002	26.54	7.64	12.52	47.78	17.89
2003	26.77	8.11	12.20	49.87	17.92
2004	30.75	8.51	12.59	43.52	20.07
2005	36.70	8.93	13.26	47.70	23.34
2006	39.61	10.12	13.83	51.68	24.63

Year	Bituminous	Subbituminous	Lignite ¹	Anthracite	Total
2007	41.24	11.21	14.99	58.92	25.82
2008	51.39	12.31	16.50	60.76	31.25
2009	55.44	13.35	17.26	57.10	33.24
2010	60.88	14.11	18.76	59.51	35.61
2011	68.50	14.07	18.77	75.70	41.01
2012	66.04	15.34	19.60	80.21	39.95
2013	60.61	14.86	19.96	87.82	37.24
2014	55.99	14.72	19.44	90.98	34.83
2015	51.55	14.63	22.09	97.91	31.81
2016	48.24	14.83	19.98	97.61	30.57
2017	55.60	14.29	19.51	93.17	33.72
2018	59.43	13.64	20.21	99.97	35.99
2019	58.93	14.01	19.86	102.22	36.07
2020	50.05	14.43	22.16	90.68	31.41

* = Through 1978, subbituminous coal is included in 'Bituminous Coal'.

1 Because of withholding to protect company confidentiality, lignite prices exclude Texas for 1955- 1977 and Montana for 1974 1978. As a result, lignite prices for 1974-1977 are for North Dakota only.

2 See 'Nominal Dollars' in Glossary.

Notes: Prices are free-on-board (F.O.B.) rail/barge prices, which are the F.O.B. prices of coal at the point of first sale, excluding freight or shipping and insurance costs. Prices are for open market and captive coal sales; see 'Captive Coal,' 'Free on Board (F.O.B.),' and 'Open Market Coal' in Glossary.

Web Page: For related information, see <http://www.eia.gov/coal/>.

Sources: 1949-1975 Bureau of Mines (BOM), Minerals Yearbook. 1976 U.S. Energy Information Administration (EIA), Energy Data Report, Coal Bituminous and Lignite in 1976, and BOM, Minerals Yearbook. 1977 and 1978 EIA, Energy Data Reports, Bituminous Coal and Lignite Production and Mine Operations, and Coal Pennsylvania Anthracite. 1979 EIA, Coal Production, and Energy Data Report, Coal Pennsylvania Anthracite. 1980-1992 EIA, Coal Production, annual reports. 1993-2000 EIA, Coal Industry Annual, annual reports and unpublished revisions. 2001-2010 EIA, Annual Coal Report, annual reports. 2011 EIA, 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 ES5. Average Price of U.S. Coal Exports and Imports, 2001-2020

(dollars per short ton)

Year	Exports			Imports		
	Metallurgical Coal	Non-Metallurgical	Coke	Metallurgical Coal	Non-Metallurgical	Coke
2001	41.63	31.88	81.07	45.21	32.53	75.48
2002	45.41	34.51	80.56	44.90	33.93	75.35
2003	44.55	26.94	96.34	47.83	30.24	86.52
2004	63.63	42.03	81.42	54.27	36.06	179.24
2005	81.56	47.64	84.15	101.31	43.35	221.13
2006	90.81	46.25	79.08	109.36	46.15	156.44
2007	88.99	47.90	90.76	96.05	45.31	194.49
2008	134.62	57.35	107.42	117.18	56.75	465.15
2009	117.73	73.63	103.46	115.93	61.40	268.37
2010	145.44	65.54	167.25	180.42	62.47	331.70
2011	185.99	80.42	216.92	263.48	81.11	389.50
2012	152.23	76.16	214.58	186.63	84.27	338.16
2013	115.50	69.23	220.88	148.59	75.41	212.10
2014	99.49	67.05	246.53	105.11	76.83	117.18
2015	89.31	56.44	230.04	96.50	67.16	146.42
2016	84.48	50.76	216.88	73.98	64.86	143.27
2017	137.32	57.14	231.46	212.16	66.04	176.36
2018	140.55	63.36	261.07	200.18	67.04	264.46
2019	137.44	63.76	279.95	191.54	66.18	305.93
2020	104.55	62.51	261.83	136.71	67.40	253.56

Notes: Exports: Average price is based on the free alongside ship (f.a.s.) value. Imports: Average price is based on the customs import value. Customs import value is the price paid for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States. Total may not equal sum of components because of independent rounding.

Sources: Exports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545;' and Imports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.'

Coal Production

Table 1. Coal Production and Number of Mines by State and Mine Type, 2020 and 2019

(thousand short tons)

Coal-Producing State and Region ¹	2020		2019		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	26	12,151	29	14,124	-10.3	-14.0
Underground	6	10,451	7	11,980	-14.3	-12.8
Surface	20	1,701	22	2,144	-9.1	-20.7
Alaska	1	1,021	1	975	-	4.7
Surface	1	1,021	1	975	-	4.7
Arizona	-	-	1	3,843	-	-
Surface	-	-	1	3,843	-	-
Colorado	7	10,056	6	12,868	16.7	-21.9
Underground	4	6,209	4	9,316	-	-33.4
Surface	3	3,848	2	3,552	50.0	8.3
Illinois	14	31,578	21	45,853	-33.3	-31.1
Underground	9	29,581	10	42,411	-10.0	-30.3
Surface	5	1,997	11	3,442	-54.6	-42.0
Indiana	18	19,942	17	31,559	5.9	-36.8
Underground	5	9,145	6	16,956	-16.7	-46.1
Surface	13	10,797	11	14,603	18.2	-26.1
Kentucky Total	97	24,245	136	36,006	-28.7	-32.7
Underground	37	19,694	55	28,747	-32.7	-31.5
Surface	60	4,551	81	7,259	-25.9	-37.3
Kentucky (East)	90	8,333	124	13,766	-27.4	-39.5
Underground	32	4,085	47	7,053	-31.9	-42.1
Surface	58	4,248	77	6,712	-24.7	-36.7
Kentucky (West)	7	15,912	12	22,240	-41.7	-28.5
Underground	5	15,608	8	21,694	-37.5	-28.1
Surface	2	304	4	546	-50.0	-44.5
Louisiana	2	677	2	1,538	-	-56.0
Surface	2	677	2	1,538	-	-56.0
Maryland	11	1,154	12	1,471	-8.3	-21.5
Underground	1	523	1	635	-	-17.6
Surface	10	631	11	836	-9.1	-24.6
Mississippi	1	2,587	1	2,697	-	-4.1
Surface	1	2,587	1	2,697	-	-4.1
Missouri	1	159	1	189	-	-16.1
Surface	1	159	1	189	-	-16.1
Montana	6	26,422	6	34,468	-	-23.3
Underground	1	6,023	1	7,019	-	-14.2
Surface	5	20,399	5	27,448	-	-25.7
New Mexico	3	10,249	3	14,536	-	-29.5
Underground	1	1,246	1	3,776	-	-67.0
Surface	2	9,003	2	10,760	-	-16.3
North Dakota	5	26,438	5	26,997	-	-2.1
Surface	5	26,438	5	26,997	-	-2.1
Ohio	10	3,587	15	7,779	-33.3	-53.9
Underground	5	2,536	5	6,332	-	-60.0
Surface	5	1,050	10	1,447	-50.0	-27.4
Oklahoma	2	1	3	227	-33.3	-99.7
Surface	2	1	3	227	-33.3	-99.7
Pennsylvania Total	134	36,305	149	50,053	-10.1	-27.5
Underground	35	32,137	37	44,588	-5.4	-27.9
Surface	99	4,168	112	5,464	-11.6	-23.7
Pennsylvania (Anthracite)	46	2,352	52	2,585	-11.5	-9.0
Underground	9	63	9	63	-	s
Surface	37	2,288	43	2,522	-14.0	-9.3
Pennsylvania (Bituminous)	88	33,954	97	47,467	-9.3	-28.5
Underground	26	32,074	28	44,525	-7.1	-28.0
Surface	62	1,879	69	2,942	-10.1	-36.1

Coal-Producing State and Region ¹	2020		2019		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Tennessee	2	92	3	436	-33.3	-78.9
Underground	1	83	1	314	-	-73.6
Surface	1	9	2	122	-50.0	-92.6
Texas	7	19,682	8	23,307	-12.5	-15.6
Surface	7	19,682	8	23,307	-12.5	-15.6
Utah	7	13,163	8	14,405	-12.5	-8.6
Underground	6	12,594	7	14,165	-14.3	-11.1
Surface	1	569	1	240	-	137.1
Virginia	41	9,685	53	12,297	-22.6	-21.2
Underground	17	7,185	20	8,716	-15.0	-17.6
Surface	24	2,501	33	3,582	-27.3	-30.2
West Virginia Total	135	67,228	162	93,279	-16.7	-27.9
Underground	67	55,699	70	70,224	-4.3	-20.7
Surface	68	11,529	92	23,055	-26.1	-50.0
West Virginia (Northern)	18	37,169	16	47,078	12.5	-21.1
Underground	10	36,802	10	46,349	-	-20.6
Surface	8	366	6	729	33.3	-49.8
West Virginia (Southern)	117	30,059	146	46,201	-19.9	-34.9
Underground	57	18,896	60	23,875	-5.0	-20.9
Surface	60	11,163	86	22,326	-30.2	-50.0
Wyoming	16	218,556	16	276,912	-	-21.1
Underground	1	2,424	1	2,194	-	10.5
Surface	15	216,131	15	274,718	-	-21.3
Appalachia Total	449	138,535	547	193,205	-17.9	-28.3
Underground	164	112,699	188	149,842	-12.8	-24.8
Surface	285	25,836	359	43,363	-20.6	-40.4
Appalachia Central	250	48,169	326	72,700	-23.3	-33.7
Underground	107	30,249	128	39,957	-16.4	-24.3
Surface	143	17,920	198	32,742	-27.8	-45.3
Appalachia Northern	173	78,214	192	106,381	-9.9	-26.5
Underground	51	71,999	53	97,905	-3.8	-26.5
Surface	122	6,215	139	8,476	-12.2	-26.7
Appalachia Southern	26	12,151	29	14,124	-10.3	-14.0
Underground	6	10,451	7	11,980	-14.3	-12.8
Surface	20	1,701	22	2,144	-9.1	-20.7
Interior Region Total	52	90,538	65	127,610	-20.0	-29.1
Underground	19	54,335	24	81,061	-20.8	-33.0
Surface	33	36,203	41	46,549	-19.5	-22.2
Illinois Basin	39	67,432	50	99,652	-22.0	-32.3
Underground	19	54,335	24	81,061	-20.8	-33.0
Surface	20	13,097	26	18,591	-23.1	-29.6
Other Interior	13	23,106	15	27,958	-13.3	-17.4
Surface	13	23,106	15	27,958	-13.3	-17.4
Western Region Total	45	305,905	46	385,003	-2.2	-20.5
Underground	13	28,496	14	36,470	-7.1	-21.9
Surface	32	277,409	32	348,533	-	-20.4
Powder River Basin	16	230,110	16	294,173	-	-21.8
Surface	16	230,110	16	294,173	-	-21.8
Uinta Basin	12	22,058	12	26,376	-	-16.4
Underground	9	18,210	10	22,823	-10.0	-20.2
Surface	3	3,848	2	3,552	50.0	8.3
Other Western	17	53,738	18	64,454	-5.6	-16.6
Underground	4	10,286	4	13,646	-	-24.6
Surface	13	43,452	14	50,807	-7.1	-14.5
East of Mississippi River	489	208,554	598	295,554	-18.2	-29.4
West of Mississippi River	57	326,423	60	410,264	-5.0	-20.4
U.S. Subtotal	546	534,978	658	705,818	-17.0	-24.2
Refuse Recovery	6	456	11	492	-45.5	-7.2
U.S. Total	552	535,434	669	706,309	-17.5	-24.2

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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

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, 2020

(thousand short tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	6	10,451	20	1,701	26	12,151
De Kalb	-	-	1	18	1	18
Jefferson	3	7,476	7	824	10	8,300
Shelby	-	-	1	3	1	3
Tuscaloosa	1	2,156	4	200	5	2,357
Walker	2	819	7	656	9	1,474
Alaska	-	-	1	1,021	1	1,021
Denali	-	-	1	1,021	1	1,021
Colorado	4	6,209	3	3,848	7	10,056
Gunnison	1	2,538	-	-	1	2,538
La Plata	1	593	-	-	1	593
Moffat	-	-	3	3,848	3	3,848
Rio Blanco	1	1,885	-	-	1	1,885
Routt	1	1,193	-	-	1	1,193
Illinois	9	29,581	5	1,997	14	31,578
Franklin	1	7,196	-	-	1	7,196
Hamilton	1	2,623	-	-	1	2,623
Macoupin	1	235	-	-	1	235
Montgomery	1	2,886	-	-	1	2,886
Perry	1	3,778	1	388	2	4,166
Randolph	1	1,819	1	76	2	1,895
Saline	-	-	2	842	2	842
Sangamon	1	766	-	-	1	766
Wabash	-	-	1	691	1	691
Washington	1	6,434	-	-	1	6,434
Williamson	1	3,842	-	-	1	3,842
Indiana	5	9,145	13	10,797	18	19,942
Clay	-	-	1	253	1	253
Daviess	-	-	2	2,101	2	2,101
Dubois	-	-	2	111	2	111
Gibson	2	3,763	2	706	4	4,469
Knox	2	5,243	-	-	2	5,243
Pike	-	-	1	118	1	118
Spencer	-	-	1	10	1	10
Sullivan	1	140	1	5,183	2	5,322
Warrick	-	-	3	2,314	3	2,314
Kentucky	37	19,694	60	4,551	97	24,245
Bell	2	196	8	363	10	560
Breathitt	-	-	1	5	1	5
Daviess	-	-	2	304	2	304
Floyd	4	400	1	4	5	404
Harlan	5	778	7	415	12	1,193
Hopkins	1	3,564	-	-	1	3,564
Johnson	-	-	3	396	3	396
Knott	1	61	4	586	5	647
Knox	1	44	4	112	5	155
Leslie	1	306	3	437	4	743
Letcher	-	-	2	53	2	53
Martin	-	-	2	139	2	139
McLean	1	260	-	-	1	260
Morgan	-	-	1	9	1	9
Muhlenberg	1	2,120	-	-	1	2,120
Ohio	1	251	-	-	1	251
Perry	4	727	4	1,004	8	1,731
Pike	14	1,573	13	503	27	2,076
Union	1	9,412	-	-	1	9,412

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Whitley	-	-	5	222	5	222
Louisiana	-	-	2	677	2	677
De Soto	-	-	1	456	1	456
Natchitoches	-	-	1	221	1	221
Maryland	1	523	10	631	11	1,154
Allegany	-	-	7	604	7	604
Garrett	1	523	3	26	4	550
Mississippi	-	-	1	2,587	1	2,587
Choctaw	-	-	1	2,587	1	2,587
Missouri	-	-	1	159	1	159
Bates	-	-	1	159	1	159
Montana	1	6,023	5	20,399	6	26,422
Big Horn	-	-	3	14,809	3	14,809
Musselshell	1	6,023	-	-	1	6,023
Richland	-	-	1	274	1	274
Rosebud	-	-	1	5,315	1	5,315
New Mexico	1	1,246	2	9,003	3	10,249
Mckinley	-	-	1	4,555	1	4,555
San Juan	1	1,246	1	4,449	2	5,695
North Dakota	-	-	5	26,438	5	26,438
McLean	-	-	1	7,261	1	7,261
Mercer	-	-	3	15,008	3	15,008
Oliver	-	-	1	4,169	1	4,169
Ohio	5	2,536	5	1,050	10	3,587
Belmont	-	-	1	218	1	218
Harrison	2	642	2	360	4	1,001
Monroe	1	1,689	-	-	1	1,689
Noble	-	-	1	461	1	461
Perry	1	104	-	-	1	104
Tuscarawas	1	101	1	12	2	113
Oklahoma	-	-	2	1	2	1
Craig	-	-	1	1	1	1
Okmulgee	-	-	1	-	1	-
Pennsylvania	35	32,137	99	4,168	134	36,305
Armstrong	3	606	-	-	3	606
Bedford	-	-	2	193	2	193
Cambria	2	748	6	161	8	908
Carbon	-	-	1	27	1	27
Clarion	-	-	4	77	4	77
Clearfield	2	227	22	625	24	852
Columbia	-	-	1	82	1	82
Dauphin	1	10	-	-	1	10
Fayette	-	-	3	9	3	9
Greene	4	20,994	-	-	4	20,994
Indiana	7	2,000	3	10	10	2,010
Jefferson	1	154	5	38	6	192
Luzerne	-	-	3	666	3	666
Lycoming	-	-	1	180	1	180
Northumberland	3	11	10	275	13	286
Schuylkill	5	42	22	1,238	27	1,280
Somerset	5	1,290	13	528	18	1,818
Washington	1	5,691	1	15	2	5,706
Westmoreland	1	363	2	45	3	408
Tennessee	1	83	1	9	2	92
Claiborne	1	83	1	9	2	92
Texas	-	-	7	19,682	7	19,682
Atascosa	-	-	1	2,648	1	2,648
Harrison	-	-	2	1,710	2	1,710
Limestone	-	-	1	10,105	1	10,105
Maverick	-	-	1	294	1	294
Robertson	-	-	1	1,972	1	1,972

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Rusk	-	-	1	2,954	1	2,954
Utah	6	12,594	1	569	7	13,163
Carbon	2	6,989	-	-	2	6,989
Emery	3	1,146	-	-	3	1,146
Kane	-	-	1	569	1	569
Sevier	1	4,459	-	-	1	4,459
Virginia	17	7,185	24	2,501	41	9,685
Buchanan	8	4,287	9	899	17	5,186
Dickenson	4	2,617	3	925	7	3,542
Russell	-	-	2	34	2	34
Tazewell	-	-	2	79	2	79
Wise	5	281	8	563	13	843
West Virginia	67	55,699	68	11,529	135	67,228
Barbour	1	756	-	-	1	756
Boone	5	2,154	8	598	13	2,752
Fayette	3	435	3	831	6	1,266
Grant	-	-	1	18	1	18
Greenbrier	1	40	3	227	4	267
Kanawha	4	3,002	3	525	7	3,527
Logan	12	4,741	8	2,018	20	6,758
Marion	1	3,875	1	170	2	4,045
Marshall	2	13,853	-	-	2	13,853
Mcdowell	12	1,262	13	1,315	25	2,578
Mercer	1	18	1	341	2	359
Mineral	-	-	1	1	1	1
Mingo	2	682	6	1,109	8	1,791
Nicholas	1	827	4	162	5	989
Ohio	1	6,757	-	-	1	6,757
Raleigh	8	3,466	5	2,542	13	6,009
Randolph	2	662	2	35	4	697
Taylor	1	4,185	-	-	1	4,185
Tucker	1	1,834	-	-	1	1,834
Webster	-	-	3	143	3	143
Wetzel	1	4,880	-	-	1	4,880
Wyoming	8	2,269	6	1,495	14	3,765
Wyoming	1	2,424	15	216,131	16	218,556
Campbell	-	-	11	190,176	11	190,176
Converse	-	-	1	19,810	1	19,810
Lincoln	-	-	1	2,475	1	2,475
Sweetwater	1	2,424	2	3,671	3	6,095
U.S. Subtotal	196	195,530	350	339,448	546	534,978
Refuse Recovery	-	-	-	-	6	456
U.S. Total	196	195,530	350	339,448	552	535,434

-- No data 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, 2020

(thousand short tons)

Coal-Producing State and Region ¹	Continuous	Conventional and Other ²	Longwall	Total
Alabama	2,054	-	8,396	10,451
Colorado	1,390	-	4,818	6,209
Illinois	14,355	118	15,109	29,581
Indiana	9,145	-	-	9,145
Kentucky Total	19,597	96	-	19,694
Kentucky (East)	3,989	96	-	4,085
Kentucky (West)	15,608	-	-	15,608
Maryland	523	-	-	523
Montana	422	-	5,601	6,023
New Mexico	62	-	1,183	1,246
Ohio	965	-	1,571	2,536
Pennsylvania Total	7,197	43	24,898	32,137
Pennsylvania (Anthracite)	20	43	-	63
Pennsylvania (Bituminous)	7,176	-	24,898	32,074
Tennessee	83	-	-	83
Utah	3,272	-	9,322	12,594
Virginia	3,384	34	3,766	7,185
West Virginia Total	23,311	38	32,350	55,699
West Virginia (Northern)	5,038	-	31,764	36,802
West Virginia (Southern)	18,272	38	586	18,896
Wyoming	291	-	2,133	2,424
Appalachia Total	41,506	212	70,982	112,699
Appalachia Central	25,728	169	4,352	30,249
Appalachia Northern	13,724	43	58,233	71,999
Appalachia Southern	2,054	-	8,396	10,451
Interior Region Total	39,108	118	15,109	54,335
Illinois Basin	39,108	118	15,109	54,335
Western Region Total	5,438	-	23,058	28,496
Uinta Basin	4,070	-	14,140	18,210
Other Western	1,367	-	8,918	10,286
East of Mississippi River	80,614	329	86,090	167,034
West of Mississippi River	5,438	-	23,058	28,496
U.S. Total	86,052	329	109,149	195,530

- = No data reported.

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

2 Mines that: 1. produce coal using shortwall, scoop loading, hand loading, or other methods, or 2. produce less than 25,000 short tons, which are not required to provide data.

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 3.1 Surface Coal Production by State and Mining Method, 2020

(thousand short tons)

Coal-Producing State and Region ¹	Contour Strip	Area	Open Pit	Mountaintop Mining	Other ²	Total
Alabama	972	-	223	-	506	1,701
Alaska	510	-	510	-	-	1,021
Colorado	2,019	-	1,741	-	88	3,848
Illinois	-	1,578	-	-	419	1,997
Indiana	-	2,329	7,679	-	789	10,797
Kentucky Total	1,811	1,125	292	168	1,156	4,551
Kentucky (East)	1,811	1,125	-	168	1,144	4,248
Kentucky (West)	-	-	292	-	12	304
Louisiana	-	677	-	-	-	677
Maryland	252	330	-	-	49	631
Mississippi	2,587	-	-	-	-	2,587
Missouri	159	-	-	-	-	159
Montana	11,596	5,590	3,213	-	-	20,399
New Mexico	4,555	-	4,449	-	-	9,003
North Dakota	22,270	-	4,169	-	-	26,438
Ohio	461	432	-	-	157	1,050
Oklahoma	-	-	-	-	1	1
Pennsylvania Total	1,414	-	2,287	-	466	4,168
Pennsylvania (Anthracite)	877	-	1,247	-	164	2,288
Pennsylvania (Bituminous)	537	-	1,040	-	302	1,879
Tennessee	-	-	-	-	9	9
Texas	1,920	13,059	4,703	-	-	19,682
Utah	-	-	546	-	23	569
Virginia	1,345	503	-	-	653	2,501
West Virginia Total	4,196	5,236	-	490	1,607	11,529
West Virginia (Northern)	244	-	-	-	122	366
West Virginia (Southern)	3,952	5,236	-	490	1,485	11,163
Wyoming	96,993	2,216	116,923	-	-	216,131
Appalachia Total	10,451	7,626	2,510	657	4,591	25,836
Appalachia Central	7,109	6,864	-	657	3,291	17,920
Appalachia Northern	2,371	762	2,287	-	794	6,215
Appalachia Southern	972	-	223	-	506	1,701
Interior Region Total	4,666	17,643	12,674	-	1,220	36,203
Illinois Basin	-	3,907	7,971	-	1,220	13,097
Other Interior	4,666	13,736	4,703	-	1	23,106
Western Region Total	137,942	7,806	131,551	-	110	277,409
Powder River Basin	107,134	5,315	117,661	-	-	230,110
Uinta Basin	2,019	-	1,741	-	88	3,848
Other Western	28,789	2,491	12,149	-	23	43,452
East of Mississippi River	13,039	11,533	10,481	657	5,811	41,520
West of Mississippi River	140,021	21,542	136,254	-	111	297,928
U.S. Total	153,059	33,074	146,735	657	5,922	339,448

- = No data reported.

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

2 Mines that: 1. produce coal using auger, highwall mine, or punch, or 2. produce less than 25,000 short tons, which are not required to provide data.

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(thousand short tons)

Coal Thickness (inches)	Underground	Surface	Total
Under 7	-	27	27
7 - Under 13	-	586	586
13 - Under 19	136	1,632	1,768
19 - Under 25	399	5,074	5,473
25 - Under 31	1,406	6,221	7,627
31 - Under 37	7,639	5,469	13,108
37 - Under 43	9,446	5,442	14,887
43 - Under 49	9,248	9,973	19,221
49 - Under 55	11,656	4,503	16,159
55 - Under 61	17,936	3,017	20,953
61 - Under 67	20,937	4,532	25,468
67 - Under 73	26,682	2,066	28,748
73 - Under 79	26,917	1,362	28,279
79 - Under 85	20,619	973	21,592
85 - Under 91	13,490	2,228	15,718
91 - Under 97	7,446	758	8,204
103 - Under 109	5,710	1,478	7,188
109 - Under 115	1,866	11,482	13,348
115 - 120	4,162	10,547	14,709
Over 120	9,510	260,874	270,384
Unknown *	328	1,204	1,989
U.S. Total	195,530	339,448	535,434

- = No data reported.

* Includes mines with production of less than 25,000 short tons, which are not required to provide data, and refuse recovery.

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

Coalbed ID Number ¹ Coalbed Name	Production (thousand short tons)			Thickness (inches)			
	Underground	Surface	Total	Average ²	Low	High	
1699	Wyodak	-	188,188	188,188	775	120	940
0212	Pittsburgh	39,193	327	39,520	79	36	108
0484	Herrin (Illinois No. 6)	29,493	1,185	30,678	72	46	84
0489	No. 9	19,835	4,271	24,106	62	36	87
0036	Pittsburgh	18,547	449	18,996	76	48	84
1701	Smith	-	17,041	17,041	932	872	982
1569	Beulah-Zap	-	15,008	15,008	195	114	210
1696	Anderson-Dietz 1-Dietz 2	-	11,602	11,602	877	500	960
1570	Hagel	-	10,888	10,888	115	112	120
0280	Blue Creek	10,051	143	10,194	50	22	68
0084	Lower Kittanning	6,906	563	7,469	73	19	120
0344	Pocahontas No. 3	7,030	-	7,030	58	34	66
1808	Rosebud	-	6,565	6,565	259	186	276
0176	Eagle	4,617	852	5,469	45	20	84
0071	Upper Freeport	4,870	9	4,878	55	11	72
1787	Roland	-	4,757	4,757	397	248	468
0204	Mammoth	4,517	-	4,517	108	108	108
1847	Upper Hiawatha	4,459	-	4,459	96	96	96
1003	Menefee Formation	593	3,507	4,100	110	72	117
1495	Deadman	2,424	1,455	3,879	130	108	144
1830	Lower O'connor	3,688	-	3,688	120	120	120
0506	No. 6	2,886	536	3,422	85	48	92
1800	Sunnyside	3,302	-	3,302	150	150	150
0103	Stockton-Lewiston	2,241	712	2,953	78	24	94
0151	Upper Elkhorn No. 3	1,723	943	2,666	43	10	74
Major Coalbeds Total		166,376	268,999	435,375	444	10	982
Other Coalbeds		28,826	69,244	98,071	87	5	652
Unknown *		328	1,204	1,989	NA	NA	NA
U.S. Total		195,530	339,448	535,434	377	-	982

- = No data reported.

NA = Not Available.

* Includes mines with production of less than 25,000 short tons, which are not required to provide data, and refuse recovery.

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.

Notes: This table lists the top 25 producing coalbeds. The category 'Other Coalbeds' includes all coalbeds from which less than 4.0 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 4.0 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 Wyoming (coalbed codes 1495, 1699, and 1701); West Virginia (coalbed codes 212, 84, 111, 168, 103, 71); Illinois (coalbed code 484); Indiana (coalbed code 489); Pennsylvania (coalbed code 36); North Dakota (coalbed codes 1569, 1570); Montana (coalbed codes 1696, 1808, 204); Virginia (coalbed code 344); Alabama (coalbed code 280); Utah (coalbed code 1847); New Mexico (coalbed code 1003); Colorado (coalbed code 1756); West Virginia (coalbed codes 157, 176); Kentucky (coalbed code 151). In some other States where these are major producing beds, the following alternative coalbed names are also used: coalbed code 484 (Kentucky, Kentucky No 11), coalbed code 489 (Indiana, Indiana No 5), coalbed code 36 (Pennsylvania/Ohio, Pittsburgh No. 8), coalbed code 111 (Kentucky, Hazard No 6).

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(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	26	12,151	-	-	-	-	-	-	26	12,151
Alaska	-	-	1	1,021	-	-	-	-	1	1,021
Colorado	4	6,209	3	3,848	-	-	-	-	7	10,056
Illinois	14	31,578	-	-	-	-	-	-	14	31,578
Indiana	18	19,942	-	-	-	-	-	-	18	19,942
Kentucky Total	97	24,245	-	-	-	-	-	-	97	24,245
Kentucky (East)	90	8,333	-	-	-	-	-	-	90	8,333
Kentucky (West)	7	15,912	-	-	-	-	-	-	7	15,912
Louisiana	-	-	-	-	2	677	-	-	2	677
Maryland	11	1,154	-	-	-	-	-	-	11	1,154
Mississippi	-	-	-	-	1	2,587	-	-	1	2,587
Missouri	1	159	-	-	-	-	-	-	1	159
Montana	1	6,023	4	20,124	1	274	-	-	6	26,422
New Mexico	2	5,800	1	4,449	-	-	-	-	3	10,249
North Dakota	-	-	-	-	5	26,438	-	-	5	26,438
Ohio	10	3,587	-	-	-	-	-	-	10	3,587
Oklahoma	2	1	-	-	-	-	-	-	2	1
Pennsylvania Total	88	33,954	-	-	-	-	46	2,352	134	36,305
Pennsylvania (Anthracite)	-	-	-	-	-	-	46	2,352	46	2,352
Pennsylvania (Bituminous)	88	33,954	-	-	-	-	-	-	88	33,954
Tennessee	2	92	-	-	-	-	-	-	2	92
Texas	1	294	-	-	6	19,388	-	-	7	19,682
Utah	7	13,163	-	-	-	-	-	-	7	13,163
Virginia	41	9,685	-	-	-	-	-	-	41	9,685
West Virginia Total	135	67,228	-	-	-	-	-	-	135	67,228
West Virginia (Northern)	18	37,169	-	-	-	-	-	-	18	37,169
West Virginia (Southern)	117	30,059	-	-	-	-	-	-	117	30,059
Wyoming	1	2,216	15	216,340	-	-	-	-	16	218,556
Appalachia Total	403	136,184	-	-	-	-	46	2,352	449	138,535
Appalachia Central	250	48,169	-	-	-	-	-	-	250	48,169
Appalachia Northern	127	75,863	-	-	-	-	46	2,352	173	78,214
Appalachia Southern	26	12,151	-	-	-	-	-	-	26	12,151
Interior Region Total	43	67,886	-	-	9	22,652	-	-	52	90,538
Illinois Basin	39	67,432	-	-	-	-	-	-	39	67,432
Other Interior	4	454	-	-	9	22,652	-	-	13	23,106
Western Region Total	15	33,411	24	245,781	6	26,713	-	-	45	305,905
Powder River Basin	-	-	16	230,110	-	-	-	-	16	230,110
Uinta Basin	9	18,210	3	3,848	-	-	-	-	12	22,058
Other Western	6	15,201	5	11,824	6	26,713	-	-	17	53,738
East of Mississippi River	442	203,616	-	-	1	2,587	46	2,352	489	208,554
West of Mississippi River	19	33,865	24	245,781	14	46,777	-	-	57	326,423
U.S. Subtotal	461	237,481	24	245,781	15	49,365	46	2,352	546	534,978
Refuse Recovery	4	436	-	-	-	-	2	21	6	456
U.S. Total	465	237,916	24	245,781	15	49,365	48	2,372	552	535,434

- = No data reported.

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

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(thousand short tons)

Coal-Producing State and Region ¹	Union		Nonunion		Total	
	Underground	Surface	Underground	Surface	Underground	Surface
Alabama	10,187	-	264	1,615	10,451	1,615
Alaska	-	1,021	-	-	-	1,021
Colorado	1,885	2,019	4,324	1,829	6,209	3,848
Illinois	-	-	29,581	1,997	29,581	1,997
Indiana	-	-	9,145	10,785	9,145	10,785
Kentucky Total	-	-	19,641	4,303	19,641	4,303
Kentucky (East)	-	-	4,033	4,005	4,033	4,005
Kentucky (West)	-	-	15,608	298	15,608	298
Louisiana	-	-	-	677	-	677
Maryland	-	-	523	582	523	582
Mississippi	-	-	-	2,587	-	2,587
Missouri	-	-	-	159	-	159
Montana	-	10,885	6,023	9,513	6,023	20,399
New Mexico	1,246	4,449	-	4,555	1,246	9,003
North Dakota	-	4,604	-	21,834	-	26,438
Ohio	-	-	2,536	1,038	2,536	1,038
Pennsylvania Total	7,916	899	24,151	2,844	32,067	3,742
Pennsylvania (Anthracite)	-	899	-	1,260	-	2,159
Pennsylvania (Bituminous)	7,916	-	24,151	1,584	32,067	1,584
Tennessee	-	-	83	-	83	-
Texas	-	13,059	-	6,623	-	19,682
Utah	-	-	12,583	569	12,583	569
Virginia	-	-	7,094	2,377	7,094	2,377
West Virginia Total	23,045	485	32,550	10,807	55,595	11,291
West Virginia (Northern)	22,609	-	14,194	312	36,802	312
West Virginia (Southern)	436	485	18,357	10,495	18,793	10,979
Wyoming	2,424	3,930	-	212,202	2,424	216,131
Appalachia Total	41,148	1,383	71,235	23,267	112,383	24,650
Appalachia Central	436	485	29,567	16,876	30,003	17,361
Appalachia Northern	30,525	899	41,405	4,776	71,929	5,675
Appalachia Southern	10,187	-	264	1,615	10,451	1,615
Interior Region Total	-	13,059	54,335	23,126	54,335	36,184
Illinois Basin	-	-	54,335	13,080	54,335	13,080
Other Interior	-	13,059	-	10,046	-	23,105
Western Region Total	5,555	26,908	22,929	250,501	28,484	277,409
Powder River Basin	-	10,611	-	219,499	-	230,110
Uinta Basin	1,885	2,019	16,314	1,829	18,199	3,848
Other Western	3,670	14,278	6,616	29,174	10,286	43,452
East of Mississippi River	41,148	1,383	125,570	38,934	166,718	40,317
West of Mississippi River	5,555	39,967	22,929	257,960	28,484	297,927
U.S. Subtotal	46,703	41,350	148,499	296,894	195,202	338,244
Unknown *	-	-	-	-	328	1,204
U.S. Total	46,703	41,350	148,499	296,894	195,530	339,448

- = No data reported.

* Includes mines with production of less than 25,000 short tons, which are not required to provide data.

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

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(thousand short tons)

Coal-Producing State	Open Market Sales ¹		Captive Sales / Transactions ²		Exports ³		Total	
	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical
Alabama	144	2,291	124	-	7,424	-	7,692	2,291
Alaska	-	1,042	-	-	-	-	-	1,042
Colorado	-	4,581	-	5,157	-	105	-	9,843
Illinois	-	18,240	-	8,247	-	4,372	-	30,860
Indiana	-	10,586	-	9,989	-	-	-	20,575
Kentucky Total	2,755	21,127	-	71	181	-	2,936	21,198
Kentucky (East)	2,755	4,500	-	71	181	-	2,936	4,572
Kentucky (West)	-	16,627	-	-	-	-	-	16,627
Louisiana	-	697	-	-	-	-	-	697
Maryland	424	393	-	-	141	-	564	393
Mississippi	-	2,538	-	-	-	-	-	2,538
Missouri	-	159	-	-	-	-	-	159
Montana	-	15,992	-	6,061	-	-	-	22,053
New Mexico	-	6,655	-	4,670	-	-	-	11,325
North Dakota	-	26,407	-	-	-	-	-	26,407
Ohio	-	3,466	-	275	-	-	-	3,741
Pennsylvania Total	4,670	20,590	187	1,312	1,167	2,614	6,023	24,516
Pennsylvania (Anthracite)	208	1,688	-	455	-	66	208	2,210
Pennsylvania (Bituminous)	4,462	18,902	187	857	1,167	2,548	5,816	22,306
Tennessee	18	-	-	-	85	-	103	-
Texas	-	2,379	-	17,721	-	224	-	20,324
Utah	-	11,966	-	-	-	160	-	12,127
Virginia	2,444	986	-	-	2,890	-	5,334	986
West Virginia Total	8,600	29,347	500	6,029	13,925	798	23,025	36,174
West Virginia (Northern)	847	22,432	-	6,029	3,841	153	4,687	28,614
West Virginia (Southern)	7,754	6,915	500	-	10,084	645	18,338	7,560
Wyoming	-	126,519	-	92,055	-	59	-	218,632
U.S. Subtotal	19,055	305,961	811	151,587	25,812	8,333	45,678	465,881
Adjustments ⁴	-6,365	-	-	-	-	-	-6,365	-
Other Exports *	-	-	-	-	16,198	18,724	16,198	18,724
U.S. Total **	12,689	305,961	811	151,587	42,010	27,057	55,510	484,605

- = No data reported.

* Estimated quantity of coal exported by coal brokers, coal traders and coal terminals reported on the EIA-8A, 'Annual Survey of Coal Stocks and Coal Exports'.

** Excludes mines producing less than 25,000 short tons, which are not required to provide data, and refuse recovery.

1 Open market sales include all coal sold on the open market to other coal companies or consumers; excludes exports.

2 Captive sales transactions include all coal used by the producing company or sold to affiliate or parent companies; excludes exports.

3 State level total and U.S. subtotal include the quantity of coal exported by coal mines only.

4 Adjustments reflect differences in source data. State-level data are sourced from the EIA-7A, 'Annual Survey of Coal Production and Preparation'. Adjustments are estimated using coal consumed for coke production from the EIA-3, 'Quarterly Survey of Industrial, Commercial, & Institutional Users' and metallurgical coal imports from the U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.' US Total Exports are sourced from U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.'

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

Table 9. Major U.S. Coal Mines, 2020

Rank	Mine Name / Operating Company	Mine Type	State	Production (short tons)
1	North Antelope Rochelle Mine / Peabody Powder River Mining LLC	Surface	Wyoming	66,111,840
2	Black Thunder / Thunder Basin Coal Company LLC	Surface	Wyoming	50,188,766
3	Antelope Coal Mine / Navajo Transitional Energy Com	Surface	Wyoming	19,809,826
4	Freedom Mine / The Coteau Properties Company	Surface	North Dakota	12,592,297
5	Eagle Butte Mine / Eagle Specialty Materials LLC	Surface	Wyoming	12,303,698
6	Caballo Mine / Peabody Caballo Mining, LLC	Surface	Wyoming	11,626,318
7	Belle Ayr Mine / Eagle Specialty Materials LLC	Surface	Wyoming	11,174,953
8	Kosse Strip / Luminant Mining Company LLC	Surface	Texas	10,104,901
9	Cordero Rojo Mine / Navajo Transitional Energy Com	Surface	Wyoming	9,773,845
10	Buckskin Mine / Buckskin Mining Company	Surface	Wyoming	9,699,282
11	Spring Creek Coal Company / Navajo Transitional Energy Com	Surface	Montana	9,513,255
12	Rawhide Mine / Peabody Caballo Mining, LLC	Surface	Wyoming	9,494,090
13	River View Mine / River View Coal LLC	Underground	Kentucky	9,412,068
14	Marshall County Mine / Marshall County Coal Resources	Underground	West Virginia	8,854,604
15	Bailey Mine / Consol Pennsylvania Coal Company	Underground	Pennsylvania	8,668,477
16	Falkirk Mine / Falkirk Mining Company	Surface	North Dakota	7,261,161
17	Mc#1 Mine / M-Class Mining LLC	Underground	Illinois	7,196,444
18	Tunnel Ridge Mine / Tunnel Ridge, LLC	Underground	West Virginia	6,756,696
19	Lively Grove Mine / Prairie State Generating Company	Underground	Illinois	6,433,987
20	Bull Mountains Mine No 1 / Signal Peak Energy LLC	Underground	Montana	6,022,919
21	No 7 Mine / Warrior Met Coal Mining, LLC	Underground	Alabama	5,708,153
22	Enlow Fork Mine / Consol Pennsylvania Coal Company	Underground	Pennsylvania	5,691,381
23	Cumberland Mine / Iron Cumberland LLC	Underground	Pennsylvania	5,621,165
24	Rosebud Mine & Crusher/Conveyo / Westmoreland Rosebud Mining LI	Surface	Montana	5,315,470
25	Bear Run Mine / Peabody Bear Run Mining LLC	Surface	Indiana	5,182,613
26	Ohio County Mine / Ohio County Coal Resources, In	Underground	West Virginia	4,998,672
27	Harrison County Mine / Harrison County Coal Resources	Underground	West Virginia	4,880,471
28	El Segundo / El Segundo Coal Company, LLC	Surface	New Mexico	4,554,536
29	Sufco / Canyon Fuel Company LLC	Underground	Utah	4,458,836
30	Navajo Mine / Bisti Fuels Company LLC	Surface	New Mexico	4,448,874
31	Harvey Mine / Consol Pennsylvania Coal Company	Underground	Pennsylvania	4,410,039
32	Leer Mine / Aci Tygart Valley	Underground	West Virginia	4,185,123
33	Center Mine / Bni Coal, Ltd	Surface	North Dakota	4,168,628
Subtotal				356,623,388
All Other Mines				178,810,966
U.S. Total				535,434,354

Notes: Major mines are mines that produced more than 4 million short tons in 2020. Company listed indicates the firm operating the mine.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and 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, 2020

Rank	Controlling Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Energy Corp	104,814	19.6
2	Arch Resources Inc	61,705	11.5
3	Navajo Nation	39,097	7.3
4	Acnr Holdings Inc	33,874	6.3
5	NACCO Industries Inc	30,801	5.8
6	Alliance Resource Partners LP	26,900	5.0
7	Mike Jamison Petri E Koivula John Mcnab	23,479	4.4
8	CONSOL Energy Inc	18,790	3.5
9	Foresight Energy Labor LLC	14,160	2.6
10	Alpha Metallurgical Resources Inc	13,897	2.6
11	Vistra Energy	13,059	2.4
12	Kiewit Peter Sons' Inc	9,699	1.8
13	Westmoreland Mining Holdings LLC	9,354	1.7
14	Wolverine Fuels LLC	8,146	1.5
15	Warrior Met Coal Intermediate Holdco LLC	7,864	1.5
16	Seven Energy Ag	7,823	1.5
17	Prairie State Energy Campus	6,434	1.2
18	Global Mining Group LLC	6,023	1.1
19	MidAmerican Energy Holdings Co	5,898	1.1
20	Hallador Energy Company	5,636	1.1
21	Iron Senegy Holding LLC	5,621	1.0
22	Coronado Coal LLC	5,534	1.0
	Subtotal	458,607	85.7
	All Other Coal Producers	76,828	14.3
	U.S. Total	535,434	100.0

Notes: The listed companies each produced more than 5 million short tons of coal in 2020. 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: 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, 2020 and 2019

(thousand short tons)

Coal-Producing State	2020			2019			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	13,855	1,986	15,841	13,915	2,651	16,566	-0.4	-25.1	-4.4
Alaska	-	3,000	3,000	-	3,000	3,000	-	-	-
Arizona	-	-	-	-	3,843	3,843	-	-	-
Colorado	14,864	5,800	20,664	16,164	5,100	21,264	-8.0	13.7	-2.8
Illinois	53,551	3,460	57,011	61,034	6,381	67,415	-12.3	-45.8	-15.4
Indiana	18,640	15,003	33,643	22,700	19,970	42,670	-17.9	-24.9	-21.2
Kentucky Total	32,822	6,485	39,308	42,581	10,763	53,345	-22.9	-39.7	-26.3
Kentucky (East)	10,352	6,175	16,527	15,031	9,963	24,995	-31.1	-38.0	-33.9
Kentucky (West)	22,470	310	22,780	27,550	800	28,350	-18.4	-61.3	-19.6
Louisiana	-	1,341	1,341	-	3,385	3,385	-	-60.4	-60.4
Maryland	600	1,146	1,746	640	1,336	1,976	-6.3	-14.2	-11.6
Mississippi	-	3,600	3,600	-	3,600	3,600	-	-	-
Missouri	-	260	260	-	260	260	-	-	-
Montana	11,000	38,800	49,800	11,000	38,800	49,800	-	-	-
New Mexico	9,000	13,900	22,900	9,000	14,400	23,400	-	-3.5	-2.1
North Dakota	-	34,261	34,261	-	34,421	34,421	-	-0.5	-0.5
Ohio	7,955	1,814	9,769	8,131	3,109	11,240	-2.2	-41.7	-13.1
Oklahoma	-	-	-	-	278	278	-	-	-
Pennsylvania Total	35,969	6,331	42,300	48,803	7,101	55,904	-26.3	-10.8	-24.3
Pennsylvania (Anthracite)	57	3,324	3,381	30	3,148	3,178	90.0	5.6	6.4
Pennsylvania (Bituminous)	35,913	3,007	38,920	48,773	3,953	52,727	-26.4	-23.9	-26.2
Tennessee	184	-	184	314	122	436	-41.4	-	-57.8
Texas	-	23,118	23,118	-	24,358	24,358	-	-5.1	-5.1
Utah	18,760	2,000	20,760	20,437	2,000	22,437	-8.2	-	-7.5
Virginia	9,316	6,217	15,533	9,794	4,402	14,195	-4.9	41.2	9.4
West Virginia Total	79,456	18,566	98,021	86,607	29,762	116,369	-8.3	-37.6	-15.8
West Virginia (Northern)	54,499	710	55,209	54,822	710	55,532	-0.6	-	-0.6
West Virginia (Southern)	24,956	17,856	42,812	31,785	29,052	60,837	-21.5	-38.5	-29.6
Wyoming	2,424	437,139	439,563	2,400	436,900	439,300	1.0	0.1	0.1
U.S. Total	308,395	624,228	932,623	353,519	655,942	1,009,461	-12.8	-4.8	-7.6

- = No data reported.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A, 'Annual Survey of Coal Production and Preparation.' Excluding refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 12. Capacity Utilization of Coal Mines by State, 2020 and 2019

(percent)

Coal-Producing State	2020			2019		
	Underground	Surface	Total	Underground	Surface	Total
Alabama	75.43	81.29	76.16	86.08	78.41	84.85
Alaska	-	34.03	34.03	-	32.49	32.49
Arizona	-	-	-	-	100.00	100.00
Colorado	41.77	66.34	48.67	57.64	69.65	60.52
Illinois	55.24	57.72	55.39	69.49	53.93	68.02
Indiana	49.06	71.88	59.24	74.70	73.12	73.96
Kentucky Total	59.84	66.35	60.91	67.28	64.36	66.69
Kentucky (East)	38.96	64.85	48.63	46.27	64.30	53.45
Kentucky (West)	69.46	96.10	69.82	78.74	65.14	78.36
Louisiana	-	50.47	50.47	-	45.43	45.43
Maryland	87.25	50.75	63.30	99.24	59.53	72.39
Mississippi	-	71.87	71.87	-	74.93	74.93
Missouri	-	61.05	61.05	-	72.80	72.80
Montana	54.75	52.57	53.06	63.81	70.74	69.21
New Mexico	13.84	64.77	44.76	41.96	74.72	62.12
North Dakota	-	77.17	77.17	-	78.43	78.43
Ohio	31.88	57.88	36.71	77.88	45.67	68.97
Oklahoma	-	-	-	-	81.54	81.54
Pennsylvania Total	89.26	60.51	84.95	91.29	71.62	88.79
Pennsylvania (Anthracite)	67.15	67.35	67.35	85.42	78.30	78.37
Pennsylvania (Bituminous)	89.29	52.94	86.48	91.29	66.31	89.42
Tennessee	45.01	-	45.01	99.87	100.00	99.90
Texas	-	85.14	85.14	-	95.69	95.69
Utah	67.07	28.45	63.35	69.31	12.00	64.20
Virginia	76.16	38.23	60.98	88.61	78.49	85.47
West Virginia Total	69.97	60.82	68.24	81.06	76.55	79.90
West Virginia (Northern)	67.53	43.99	67.23	84.55	96.29	84.70
West Virginia (Southern)	75.30	61.49	69.54	75.04	76.06	75.53
Wyoming	100.00	49.44	49.72	91.40	62.88	63.03
U.S. Total	63.31	54.20	57.21	75.57	66.65	69.78

- = No data reported.

Notes: Capacity utilization is the ratio of annual production to annual productive capacity. Excludes refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(thousand short tons)

Coal-Producing State	Continuous		Conventional and Other ¹		Longwall		Total	
	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent
Alabama	2,511	81.82	s	-	11,344	74.02	13,855	75.43
Colorado	2,464	56.44	s	-	12,400	38.86	14,864	41.77
Illinois	21,962	65.36	1,050	11.21	30,539	49.47	53,551	55.24
Indiana	18,640	49.06	s	-	s	-	18,640	49.06
Kentucky Total	32,742	59.80	80	76.04	s	-	32,822	59.84
Kentucky (East)	10,272	38.67	80	76.04	s	-	10,352	38.96
Kentucky (West)	22,470	69.46	s	-	s	-	22,470	69.46
Maryland	600	87.25	s	-	s	-	600	87.25
Montana	770	54.75	s	-	10,230	54.75	11,000	54.75
New Mexico	450	13.84	s	-	8,550	13.84	9,000	13.84
Ohio	1,910	50.54	s	-	6,045	25.99	7,955	31.88
Pennsylvania Total	8,243	87.22	32	54.70	27,694	89.90	35,969	89.26
Pennsylvania (Anthracite)	25	83.37	32	54.70	s	-	57	67.15
Pennsylvania (Bituminous)	8,219	87.23	s	-	27,694	89.90	35,913	89.29
Tennessee	184	45.01	s	-	s	-	184	45.01
Utah	5,225	62.41	s	-	13,535	68.87	18,760	67.07
Virginia	4,216	78.95	s	-	5,100	73.85	9,316	76.16
West Virginia Total	30,163	77.07	s	-	49,293	65.63	79,456	69.97
West Virginia (Northern)	6,844	73.61	s	-	47,655	66.65	54,499	67.53
West Virginia (Southern)	23,318	78.08	s	-	1,638	35.76	24,956	75.30
Wyoming	291	100.00	s	-	2,133	100.00	2,424	100.00
U.S. Total	130,369	65.89	1,162	16.87	176,864	61.71	308,395	63.31

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

¹ Mines that produce coal using shortwall, scoop loading, hand loading, or other methods.

Notes: 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 refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report,' for annual production.

Table 13.1 Productive Capacity and Capacity Utilization of Surface Coal Mines by State and Mining Method, 2020

(thousand short tons)

Coal-Producing State	Contour Strip		Area		Open Pit		Mountaintop Mining		Other ¹		Total	
	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent
Alabama	1,326	73.31	-	-	223	100.00	-	-	438	95.93	1,986	81.29
Alaska	1,500	34.03	-	-	1,500	34.03	-	-	-	-	3,000	34.03
Colorado	2,300	87.77	-	-	2,000	87.07	-	-	1,500	5.84	5,800	66.34
Illinois	-	-	2,925	53.95	-	-	-	-	535	78.31	3,460	57.72
Indiana	-	-	3,780	61.61	9,535	80.53	-	-	1,688	46.02	15,003	71.88
Kentucky Total	3,018	60.01	1,388	81.04	304	96.10	168	100.00	1,608	56.41	6,485	66.35
Kentucky (East)	3,018	60.01	1,388	81.04	-	-	168	100.00	1,601	56.26	6,175	64.85
Kentucky (West)	-	-	-	-	304	96.10	-	-	6	96.10	310	96.10
Louisiana	-	-	1,341	50.47	-	-	-	-	-	-	1,341	50.47
Maryland	646	38.95	500	66.00	-	-	-	-	-	-	1,146	50.75
Mississippi	3,600	71.87	-	-	-	-	-	-	-	-	3,600	71.87
Missouri	260	61.05	-	-	-	-	-	-	-	-	260	61.05
Montana	23,500	49.34	10,400	53.75	4,900	65.57	-	-	-	-	38,800	52.57
New Mexico	5,000	91.09	-	-	8,900	49.99	-	-	-	-	13,900	64.77
North Dakota	29,261	76.11	-	-	5,000	83.37	-	-	-	-	34,261	77.17
Ohio	600	76.82	839	51.48	-	-	-	-	375	41.91	1,814	57.88
Pennsylvania Total	1,800	78.57	-	-	4,114	55.60	-	-	417	30.97	6,331	60.51
Pennsylvania (Anthracite)	1,077	81.42	-	-	2,045	60.98	-	-	202	56.87	3,324	67.35
Pennsylvania (Bituminous)	723	74.34	-	-	2,069	50.27	-	-	215	6.67	3,007	52.94
Texas	4,324	44.41	13,059	100.00	5,735	82.01	-	-	-	-	23,118	85.14
Utah	-	-	-	-	1,920	28.45	-	-	80	28.45	2,000	28.45
Virginia	4,578	29.37	783	64.26	-	-	-	-	856	61.77	6,217	38.23
West Virginia Total	8,081	51.93	6,474	80.87	-	-	1,475	33.21	2,536	54.00	18,566	60.82
West Virginia (Northern)	610	40.03	-	-	-	-	-	-	100	68.11	710	43.99
West Virginia (Southern)	7,471	52.90	6,474	80.87	-	-	1,475	33.21	2,436	53.42	17,856	61.49
Wyoming	252,200	38.46	5,000	44.32	179,939	64.98	-	-	-	-	437,139	49.44
U.S. Total	341,994	44.75	46,489	71.15	224,070	65.49	1,643	40.02	10,033	48.02	624,228	54.20

- = No data reported.

1 Mines that: 1. produce coal using auger, highwall mine, or punch.

Notes: 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 refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding. Mines reporting multiple mining methods are assigned to the mining method with the greatest percentage of production reported.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report,' for annual production.

Recoverable Reserves

Table 14. Recoverable Coal Reserves at Producing Mines by State, 2020 and 2019

(million short tons)

Coal-Producing State	2020	2019	Percent Change Recoverable Coal Reserves
	Recoverable Coal Reserves	Recoverable Coal Reserves	
Alabama	190	204	-7.1
Alaska	47	48	-2.1
Arizona	-	193	-
Colorado	193	237	-18.6
Illinois	1,883	1,900	-0.9
Indiana	411	446	-7.7
Kentucky Total	468	699	-33.0
Kentucky (East)	157	272	-42.2
Kentucky (West)	311	427	-27.2
Louisiana	13	30	-56.9
Maryland	7	8	-13.6
Mississippi	108	108	0.1
Missouri	s	s	-93.4
Montana	707	778	-9.1
New Mexico	65	82	-20.7
North Dakota	922	928	-0.6
Ohio	54	85	-36.6
Oklahoma	-	s	-
Pennsylvania Total	975	1,070	-8.8
Pennsylvania (Anthracite)	117	118	-0.7
Pennsylvania (Bituminous)	859	952	-9.8
Tennessee	9	9	-0.8
Texas	316	345	-8.5
Utah	180	180	-0.3
Virginia	178	175	1.7
West Virginia Total	1,567	1,436	9.1
West Virginia (Northern)	1,020	776	31.5
West Virginia (Southern)	547	660	-17.2
Wyoming	4,907	5,189	-5.4
U.S. Total	13,201	14,151	-6.7

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e. mined) from existing coal reserves at reporting mines. Excludes refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(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	179	336	667	10	2,209	3,101	190	2,545	3,768
Alaska	-	2,335	5,423	47	478	660	47	2,812	6,083
Arkansas	-	126	271	-	101	144	-	227	415
Colorado	82	5,689	10,840	111	3,740	4,754	193	9,429	15,595
Georgia	-	1	2	-	1	2	-	2	4
Idaho	-	2	4	-	-	-	-	2	4
Illinois	1,874	27,566	86,782	9	10,021	16,466	1,883	37,587	103,247
Indiana	143	3,444	8,315	268	217	371	411	3,661	8,686
Iowa	-	807	1,732	-	320	457	-	1,127	2,189
Kansas	-	-	-	-	679	970	-	679	970
Kentucky Total	404	6,672	15,541	64	7,188	12,446	468	13,860	27,987
Kentucky (East)	93	257	459	64	4,970	8,900	157	5,226	9,359
Kentucky (West)	311	6,415	15,082	s	2,218	3,546	311	8,633	18,628
Louisiana	-	-	-	13	272	367	13	272	367
Maryland	3	303	554	4	26	38	7	329	592
Michigan	-	55	123	-	3	5	-	58	128
Mississippi	-	-	-	108	-	-	108	-	-
Missouri	-	689	1,479	s	3,153	4,504	-	3,842	5,983
Montana	199	35,850	70,814	508	38,491	47,626	707	74,341	118,440
New Mexico	3	2,728	5,997	63	3,991	5,708	65	6,719	11,705
North Carolina	-	5	11	-	-	-	-	5	11
North Dakota	-	-	-	922	6,496	8,515	922	6,496	8,515
Ohio	52	7,546	17,153	2	3,693	5,641	54	11,239	22,794
Oklahoma	-	569	1,221	-	218	312	-	787	1,533
Oregon	-	6	15	-	2	3	-	9	17
Pennsylvania Total	835	9,965	21,826	141	954	4,095	975	10,919	25,921
Pennsylvania (Anthracite)	s	340	3,840	116	416	3,322	117	755	7,162
Pennsylvania (Bituminous)	834	9,625	17,986	25	539	773	859	10,164	18,759
South Dakota	-	-	-	-	277	366	-	277	366
Tennessee	9	270	494	-	170	251	9	441	744
Texas	-	-	-	316	9,003	11,695	316	9,003	11,695
Utah	179	2,253	4,596	1	207	261	180	2,460	4,857
Virginia	165	430	766	13	289	451	178	719	1,217
Washington	-	674	1,332	-	6	8	-	681	1,340
West Virginia Total	1,369	14,340	26,869	198	1,923	3,048	1,567	16,263	29,917
West Virginia (Northern)	1,014	NA	NA	6	NA	NA	1,020	NA	NA
West Virginia (Southern)	354	NA	NA	192	NA	NA	547	NA	NA
Wyoming	2	22,904	42,415	4,905	11,843	14,304	4,907	34,747	56,720
U.S. Total	5,497	145,567	325,241	7,704	105,972	146,570	13,201	251,539	471,811

-- No data reported.

NA = Not Available.

s = Value is less than 0.5 of the table metric.

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, and after applying assumed mining recovery rates. This estimate does not include any specific economic feasibility criteria. The effective date for the demonstrated reserve base, as customarily worded, is 'Remaining as of January 1, 2021.' These data are contemporaneous with the Recoverable Reserves at Producing Mines, customarily presented as of the end of the reporting year's mining, that is in this case, December 31, 2020. 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 25,000 short tons, which are not required to provide reserves data.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 16. Recoverable Coal Reserves at Producing Underground Coal Mines by State and Mining Method, 2020

(million short tons)

Coal-Producing State	Continuous	Conventional and Other ¹	Longwall	Total
	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines
Alabama	41	s	138	179
Colorado	24	s	58	82
Illinois	484	37	1,354	1,874
Indiana	143	s	s	143
Kentucky Total	404	s	s	404
Kentucky (East)	93	s	s	93
Kentucky (West)	311	s	s	311
Maryland	3	s	s	3
Montana	14	s	185	199
New Mexico	s	s	2	3
Ohio	50	s	2	52
Pennsylvania Total	120	s	714	835
Pennsylvania (Anthracite)	s	s	s	s
Pennsylvania (Bituminous)	120	s	714	834
Tennessee	9	s	s	9
Utah	52	s	127	179
Virginia	54	s	111	165
West Virginia Total	487	s	882	1,369
West Virginia (Northern)	141	s	873	1,014
West Virginia (Southern)	346	s	9	354
Wyoming	s	s	2	2
U.S. Total	1,884	37	3,576	5,497

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

1 Mines that produce coal using shortwall, scoop loading, hand loading, or other methods.

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. Excludes mines producing less than 25,000 short tons, which are not required to provide data and refuse recovery.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report.'

Table 16.1 Recoverable Coal Reserves at Producing Surface Coal Mines by State and Mining Method, 2020

(million short tons)

Coal-Producing State	Contour Strip	Area	Open Pit	Mountaintop Mining	Other ¹	Total
	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines	Recoverable Coal Reserves at Producing Mines
Alabama	10	-	s	-	s	10
Alaska	23	-	23	-	-	47
Colorado	14	-	96	-	1	111
Illinois	-	8	-	-	1	9
Indiana	-	19	248	-	1	268
Kentucky Total	30	10	s	s	24	64
Kentucky (East)	30	10	-	s	24	64
Kentucky (West)	-	-	s	-	s	s
Louisiana	-	13	-	-	-	13
Maryland	1	3	-	-	-	4
Mississippi	108	-	-	-	-	108
Missouri	s	-	-	-	-	s
Montana	212	179	117	-	-	508
New Mexico	10	-	53	-	-	63
North Dakota	852	-	70	-	-	922
Ohio	1	1	-	-	s	2
Pennsylvania Total	47	-	87	-	7	141
Pennsylvania (Anthracite)	44	-	72	-	s	116
Pennsylvania (Bituminous)	3	-	15	-	7	25
Texas	108	131	78	-	-	316
Utah	-	-	1	-	s	1
Virginia	7	3	-	-	3	13
West Virginia Total	96	56	-	26	20	198
West Virginia (Northern)	5	-	-	-	1	6
West Virginia (Southern)	91	56	-	26	19	192
Wyoming	1,941	52	2,912	-	-	4,905
U.S. Total	3,460	475	3,685	26	57	7,704

- = No data reported.

s = Value is less than 0.5 of the table metric.

1 Mines that: 1. produce coal using auger, highwall mine, or punch.

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. Excludes mines producing less than 25,000 short tons, which are not required to provide data and refuse recovery. Mines reporting multiple mining methods are assigned to the mining method with the greatest percentage of production reported.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report.'

Table 17. Recoverable Coal Reserves at Producing U.S. Mines by Mine Production Range and Mine Type, 2020

(million short tons)

Mine Production Range (thousand short tons)	Underground	Surface	Total
	Recoverable Coal Reserves	Recoverable Coal Reserves	Recoverable Coal Reserves
Over 500 to 1,000	312	52	364
Over 200 to 500	371	192	563
Over 100 to 200	102	62	164
Over 50 to 100	85	78	164
Over 10 to 50	44	69	113
U.S. Total	5,497	7,704	13,201

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report.'

Employment

Table 18. Average Number of Employees by State and Mine Type, 2020 and 2019

Coal-Producing State and Region ¹	2020			2019			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	2,146	384	2,530	2,371	559	2,930	-9.5	-31.3	-13.7
Alaska	-	102	102	-	101	101	-	1.0	1.0
Arizona	-	-	-	-	243	243	-	-	-
Colorado	725	393	1,118	858	414	1,272	-15.5	-5.1	-12.1
Illinois	1,983	192	2,175	2,776	329	3,105	-28.6	-41.6	-30.0
Indiana	1,045	953	1,998	1,646	1,285	2,931	-36.5	-25.8	-31.8
Kentucky Total	3,020	986	4,006	4,827	1,430	6,257	-37.4	-31.0	-36.0
Kentucky (East)	1,405	954	2,359	2,432	1,368	3,800	-42.2	-30.3	-37.9
Kentucky (West)	1,615	32	1,647	2,395	62	2,457	-32.6	-48.4	-33.0
Louisiana	-	125	125	-	242	242	-	-48.3	-48.3
Maryland	130	96	226	138	122	260	-5.8	-21.3	-13.1
Mississippi	-	194	194	-	194	194	-	-	-
Missouri	-	12	12	-	14	14	-	-14.3	-14.3
Montana	258	844	1,102	274	1,028	1,302	-5.8	-17.9	-15.4
New Mexico	202	630	832	271	655	926	-25.5	-3.8	-10.2
North Dakota	2	1,225	1,227	-	1,241	1,241	-	-1.3	-1.1
Ohio	352	165	517	688	295	983	-48.8	-44.1	-47.4
Oklahoma	-	17	17	-	56	56	-	-69.6	-69.6
Pennsylvania Total	3,424	1,394	4,818	3,886	1,546	5,432	-11.9	-9.8	-11.3
Pennsylvania (Anthracite)	65	837	902	68	848	916	-4.4	-1.3	-1.5
Pennsylvania (Bituminous)	3,359	557	3,916	3,818	698	4,516	-12.0	-20.2	-13.3
Tennessee	33	5	38	86	27	113	-61.6	-81.5	-66.4
Texas	-	1,328	1,328	-	1,531	1,531	-	-13.3	-13.3
Utah	1,316	57	1,373	1,397	49	1,446	-5.8	16.3	-5.0
Virginia	1,452	642	2,094	1,883	865	2,748	-22.9	-25.8	-23.8
West Virginia Total	9,129	2,289	11,418	10,647	3,341	13,988	-14.3	-31.5	-18.4
West Virginia (Northern)	3,789	115	3,904	4,130	158	4,288	-8.3	-27.2	-9.0
West Virginia (Southern)	5,340	2,174	7,514	6,517	3,183	9,700	-18.1	-31.7	-22.5
Wyoming	139	4,728	4,867	133	5,266	5,399	4.5	-10.2	-9.9
Appalachia Total	18,071	5,929	24,000	22,131	8,123	30,254	-18.3	-27.0	-20.7
Appalachia Central	8,230	3,775	12,005	10,918	5,443	16,361	-24.6	-30.6	-26.6
Appalachia Northern	7,695	1,770	9,465	8,842	2,121	10,963	-13.0	-16.5	-13.7
Appalachia Southern	2,146	384	2,530	2,371	559	2,930	-9.5	-31.3	-13.7
Interior Region Total	4,643	2,853	7,496	6,817	3,713	10,530	-31.9	-23.2	-28.8
Illinois Basin	4,643	1,177	5,820	6,817	1,676	8,493	-31.9	-29.8	-31.5
Other Interior	-	1,676	1,676	-	2,037	2,037	-	-17.7	-17.7
Western Region Total	2,642	7,979	10,621	2,933	8,997	11,930	-9.9	-11.3	-11.0
Powder River Basin	-	4,939	4,939	-	5,628	5,628	-	-12.2	-12.2
Uinta Basin	1,956	415	2,371	2,167	437	2,604	-9.7	-5.0	-8.9
Other Western	686	2,625	3,311	766	2,932	3,698	-10.4	-10.5	-10.5
East of Mississippi River	22,714	7,300	30,014	28,948	9,993	38,941	-21.5	-26.9	-22.9
West of Mississippi River	2,642	9,461	12,103	2,933	10,840	13,773	-9.9	-12.7	-12.1
U.S. Subtotal	25,356	16,761	42,117	31,881	20,833	52,714	-20.5	-19.5	-20.1
Refuse Recovery	-	-	42	-	-	90	-	-	-53.3
U.S. Total	25,356	16,761	42,159	31,881	20,833	52,804	-20.5	-19.5	-20.2

- = No data reported.

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

Notes: 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 18.1. Average Number of Employees and Number of Mines by State and Coal Type, 2020

Coal-Producing State ¹	Number of Mines			Average Number of Employees		
	Metallurgical ²	Non-Metallurgical ²	Total ³	Metallurgical ²	Non-Metallurgical ²	Total ³
Alabama	9	22	26	1,997	441	2,438
Alaska	-	1	1	-	102	102
Colorado	-	7	7	-	1,118	1,118
Illinois	-	15	15	-	2,052	2,052
Indiana	-	18	18	-	1,914	1,914
Kentucky Total	25	75	97	868	2,566	3,434
Kentucky (East)	25	68	90	868	1,082	1,950
Kentucky (West)	-	7	7	-	1,484	1,484
Louisiana	-	2	2	-	125	125
Maryland	2	10	11	124	63	187
Mississippi	-	1	1	-	194	194
Missouri	-	1	1	-	12	12
Montana	-	6	6	-	1,091	1,091
New Mexico	-	3	3	-	832	832
North Dakota	-	5	5	-	1,223	1,223
Ohio	-	10	10	-	473	473
Oklahoma	-	2	2	-	17	17
Pennsylvania Total	38	119	136	1,115	3,136	4,251
Pennsylvania (Anthracite)	4	44	48	45	445	490
Pennsylvania (Bituminous)	34	75	88	1,070	2,691	3,761
Tennessee	1	1	2	23	2	25
Texas	-	7	7	-	1,328	1,328
Utah	-	7	7	-	1,286	1,286
Virginia	18	34	43	1,412	445	1,857
West Virginia Total	79	99	136	5,669	4,468	10,137
West Virginia (Northern)	6	16	18	952	2,795	3,747
West Virginia (Southern)	73	83	118	4,717	1,673	6,390
Wyoming	-	16	16	-	4,867	4,867
Appalachia Total	172	363	454	11,208	10,110	21,318
Appalachia Central	117	186	253	7,020	3,202	10,222
Appalachia Northern	46	155	175	2,191	6,467	8,658
Appalachia Southern	9	22	26	1,997	441	2,438
Interior Region Total	-	53	53	-	7,126	7,126
Illinois Basin	-	40	40	-	5,450	5,450
Other Interior	-	13	13	-	1,676	1,676
Western Region Total	-	45	45	-	10,519	10,519
Powder River Basin	-	16	16	-	4,928	4,928
Uinta Basin	-	12	12	-	2,284	2,284
Other Western	-	17	17	-	3,307	3,307
East of Mississippi River	172	404	495	11,208	15,754	26,962
West of Mississippi River	-	57	57	-	12,001	12,001
U.S. Total	172	461	552	11,208	27,755	38,963

- = No data reported.

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

2 Some mines produce both metallurgical and non-metallurgical.

3 Total may not equal the sum, as some mines produced both metallurgical and non-metallurgical.

Note: Excludes mines producing less than 25,000 tons per year, which are not required to provide data.

Sources: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report', U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 19. Average Number of Employees at Underground and Surface Mines by State and Mine Production Range, 2020

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Zero ²	Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10		
Alabama	1,645	361	133	133	90	52	24	92	2,530
Underground	1,645	358	-	63	-	-	-	80	2,146
Surface	-	3	133	70	90	52	24	12	384
Alaska	102	-	-	-	-	-	-	-	102
Surface	102	-	-	-	-	-	-	-	102
Colorado	1,021	85	-	-	12	-	-	-	1,118
Underground	640	85	-	-	-	-	-	-	725
Surface	381	-	-	-	12	-	-	-	393
Illinois	1,623	334	61	11	11	-	-	135	2,175
Underground	1,623	214	37	-	-	-	-	109	1,983
Surface	-	120	24	11	11	-	-	26	192
Indiana	1,745	-	80	67	-	11	11	84	1,998
Underground	946	-	-	15	-	-	-	84	1,045
Surface	799	-	80	52	-	11	11	-	953
Kentucky Total	1,363	104	791	378	429	261	108	521	4,006
Underground	1,363	-	701	224	251	74	19	341	3,020
Surface	-	104	90	154	178	187	89	180	986
Kentucky (East)	-	104	674	378	429	261	104	358	2,359
Underground	-	-	608	224	251	74	19	182	1,405
Surface	-	104	66	154	178	187	85	176	954
Kentucky (West)	1,363	-	117	-	-	-	4	163	1,647
Underground	1,363	-	93	-	-	-	-	159	1,615
Surface	-	-	24	-	-	-	4	4	32
Louisiana	-	-	125	-	-	-	-	-	125
Surface	-	-	125	-	-	-	-	-	125
Maryland	-	91	12	46	-	27	11	39	226
Underground	-	91	-	-	-	-	-	39	130
Surface	-	-	12	46	-	27	11	-	96
Mississippi	194	-	-	-	-	-	-	-	194
Surface	194	-	-	-	-	-	-	-	194
Missouri	-	-	-	12	-	-	-	-	12
Surface	-	-	-	12	-	-	-	-	12
Montana	1,080	-	11	-	-	-	-	11	1,102
Underground	258	-	-	-	-	-	-	-	258
Surface	822	-	11	-	-	-	-	11	844
New Mexico	832	-	-	-	-	-	-	-	832
Underground	202	-	-	-	-	-	-	-	202
Surface	630	-	-	-	-	-	-	-	630
North Dakota	1,188	-	35	-	-	-	-	4	1,227
Underground	-	-	-	-	-	-	-	2	2
Surface	1,188	-	35	-	-	-	-	2	1,225
Ohio	172	-	197	90	-	14	-	44	517
Underground	172	-	111	45	-	-	-	24	352
Surface	-	-	86	45	-	14	-	20	165
Oklahoma	-	-	-	-	-	-	17	-	17
Surface	-	-	-	-	-	-	17	-	17
Pennsylvania Total	2,433	310	372	459	230	227	212	515	4,818
Underground	2,433	250	279	181	75	23	35	133	3,424
Surface	-	60	93	278	155	204	177	382	1,394
Pennsylvania (Anthracite)	-	60	51	105	102	97	67	376	902
Underground	-	-	-	-	-	23	24	18	65
Surface	-	60	51	105	102	74	43	358	837
Pennsylvania (Bituminous)	2,433	250	321	354	128	130	145	139	3,916
Underground	2,433	250	279	181	75	-	11	115	3,359
Surface	-	-	42	173	53	130	134	24	557
Tennessee	-	-	-	-	23	-	2	13	38
Underground	-	-	-	-	23	-	-	10	33

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)								Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10	Zero ²	
Surface	-	-	-	-	-	-	2	3	5
Texas	1,167	-	136	-	25	-	-	-	1,328
Surface	1,167	-	136	-	25	-	-	-	1,328
Utah	1,076	112	89	-	-	9	-	76	1,373
Underground	1,076	77	89	-	-	9	-	65	1,316
Surface	-	35	-	-	-	-	-	11	57
Virginia	793	130	367	169	115	226	40	254	2,094
Underground	793	-	161	107	79	117	27	168	1,452
Surface	-	130	206	62	36	109	13	86	642
West Virginia Total	3,830	2,916	1,891	609	388	351	147	1,286	11,418
Underground	3,413	2,470	1,474	405	214	188	40	925	9,129
Surface	417	446	417	204	174	163	107	361	2,289
West Virginia (Northern)	3,025	636	-	46	16	15	9	157	3,904
Underground	3,025	636	-	-	16	-	-	112	3,789
Surface	-	-	-	46	-	15	9	45	115
West Virginia (Southern)	805	2,280	1,891	563	372	336	138	1,129	7,514
Underground	388	1,834	1,474	405	198	188	40	813	5,340
Surface	417	446	417	158	174	148	98	316	2,174
Wyoming	4,867	-	-	-	-	-	-	-	4,867
Underground	139	-	-	-	-	-	-	-	139
Surface	4,728	-	-	-	-	-	-	-	4,728
Appalachia Total	8,873	3,912	3,646	1,884	1,275	1,158	540	2,601	24,000
Underground	8,456	3,169	2,633	1,025	642	402	121	1,561	18,071
Surface	417	743	1,013	859	633	756	419	1,040	5,929
Appalachia Central	1,598	2,514	2,932	1,110	939	823	284	1,754	12,005
Underground	1,181	1,834	2,243	736	551	379	86	1,173	8,230
Surface	417	680	689	374	388	444	198	581	3,775
Appalachia Northern	5,630	1,037	581	641	246	283	232	755	9,465
Underground	5,630	977	390	226	91	23	35	308	7,695
Surface	-	60	191	415	155	260	197	447	1,770
Appalachia Southern	1,645	361	133	133	90	52	24	92	2,530
Underground	1,645	358	-	63	-	-	-	80	2,146
Surface	-	3	133	70	90	52	24	12	384
Interior Region Total	6,092	334	519	90	36	11	32	382	7,496
Underground	3,932	214	130	15	-	-	-	352	4,643
Surface	2,160	120	389	75	36	11	32	30	2,853
Illinois Basin	4,731	334	258	78	11	11	15	382	5,820
Underground	3,932	214	130	15	-	-	-	352	4,643
Surface	799	120	128	63	11	11	15	30	1,177
Other Interior	1,361	-	261	12	25	-	17	-	1,676
Surface	1,361	-	261	12	25	-	17	-	1,676
Western Region Total	10,166	197	135	-	12	9	-	91	10,621
Underground	2,315	162	89	-	-	9	-	67	2,642
Surface	7,851	35	46	-	12	-	-	24	7,979
Powder River Basin	4,928	-	-	-	-	-	-	11	4,939
Surface	4,928	-	-	-	-	-	-	11	4,939
Uinta Basin	2,097	77	89	-	12	9	-	76	2,371
Underground	1,716	77	89	-	-	9	-	65	1,956
Surface	381	-	-	-	12	-	-	11	415
Other Western	3,141	120	46	-	-	-	-	4	3,311
Underground	599	85	-	-	-	-	-	2	686
Surface	2,542	35	46	-	-	-	-	2	2,625
East of Mississippi River	13,798	4,246	3,904	1,962	1,286	1,169	555	2,983	30,014
Underground	12,388	3,383	2,763	1,040	642	402	121	1,913	22,714
Surface	1,410	863	1,141	922	644	767	434	1,070	7,300
West of Mississippi River	11,333	197	396	12	37	9	17	91	12,103
Underground	2,315	162	89	-	-	9	-	67	2,642
Surface	9,018	35	307	12	37	-	17	24	9,461
U.S. Subtotal	25,131	4,443	4,300	1,974	1,323	1,178	572	3,074	42,117
Underground	14,703	3,545	2,852	1,040	642	411	121	1,980	25,356
Surface	10,428	898	1,448	934	681	767	451	1,094	16,761

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Zero ²	Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10		
Refuse Recovery	-	-	-	27	-	12	3	-	42
U.S. Total	25,131	4,443	4,300	2,001	1,323	1,190	575	3,074	42,159

- = No data reported.

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

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

Notes: 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, 2020

Coal-Producing State and Region ¹	Union		Nonunion	
	Underground	Surface	Underground	Surface
Alabama	2,050	3	96	336
Alaska	-	102	-	-
Colorado	178	169	547	224
Illinois	-	-	1,983	204
Indiana	-	-	1,045	931
Kentucky Total	-	-	2,932	821
Kentucky (East)	-	-	1,317	793
Kentucky (West)	-	-	1,615	28
Louisiana	-	-	-	125
Maryland	-	-	130	76
Mississippi	-	-	-	194
Missouri	-	-	-	12
Montana	-	593	258	251
New Mexico	202	370	-	260
North Dakota	-	212	2	1,013
Ohio	-	-	352	165
Pennsylvania Total	983	277	2,391	833
Pennsylvania (Anthracite)	-	277	41	492
Pennsylvania (Bituminous)	983	-	2,350	341
Tennessee	-	-	33	3
Texas	-	517	-	811
Utah	-	-	1,307	46
Virginia	62	1	1,261	561
West Virginia Total	2,277	39	6,720	2,081
West Virginia (Northern)	1,959	10	1,830	81
West Virginia (Southern)	318	29	4,890	2,000
Wyoming	139	475	-	4,253
Appalachia Total	5,372	320	12,300	4,848
Appalachia Central	380	30	7,501	3,357
Appalachia Northern	2,942	287	4,703	1,155
Appalachia Southern	2,050	3	96	336
Interior Region Total	-	517	4,643	2,305
Illinois Basin	-	-	4,643	1,163
Other Interior	-	517	-	1,142
Western Region Total	519	1,921	2,114	6,047
Powder River Basin	-	582	-	4,357
Uinta Basin	178	169	1,769	235
Other Western	341	1,170	345	1,455
East of Mississippi River	5,372	320	16,943	6,205
West of Mississippi River	519	2,438	2,114	6,995
U.S. Total	5,891	2,758	19,057	13,200

- = No data reported.

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

Notes: Includes all employees at preparation plants and tipples not co-located with a mine. 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 25,000 short tons and preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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 Productivity by State and Mine Type, 2020 and 2019

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2020	2019	Percent Change	2020	2019	Percent Change	2020	2019	Percent Change
Alabama	31	39	-20.5	2,530	2,930	-13.7	1.96	1.95	0.7
Underground	10	12	-16.7	2,146	2,371	-9.5	1.96	1.99	-1.3
Surface	21	27	-22.2	384	559	-31.3	1.99	1.78	11.6
Alaska	1	1	-	102	101	1.0	5.11	5.14	-0.6
Surface	1	1	-	102	101	1.0	5.11	5.14	-0.6
Arizona	-	1	-	-	243	-	-	7.86	-
Surface	-	1	-	-	243	-	-	7.86	-
Colorado	7	6	16.7	1,118	1,272	-12.1	4.65	4.87	-4.5
Underground	4	4	-	725	858	-15.5	4.45	5.12	-13.1
Surface	3	2	50.0	393	414	-5.1	5.00	4.31	16.2
Illinois	22	28	-21.4	2,175	3,105	-30.0	6.84	6.44	6.3
Underground	14	15	-6.7	1,983	2,776	-28.6	7.12	6.71	6.2
Surface	8	13	-38.5	192	329	-41.6	4.31	4.29	0.5
Indiana	20	22	-9.1	1,998	2,931	-31.8	4.60	4.38	5.0
Underground	7	10	-30.0	1,045	1,646	-36.5	4.08	4.11	-0.8
Surface	13	12	8.3	953	1,285	-25.8	5.16	4.74	8.9
Kentucky Total	141	203	-30.5	4,006	6,257	-36.0	2.91	2.52	15.4
Underground	58	90	-35.6	3,020	4,827	-37.4	3.11	2.57	21.2
Surface	83	113	-26.5	986	1,430	-31.0	2.26	2.35	-3.6
Kentucky (East)	128	182	-29.7	2,359	3,800	-37.9	1.78	1.70	4.6
Underground	48	76	-36.8	1,405	2,432	-42.2	1.48	1.37	8.1
Surface	80	106	-24.5	954	1,368	-30.3	2.21	2.28	-3.2
Kentucky (West)	13	21	-38.1	1,647	2,457	-33.0	4.35	3.59	21.2
Underground	10	14	-28.6	1,615	2,395	-32.6	4.38	3.59	21.9
Surface	3	7	-57.1	32	62	-48.4	3.37	3.59	-6.0
Louisiana	2	2	-	125	242	-48.3	2.64	3.29	-19.8
Surface	2	2	-	125	242	-48.3	2.64	3.29	-19.8
Maryland	12	13	-7.7	226	260	-13.1	2.48	2.47	0.4
Underground	2	2	-	130	138	-5.8	1.93	1.94	-0.4
Surface	10	11	-9.1	96	122	-21.3	3.27	3.14	4.1
Mississippi	1	1	-	194	194	-	6.58	6.67	-1.2
Surface	1	1	-	194	194	-	6.58	6.67	-1.2
Missouri	1	1	-	12	14	-14.3	6.37	6.41	-0.6
Surface	1	1	-	12	14	-14.3	6.37	6.41	-0.6
Montana	7	7	-	1,102	1,302	-15.4	12.38	13.29	-6.8
Underground	1	1	-	258	274	-5.8	10.92	11.42	-4.4
Surface	6	6	-	844	1,028	-17.9	12.89	13.87	-7.1
New Mexico	3	3	-	832	926	-10.2	6.09	7.56	-19.5
Underground	1	1	-	202	271	-25.5	2.74	7.19	-61.9
Surface	2	2	-	630	655	-3.8	7.33	7.70	-4.9
North Dakota	7	5	40.0	1,227	1,241	-1.1	11.15	11.16	-
Underground	1	-	-	2	-	-	-	-	-
Surface	6	5	20.0	1,225	1,241	-1.3	11.17	11.16	0.1
Ohio	17	23	-26.1	517	983	-47.4	3.25	3.65	-11.0
Underground	8	9	-11.1	352	688	-48.8	3.40	4.12	-17.3
Surface	9	14	-35.7	165	295	-44.1	2.92	2.43	20.1
Oklahoma	2	3	-33.3	17	56	-69.6	0.3	1.91	-98.5
Surface	2	3	-33.3	17	56	-69.6	0.3	1.91	-98.5
Pennsylvania Total	178	200	-11.0	4,818	5,432	-11.3	4.00	4.14	-3.4
Underground	51	54	-5.6	3,424	3,886	-11.9	4.89	4.94	-0.9
Surface	127	146	-13.0	1,394	1,546	-9.8	1.67	1.79	-6.8
Pennsylvania (Anthracite)	77	85	-9.4	902	916	-1.5	1.44	1.43	0.6
Underground	16	17	-5.9	65	68	-4.4	0.61	0.55	10.8
Surface	61	68	-10.3	837	848	-1.3	1.50	1.49	0.4
Pennsylvania (Bituminous)	101	115	-12.2	3,916	4,516	-13.3	4.56	4.62	-1.1
Underground	35	37	-5.4	3,359	3,818	-12.0	4.96	4.99	-0.7

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2020	2019	Percent Change	2020	2019	Percent Change	2020	2019	Percent Change
Surface	66	78	-15.4	557	698	-20.2	1.94	2.16	-10.3
Tennessee	6	7	-14.3	38	113	-66.4	1.13	1.60	-29.5
Underground	3	3	-	33	86	-61.6	1.11	1.51	-26.6
Surface	3	4	-25.0	5	27	-81.5	1.38	1.90	-27.3
Texas	7	8	-12.5	1,328	1,531	-13.3	7.85	6.89	13.9
Surface	7	8	-12.5	1,328	1,531	-13.3	7.85	6.89	13.9
Utah	13	14	-7.1	1,373	1,446	-5.0	4.32	4.46	-3.1
Underground	10	11	-9.1	1,316	1,397	-5.8	4.37	4.58	-4.5
Surface	3	3	-	57	49	16.3	3.36	1.74	93.4
Virginia	61	74	-17.6	2,094	2,748	-23.8	2.25	2.07	8.7
Underground	28	32	-12.5	1,452	1,883	-22.9	2.40	2.14	12.1
Surface	33	42	-21.4	642	865	-25.8	1.91	1.92	-0.5
West Virginia Total	208	241	-13.7	11,418	13,988	-18.4	2.72	2.83	-3.7
Underground	104	110	-5.5	9,129	10,647	-14.3	2.79	2.79	0.2
Surface	104	131	-20.6	2,289	3,341	-31.5	2.42	2.95	-18.0
West Virginia (Northern)	25	24	4.2	3,904	4,288	-9.0	4.18	4.67	-10.5
Underground	14	15	-6.7	3,789	4,130	-8.3	4.22	4.73	-10.8
Surface	11	9	22.2	115	158	-27.2	1.99	2.49	-20.0
West Virginia (Southern)	183	217	-15.7	7,514	9,700	-22.5	1.90	2.02	-5.6
Underground	90	95	-5.3	5,340	6,517	-18.1	1.68	1.55	8.6
Surface	93	122	-23.8	2,174	3,183	-31.7	2.44	2.97	-17.9
Wyoming	16	16	-	4,867	5,399	-9.9	23.29	25.30	-7.9
Underground	1	1	-	139	133	4.5	7.70	8.59	-10.4
Surface	15	15	-	4,728	5,266	-10.2	23.83	25.70	-7.3
Appalachia Total	641	779	-17.7	24,000	30,254	-20.7	2.74	2.79	-1.7
Underground	254	298	-14.8	18,071	22,131	-18.3	2.91	2.91	0.2
Surface	387	481	-19.5	5,929	8,123	-27.0	2.17	2.44	-10.9
Appalachia Central	378	480	-21.3	12,005	16,361	-26.6	1.94	1.95	-0.8
Underground	169	206	-18.0	8,230	10,918	-24.6	1.77	1.61	10.3
Surface	209	274	-23.7	3,775	5,443	-30.6	2.29	2.64	-13.3
Appalachia Northern	232	260	-10.8	9,465	10,963	-13.7	4.00	4.27	-6.3
Underground	75	80	-6.3	7,695	8,842	-13.0	4.42	4.73	-6.7
Surface	157	180	-12.8	1,770	2,121	-16.5	1.92	2.01	-4.6
Appalachia Southern	31	39	-20.5	2,530	2,930	-13.7	1.96	1.95	0.7
Underground	10	12	-16.7	2,146	2,371	-9.5	1.96	1.99	-1.3
Surface	21	27	-22.2	384	559	-31.3	1.99	1.78	11.6
Interior Region Total	68	86	-20.9	7,496	10,530	-28.8	5.72	5.12	11.8
Underground	31	39	-20.5	4,643	6,817	-31.9	5.46	4.92	10.9
Surface	37	47	-21.3	2,853	3,713	-23.2	6.18	5.52	12.1
Illinois Basin	55	71	-22.5	5,820	8,493	-31.5	5.35	4.86	10.2
Underground	31	39	-20.5	4,643	6,817	-31.9	5.46	4.92	10.9
Surface	24	32	-25.0	1,177	1,676	-29.8	4.95	4.61	7.5
Other Interior	13	15	-13.3	1,676	2,037	-17.7	7.20	6.35	13.4
Surface	13	15	-13.3	1,676	2,037	-17.7	7.20	6.35	13.4
Western Region Total	54	53	1.9	10,621	11,930	-11.0	14.58	15.76	-7.5
Underground	18	18	-	2,642	2,933	-9.9	5.09	5.78	-12.0
Surface	36	35	2.9	7,979	8,997	-11.3	18.03	19.23	-6.2
Powder River Basin	17	17	-	4,939	5,628	-12.2	24.24	25.71	-5.7
Surface	17	17	-	4,939	5,628	-12.2	24.24	25.71	-5.7
Uinta Basin	18	18	-	2,371	2,604	-8.9	4.47	4.72	-5.3
Underground	13	14	-7.1	1,956	2,167	-9.7	4.43	4.84	-8.6
Surface	5	4	25.0	415	437	-5.0	4.69	4.05	15.9
Other Western	19	18	5.6	3,311	3,698	-10.5	8.20	8.70	-5.8
Underground	5	4	25.0	686	766	-10.4	6.92	8.55	-19.0
Surface	14	14	-	2,625	2,932	-10.5	8.57	8.74	-2.0
East of Mississippi River	697	851	-18.1	30,014	38,941	-22.9	3.28	3.27	0.2
Underground	285	337	-15.4	22,714	28,948	-21.5	3.43	3.39	1.2
Surface	412	514	-19.8	7,300	9,993	-26.9	2.78	2.91	-4.4
West of Mississippi River	66	67	-1.5	12,103	13,773	-12.1	13.71	14.43	-4.9
Underground	18	18	-	2,642	2,933	-9.9	5.09	5.78	-12.0

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2020	2019	Percent Change	2020	2019	Percent Change	2020	2019	Percent Change
Surface	48	49	-2.0	9,461	10,840	-12.7	16.37	16.89	-3.1
U.S. Subtotal	763	918	-16.9	42,117	52,714	-20.1	6.12	5.95	3.0
Underground	303	355	-14.6	25,356	31,881	-20.5	3.60	3.60	0.2
Surface	460	563	-18.3	16,761	20,833	-19.5	10.24	9.88	3.6
Refuse Recovery	14	19	-26.3	42	90	-53.3	8.55	4.36	96.2
U.S. Total	777	937	-17.1	42,159	52,804	-20.2	6.12	5.94	3.0

-- No data reported.

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

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

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

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

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(short tons produced per employee hour)

Coal-Producing State, Region ¹ and Mine Type	Continuous	Conventional and Other ²	Longwall	Total
Alabama	2.15	-	2.00	1.96
Colorado	4.05	-	4.58	4.45
Illinois	6.15	0.49	9.60	7.12
Indiana	4.41	-	-	4.08
Kentucky Total	3.57	0.7	-	3.12
Kentucky (East)	1.76	0.13	-	1.48
Kentucky (West)	4.84	-	-	4.38
Maryland	2.73	-	-	1.93
Montana	10.92	-	10.92	10.92
New Mexico	2.74	-	2.74	2.74
Ohio	2.79	-	4.29	3.40
Pennsylvania Total	3.55	0.5	5.97	4.92
Pennsylvania (Anthracite)	0.79	0.37	-	0.52
Pennsylvania (Bituminous)	3.59	-	5.97	4.97
Tennessee	1.56	-	-	1.11
Utah	3.98	-	4.88	4.39
Virginia	2.06	-	4.16	2.45
West Virginia Total	2.04	-	5.01	2.81
West Virginia (Northern)	2.22	-	5.13	4.22
West Virginia (Southern)	2.00	-	2.20	1.70
Wyoming	7.70	-	7.70	7.70
Appalachia Total	2.20	0.2	4.41	2.93
Appalachia Central	1.96	0.2	3.72	1.79
Appalachia Northern	2.84	0.2	5.43	4.43
Appalachia Southern	2.15	-	2.00	1.96
Interior Region Total	5.12	0.16	9.60	5.46
Illinois Basin	5.12	0.16	9.60	5.46
Western Region Total	4.30	-	5.51	5.10
Uinta Basin	4.05	-	4.77	4.43
Other Western	5.26	-	7.30	6.92
East of Mississippi River	3.04	0.5	4.87	3.45
West of Mississippi River	4.30	-	5.51	5.10
U.S. Total	3.10	0.5	4.99	3.62

- = No data reported.

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

2 Mines that produce coal using shortwall, scoop loading, hand loading, or other methods.

Notes: For each State, stand alone preparation plant hours are distributed across mining methods by the proportion of underground hours 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 25,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 22.1. Surface Coal Mining Productivity By State and Mining Method, 2020

(short tons produced per employee hour)

Coal-Producing State and Region ¹	Contour Strip	Area	Open Pit	Mountaintop Mining	Other ²	Total
Alabama	1.81	-	1.85	-	2.56	1.99
Alaska	5.11	-	5.11	-	-	5.11
Colorado	5.65	-	4.27	-	21.25	5.00
Illinois	-	4.72	-	-	3.24	4.31
Indiana	-	4.65	5.25	-	6.25	5.16
Kentucky Total	2.32	3.67	4.48	3.25	1.43	2.26
Kentucky (East)	2.32	3.67	-	3.25	1.46	2.21
Kentucky (West)	-	-	4.48	-	0.47	3.37
Louisiana	-	2.64	-	-	-	2.64
Maryland	2.38	5.68	-	-	1.66	3.27
Mississippi	6.58	-	-	-	-	6.58
Missouri	6.37	-	-	-	-	6.37
Montana	18.42	9.24	9.67	-	s	12.89
New Mexico	9.06	-	6.12	-	-	7.33
North Dakota	10.97	-	12.52	-	s	11.17
Ohio	3.88	3.43	-	-	1.37	2.92
Oklahoma	-	-	-	-	0.3	0.3
Pennsylvania Total	2.50	-	2.89	-	0.41	1.67
Pennsylvania (Anthracite)	2.31	-	3.63	-	0.20	1.50
Pennsylvania (Bituminous)	2.88	-	2.33	-	0.90	1.94
Tennessee	-	-	-	-	1.38	1.38
Texas	3.05	11.22	6.58	-	-	7.85
Utah	-	-	4.79	-	0.41	3.36
Virginia	2.34	2.81	-	-	1.18	1.91
West Virginia Total	2.68	2.90	-	2.39	1.36	2.42
West Virginia (Northern)	3.34	-	-	-	1.10	1.99
West Virginia (Southern)	2.64	2.90	-	2.39	1.39	2.44
Wyoming	20.60	7.85	28.67	-	-	23.83
Appalachia Total	2.46	3.08	2.76	2.56	1.15	2.17
Appalachia Central	2.49	2.99	-	2.56	1.36	2.29
Appalachia Northern	2.75	4.14	2.89	-	0.57	1.92
Appalachia Southern	1.81	-	1.85	-	2.56	1.99
Interior Basin Total	4.45	7.82	5.65	-	3.96	6.18
Illinois Basin	-	4.68	5.21	-	4.35	4.95
Interior	4.45	9.67	6.58	-	0.3	7.20
Western Total	16.56	8.80	21.60	-	1.41	18.03
Powder River Basin	21.86	9.12	29.46	-	s	24.24
Uinta Region	5.65	-	4.27	-	1.60	4.69
Western	9.38	8.19	7.19	-	2.83	8.57
East of Mississippi River	2.81	3.48	4.30	2.56	1.36	2.78
West of Mississippi River	15.59	9.33	20.02	-	1.04	16.37
U.S. Total	11.23	5.89	15.87	2.56	1.35	10.24

- = No data reported.

s = Value is less than 0.5 of the table metric.

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

2 Mines that: 1. produce coal using auger, highwall mine, or punch.

Notes: For each State, stand alone preparation plant hours are distributed across mining methods by the proportion of surface hours 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 25,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(short tons produced per employee hour)

Coal-Producing State, Region ^a and Mine Type	Mine Production Range (thousand short tons)							Total ²
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	10 or Under	
Alabama	2.27	0.86	2.91	1.75	1.32	1.77	0.59	1.96
Underground	2.27	0.86	-	1.79	-	-	-	1.96
Surface	-	-	2.91	1.71	1.32	1.77	0.59	1.99
Alaska	5.11	-	-	-	-	-	-	5.11
Surface	5.11	-	-	-	-	-	-	5.11
Colorado	4.69	3.68	-	-	21.25	-	-	4.65
Underground	4.55	3.68	-	-	-	-	-	4.45
Surface	4.92	-	-	-	21.25	-	-	5.00
Illinois	8.15	3.06	5.28	11.69	3.66	-	-	6.84
Underground	8.15	2.07	3.28	-	-	-	-	7.12
Surface	-	4.15	8.37	11.69	3.66	-	-	4.31
Indiana	4.79	-	5.37	4.04	-	4.05	1.82	4.60
Underground	4.43	-	-	3.42	-	-	-	4.08
Surface	5.20	-	5.37	4.28	-	4.05	1.82	5.16
Kentucky Total	4.91	3.70	2.35	2.13	2.11	1.73	0.71	2.91
Underground	4.91	-	2.12	1.49	1.70	1.16	1.61	3.11
Surface	-	3.70	3.74	2.82	2.65	2.01	0.64	2.26
Kentucky (East)	-	3.70	2.13	2.13	2.11	1.73	0.73	1.78
Underground	-	-	1.95	1.49	1.70	1.16	1.61	1.48
Surface	-	3.70	3.44	2.82	2.65	2.01	0.66	2.21
Kentucky (West)	4.91	-	3.81	-	-	-	0.48	4.35
Underground	4.91	-	3.50	-	-	-	-	4.38
Surface	-	-	4.48	-	-	-	0.48	3.37
Louisiana	-	-	2.64	-	-	-	-	2.64
Surface	-	-	2.64	-	-	-	-	2.64
Maryland	-	2.73	7.52	3.02	-	2.04	0.83	2.48
Underground	-	2.73	-	-	-	-	-	1.93
Surface	-	-	7.52	3.02	-	2.04	0.83	3.27
Mississippi	6.58	-	-	-	-	-	-	6.58
Surface	6.58	-	-	-	-	-	-	6.58
Missouri	-	-	-	6.37	-	-	-	6.37
Surface	-	-	-	6.37	-	-	-	6.37
Montana	12.47	-	12.66	-	-	-	-	12.38
Underground	10.92	-	-	-	-	-	-	10.92
Surface	13.03	-	12.66	-	-	-	-	12.89
New Mexico	6.09	-	-	-	-	-	-	6.09
Underground	2.74	-	-	-	-	-	-	2.74
Surface	7.33	-	-	-	-	-	-	7.33
North Dakota	11.33	-	6.30	-	-	-	-	11.15
Surface	11.33	-	6.30	-	-	-	-	11.17
Ohio	4.29	-	3.13	3.22	-	0.44	-	3.25
Underground	4.29	-	2.96	2.49	-	-	-	3.40
Surface	-	-	3.32	3.87	-	0.44	-	2.92
Oklahoma	-	-	-	-	-	-	0.3	0.3
Surface	-	-	-	-	-	-	0.3	0.3
Pennsylvania Total	5.96	4.21	2.86	2.81	1.90	1.89	0.98	4.00
Underground	5.96	4.02	3.00	2.86	1.52	1.00	0.66	4.89
Surface	-	5.12	2.45	2.77	2.09	1.99	1.07	1.67
Pennsylvania (Anthracite)	-	5.12	2.20	3.83	1.73	2.22	0.90	1.44
Underground	-	-	-	-	-	1.00	0.85	0.61
Surface	-	5.12	2.20	3.83	1.73	2.64	0.92	1.50
Pennsylvania (Bituminous)	5.96	4.02	2.96	2.54	2.03	1.67	1.03	4.56
Underground	5.96	4.02	3.00	2.86	1.52	-	0.37	4.96
Surface	-	-	2.73	2.22	2.77	1.67	1.14	1.94
Tennessee	-	-	-	-	1.56	-	14.29	1.13
Underground	-	-	-	-	1.56	-	-	1.11

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Total ²
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	10 or Under	
Surface	-	-	-	-	-	-	14.29	1.38
Texas	8.41	-	1.77	-	1.82	-	-	7.85
Surface	8.41	-	1.77	-	1.82	-	-	7.85
Utah	4.89	4.15	2.22	-	-	1.10	-	4.32
Underground	4.89	3.72	2.22	-	-	1.10	-	4.37
Surface	-	4.79	-	-	-	-	-	3.36
Virginia	3.33	2.25	2.32	1.88	1.38	1.24	0.86	2.25
Underground	3.33	-	1.95	1.47	1.12	1.20	0.68	2.40
Surface	-	2.25	2.63	2.46	2.13	1.26	1.12	1.91
West Virginia Total	4.70	1.95	2.13	2.09	1.92	1.18	0.40	2.72
Underground	4.88	1.79	1.88	1.39	1.70	0.96	0.45	2.79
Surface	3.25	2.80	3.00	3.46	2.11	1.43	0.38	2.42
West Virginia (Northern)	5.12	0.88	-	3.74	2.43	2.58	0.14	4.18
Underground	5.12	0.88	-	-	2.43	-	-	4.22
Surface	-	-	-	3.74	-	2.58	0.14	1.99
West Virginia (Southern)	3.05	2.27	2.13	1.98	1.89	1.12	0.41	1.90
Underground	2.82	2.13	1.88	1.39	1.61	0.96	0.45	1.68
Surface	3.25	2.80	3.00	3.39	2.11	1.33	0.40	2.44
Wyoming	23.29	-	-	-	-	-	-	23.29
Underground	7.70	-	-	-	-	-	-	7.70
Surface	23.83	-	-	-	-	-	-	23.83
Appalachia Total	4.34	2.10	2.33	2.30	1.88	1.51	0.75	2.74
Underground	4.39	1.88	2.06	1.76	1.58	1.05	0.65	2.91
Surface	3.25	2.99	2.99	2.89	2.15	1.72	0.78	2.17
Appalachia Central	3.19	2.33	2.15	2.02	1.92	1.36	0.61	1.94
Underground	3.17	2.13	1.90	1.43	1.57	1.06	0.65	1.77
Surface	3.25	2.84	2.94	2.99	2.37	1.59	0.59	2.29
Appalachia Northern	5.42	1.98	3.06	2.94	1.94	1.85	0.95	4.00
Underground	5.42	1.82	2.99	2.79	1.69	1.00	0.66	4.42
Surface	-	5.12	3.20	3.02	2.09	1.93	1.02	1.92
Appalachia Southern	2.27	0.86	2.91	1.75	1.32	1.77	0.59	1.96
Underground	2.27	0.86	-	1.79	-	-	-	1.96
Surface	-	-	2.91	1.71	1.32	1.77	0.59	1.99
Interior Region Total	6.40	3.06	3.61	4.92	2.40	4.05	0.21	5.72
Underground	6.11	2.07	3.43	3.42	-	-	-	5.46
Surface	6.96	4.15	3.66	5.35	2.40	4.05	0.21	6.18
Illinois Basin	5.96	3.06	4.70	4.69	3.66	4.05	0.59	5.35
Underground	6.11	2.07	3.43	3.42	-	-	-	5.46
Surface	5.20	4.15	5.65	5.13	3.66	4.05	0.59	4.95
Other Interior	8.14	-	2.29	6.37	1.82	-	0.3	7.20
Surface	8.14	-	2.29	6.37	1.82	-	0.3	7.20
Western Region Total	15.14	3.99	3.89	-	21.25	1.10	-	14.58
Underground	5.46	3.70	2.22	-	-	1.10	-	5.09
Surface	18.28	4.79	7.82	-	21.25	-	-	18.03
Powder River Basin	24.28	-	-	-	-	-	-	24.24
Surface	24.28	-	-	-	-	-	-	24.24
Uinta Basin	4.80	3.72	2.22	-	21.25	1.10	-	4.47
Underground	4.77	3.72	2.22	-	-	1.10	-	4.43
Surface	4.92	-	-	-	21.25	-	-	4.69
Other Western	8.39	4.15	7.82	-	-	-	-	8.20
Underground	7.34	3.68	-	-	-	-	-	6.92
Surface	8.68	4.79	7.82	-	-	-	-	8.57
East of Mississippi River	4.92	2.17	2.47	2.39	1.89	1.51	0.75	3.28
Underground	4.94	1.89	2.11	1.79	1.58	1.05	0.65	3.43
Surface	4.78	3.18	3.29	3.01	2.17	1.73	0.77	2.78
West of Mississippi River	14.45	3.99	2.96	6.37	3.43	1.10	0.3	13.71
Underground	5.46	3.70	2.22	-	-	1.10	-	5.09
Surface	16.98	4.79	3.27	6.37	3.43	-	0.3	16.37
U.S. Subtotal	8.96	2.25	2.51	2.41	1.92	1.51	0.72	6.12
Underground	5.02	1.97	2.11	1.79	1.58	1.05	0.65	3.60
Surface	15.11	3.27	3.28	3.05	2.22	1.73	0.73	10.24

Mine Production Range (thousand short tons)

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)						Total ²	
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50		10 or Under
Refuse Recovery	-	-	-	9.25	-	5.77	3.41	8.55
U.S. Total	8.96	2.25	2.51	2.48	1.92	1.52	0.73	6.12

- = No data reported.

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

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

Notes: 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.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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, 2020

(short tons produced per employee hour)

Coal-Producing State and Region ¹	Union		Nonunion	
	Underground	Surface	Underground	Surface
Alabama	1.99	-	1.20	2.06
Alaska	-	5.11	-	-
Colorado	5.18	5.65	4.19	4.44
Illinois	-	-	7.12	4.31
Indiana	-	-	4.08	5.17
Kentucky Total	-	-	3.17	2.40
Kentucky (East)	-	-	1.53	2.33
Kentucky (West)	-	-	4.38	3.81
Louisiana	-	-	-	2.64
Maryland	-	-	1.93	3.55
Mississippi	-	-	-	6.58
Missouri	-	-	-	6.37
Montana	-	9.84	10.92	19.98
New Mexico	2.74	6.12	-	9.06
North Dakota	-	11.45	-	11.11
Ohio	-	-	3.40	2.92
Pennsylvania Total	4.22	1.70	5.24	1.81
Pennsylvania (Anthracite)	-	1.70	0.52	1.47
Pennsylvania (Bituminous)	4.22	-	5.31	2.26
Tennessee	-	-	1.11	-
Texas	-	11.22	-	4.93
Utah	-	-	4.39	3.89
Virginia	-	-	2.58	2.00
West Virginia Total	4.54	6.63	2.22	2.43
West Virginia (Northern)	5.07	-	3.33	2.30
West Virginia (Southern)	0.70	9.03	1.76	2.44
Wyoming	7.70	4.61	-	25.83
Appalachian Total	3.37	2.29	2.74	2.27
Appalachia Central	0.57	8.56	1.86	2.34
Appalachia Northern	4.82	1.64	4.19	2.14
Appalachia Southern	1.99	-	1.20	2.06
Interior Region Total	-	11.22	5.46	4.98
Illinois Basin	-	-	5.46	4.98
Other Interior	-	11.22	-	4.98
Western Region Total	4.90	7.38	5.15	21.38
Powder River Basin	-	9.79	-	26.10
Uinta Basin	5.18	5.65	4.36	4.16
Other Western	4.77	6.48	9.24	10.17
East of Mississippi River	3.37	2.29	3.49	2.94
West of Mississippi River	4.90	8.31	5.15	19.33
U.S. Total	3.50	7.64	3.67	11.15

- = No data reported.

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

Notes: 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 25,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Sources: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' 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. Intentionally left blank

Table 26. U.S. Coal Consumption by End Use Sector, Census Division, and State, 2020 and 2019

(thousand short tons)

Census Division and State	2020				2019				Total		
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	2020	2019	Percent Change
	-	-	-	-	-	-	-	-	-	-	-
New England	119	13	-	-	276	21	-	-	133	297	-55.4
Connecticut	4	-	-	-	48	-	-	-	4	48	-92.3
Maine	58	13	-	-	69	18	-	-	71	88	-18.5
Massachusetts	-	-	-	-	-	3	-	-	-	3	-
New Hampshire	58	-	-	-	159	-	-	-	58	159	-63.9
Rhode Island	s	-	-	-	s	-	-	-	s	s	-
Middle Atlantic	14,158	648	3,667	9	20,197	845	5,505	12	18,482	26,559	-30.4
New Jersey	473	-	-	-	530	-	-	-	473	530	-10.8
New York	64	158	-	-	187	349	-	-	222	536	-58.6
Pennsylvania	13,622	490	3,667	9	19,480	496	5,505	12	17,788	25,494	-30.2
East North Central	89,752	5,177	8,441	130	115,719	6,084	9,772	169	103,502	131,744	-21.4
Illinois	17,800	2,482	926	81	29,152	2,488	993	87	21,288	32,721	-34.9
Indiana	24,034	1,422	3,698	35	30,999	1,792	3,867	61	29,188	36,719	-20.5
Michigan	15,919	293	933	-	21,278	553	1,365	-	17,145	23,196	-26.1
Ohio	18,761	393	2,884	-	19,595	439	3,548	-	22,039	23,583	-6.6
Wisconsin	13,239	588	-	15	14,694	812	-	20	13,842	15,526	-10.9
West North Central	91,594	10,713	-	116	103,859	11,258	-	165	102,423	115,282	-11.2
Iowa	8,199	2,121	-	76	12,787	2,326	-	99	10,397	15,212	-31.7
Kansas	11,263	56	-	-	11,535	80	-	-	11,319	11,615	-2.6
Minnesota	8,467	734	-	4	10,604	995	-	5	9,205	11,604	-20.7
Missouri	30,468	809	-	6	32,764	822	-	9	31,283	33,595	-6.9
Nebraska	11,587	870	-	-	13,149	1,007	-	-	12,457	14,156	-12.0
North Dakota	20,480	5,930	-	30	21,329	5,810	-	53	26,440	27,192	-2.8
South Dakota	1,130	193	-	-	1,690	218	-	-	1,322	1,908	-30.7
South Atlantic	53,094	2,048	1,535	58	70,542	2,515	1,711	80	56,735	74,848	-24.2
Delaware	76	-	-	-	85	-	-	-	76	85	-11.3
District of Columbia	-	-	-	s	-	-	-	s	s	s	-100.0
Florida	7,496	219	-	-	9,533	417	-	-	7,716	9,950	-22.5
Georgia	7,340	275	-	-	13,552	312	-	-	7,616	13,863	-45.1
Maryland	1,646	393	-	-	2,676	471	-	-	2,039	3,147	-35.2
North Carolina	8,575	347	-	48	12,352	361	-	58	8,971	12,771	-29.8
South Carolina	5,555	136	-	-	6,474	161	-	-	5,691	6,635	-14.2
Virginia	1,814	356	896	10	1,973	457	1,038	22	3,077	3,489	-11.8
West Virginia	20,590	321	639	-	23,897	337	673	-	21,550	24,907	-13.5
East South Central	43,561	2,333	770	3	52,607	2,741	978	6	46,667	56,332	-17.2
Alabama	11,896	555	770	-	14,245	803	978	-	13,220	16,026	-17.5
Kentucky	20,809	591	-	3	25,168	689	-	6	21,402	25,862	-17.3
Mississippi	3,989	76	-	-	3,833	19	-	-	4,064	3,852	5.5
Tennessee	6,869	1,112	-	-	9,362	1,230	-	-	7,981	10,592	-24.7
West South Central	71,983	821	-	-	87,566	1,122	-	-	72,804	88,688	-17.9
Arkansas	9,201	149	-	-	13,763	172	-	-	9,350	13,935	-32.9
Louisiana	2,743	219	-	-	5,287	205	-	-	2,962	5,492	-46.1
Oklahoma	3,970	157	-	-	5,206	241	-	-	4,127	5,446	-24.2
Texas	56,069	296	-	-	63,311	503	-	-	56,365	63,814	-11.7
Mountain	65,656	2,576	-	4	80,074	3,054	-	8	68,236	83,136	-17.9
Arizona	8,274	277	-	-	12,875	282	-	-	8,551	13,157	-35.0
Colorado	11,477	159	-	1	14,515	187	-	s	11,637	14,703	-20.9
Idaho	-	108	-	-	-	101	-	-	108	101	7.0
Montana	5,624	201	-	1	9,275	197	-	2	5,826	9,474	-38.5
Nevada	1,105	249	-	-	1,551	286	-	-	1,354	1,837	-26.3
New Mexico	7,443	64	-	-	8,148	60	-	-	7,506	8,208	-8.6
Utah	10,866	306	-	-	11,891	382	-	-	11,173	12,272	-9.0
Wyoming	20,866	1,211	-	2	21,818	1,559	-	6	22,080	23,384	-5.6
Pacific	5,909	1,330	-	473	7,766	1,455	-	435	7,711	9,656	-20.1

Census Division and State	2020				2019				Total		Percent Change
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	2020	2019	
Alaska	777	1	-	473	745	1	-	435	1,251	1,182	5.9
California	s	1,211	-	-	s	1,323	-	-	1,211	1,323	-8.4
Hawaii	670	-	-	-	717	-	-	-	670	717	-6.6
Oregon	985	35	-	-	1,499	52	-	-	1,020	1,551	-34.2
Washington	3,476	82	-	-	4,804	79	-	-	3,558	4,883	-27.1
U.S. Total	435,827	25,660	14,414	793	538,606	29,095	17,967	876	476,693	586,543	-18.7

- = No data reported.

NM = Not Meaningful.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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).

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

Sources: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data,' and Form EIA-7A, 'Annual Survey of Coal Production and Preparation.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 27. Year-End Coal Stocks by Sector, Census Division, and State, 2020 and 2019

(thousand short tons)

Census Division and State	2020					2019					Total		
	Electric Power ¹	Other Industrial	Commercial and Institutional	Producer and Distributor		Electric Power ¹	Other Industrial	Commercial and Institutional	Producer and Distributor		2020	2019	Percent Change
	-	-	-	-	332	-	-	-	-	319	332	319	4.1
New England	491	s	-	-	-	465	1	-	-	-	491	466	5.4
Connecticut	w	-	-	-	-	w	-	-	-	-	w	w	-2.3
Maine	s	s	-	-	-	s	1	-	-	-	s	1	-100.0
Massachusetts	-	-	-	-	-	-	s	-	-	-	-	s	-
New Hampshire	w	-	-	-	-	w	-	-	-	-	w	w	9.8
Rhode Island	s	-	-	-	-	s	-	-	-	-	s	s	-
Middle Atlantic	4,036	212	364	28	739	4,857	234	446	37	820	5,379	6,394	-15.9
New Jersey	w	-	-	-	-	w	-	-	-	-	w	w	22.7
New York	s	63	-	-	-	w	78	-	-	-	63	w	w
Pennsylvania	w	149	364	28	739	4,672	156	446	37	820	w	6,132	w
East North Central	31,919	619	929	22	3,756	28,377	839	1,371	21	4,604	37,244	35,212	5.8
Illinois	6,220	122	126	20	2,534	4,385	119	174	17	1,935	9,022	6,629	36.1
Indiana	10,635	211	231	2	776	8,900	312	279	1	1,877	11,854	11,370	4.3
Michigan	4,930	140	278	-	73	4,998	233	522	-	71	5,422	5,824	-6.9
Ohio	6,585	29	293	-	66	6,697	25	396	-	342	6,973	7,461	-6.5
Wisconsin	3,549	117	-	-	307	3,397	149	-	3	379	3,973	3,928	1.2
West North Central	26,370	499	-	39	1,737	22,810	522	-	36	2,181	28,645	25,549	12.1
Iowa	7,523	163	-	22	48	4,659	163	-	17	41	7,756	4,881	58.9
Kansas	3,340	8	-	-	-	3,227	19	-	-	-	3,348	3,246	3.2
Minnesota	3,149	38	-	9	23	3,743	35	-	7	44	3,218	3,830	-16.0
Missouri	7,399	45	-	1	-	7,070	66	-	1	-	7,445	7,137	4.3
Nebraska	3,114	35	-	-	-	2,597	44	-	-	-	3,150	2,641	19.3
North Dakota	w	171	-	7	1,667	w	155	-	11	2,096	w	w	0.1
South Dakota	w	39	-	-	-	w	40	-	-	-	w	w	-22.9
South Atlantic	20,491	355	167	42	5,489	23,244	463	229	46	8,873	26,545	32,855	-19.2
Delaware	w	-	-	-	-	w	-	-	-	-	w	w	-48.4
District of Columbia	-	-	-	3	-	-	-	-	3	-	3	3	s
Florida	2,049	56	-	-	-	2,737	97	-	-	-	2,105	2,834	-25.7
Georgia	4,839	44	-	-	-	5,045	103	-	-	-	4,883	5,148	-5.2
Maryland	1,427	6	-	-	293	1,723	9	-	-	779	1,726	2,511	-31.3
North Carolina	3,527	65	-	28	-	3,776	53	-	33	-	3,620	3,862	-6.3
South Carolina	1,438	45	-	-	-	2,398	55	-	-	-	1,484	2,452	-39.5
Virginia	w	53	46	12	1,069	w	60	75	10	2,724	w	w	-56.2
West Virginia	6,579	85	122	-	4,127	6,321	86	154	-	5,370	10,913	11,931	-8.5
East South Central	11,367	237	194	7	1,943	12,837	201	286	7	2,528	13,747	15,858	-13.3
Alabama	2,993	77	194	-	913	w	70	286	-	722	4,177	w	w
Kentucky	5,600	66	-	7	370	6,582	33	-	7	1,169	6,043	7,790	-22.4
Mississippi	w	8	-	-	661	w	4	-	-	613	w	w	-27.5
Tennessee	w	85	-	-	-	2,868	94	-	-	24	w	2,986	w
West South Central	20,032	280	-	-	1,786	18,248	324	-	-	2,603	22,098	21,175	4.4
Arkansas	3,911	33	-	-	-	3,611	30	-	-	-	3,944	3,641	8.3
Louisiana	3,810	3	-	-	780	2,588	6	-	-	818	4,593	3,412	34.6
Oklahoma	2,662	79	-	-	13	2,578	108	-	-	16	2,754	2,701	2.0
Texas	9,648	165	-	-	993	9,471	180	-	-	1,770	10,806	11,421	-5.4
Mountain	18,053	530	-	4	7,895	16,493	539	-	3	9,494	26,482	26,529	-0.2
Arizona	3,456	24	-	-	-	3,325	32	-	-	-	3,479	3,357	3.6
Colorado	3,662	15	-	s	1,021	3,581	28	-	1	1,435	4,699	5,044	-6.9
Idaho	-	201	-	-	-	-	223	-	-	-	201	223	-9.7
Montana	w	73	-	3	716	w	51	-	2	838	w	w	-6.5
Nevada	w	54	-	-	-	w	34	-	-	-	w	w	0.2
New Mexico	w	3	-	-	2,816	w	4	-	-	3,917	w	w	-28.0
Utah	4,475	28	-	-	1,881	2,866	57	-	-	1,896	6,384	4,819	32.5
Wyoming	w	133	-	s	1,461	4,644	110	-	s	1,408	w	6,162	w
Pacific	989	116	-	109	294	1,195	136	-	97	217	1,508	1,645	-8.3

Census Division and State	2020					2019					Total		
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Producer and Distributor	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Producer and Distributor	2020	2019	Percent Change
Alaska	w	-	-	109	194	w	-	-	97	217	w	w	4.1
California	s	110	-	-	100	s	122	-	-	-	209	122	71.2
Hawaii	w	-	-	-	-	w	-	-	-	-	w	w	81.8
Oregon	s	2	-	-	-	w	6	-	-	-	2	w	w
Washington	w	4	-	-	-	w	7	-	-	-	w	w	19.6
U.S. Total	133,748	2,848	1,654	250	23,640	128,526	3,258	2,333	246	31,320	162,139	165,683	-2.1

- = No data reported.

w = Data withheld to avoid disclosure.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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). Coal stocks include waste coal.

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

Sources: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data,' Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and Form EIA-8A, 'Annual Survey of Coal Stocks and Coal Exports.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Average Mine Sales Price

Table 28. Average Sales Price of Coal by State and Mine Type, 2020 and 2019

(dollars per short ton)

Coal-Producing State	2020			2019			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	100.76	80.48	98.01	146.47	81.27	137.26	-31.2	-1.0	-28.6
Alaska	-	w	w	-	w	w	-	w	w
Arizona	-	-	-	-	w	w	-	w	w
Colorado	w	w	41.45	w	w	44.21	w	w	-6.2
Illinois	22.81	39.15	23.86	36.38	42.22	36.84	-37.3	-7.3	-35.2
Indiana	40.04	40.87	40.49	39.03	42.79	40.80	2.6	-4.5	-0.8
Kentucky Total	47.53	56.25	49.04	50.26	58.36	51.89	-5.4	-3.6	-5.5
Kentucky (East)	w	w	64.06	w	w	67.09	w	w	-4.5
Kentucky (West)	w	w	41.70	w	w	42.57	w	w	-2.0
Louisiana	-	w	w	-	w	w	-	w	w
Maryland	w	w	62.40	w	w	77.28	w	w	-19.3
Mississippi	-	w	w	-	w	w	-	w	w
Missouri	-	w	w	-	w	w	-	w	w
Montana	w	w	20.27	w	w	21.66	w	w	-6.4
New Mexico	w	w	40.62	w	w	39.71	w	w	2.3
North Dakota	-	19.48	19.48	-	18.93	18.93	-	2.9	2.9
Ohio	40.11	34.13	38.49	40.66	36.62	39.88	-1.4	-6.8	-3.5
Oklahoma	-	-	-	-	w	w	-	w	w
Pennsylvania Total	49.06	76.61	52.11	54.36	81.28	57.11	-9.8	-5.8	-8.8
Pennsylvania (Anthracite)	w	w	90.68	w	w	102.22	w	w	-11.3
Pennsylvania (Bituminous)	w	w	49.35	w	w	54.88	w	w	-10.1
Tennessee	w	-	w	w	w	66.42	w	w	w
Texas	-	17.98	17.98	-	16.90	16.90	-	6.4	6.4
Utah	w	w	37.22	w	w	37.95	w	w	-1.9
Virginia	71.86	75.44	72.76	97.66	99.12	98.06	-26.4	-23.9	-25.8
West Virginia Total	59.64	66.48	60.80	72.48	73.39	72.70	-17.7	-9.4	-16.4
West Virginia (Northern)	w	w	48.19	w	w	55.03	w	w	-12.4
West Virginia (Southern)	w	w	76.43	w	w	91.13	w	w	-16.1
Wyoming	w	w	13.04	w	w	12.63	w	w	3.3
U.S. Total	49.80	20.67	31.41	58.68	22.47	36.07	-15.1	-8.0	-12.9

- = No data reported.

w = Data withheld to avoid disclosure.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 29. Average Sales Price of Coal by State and Underground Mining Method, 2020

(dollars per short ton)

Coal-Producing State	Continuous	Conventional and Other ¹	Longwall	Total
Alabama	100.14	-	100.91	100.76
Colorado	w	-	w	w
Illinois	w	w	18.74	22.81
Indiana	40.04	-	-	40.04
Kentucky Total	w	w	-	47.53
Kentucky (East)	w	w	-	w
Kentucky (West)	w	-	-	w
Maryland	w	-	-	w
Montana	w	-	w	w
New Mexico	w	-	w	w
Ohio	w	-	w	40.11
Pennsylvania Total	w	w	41.07	49.06
Pennsylvania (Anthracite)	w	w	-	w
Pennsylvania (Bituminous)	w	-	41.07	w
Tennessee	w	-	-	w
Utah	w	-	w	w
Virginia	w	-	w	71.86
West Virginia Total	77.54	-	46.67	59.64
West Virginia (Northern)	w	-	w	w
West Virginia (Southern)	w	-	w	w
Wyoming	w	-	w	w
U.S. Total	w	w	45.05	49.80

- = No data reported.

w = Data withheld to avoid disclosure.

¹ Mines that produce coal using shortwall, scoop loading, hand loading, or other methods.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 29.1. Average Sales Price of Coal by State and Surface Mining Method, 2020

(dollars per short ton)

Coal-Producing State	Contour Strip	Area	Open Pit	Mountaintop Mining	Other ¹	Total
Alabama	w	-	w	-	82.75	80.48
Alaska	w	-	w	-	-	w
Colorado	w	-	w	-	w	w
Illinois	-	w	-	-	w	39.15
Indiana	-	41.86	40.38	-	42.94	40.87
Kentucky Total	62.74	w	w	w	59.16	56.25
Kentucky (East)	62.74	w	-	w	w	w
Kentucky (West)	-	-	w	-	w	w
Louisiana	-	w	-	-	-	w
Maryland	w	w	-	-	-	w
Mississippi	w	-	-	-	-	w
Missouri	w	-	-	-	-	w
Montana	w	w	w	-	-	w
New Mexico	w	-	w	-	-	w
North Dakota	w	-	w	-	-	19.48
Ohio	w	w	-	-	w	34.13
Oklahoma	-	-	-	-	-	-
Pennsylvania Total	77.70	-	74.91	-	96.90	76.61
Pennsylvania (Anthracite)	w	-	85.72	-	w	w
Pennsylvania (Bituminous)	w	-	61.26	-	w	w
Tennessee	-	-	-	-	-	-
Texas	w	w	w	-	-	17.98
Utah	-	-	w	-	w	w
Virginia	w	w	-	-	77.71	75.44
West Virginia Total	w	65.71	-	w	74.10	66.48
West Virginia (Northern)	w	-	-	-	w	w
West Virginia (Southern)	w	65.71	-	w	w	w
Wyoming	w	w	11.89	-	-	w
U.S. Total	19.64	34.54	17.08	53.67	63.13	20.67

- = No data reported.

w = Data withheld to avoid disclosure.

¹ Mines that: 1. produce coal using auger, highwall mine, or punch.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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. Mines reporting multiple mining methods are assigned to the mining method with the greatest percentage of production reported.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 30. Average Sales Price of Coal by State, County, and Number of Mines, 2020

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Alabama	18	12,596	98.01
Jefferson	8	8,675	96.57
Tuscaloosa	4	w	w
Walker	6	1,643	98.11
Alaska	1	w	w
Denali	1	w	w
Colorado	7	10,390	41.45
Gunnison	1	w	w
La Plata	1	w	w
Moffat	3	w	w
Rio Blanco	1	w	w
Routt	1	w	w
Illinois	14	30,889	23.86
Franklin	1	w	w
Hamilton	1	w	w
Macoupin	1	w	w
Montgomery	1	w	w
Perry	2	w	w
Randolph	2	w	w
Saline	2	w	w
Sangamon	1	w	w
Wabash	1	w	w
Washington	1	w	w
Williamson	1	w	w
Indiana	16	20,872	40.49
Clay	1	w	w
Daviess	2	w	w
Dubois	1	w	w
Gibson	4	4,775	38.54
Knox	2	w	w
Pike	1	w	w
Sullivan	2	w	w
Warrick	3	w	w
Kentucky	67	24,798	49.04
Bell	7	481	75.51
Daviess	1	w	w
Floyd	4	433	77.69
Harlan	9	1,216	64.08
Hopkins	1	w	w
Johnson	3	w	w
Knott	4	638	51.72
Knox	4	132	126.57
Leslie	4	779	62.02
Letcher	1	w	w
Martin	2	w	w
McClean	1	w	w
Muhlenberg	1	w	w
Ohio	1	w	w
Perry	5	1,721	59.35
Pike	17	1,969	68.75
Union	1	w	w
Whitley	1	w	w
Louisiana	2	w	w
De Soto	1	w	w
Natchitoches	1	w	w
Maryland	6	1,115	62.40
Allegany	5	582	41.68
Garrett	1	w	w

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Mississippi	1	w	w
Choctaw	1	w	w
Missouri	1	w	w
Bates	1	w	w
Montana	6	26,381	20.27
Big Horn	3	w	w
Musselshell	1	w	w
Richland	1	w	w
Rosebud	1	w	w
New Mexico	3	w	w
Mckinley	1	w	w
San Juan	2	w	w
North Dakota	5	26,407	19.48
Mclean	1	w	w
Mercer	3	w	w
Oliver	1	w	w
Ohio	10	3,859	38.49
Belmont	1	w	w
Harrison	4	1,010	40.93
Monroe	1	w	w
Noble	1	w	w
Perry	1	w	w
Tuscarawas	2	w	w
Pennsylvania	68	36,122	52.11
Armstrong	3	w	w
Bedford	1	w	w
Cambria	6	904	82.25
Carbon	1	w	w
Clarion	1	w	w
Clearfield	6	785	73.75
Columbia	1	w	w
Dauphin	1	w	w
Greene	4	21,005	41.00
Indiana	7	2,000	87.11
Jefferson	1	w	w
Luzerne	2	w	w
Lycoming	1	w	w
Northumberland	6	270	55.00
Schuylkill	15	1,292	110.85
Somerset	9	1,775	76.20
Washington	1	w	w
Westmoreland	2	w	w
Tennessee	1	w	w
Claiborne	1	w	w
Texas	7	20,324	17.98
Atascosa	1	w	w
Harrison	2	w	w
Limestone	1	w	w
Maverick	1	w	w
Robertson	1	w	w
Rusk	1	w	w
Utah	6	13,202	37.22
Carbon	2	w	w
Emery	2	w	w
Kane	1	w	w
Sevier	1	w	w
Virginia	22	9,878	72.76
Buchanan	10	5,407	69.98
Dickenson	4	3,520	76.53
Russell	1	w	w
Tazewell	2	w	w
Wise	5	818	74.90

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
West Virginia	103	67,518	60.80
Barbour	1	w	w
Boone	10	2,870	78.17
Fayette	2	w	w
Greenbrier	3	w	w
Kanawha	5	3,568	60.21
Logan	19	7,154	73.81
Marion	2	w	w
Marshall	2	w	w
Mcdowell	19	2,487	70.86
Mercer	1	w	w
Mingo	8	1,222	57.79
Nicholas	2	w	w
Ohio	1	w	w
Raleigh	11	6,068	87.63
Randolph	2	w	w
Taylor	1	w	w
Tucker	1	w	w
Webster	1	w	w
Wetzel	1	w	w
Wyoming	11	4,025	83.83
Wyoming	16	218,632	13.04
Campbell	11	190,249	11.41
Converse	1	w	w
Lincoln	1	w	w
Sweetwater	3	w	w
U.S. Total	380	538,847	31.41

- = No data reported.

w = Data withheld to avoid disclosure.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 31. Average Sales Price of Coal by State and Coal Rank, 2020

(dollars per short ton)

Coal-Producing State	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama	98.01	-	-	-	98.01
Alaska	-	w	-	-	w
Colorado	w	w	-	-	41.45
Illinois	23.86	-	-	-	23.86
Indiana	40.49	-	-	-	40.49
Kentucky Total	49.04	-	-	-	49.04
Kentucky (East)	64.06	-	-	-	64.06
Kentucky (West)	41.70	-	-	-	41.70
Louisiana	-	-	w	-	w
Maryland	62.40	-	-	-	62.40
Mississippi	-	-	w	-	w
Missouri	w	-	-	-	w
Montana	w	17.82	w	-	20.27
New Mexico	w	w	-	-	40.62
North Dakota	-	-	19.48	-	19.48
Ohio	38.49	-	-	-	38.49
Pennsylvania Total	49.35	-	-	90.68	52.11
Pennsylvania (Anthracite)	-	-	-	90.68	90.68
Pennsylvania (Bituminous)	49.35	-	-	-	49.35
Tennessee	w	-	-	-	w
Texas	w	-	w	-	17.98
Utah	37.22	-	-	-	37.22
Virginia	72.76	-	-	-	72.76
West Virginia Total	60.80	-	-	-	60.80
West Virginia (Northern)	48.19	-	-	-	48.19
West Virginia (Southern)	76.43	-	-	-	76.43
Wyoming	w	w	-	-	13.04
U.S. Total	50.05	14.43	22.16	90.68	31.41

- = No data reported.

w = Data withheld to avoid disclosure.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 32. Average Sales Price of Coal by Mine Production Range and Mine Type, 2020

(dollars per short ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	43.76	16.49	25.88
Over 500 to 1,000	79.07	56.71	72.00
Over 200 to 500	75.91	72.11	74.24
Over 100 to 200	78.76	66.48	71.33
Over 50 to 100	73.49	66.15	68.79
50 or Under	91.98	62.68	69.26
U.S. Total	49.80	20.67	31.41

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 33. Average Sales Price of U.S. Coal by State and Disposition, 2020

(dollars per short ton)

Coal-Producing State	Open Market ¹	Captive ²	Total ³
Alabama	w	w	98.01
Alaska	w	-	w
Colorado	39.00	42.84	41.45
Illinois	w	w	23.86
Indiana	40.57	40.71	40.49
Kentucky Total	47.95	225.00	49.04
Kentucky (East)	w	w	64.06
Kentucky (West)	41.71	-	41.70
Louisiana	w	-	w
Maryland	59.36	-	62.40
Mississippi	w	-	w
Missouri	w	-	w
Montana	w	w	20.27
New Mexico	w	w	w
North Dakota	19.48	-	19.48
Ohio	w	w	38.49
Pennsylvania Total	w	w	52.11
Pennsylvania (Anthracite)	w	w	90.68
Pennsylvania (Bituminous)	w	w	49.35
Tennessee	w	-	w
Texas	w	w	17.98
Utah	39.35	-	37.22
Virginia	85.59	-	72.76
West Virginia Total	58.26	40.54	60.80
West Virginia (Northern)	w	w	48.19
West Virginia (Southern)	w	w	76.43
Wyoming	12.94	13.19	13.04
U.S. Total	31.44	19.10	31.41

- = No data reported.

w = Data withheld to avoid disclosure.

1 Open market includes coal sold on the open market to other coal companies or consumers; excludes exports.

2 Captive includes all coal used by the producing company or sold to affiliated or parent companies; excludes exports.

3 Total includes price of coal sold on the open market, captive market and exported by coal mines. Excludes price of coal exported by coal brokers, coal traders and coal terminals.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 33.1 Average Sales Price of U.S. Coal by Use and Disposition, 2014-2020

(dollars per short ton)

Year	Open Market Sales ¹		Captive Sales / Transactions ²		Exports ³		Total	
	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical	Metallurgical	Non-Metallurgical
2014	77.45	32.26	79.51	21.83	105.41	50.85	92.69	30.17
2015	69.38	30.40	101.21	22.15	93.45	44.76	83.54	28.50
2016	65.03	29.37	71.52	22.14	92.76	35.99	82.11	27.36
2017	88.92	28.21	86.00	19.91	160.34	40.02	133.23	26.53
2018	97.78	27.87	104.63	20.19	171.65	43.51	144.34	27.02
2019	105.58	28.83	118.34	21.17	157.88	43.37	139.78	27.54
2020	91.93	27.68	71.07	18.83	119.21	28.43	110.64	24.93

1 Open market includes coal sold on the open market to other coal companies or consumers; excludes exports.

2 Captive includes all coal used by the producing company or sold to affiliated or parent companies; excludes exports.

3 Excludes price of coal exported by coal brokers, coal traders and coal terminals.

Notes: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 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: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Average Consumer Prices

Table 34. Average Price of Coal Delivered to End Use Sector by Census Division and State, 2020 and 2019

(dollars per short ton)

Census Division and State	2020				2019				Annual Percent Change			
	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke
New England	w	w	-	-	w	w	-	-	-13.38	-5.19	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Maine	w	w	-	-	w	w	-	-	-22.38	-9.03	-	-
Massachusetts	-	-	-	-	-	w	-	-	-	w	-	-
New Hampshire	80.98	-	-	-	77.89	-	-	-	3.97	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
Middle Atlantic	33.49	86.65	w	129.33	w	85.97	w	112.96	w	0.79	-14.08	14.49
New Jersey	w	-	-	-	w	-	-	-	4.93	-	-	-
New York	-	w	-	-	w	w	-	-	w	7.69	-	-
Pennsylvania	w	84.55	w	129.33	w	85.23	w	112.96	-21.62	-0.80	-14.08	14.49
East North Central	38.70	69.99	136.37	65.44	40.24	77.98	156.47	69.11	-3.83	-10.25	-12.85	-5.31
Illinois	w	w	w	53.47	w	w	w	53.70	-9.73	-4.44	-20.97	s
Indiana	w	102.18	w	w	w	107.49	w	w	-1.45	-4.94	-17.14	-2.99
Michigan	w	91.78	w	-	w	97.61	w	-	-1.67	-5.97	-10.76	-
Ohio	w	103.27	135.47	-	w	100.50	144.56	-	-1.08	2.76	-6.29	-
Wisconsin	35.31	80.66	-	159.13	39.98	84.36	-	157.23	-11.68	-4.39	-	1.21
West North Central	25.67	27.69	-	82.38	26.89	28.84	-	81.03	-4.54	-3.99	-	1.67
Iowa	26.49	34.98	-	w	27.08	35.74	-	w	-2.18	-2.13	-	-1.31
Kansas	26.52	w	-	-	27.61	w	-	-	-3.95	3.19	-	-
Minnesota	34.49	49.14	-	w	35.76	48.90	-	w	-3.55	s	-	1.34
Missouri	27.55	50.13	-	w	29.53	53.60	-	w	-6.71	-6.47	-	-1.01
Nebraska	21.18	24.28	-	-	20.97	w	-	-	1.00	w	-	-
North Dakota	21.06	w	-	w	21.20	w	-	w	-0.66	s	-	-2.15
South Dakota	30.90	w	-	-	29.42	w	-	-	5.03	-4.20	-	-
South Atlantic	56.94	94.21	w	w	60.59	101.78	w	w	-6.02	-7.44	-13.61	-11.05
Delaware	-	-	-	-	w	-	-	-	w	-	-	-
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-
Florida	58.80	103.02	-	-	67.06	113.72	-	-	-12.32	-9.41	-	-
Georgia	53.72	91.60	-	-	52.97	106.43	-	-	1.42	-13.93	-	-
Maryland	w	w	-	-	w	w	-	-	-1.32	s	-	-
North Carolina	w	96.50	-	w	w	105.01	-	w	-8.69	-8.10	-	-12.82
South Carolina	w	101.06	-	-	w	102.25	-	-	-2.12	-1.16	-	-
Virginia	52.94	91.37	w	131.99	w	99.15	w	138.52	w	-7.85	-12.86	-4.71
West Virginia	w	w	w	-	51.79	141.76	w	-	w	w	-14.73	-
East South Central	w	99.20	w	w	w	96.16	w	w	-5.38	3.16	-13.10	-
Alabama	39.06	92.81	w	-	43.27	94.64	w	-	-9.73	-1.93	-13.10	-
Kentucky	41.78	105.38	-	w	42.17	103.17	-	w	-0.92	2.14	-	-
Mississippi	w	w	-	-	w	w	-	-	-7.59	6.15	-	-
Tennessee	42.77	90.63	-	-	48.32	91.56	-	-	-11.49	-1.02	-	-
West South Central	29.73	81.72	-	-	29.59	78.70	-	-	s	3.84	-	-
Arkansas	w	w	-	-	w	w	-	-	-3.05	-1.71	-	-
Louisiana	w	w	-	-	w	w	-	-	36.52	-8.04	-	-
Oklahoma	27.49	115.78	-	-	29.73	79.91	-	-	-7.53	44.89	-	-
Texas	w	86.95	-	-	w	84.92	-	-	s	2.39	-	-
Mountain	35.94	60.50	-	w	36.32	59.59	-	w	-1.05	1.53	-	13.55
Arizona	38.82	w	-	-	48.95	w	-	-	-20.69	2.15	-	-
Colorado	31.73	w	-	w	32.38	w	-	-	-2.01	8.57	-	w
Idaho	-	w	-	-	-	w	-	-	-	22.63	-	-
Montana	w	43.06	-	w	w	50.96	-	w	13.76	-15.50	-	0.60
Nevada	w	75.60	-	-	w	77.91	-	-	-10.62	-2.96	-	-
New Mexico	47.52	w	-	-	45.84	w	-	-	3.66	-2.87	-	-
Utah	44.99	53.73	-	-	43.19	57.77	-	-	4.17	-6.99	-	-
Wyoming	w	48.18	-	w	w	47.78	-	w	4.73	0.84	-	5.03
Pacific	43.94	82.09	-	w	41.75	79.97	-	w	5.25	2.65	-	0.74
Alaska	49.26	-	-	w	50.48	-	-	w	-2.42	-	-	0.74

Census Division and State	2020				2019				Annual Percent Change			
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional
California	-	81.96	-	-	-	79.64	-	-	-	2.91	-	-
Hawaii	w	-	-	-	w	-	-	-	4.65	-	-	-
Oregon	37.61	w	-	-	39.57	w	-	-	-4.95	-5.72	-	-
Washington	w	w	-	-	w	w	-	-	-0.5	4.27	-	-
U.S. Total	36.14	57.18	127.16	84.52	38.53	61.37	145.85	86.34	-6.20	-6.83	-12.81	-2.11

- = No data reported.

w = Data withheld to avoid disclosure.

s = Value is less than 0.5 of the table metric, but value is included in any associated total.

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).

Sources: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' and Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Imports and Exports

Table 35. Coal Imports by Country of Origin, 2000-2020

(Short Tons)

Year	Europe																	Total	South Africa	Other	Total
	Australia	New Zealand	Canada	Mexico	Colombia	Venezuela	China	India	Indonesia	Norway	Poland	Russia	Ukraine	United Kingdom	Other						
2000	167,595	-	1,923,434	6,671	7,636,614	2,038,774	19,646	205	718,149	-	-	1,212	-	238	-	1,450	-	85	12,512,623		
2001	315,870	24,178	2,571,415	8,325	11,176,191	3,335,258	109,877	1,169	882,455	15,933	514,166	219,077	-	75,704	12	824,892	440,408	97,273	19,787,299		
2002	821,280	-	2,110,688	41,832	9,205,161	3,349,883	62,185	2,055	962,474	-	121,660	87,586	-	277	121	209,644	77,314	33,034	16,875,429		
2003	330,337	53,484	2,099,087	-	15,479,019	4,624,916	149,904	2,000	2,104,731	-	-	68,560	-	717	152	69,429	78,264	52,951	25,043,970		
2004	295,526	-	2,877,616	309	16,661,238	4,435,630	147,136	443	2,180,899	-	74,609	263,776	104,861	44,285	147,172	634,703	33,795	159,881	27,280,004		
2005	230,997	42,136	2,017,435	1,343	21,215,089	3,734,056	20,094	-	2,467,977	-	76,937	393,592	34,728	839	51,994	558,090	77,044	148,082	30,460,349		
2006	245,184	-	2,048,224	-	25,340,602	4,197,636	43,491	-	3,146,627	36,806	-	940,685	-	1,069	159,874	1,138,434	61,649	184,003	36,245,976		
2007	65,726	51,070	1,967,271	-	26,863,901	3,425,108	50,257	214	3,663,107	35,557	-	134,591	37,527	1,870	32	209,577	-	50,648	36,346,847		
2008	149,344	-	2,027,148	-	26,261,802	2,311,865	45,113	-	3,373,574	-	-	71	37,354	-	1,086	38,511	45	1,363	34,207,679		
2009	151,738	-	1,287,626	6	17,787,441	1,297,214	9,364	805	2,084,271	-	-	-	19,878	33	11	19,922	-	139	22,638,515		
2010	380,404	450	1,766,896	-	14,583,950	581,700	52,869	2,002	1,904,040	-	-	-	41,370	3,647	4	45,021	-	35,359	19,352,687		
2011	61,745	-	1,680,490	427	9,500,387	778,887	22,128	3,759	856,038	-	331	177	124,775	-	1,969	127,252	33	58,429	13,087,606		
2012	-	220	1,107,727	43	6,951,515	287,147	77,738	14,650	517,532	-	-	14,330	187,837	10	3	202,180	-	508	9,159,257		
2013	22	-	1,116,076	-	6,575,927	42,428	51,944	1,356	886,920	-	-	36,395	181,116	115	1,595	219,221	-	14,126	8,906,425		
2014	532	-	1,026,523	17	8,295,286	288,738	39,776	1,536	1,526,611	-	-	42,439	103,167	164	-	145,770	23	25,114	11,349,926		
2015	60,994	-	1,187,655	83	8,936,034	74,175	16,099	406	890,124	-	-	-	58,802	570	93	59,465	50,773	42,296	11,318,011		
2016	121,967	-	1,078,480	978	7,890,800	-	6,955	-	613,944	-	-	64,774	-	341	657	65,772	28,488	39,631	9,846,358		
2017	700	-	891,734	92	6,112,092	46	6,474	444	699,453	-	-	34,449	-	59	12,703	47,211	37,829	19,280	7,802,652		
2018	-	-	770,364	625	4,060,581	-	28,624	-	915,188	-	-	78,908	27,377	575	2,285	109,145	47,404	24,509	5,954,155		
2019	-	-	817,190	1,092	5,033,032	-	54,715	-	655,398	-	-	68,729	-	210	40,886	109,825	24,251	42,520	6,697,137		
2020	-	-	448,719	52	3,655,196	-	109,814	-	639,982	-	-	278,554	-	913	3,308	282,775	-	4,140	5,137,370		

Notes: Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see <http://www.eia.gov/coal/>.

Sources: 2000 U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.' 2001 forward U.S. Energy Information Administration, Quarterly Coal Report October-December, quarterly reports.

Table 36. Coal Exports by Country of Destination, 1960-2020

(Thousand Short Tons)

Year	Europe											Total	Japan	Other ³	Total	
	Canada	Brazil	Belgium ¹	Denmark	France	Germany ²	Italy	Netherlands	Spain	Turkey	United Kingdom					Other ³
1960	12,843	1,067	1,116	130	794	4,566	4,899	2,837	331	-	-	2,440	17,113	5,617	1,341	37,981
1961	12,135	994	971	80	708	4,326	4,797	2,552	228	-	-	2,026	15,688	6,614	974	36,405
1962	12,302	1,327	1,289	38	851	5,056	5,978	3,320	766	-	2	1,848	19,148	6,465	973	40,215
1963	14,557	1,161	2,651	41	2,726	5,560	7,872	5,000	1,500	-	-	2,372	27,722	6,057	938	50,435
1964	14,824	1,103	2,325	18	2,216	5,162	8,068	4,187	1,426	-	-	2,552	25,954	6,526	1,137	49,544
1965	16,304	1,213	2,246	6	2,099	4,730	8,970	3,374	1,406	-	7	2,252	25,090	7,491	934	51,032
1966	16,453	1,745	1,841	2	1,582	4,894	7,837	3,165	1,204	-	1	2,525	23,051	7,793	1,026	50,068
1967	15,757	1,736	1,422	-	2,132	4,694	5,860	2,227	1,012	-	-	2,072	19,419	12,224	987	50,123
1968	17,149	1,789	1,053	-	1,460	3,785	4,312	1,491	1,480	-	-	1,883	15,464	15,824	929	51,155
1969	17,261	1,847	943	-	2,254	3,493	3,720	1,645	1,825	-	-	1,330	15,210	21,367	1,176	56,861
1970	19,111	2,021	1,881	-	3,574	5,030	4,266	2,113	3,153	-	3	1,786	21,806	27,636	1,159	71,733
1971	18,031	1,873	765	-	3,207	2,937	2,680	1,627	2,556	-	1,669	1,127	16,568	19,717	1,115	57,304
1972	18,661	1,920	1,144	-	1,730	2,399	3,705	2,289	2,139	-	2,381	1,099	16,886	18,038	1,235	56,740
1973	16,709	1,647	1,205	-	1,971	1,633	3,322	1,820	2,234	-	941	1,310	14,436	19,190	1,605	53,587
1974	14,187	1,294	1,109	-	2,676	1,484	3,922	2,556	2,017	-	1,405	886	16,055	27,346	1,779	60,661
1975	17,279	2,008	627	-	3,622	1,989	4,504	2,110	2,691	-	1,889	1,609	19,041	25,423	2,558	66,309
1976	16,942	2,242	2,202	34	3,532	1,000	4,211	3,507	2,513	-	843	2,072	19,914	18,803	2,120	60,021
1977	17,692	2,283	1,516	99	2,106	889	4,149	1,962	1,570	-	607	2,077	14,975	15,862	3,500	54,312
1978	15,657	1,492	1,054	-	1,660	617	3,227	1,082	758	-	398	2,188	10,984	10,087	2,494	40,714
1979	19,513	2,829	3,204	163	3,866	2,556	4,985	2,011	1,351	-	1,351	4,442	23,929	15,681	4,090	66,042
1980	17,473	3,265	4,633	1,650	7,789	2,530	7,131	4,657	3,409	-	4,140	6,009	41,948	23,069	5,987	91,742
1981	18,238	2,727	4,254	3,879	9,745	4,308	10,473	6,820	6,381	569	2,341	8,243	57,013	25,856	8,707	112,541
1982	18,564	3,130	4,761	2,809	8,985	2,336	11,279	5,934	5,582	1,564	2,017	6,013	51,280	25,768	7,535	106,277
1983	17,151	3,572	2,544	1,740	4,201	1,488	8,057	4,162	3,257	1,628	1,237	4,748	33,062	17,865	6,122	77,772
1984	20,444	4,706	3,902	614	3,791	913	7,624	5,483	2,306	1,472	2,853	3,853	32,811	16,325	7,197	81,483
1985	16,393	5,862	4,427	2,159	4,481	1,078	10,252	6,327	3,456	2,196	2,676	8,054	45,106	15,372	9,947	92,680
1986	14,478	5,720	4,362	2,123	5,389	810	10,359	5,631	2,620	2,418	2,907	5,933	42,552	11,370	11,398	85,518
1987	16,227	5,830	4,578	934	2,886	477	9,537	4,093	2,454	772	2,589	5,839	34,159	11,082	12,309	79,607
1988	19,232	5,252	6,490	2,804	4,302	702	11,070	5,086	2,542	2,023	3,671	6,448	45,138	14,122	11,279	95,023
1989	16,777	5,681	7,094	3,178	6,517	745	11,240	6,076	3,339	1,686	4,513	7,216	51,604	13,846	12,907	100,815
1990	15,511	5,847	8,500	3,188	6,879	1,057	11,947	8,369	3,791	2,117	5,177	7,357	58,382	13,338	12,726	105,804
1991	11,178	7,052	7,464	4,658	9,509	1,742	11,274	9,625	4,694	2,186	6,171	8,197	65,520	12,269	12,950	108,969
1992	15,140	6,370	7,196	3,832	8,060	1,003	9,344	9,148	4,535	1,990	5,595	6,551	57,254	12,304	11,448	102,516
1993	8,889	5,197	5,229	336	3,972	508	6,918	5,562	4,064	1,605	4,111	5,270	37,575	11,878	10,980	74,519
1994	9,193	5,482	4,911	477	2,875	323	7,543	4,874	4,132	1,335	3,363	5,994	35,827	10,158	10,699	71,359
1995	9,427	6,351	4,501	2,100	3,659	1,953	9,063	7,301	4,653	2,011	4,726	8,653	48,620	11,787	12,362	88,547
1996	12,029	6,540	4,569	1,316	3,852	1,055	9,204	7,058	4,093	2,167	6,196	7,682	47,192	10,529	14,183	90,473
1997	14,975	7,455	4,319	350	3,398	870	7,019	4,825	4,134	2,092	7,185	7,139	41,331	7,974	11,810	83,545
1998	20,654	6,475	3,195	274	3,192	1,247	5,317	4,516	3,156	1,592	5,947	5,337	33,773	7,734	9,412	78,048
1999	19,826	4,442	2,073	-	2,522	573	4,014	3,432	2,472	795	3,162	3,466	22,509	4,953	6,746	58,476
2000	18,769	4,536	2,890	77	3,044	976	3,711	2,623	2,686	1,809	3,294	3,859	24,969	4,446	5,769	58,489

Europe

Year	Canada	Brazil	Belgium ¹	Denmark	France	Germany ²	Italy	Netherlands	Spain	Turkey	United Kingdom	Other ³	Total	Japan	Other ³	Total
2001	17,633	4,574	2,770	-	2,235	913	5,408	2,123	1,645	887	2,471	2,368	20,821	2,070	3,568	48,666
2002	16,686	3,538	2,371	-	1,305	958	3,077	1,650	1,914	580	1,902	1,816	15,574	1,253	2,550	39,601
2003	20,760	3,514	1,816	288	1,278	535	2,826	1,993	1,771	1,097	1,480	2,064	15,148	6	3,586	43,014
2004	17,760	4,361	1,743	74	1,103	642	2,105	2,471	1,529	1,271	1,986	2,286	15,211	4,426	6,240	47,998
2005	19,466	4,199	2,079	73	1,261	669	2,455	2,623	1,863	1,888	1,777	4,136	18,825	2,081	5,371	49,942
2006	19,889	4,534	2,166	383	1,625	1,650	3,283	2,091	1,632	1,226	2,565	4,183	20,805	332	4,087	49,647
2007	18,389	6,512	2,109	80	2,384	2,321	3,544	4,553	1,483	1,447	3,361	5,837	27,119	5	7,138	59,163
2008	22,979	6,380	3,081	385	3,469	2,531	3,197	7,004	2,383	1,915	5,763	10,577	40,306	1,733	10,122	81,519
2009	10,599	7,416	2,690	321	3,364	2,457	2,343	5,878	1,744	1,428	4,589	5,261	30,073	907	10,102	59,097
2010	11,400	7,925	2,283	80	3,165	2,663	3,308	7,306	1,947	2,532	4,391	10,532	38,208	3,164	21,019	81,716
2011	6,845	8,680	3,072	161	4,042	4,761	5,589	10,785	1,795	2,945	6,927	13,864	53,942	6,923	44,733	107,259
2012	7,211	7,954	2,650	-	4,120	5,260	8,540	13,542	2,182	5,333	12,083	12,688	66,399	5,699	51,171	125,746
2013	7,110	8,610	2,007	-	4,109	5,475	6,594	12,709	1,579	4,984	13,511	9,787	60,755	5,360	45,611	117,659
2014	6,724	8,032	1,013	-	2,373	4,815	5,781	12,479	1,400	4,460	9,808	10,340	52,469	4,898	35,474	97,257
2015	5,958	6,339	1,196	45	1,332	4,018	3,431	12,908	1,272	2,055	4,201	7,436	37,894	4,657	26,547	73,958
2016	5,011	6,939	1,254	61	1,340	3,503	1,910	10,159	1,396	1,487	1,064	5,207	27,381	4,555	21,591	60,271
2017	5,287	7,678	1,252	119	2,176	4,923	3,143	9,313	1,927	2,572	2,730	11,401	39,555	7,683	48,143	96,945
2018	5,724	8,516	1,094	64	1,806	3,568	3,350	12,415	1,835	2,963	4,221	12,591	43,908	10,543	60,144	116,244
2019	5,118	7,591	657	-	1,285	1,792	2,674	10,148	619	1,806	1,396	12,993	33,370	11,024	49,654	93,765
2020	4,587	7,889	547	-	973	683	1,221	5,796	395	2,722	1,135	8,681	22,154	6,072	37,045	69,067

NA=Not Available.

- =No data reported.

¹ Through 1999, includes Luxembourg.

² Through 1990, data for Germany are for the former West Germany only. Beginning in 1991, data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

³ See source publications for data for countries included in 'Other'.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 1960-1988 U.S. Department of Commerce, Bureau of the Census, U.S. Exports by Schedule B Commodities, EM 522. 1989-2000 U.S. Energy Information Administration (EIA), Coal Industry Annual, annual reports. 2001 forward EIA, Quarterly Coal Report October-December, quarterly reports; and U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.'