

# Quarterly Coal Report October–December 2018

April 2019















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### **Contacts**

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#### **Preface**

EIA publishes this report to fulfill data collection and dissemination responsibilities under the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended.

The *Quarterly Coal Report* (QCR) provides information about U.S. coal production, exports, imports, receipts, prices, consumption, quality, stocks, and refined coal data to a wide audience, including Congress, federal and state agencies, the coal industry, and the general public. In addition, the QCR offers U.S. coke production, consumption, stocks, imports, and exports data. The fourth-quarter 2018 QCR includes detailed quarterly coal data for October 2018—December 2018 and aggregated quarterly historical coal data for 2012 through fourth-quarter 2018.

All data for 2017 and previous years are final. All data for 2018 are preliminary.

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Table ES-1. U.S. coal summary statistics, 2012 - 2018

		Waste coal	distributor			Consumer	
Production <sup>1</sup>	Imports	supplied	stocks <sup>2</sup>	Consumption	Exports	stocks <sup>2</sup>	for
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				· · · · · · · · · · · · · · · · · · ·			-
			46,157			192,696	-
1,016,458	9,159	11,196		889,185	125,746		14,980
244,867		3,169		228,987	31,835	178,419	-
243,211		2,687	50,129	216,014	29,427	178,110	-
257,595	2,398	2,782	47,135	253,357	28,589	160,079	-
239,169	2,323	2,640	45,652	226,084	27,809	154,676	-
984,842	8,906	11,279		924,442	117,659		1,451
245,271	2,450	3,277	44,728	248,329	27,584	123,990	-
245,844	3,574	2,896	42,682	211,881	24,674	139,471	-
255,377	3,151	3,256	38,828	247,453	22,723	131,386	-
253,557	2,174	2,662	38,894	210,068	22,276	158,833	-
1,000,049	11,350	12,090		917,731	97,257		11,101
240,324	3,009	2,821	39,610	212,772	21,979	160,509	-
212,557	2,640	2,209	39,399	188,975	19,766	173,314	-
							-
							-
							5,452
				·			,
173,225	2,698	2,829	35,207	166,448	14,153	197,755	-
							-
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			-,	· · · · · · · · · · · · · · · · · · ·		- ,	2,449
	-,-						, -
197.138	1.915	2.918	25.190	173.712	22.307	166.774	-
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						2 . 2,3 0 7	4,562
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187.639	1.367	2.816	26.775*	167.531	27.221	131.206	-
					· · · · · · · · · · · · · · · · · · ·		
			,				
			23,370			100,114	3,531
· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·		3,331
	243,211 257,595 239,169 <b>984,842</b> 245,271 245,844 255,377 253,557 <b>1,000,049</b>	266,865 2,022 241,047 2,329 258,956 2,415 249,591 2,394 1,016,458 9,159  244,867 1,429 243,211 2,756 257,595 2,398 239,169 2,323 984,842 8,906  245,271 2,450 245,844 3,574 255,377 3,151 253,557 2,174 1,000,049 11,350  240,324 3,009 212,557 2,640 236,823 2,965 207,237 2,705 896,941 11,318  173,225 2,698 160,853 2,292 195,101 2,733 199,186 2,124 728,364 9,846  197,138 1,915 187,098 2,197 196,440 2,308 193,933 1,357 774,609 7,777  187,639 1,367 180,785 1,546 194,663 1,439 192,435 1,602 755,523 5,954 774,609 7,777	266,865       2,022       2,893         241,047       2,329       2,500         258,956       2,415       2,982         249,591       2,394       2,821         1,016,458       9,159       11,196         244,867       1,429       3,169         243,211       2,756       2,687         257,595       2,398       2,782         239,169       2,323       2,640         984,842       8,906       11,279         245,271       2,450       3,277         245,844       3,574       2,896         255,377       3,151       3,256         253,557       2,174       2,662         1,000,049       11,350       12,090         240,324       3,009       2,821         212,557       2,640       2,209         236,823       2,965       2,722         207,237       2,705       2,217         896,941       11,318       9,969         173,225       2,698       2,829         160,853       2,292       2,174         195,101       2,733       2,880         199,186       2,124       2,256	266,865 2,022 2,893 51,141 241,047 2,329 2,500 50,374 258,956 2,415 2,982 46,231 249,591 2,394 2,821 46,157  1,016,458 9,159 11,196  244,867 1,429 3,169 48,422 243,211 2,756 2,687 50,129 257,595 2,398 2,782 47,135 239,169 2,323 2,640 45,652 984,842 8,906 11,279  245,271 2,450 3,277 44,728 245,844 3,574 2,896 42,682 255,377 3,151 3,256 38,828 253,557 2,174 2,662 38,894  1,000,049 11,350 12,090  240,324 3,009 2,821 39,610 212,557 2,640 2,209 39,399 236,823 2,965 2,722 36,213 207,237 2,705 2,217 35,871 896,941 11,318 9,969  173,225 2,698 2,829 35,207 160,853 2,292 2,174 32,932 195,101 2,733 2,880 27,282 199,186 2,124 2,256 25,309 728,364 9,846 10,138  197,138 1,915 2,918 25,190 187,098 2,197 2,123 23,430 193,933 1,357 2,301 23,999 774,609 7,777 9,951	266,865         2,022         2,893         51,141         207,833           241,047         2,329         2,500         50,374         201,555           258,956         2,415         2,982         46,231         253,984           249,591         2,394         2,821         46,157         225,813           1,016,458         9,159         11,196         889,185           244,867         1,429         3,169         48,422         228,987           243,211         2,756         2,687         50,129         216,014           257,595         2,398         2,782         47,135         253,357           239,169         2,323         2,640         45,652         226,084           984,842         8,906         11,279         924,442           245,271         2,450         3,277         44,728         248,329           245,844         3,574         2,896         42,682         211,881           255,377         3,151         3,256         38,894         210,068           1,000,049         11,350         12,090         917,731           240,324         3,009         2,821         39,610         212,772           21	266,865         2,022         2,893         51,141         207,833         28,642           241,047         2,329         2,500         50,374         201,555         37,534           258,956         2,415         2,982         46,231         253,984         31,563           249,591         2,394         2,821         46,157         225,813         28,006           1,016,458         9,159         11,196         889,185         125,746           244,867         1,429         3,169         48,422         228,987         31,835           243,211         2,756         2,687         50,129         216,014         29,427           257,595         2,398         2,782         47,135         253,357         28,589           239,169         2,323         2,640         45,652         226,084         27,809           984,842         8,906         11,279         244,2682         211,881         24,674           245,271         2,450         3,277         44,728         248,329         27,584           245,844         3,574         2,896         42,682         211,881         24,674           253,577         3,151         3,256         38,828	266,865         2,022         2,893         51,141         207,833         28,642         202,166           241,047         2,329         2,500         50,374         201,555         37,534         205,023           258,956         2,415         2,982         46,231         253,984         31,563         189,530           249,991         2,394         2,821         46,157         225,813         28,006         192,696           1,016,458         9,159         11,196         889,185         125,746         125,746           244,867         1,429         3,169         48,422         228,987         31,835         178,419           243,211         2,756         2,687         50,129         216,014         29,427         178,110           257,595         2,398         2,782         47,135         253,357         28,589         160,079           239,169         2,323         2,640         45,652         226,084         27,809         154,676           245,271         2,450         3,277         44,728         248,329         27,584         123,990           245,271         2,450         3,277         44,728         248,329         27,584         123,990 </td

<sup>1</sup> Includes refuse recovery.

Note: Beginning with 1999, the first three quarters of Producer and Distributor Stocks data for each year are estimated. Total may not equal sum of components because of independent rounding.

<sup>2</sup> Reported as of the last day of the quarter.

<sup>3 &#</sup>x27;Losses and Unaccounted For' is calculated as production plus imports plus waste coal supplied minus the change in producer and distributor stocks minus consumption minus exports minus the change in consumer stocks.

<sup>\*</sup> Estimated.

Source: \*Production: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'
\*Imports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.' \*Waste Coal Supplied: Form EIA-923, 'Power Plant Operations Report' and Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' \*Producer and Distributor Stocks: 'Short-Term Energy Outlook' estimates, Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and Form EIA-8A, 'Annual Survey of Coal Stocks and Coal Exports.' \*Exports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.' \*Consumption: Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users,' and Form EIA-7A, 'Annual Survey of Coal Production and Preparation.' \*Consumer Stocks: Form EIA-923, 'Power Plant Operations Report' and Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table ES-2. U.S. coke summary statistics, 2012 - 2018

Year and			Producer and distributor		
quarter	Production	Imports	stocks1	Consumption <sup>2</sup>	Exports
2012		•		·	
January - March	3,857	365	636	4,160	172
April - June	3,863	462	594	4,165	203
July - September	3,726	145	532	3,722	210
October - December	3,726	162	606	3,425	389
Total	15,172	1,135		15,472	974
2013					
January - March	3,841	57	573	3,763	167
April - June	3,954	42	757	3,599	212
July - September	3,742	31	778	3,539	213
October - December	3,783	8	872	3,450	247
Total	15,320	138		14,351	840
2014					
January - March	3,483	2	718	3,515	124
April - June	3,718	38	751	3,531	192
July - September	4,036	12	786	3,697	316
October - December	3,917	25	797	3,616	315
Total	15,154	77		14,359	946
2015					
January - March	3,611	3	1,044	3,204	163
April - June	3,511	10	1,127	3,135	302
July - September	3,507	74	785	3,770	152
October - December	3,126	54	707	3,018	239
Total	13,755	140		13,128	857
2016					
January - March	2,950	4	831	2,757	72
April - June	2,927	95	765	2,919	169
July - September	2,987	73	656	2,877	291
October - December	2,992	57	579	2,659	467
Total	11,855	229		11,212	1,000
2017					
January - March	3,027	1	448	2,918	242
April - June	3,124	27	414	2,953	231
July - September	3,411	5	465	3,087	278
October - December	3,386	25	558	2,860	458
Total	12,948	58		11,818	1,209
2018					
January - March	3,219	4	405	3,072	304
April - June	3,479	68	440	3,225	286
July - September	3,564	10	396	3,412	206
October - December	3,545	35	354	3,268	354
Total	13,806	117		12,976	1,151
2017 January - December	12,948	58		11,818	1,209
2016 January - December	11,855	229		11,212	1,000

<sup>1</sup> Reported as of the last day of the quarter.

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

Source: \*Production, Consumption, and Producer and Distributor Stocks: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' \*Imports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.' \*Exports: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

 $<sup>{\</sup>small 2\ Consumption\ is\ equal\ to\ production\ plus\ imports\ minus\ the\ change\ in\ producer\ and\ distributor\ stocks\ minus\ exports.}\\$ 

Table ES-3. Summary statistics for coal refining plants, 2012 - 2018

Coal receipts by rank Average price of receipts Refined coal Refined coal Year and (dollars per short ton) **Bituminous Subbituminous** Lignite **Total** produced sold quarter 2012 30 1,890 231 2,151 27.47 1,756 January - March 992 25.42 April - June 2,853 3,844 3,668 2,593 5,399 4,182 July - September 2,806 24.32 October -2,571 2,347 4,919 24.55 4,434 December **Total** 30 10,120 6,164 16,313 25.06 14,040 2013 5,067 2,733 2,334 24.60 4,989 January - March April - June 2,105 1,910 4,015 25.24 3,615 July - September 54 3,279 2,823 26.93 6,197 6,156 October -733 3,848 2,635 7,216 29.01 6,111 December **Total** 786 11,966 9,701 22,454 26.77 20,912 2014 January - March 486 4,887 2,623 7,996 29.13 7,717 April - June 552 3.985 2,737 7,273 28.16 6.909 July - September 426 7,550 3,181 11,157 30.08 10,113 October -1,130 8,549 2,841 12,520 28.13 11,105 December **Total** 2,594 24,972 11,381 38,946 28.90 35,843 2015 January - March 1,475 7,784 3,212 12,471 29.07 11,403 April - June 1,355 7,435 3,146 11,936 28.67 11,237 July - September w W w October w w w w W w w December Total w w w w w w w 2016 January - March w w w w w w w April - June w W w w w w w July - September W W W W w w w October w w w w w w w December **Total** w w w w w w w 2017 January - March w W w w W w w April - June w w w w w w w July - September 15,073 17,625 3,186 35,884 35.69 33,556 33,556 October -13,245 17,509 2,798 33,552 35.75 31,894 31,894 December Total w 2018 January - March 14,908 16,401 4,016 35,326 36.93 46,972 46,972 April - June 15,458 14,820 4,959 35,236 37.01 33,989 33,989 July - September 19,199 18,761 4,302 42,262 36.51 41,867 41,867 October -18,144 3,951 41,412 36.45 38,320 19,317 38,320 December **Total** 67,710 69,299 17,228 154,237 36.71 161,148 161,148

Note: Average price is based on the cost, insurance, and freight (c.i.f. value). Total may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

Respondent survey frame updated for Q3 2017 to include full universe of coal refining facilities. Frame was incomplete prior to Q3 2017, resulting in incomplete data.

w = Data withheld to avoid disclosure.

### **Production**

Table 1. U.S. coal production, 2012 - 2018

Year	January - March	April - June	July - September	October - December	Total
2012	266,865	241,047	258,956	249,591	1,016,458
2013	244,867	243,211	257,595	239,169	984,842
2014	245,271	245,844	255,377	253,557	1,000,049
2015	240,324	212,557	236,823	207,237	896,941
2016	173,225	160,853	195,101	199,186	728,364
2017	197,138	187,098	196,440	193,933	774,609
2018	187,639	180,785	194,663	192,435	755,523

Note: Total 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 by state** 

			_		Year to date	
Coal-producing region	October - December	July - September	October - December	2010	2047	Percent
and state	2018	2018	2017	2018	2017	change
Alabama	3,666	3,648	3,107	14,751	12,861	14.7
Alaska	291	210	264	923	959	-3.8
Arizona	1,612	1,720	1,798	6,550	6,221	5.3
Arkansas	-	-	-	-	43	-
Colorado	3,343	3,628	3,745	14,026	15,047	-6.8
Illinois	12,302	12,346	11,436	49,355	48,204	2.4
Indiana	9,083	8,369	7,668	34,780	31,472	10.5
Kentucky Total	9,663	9,689	9,968	39,503	41,784	-5.5
Eastern (Kentucky)	3,939	4,123	4,654	16,839	18,179	-7.4
Western (Kentucky)	5,724	5,566	5,314	22,665	23,606	-4.0
Louisiana	292	512	489	1,483	2,079	-28.6
Maryland	290	273	403	1,227	1,808	-32.2
Mississippi	669	862	582	2,940	2,604	12.9
Missouri	65	64	60	259	244	6.0
Montana	10,906	9,568	9,739	38,610	35,232	9.6
New Mexico	3,984	3,045	2,765	10,792	13,844	-22.0
North Dakota	7,305	7,921	7,506	29,643	28,788	3.0
Ohio	2,457	2,404	2,440	8,982	9,489	-5.3
Oklahoma	94	241	146	716	561	27.6
Pennsylvania Total	12,663	11,675	12,166	49,799	49,085	1.5
Anthracite (Pennsylvania)	478	474	477	1,851	1,867	-0.8
Bituminous (Pennsylvania)	12,186	11,201	11,690	47,948	47,219	1.5
Tennessee	44	45	71	190	431	-55.9
Texas	5,630	6,642	9,879	24,823	36,382	-31.8
Utah	3,433	3,478	4,127	13,591	14,326	-5.1
Virginia	3,162	3,156	3,121	12,612	13,202	-4.5
West Virginia Total	23,182	23,505	24,245	95,092	92,791	2.5
Northern (West Virginia)	11,751	11,319	12,375	45,869	46,754	-1.9
Southern (West Virginia)	11,431	12,186	11,870	49,223	46,037	6.9
Wyoming	78,146	81,469	78,052	304,188	316,454	-3.9
Appalachia Total	49,404	48,827	50,207	199,491	197,846	0.8
Appalachia Central	18,577	19,509	19,715	78,864	77,848	1.3
Appalachia Northern	27,161	25,670	27,385	105,876	107,137	-1.2
Appalachia Southern	3,666	3,648	3,107	14,751	12,861	14.7
Interior Region Total	33,859	34,604	35,574	137,020	145,194	-5.6
Illinois Basin	27,109	26,281	24,417	106,800	103,282	3.4
Interior	6,750	8,322	11,156	30,221	41,913	-27.9
Western Region Total	109,021	111,039	107,996	418,323	430,870	-2.9
Powder River Basin	83,889	86,615	83,362	324,211	334,366	-3.0
Uinta Region	6,543	6,849	7,519	26,513	28,068	-5.5
Western	18,589	17,575	17,115	67,598	68,436	-1.2
East of Mississippi River	77,181	75,971	75,207	309,230	303,731	1.8
West of Mississippi River	115,103	118,500	118,571	445,604	470,179	-5.2
U.S. Subtotal	192,284	194,470	193,778	754,834	773,911	-2.5
Refuse recovery	151	193	155	688	699	-1.5
U.S. Total	192,435	194,663	193,933	755,523	774,609	-2.5

Note: Total 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. Coke and breeze production at coke plants

					Year to date			
Census division	October - December	July - September	October - December			Percent		
Cerisus division	2018	2018	2017	2018	2017	change		
Middle Atlantic	1,157	1,152	1,056	4,353	4,066	7.1		
East North Central	1,971	2,014	1,905	7,810	7,181	8.8		
South Atlantic	346	332	315	1,301	1,238	5.0		
East South Central	250	258	279	1,043	1,069	-2.4		
U.S. Total	3,724	3,756	3,556	14,508	13,554	7.0		
Coke Total	3,545	3,564	3,386	13,806	12,948	6.6		
Breeze Total	179	192	170	701	606	15.7		

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

## **Exports and imports**

Table 4. U.S. coal exports and imports, 2012 - 2018

	January - March		April - June		July - September		October - December		Total	
Year	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
2012	28,642	2,022	37,534	2,329	31,563	2,415	28,006	2,394	125,746	9,159
2013	31,835	1,429	29,427	2,756	28,589	2,398	27,809	2,323	117,659	8,906
2014	27,584	2,450	24,674	3,574	22,723	3,151	22,276	2,174	97,257	11,350
2015	21,979	3,009	19,766	2,640	16,914	2,965	15,299	2,705	73,958	11,318
2016	14,153	2,698	14,223	2,292	12,552	2,733	19,343	2,124	60,271	9,846
2017	22,307	1,915	21,796	2,197	24,644	2,308	28,206	1,357	96,953	7,777
2018	27,221	1,367	30,876	1,546	29,067	1,439	28,469	1,602	115,632	5,954

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

Source: 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.'

Table 5. Average price of U.S. coal exports and imports, 2012 - 2018

(dollars per short ton)

	January - March		April - June		July - September		October - December		Total	
Year	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
2012	134.88	103.82	118.95	100.89	115.12	93.25	104.64	90.39	118.43	96.78
2013	99.68	86.87	96.77	83.18	91.64	81.66	91.46	83.12	95.06	83.35
2014	90.72	78.15	86.24	80.46	85.69	80.60	84.94	85.48	87.08	80.96
2015	82.31	69.95	80.14	74.40	73.52	71.85	68.61	70.48	76.89	71.61
2016	61.41	63.97	65.79	66.30	67.24	62.70	92.57	71.32	73.66	65.75
2017	110.44	74.81	110.65	79.44	98.79	79.71	90.59	86.54	101.75	79.62
2018	105.78	71.48	103.26	82.95	99.30	91.02	108.58	83.07	104.17	82.30

Note: 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.

Source: 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.'

Table 6. Quantity and average price of U.S. coal imports by origin, 2012 - 2018

(short tons and dollars per short ton)

Year and quarter	Australia	Canada	Colombia	Indonesia	China	Venezuela	Other countries	Total
2012	-	1,107,727	6,951,515	517,532	77,738	287,147	217,598	9,159,257
2013	22	1,116,076	6,575,927	886,920	51,944	42,428	233,108	8,906,425
2014	532	1,026,523	8,295,286	1,526,611	39,776	288,738	172,460	11,349,926
2015	60,994	1,187,655	8,936,034	890,124	16,099	74,175	152,930	11,318,011
2016	121,967	1,078,480	7,890,800	613,944	6,955	-	134,212	9,846,358
2017								
January - March	-	204,185	1,649,757	58,863	1,202	-	1,047	1,915,054
April - June	700	205,598	1,789,959	199,996	676	-	121	2,197,050
July - September	-	306,509	1,767,445	196,208	2,081	-	35,740	2,307,983
October - December	-	175,442	879,451	244,386	2,515	46	55,245	1,357,085
U.S. Total	700	891,734	6,086,612	699,453	6,474	46	92,153	7,777,172
2018								
January - March	-	105,103	1,032,860	196,457	4,962	-	27,580	1,366,962
April - June	-	210,538	1,057,691	265,469	3,978	-	8,724	1,546,400
July - September	-	256,680	839,988	255,835	13,312	-	72,895	1,438,710
October - December	-	198,038	1,130,042	197,427	6,372	-	70,199	1,602,078
U.S. Total	-	770,359	4,060,581	915,188	28,624	-	179,398	5,954,150
Average price (dollars per short ton)		404.00	22.01		100.00		424.22	22.72
2012	-	184.89	83.94	53.54	133.39	109.51	131.25	96.78
2013	182.64	145.52	75.11	59.45	107.55	91.81	101.89	83.35
2014	117.40	131.45	78.63	56.36	155.20	83.80	88.53	80.96
2015	60.25	114.88	66.70	56.65	184.78	68.88	103.61	71.61
2016	47.66	77.40	65.10	52.17	126.99	-	85.65	65.75
2017		150.00	65.50	66.71	155.01		05.10	
January - March	-	150.23	65.70	66.51	155.91	-	85.19	74.81
April - June	74.89	238.56	63.75	55.81	168.50	-	363.51	79.44
July - September	-	188.40	62.12	60.01	69.52	-	126.07	79.71
October - December	-	181.32	68.13	73.61	73.22	103.33	136.41	86.54
U.S. Total	74.89	189.83	64.44	64.11	97.33	103.33	132.12	79.62
2018		104.51	50.27	74.05	162.00		100.26	74.40
January - March	-	181.51	58.37	74.05	162.88	-	108.36	71.48
April - June	-	212.64	59.31	71.57	260.72	-	84.50	82.95
July - September	-	186.35	61.92	78.15	74.93	-	138.82	91.02
October - December	-	180.03	65.24	78.42	146.86	-	104.02	83.07
U.S. Total	-	191.25	61.26	75.42	132.01	-	117.88	82.30

<sup>- =</sup> No data reported.

Note: Average price is based on the customs import value, including value for shipments of specialty coal not used as a fuel source (about 0.05 percent of all shipments). 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. Coal imports include coal to Puerto Rico and the Virgin Islands. Total may not equal sum of components because of independent rounding.

### Table 7. U.S. coal exports

(short tons)

					Year to date	
Continent and country	October - December	July - September	October - December	2018	2017	Percent
of destination	2018	2018	2017			change
North America Total Canada*	3,567,039	3,508,089	<b>3,076,272</b> 1,565,292	12,541,071	10,389,077	<b>20.7</b> 8.3
	1,922,294	1,624,597	1,565,292	5,726,402	5,285,938	
Dominican Republic	98,882	90,814	121 000	251,695	159,785	57.5
Guatemala	81,488	71,620	121,000	285,329	759,117	-62.4
Honduras	93,211	42,219	38,581	216,322	74,570	190.1
Jamaica	36,376	1 420 001	33,124	72,772	135,273	-46.2
Mexico	1,213,488	1,439,991	1,284,494	5,418,604	3,737,125	45.0
Panama	432	56,836	33,678	152,994	173,346	-11.7
Trinidad and Tobago Other**	120,868	181,913 99	47 56	366,058	63,053 870	480.6
South America Total	2 502 002			50,895		NM 17.0
	2,583,002	2,409,482	2,422,518	10,329,432	8,826,790	17.0
Argentina	240,262	185,522	211,433	784,219	573,011	36.9
Brazil	2,216,980	1,943,568	2,210,211	8,595,068	7,562,884	13.6
Chile	124,466	240,700	440	868,605	631,943	37.4
Peru	301	-	174	889	57,749	-98.5
Other**	993	39,692	260	80,651	1,203	NM
Europe Total	11,882,983	11,726,370	11,162,413	43,807,515	39,560,548	10.7
Austria	562,480	211,878	112,382	1,048,430	572,142	83.2
Belgium	260,230	222,220	263,346	1,093,844	1,251,804	-12.6
Croatia	417,887	667,762	453,230	2,323,071	1,927,196	20.5
Denmark (Except Greenland)	64,080	-	80,746	64,080	119,327	-46.3
Finland	148,716	242,510	121,253	531,418	417,706	27.2
France	426,825	355,403	631,071	1,704,998	2,175,881	-21.6
Germany, Federal Republic of	858,913	871,622	1,549,722	3,568,331	4,900,458	-27.2
Greece	-	-	39,780	85,704	68,341	25.4
Ireland	-	-	-	-	91,569	-
Italy	990,234	853,944	987,187	3,407,875	3,142,717	8.4
Netherlands	3,817,403	3,492,205	1,840,065	12,362,341	9,372,985	31.9
Norway	16,915	19,451	19,728	68,879	78,700	-12.5
Poland	429,665	387,692	450,626	1,825,888	1,356,871	34.6
Portugal	82,673	93,855	342,166	580,695	816,144	-28.8
Romania	62,391	97,459	97,237	345,390	211,642	63.2
Slovakia	-	-	143,399	55,139	518,492	-89.4
Slovenia	-	-	115,253	127,242	127,574	-0.3
Spain	388,947	598,164	459,083	1,832,788	1,757,794	4.3
Sweden	52,052	218,253	216,592	572,801	876,687	-34.7
Turkey	400,827	805,673	475,503	3,062,852	2,563,970	19.5
Ukraine	1,247,359	1,251,606	1,950,638	4,816,809	4,463,457	7.9
United Kingdom	1,585,282	1,272,996	812,979	4,194,270	2,729,552	53.7
Other**	70,104	63,677	427	134,670	19,539	NM
Asia Total	8,530,318	9,166,009	9,541,433	40,280,708	32,840,845	22.7
China	143,682	434,413	442,562	2,615,707	3,238,216	-19.2
India	3,471,318	3,729,446	4,346,265	17,187,540	11,464,645	49.9
Japan	2,986,596	2,475,990	2,013,869	10,390,808	7,668,420	35.5
Pakistan	23	60,304	130,786	191,537	189,890	0.9
South Korea (Republic of	1,808,916	2,463,333	2,281,908	9,320,837	9,450,656	-1.4
Korea)						
Taiwan	148	84	323,938	743	539,435	-99.9
Thailand	116,945	457	575	503,623	136,101	270.0
United Arab Emirates	22	29	-	57	82,552	-99.9
Other**	2,668	1,953	1,530	69,856	70,930	-1.5
Australia and Oceania Total	52	70	1,008	334	49,358	-99.3
Other**	52	70	1,008	334	49,358	-99.3
Africa Total	1,905,574	2,256,681	2,002,316	8,672,992	5,286,767	64.1

Continent and country of destination		July - September 2018	October - December 2017			
	October - December 2018			2018	2017	Percent change
Egypt	675,829	922,142	898,205	3,830,476	1,949,614	96.5
Morocco	1,152,562	988,345	1,050,953	4,285,976	2,927,282	46.4
Nigeria	-	-	-	-	53,719	-
Senegal	-	38,381	-	71,450	105,800	-32.5
South Africa	77,183	79,946	-	157,600	118,347	33.2
Togo	-	110,013	53,150	164,059	108,915	50.6
Other**	-	117,854	8	163,431	23,090	NM
Total	28,468,968	29,066,701	28,205,960	115,632,052	96,953,385	19.3

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

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

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

**Table 8. Average price of U.S. coal exports** (dollars per short ton)

Continent and country	October - December	July - September	October - December	Ť	ear to date	Percent
of destination	2018	2018	2017	2018	2017	change
North America Total	82.70	82.30	78.36	79.35	78.85	0.6
Canada*	99.00	105.29	106.67	105.34	100.30	5.0
Dominican Republic	57.45	59.22	-	59.65	64.34	-7.3
Guatemala	72.68	62.96	63.94	64.07	69.95	-8.4
Honduras	77.74	58.97	88.90	64.37	81.73	-21.2
Jamaica	54.43	-	88.91	54.47	54.72	-0.5
Mexico	52.47	48.99	44.98	49.21	53.47	-8.0
Panama	79.93	58.97	64.53	56.20	50.10	12.2
Trinidad and Tobago	166.66	172.51	360.72	172.13	55.41	210.6
Other**	-	195.75	393.00	47.49	96.45	-50.8
South America Total	145.17	128.09	122.60	135.53	127.66	6.2
Argentina	180.02	169.48	154.70	177.96	154.94	14.9
Brazil	145.67	132.61	119.40	138.96	132.36	5.0
Chile	66.48	68.52	276.95	68.30	50.42	35.5
Peru	214.17	-	534.14	369.95	75.42	390.5
Other**	427.36	74.71	644.86	79.09	684.58	-88.4
Europe Total	118.41	112.50	102.56	117.78	111.69	5.5
Austria	188.58	164.41	151.23	181.38	194.94	-7.0
Belgium	152.04	158.08	149.51	158.28	139.82	13.2
Croatia	183.44	150.87	137.50	154.42	147.87	4.4
Denmark (Except	91.63	-	68.58	91.63	68.45	33.9
Greenland)	31.00		00.00	31.00	00.10	33.3
Finland	168.18	162.92	163.61	158.93	163.37	-2.7
France	148.69	123.64	87.44	138.30	121.90	13.5
Germany, Federal	72.29	87.38	100.90	98.80	101.34	-2.5
Republic of						
Greece	-	-	31.27	75.27	56.11	34.1
Ireland	-	-	-	-	73.48	-
Italy	99.48	99.98	98.19	112.45	124.02	-9.3
Netherlands	99.30	87.18	83.13	91.06	74.27	22.6
Norway	139.36	149.21	135.24	143.93	131.98	9.1
Poland	142.16	118.62	82.33	136.14	113.88	19.5
Portugal	108.86	63.50	66.03	68.77	55.36	24.2
Romania	115.31	68.63	134.04	86.17	137.94	-37.5
Slovakia	-	-	146.52	144.66	150.26	-3.7
Slovenia	-	-	76.39	63.50	78.34	-18.9
Spain	102.22	112.75	107.24	108.79	105.20	3.4
Sweden	167.68	137.42	140.68	149.08	151.42	-1.5
Turkey	138.32	151.90	122.34	131.86	137.28	-3.9
Ukraine	178.16	161.67	116.96	166.66	148.46	12.3
United Kingdom	85.09	82.74	82.10	92.43	91.71	0.8
Other**	143.96	158.06	140.75	150.30	125.75	19.5
Asia Total	102.77	87.64	77.83	96.45	94.01	2.6
China	109.59	76.06	106.23	119.11	122.44	-2.7
India	95.95	92.43	75.90	96.94	93.61	3.6
Japan	129.41	101.24	97.68	119.31	108.80	9.7
Pakistan	123.04	63.34	47.17	56.76	47.30	20.0
South Korea (Republic of	73.42	69.20	64.09	66.04	77.31	-14.6
Korea)						
Taiwan	460.07	463.19	48.83	269.34	42.21	NM
Thailand	68.30	267.30	231.33	69.47	61.09	13.7
United Arab Emirates	276.23	345.83	-	351.68	47.91	NM
Other**	182.23	235.39	411.52	85.45	122.12	-30.0
Australia and Oceania Total	640.85	579.76	211.99	462.47	172.46	168.2
Other**	640.85	579.76	211.99	462.47	172.46	168.2
Africa Total	72.11	73.67	64.63	69.76	76.53	-8.8

		July - September	October - December		Year to date		
Continent and country	October - December					Percent	
of destination	2018	2018	2017	2018	2017	change	
Egypt	76.99	69.20	68.60	71.33	93.34	-23.6	
Morocco	66.72	64.93	61.93	64.41	65.25	-1.3	
Nigeria	-	-	-	-	53.07	-	
Senegal	-	58.97	-	55.61	58.08	-4.3	
South Africa	109.77	181.58	-	147.52	136.66	7.9	
Togo	-	62.68	50.79	62.95	48.13	30.8	
Other**	-	123.86	1,185.38	111.03	52.34	112.1	
Total	108.58	99.30	90.59	104.17	101.75	2.4	

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Note: Average price is based on the free alongside ship (f.a.s.) value, including value for shipments of specialty coal not used as a fuel source (about 0.05 percent of all shipments). Total may not equal sum of components because of independent rounding.

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

**Table 9. U.S. steam coal exports** (short tons)

			_		Year to date		
Continent and country of destination	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change	
North America Total	1,920,827	1,818,494	1,301,995	7,006,895	5,264,273	33.1	
Canada*	386,018	228,374	212,803	1,058,152	1,140,664	-7.2	
Dominican Republic	98,882	90,814	-	251,695	108,297	132.4	
Guatemala	81,488	71,620	121,000	285,329	759,117	-62.4	
Honduras	93,211	42,219	38,581	216,322	74,570	190.1	
Jamaica	36,376		33,124	72,772	135,273	-46.2	
Mexico	1,103,552	1,328,500	862,706	4,734,559	2,871,870	64.9	
Panama	432	56,836	33,678	152,994	173,346	-11.7	
Trinidad and Tobago	120,868	32	47	184,177	266	NM	
Other**	-	99	56	50,895	870	NM	
South America Total	157,831	427,118	77,710	1,231,618	934,526	31.8	
Argentina	137,031	49,648	22	96,218	182	NM	
Brazil	32,071	97,078	76,814	185,255	243,449	-23.9	
Chile	124,466	240,700	440	868,605		37.4	
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	631,943		
Peru Peru	301	- 20.602	174	889	57,749	-98.5	
Other**	993	39,692	260	80,651	1,203	NM	
Europe Total	5,335,236	4,641,243	4,565,204	16,517,375	14,945,821	10.5	
Austria	-	375	375	375	2,346	-84.0	
Belgium	38,175	43	-	38,218	432	NM	
Croatia	-	78,264	-	90,345	-		
Denmark (Except Greenland)	64,080	-	80,746	64,080	119,327	-46.3	
Finland	-	1	-	14,331	-	-	
France	92,558	153,358	338,130	433,550	750,593	-42.2	
Germany, Federal Republic of	637,020	643,605	905,333	2,182,766	2,467,546	-11.5	
Greece	<del>-</del>	-	39,780	85,704	68,341	25.4	
Italy	445,087	404,489	443,603	1,397,982	910,585	53.5	
Netherlands	2,211,790	1,619,119	979,411	6,164,865	5,976,585	3.2	
Norway		4,189	-	4,189	8,818	-52.5	
Poland	143,349	210,425	336,900	707,509	524,976	34.8	
Portugal	82,673	93,855	342,166	497,736	731,347	-31.9	
Romania	-	-		41,201	-	-	
Slovakia		_		23		_	
Slovenia					12,321	_	
Spain	255,535	347,315	212,062	1,075,546	899,205	19.6	
Sweden	233,333	347,313	53,022	34,074	151,488	-77.5	
Turkey	38,092	86,085	63,367	514,480	471,986	9.0	
·	116,091	80,083					
Ukraine United Kingdom	· · · · · · · · · · · · · · · · · · ·	000.679	133,883	226,826	133,883	69.4	
	1,210,621	999,678	635,999	2,942,079	1,714,451	71.6	
Other**	165	442	427	1,496	1,591	-6.0	
Asia Total	4,829,084	6,247,961	6,094,347	23,500,513	17,298,911	35.8	
China	382	189,700	67,246	372,301	332,909	11.8	
India	2,556,630	3,054,197	3,197,290	11,531,728	7,539,785	52.9	
Japan	1,128,181	1,356,633	945,098	4,400,612	2,693,922	63.4	
Pakistan	23	60,304	26	191,537	59,130	223.9	
South Korea (Republic of Korea)	1,024,195	1,584,909	1,558,797	6,430,776	5,867,926	9.6	
Taiwan	148	84	323,938	743	539,435	-99.9	
Thailand	116,835	304	422	503,207	135,642	271.0	
United Arab Emirates	22	29	-	57	82,552	-99.9	
Other**	2,668	1,801	1,530	69,552	47,610	46.1	
Australia and Oceania Total	52	70	1,008	334	1,945	-82.8	
Other**	52	70	1,008	334	1,945	-82.8	
Africa Total	1,053,351	1,411,101	1,377,426	5,862,143	3,253,343	80.2	
Egypt	423,580	844,981	584,686	3,235,113	1,222,053	164.7	
-016.	723,300	544,501	30-,000	5,235,113	_,,	107.7	

Continent and country of destination		July - September 2018	October - December 2017			
	October - December					Percent
	2018			2018	2017	change
Morocco	629,750	389,390	739,582	2,317,116	1,739,599	33.2
Nigeria	-	-	-	-	53,719	-
Senegal	-	38,381	-	71,450	105,800	-32.5
South Africa	21	28	-	520	167	211.4
Togo	-	110,013	53,150	164,059	108,915	50.6
Other**	-	28,308	8	73,885	23,090	220.0
Total	13,296,381	14,545,987	13,417,690	54,118,878	41,698,819	29.8

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Note: Steam coal includes bituminous, sub-bituminous, lignite, and anthracite. Total may not equal sum of components because of independent rounding. Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.'

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

**Table 10. Average price of U.S. steam coal exports** (dollars per short ton)

Continent and country	October - December	July - September	October - December	Y	ear to date	Percent
of destination	2018	2018	2017	2018	2017	change
North America Total	60.51	51.45	50.89	53.97	54.60	-1.2
Canada*	79.86	103.20	106.10	95.04	91.50	3.9
Dominican Republic	57.45	59.22	-	59.65	47.49	25.6
Guatemala	72.68	62.96	63.94	64.07	69.95	-8.4
Honduras	77.74	58.97	88.90	64.37	81.73	-21.2
Jamaica	54.43	-	88.91	54.47	54.72	-0.5
Mexico	40.22	40.81	31.71	38.81	35.69	8.7
Panama	79.93	58.97	64.53	56.20	50.10	12.2
Trinidad and Tobago	166.66	1,016.47	360.72	171.90	286.24	-39.9
Other**	-	195.75	393.00	47.49	96.45	-50.8
South America Total	74.24	84.86	86.82	80.97	60.36	34.1
Argentina	-	172.45	245.45	172.33	282.88	-39.1
Brazil	92.11	84.73	82.79	92.37	79.34	16.4
Chile	66.48	68.52	276.95	68.30	50.42	35.5
Peru	214.17	-	534.14	369.95	75.42	390.5
Other**	427.36	74.71	644.86	79.09	684.58	-88.4
Europe Total	72.13	68.05	63.54	69.04	62.78	10.0
Austria	-	27.66	27.66	27.66	26.53	4.3
Belgium	111.75	385.58	-	112.06	73.24	53.0
Croatia	-	90.72	-	87.08	-	-
Denmark (Except	91.63	-	68.58	91.63	68.45	33.9
Greenland)						
Finland	-	3,654.00	-	181.41	-	-
France	58.97	66.94	63.02	61.85	69.33	-10.8
Germany, Federal	66.78	62.50	57.42	62.73	55.72	12.6
Republic of						
Greece	-	-	31.27	75.27	56.11	34.1
Italy	65.33	63.53	63.60	64.95	70.47	-7.8
Netherlands	71.67	66.89	56.97	67.83	57.89	17.2
Norway	-	140.61	-	140.61	131.55	6.9
Poland	74.25	75.17	60.22	82.32	63.12	30.4
Portugal	108.86	63.50	66.03	69.65	57.23	21.7
Romania	-	-	-	63.50	-	-
Slovakia	-	-	-	2,044.35	-	-
Slovenia	-	-	-	-	96.61	-
Spain	57.86	63.90	85.64	67.09	63.04	6.4
Sweden	-	-	137.90	181.16	108.63	66.8
Turkey	56.33	199.20	67.91	83.74	123.84	-32.4
Ukraine	185.42	-	75.98	125.90	75.98	65.7
United Kingdom	66.91	62.47	67.79	66.03	62.55	5.6
Other**	95.55	123.39	140.75	103.26	101.34	1.9
Asia Total	71.98	65.64	55.85	63.98	53.24	20.2
China	381.54	33.74	66.28	35.73	47.14	-24.2
India	80.48	80.64	62.96	74.66	60.13	24.2
Japan	85.00	69.86	62.23	75.04	69.09	8.6
Pakistan	123.04	63.34	239.69	56.76	47.68	19.0
South Korea (Republic of Korea)	36.38	36.77	37.99	38.45	38.07	1.0
Taiwan	460.07	463.19	48.83	269.34	42.21	NM
Thailand	68.21	351.64	279.05	69.43	60.96	13.9
United Arab Emirates	276.23	345.83	-	351.68	47.91	NM
Other**	182.23	246.82	411.52	85.39	98.88	-13.6
Australia and Oceania Total	640.85	579.76	211.99	462.47	274.36	68.6
Other**	640.85	579.76	211.99	462.47	274.36	68.6
Africa Total	67.95	62.28	62.27	63.77	69.68	-8.5
	00		~=·= <i>,</i>			

Continent and country		July - September	October - December		Year to date		
	October - December					Percent	
of destination	2018	2018	2017	2018	2017	change	
Morocco	69.38	67.94	61.27	65.00	62.79	3.5	
Nigeria	-	-	-	-	53.07	-	
Senegal	-	58.97	-	55.61	58.08	-4.3	
South Africa	3,460.71	587.71	-	669.98	546.93	22.5	
Togo	-	62.68	50.79	62.95	48.13	30.8	
Other**	=	58.97	1,185.38	70.61	52.34	34.9	
Total	70.09	64.88	58.84	64.60	58.29	10.8	

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Note: Average price is based on the free alongside ship (f.a.s) value, including value for shipments of specialty coal not used as a fuel source (about 0.05 percent of all shipments). Steam coal includes bituminous, sub-bituminous, lignite, and anthracite. Total may not equal sum of components because of independent rounding. Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.'

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

Table 11. U.S. metallurgical coal exports

			_	Year to date		
Continent and country	October - December	July - September	October - December	2040	2047	Percent
of destination	2018	2018	2017	2018	2017	change
North America Total	1,646,212	1,689,595	1,774,277	5,534,176	5,124,804	8.0
Canada*	1,536,276	1,396,223	1,352,489	4,668,250	4,145,274	12.6
Dominican Republic	-	-	-	-	51,488	
Mexico	109,936	111,491	421,788	684,045	865,255	-20.9
Trinidad and Tobago	-	181,881	-	181,881	62,787	189.7
South America Total	2,425,171	1,982,364	2,344,808	9,097,814	7,892,264	15.3
Argentina	240,262	135,874	211,411	688,001	572,829	20.1
Brazil	2,184,909	1,846,490	2,133,397	8,409,813	7,319,435	14.9
Europe Total	6,547,747	7,085,127	6,597,209	27,290,140	24,614,727	10.9
Austria	562,480	211,503	112,007	1,048,055	569,796	83.9
Belgium	222,055	222,177	263,346	1,055,626	1,251,372	-15.6
Croatia	417,887	589,498	453,230	2,232,726	1,927,196	15.9
Finland	148,716	242,509	121,253	517,087	417,706	23.8
France	334,267	202,045	292,941	1,271,448	1,425,288	-10.8
Germany, Federal Republic of	221,893	228,017	644,389	1,385,565	2,432,912	-43.0
Ireland	-	-	-	-	91,569	-
Italy	545,147	449,455	543,584	2,009,893	2,232,132	-10.0
Netherlands	1,605,613	1,873,086	860,654	6,197,476	3,396,400	82.5
Norway	16,915	15,262	19,728	64,690	69,882	-7.4
Poland	286,316	177,267	113,726	1,118,379	831,895	34.4
Portugal	-			82,959	84,797	-2.2
Romania	62,391	97,459	97,237	304,189	211,642	43.7
Slovakia	-	-	143,399	55,116	518,492	-89.4
Slovenia	-	-	115,253	127,242	115,253	10.4
Spain	133,412	250,849	247,021	757,242	858,589	-11.8
Sweden	52,052	218,253	163,570	538,727	725,199	-25.7
Turkey	362,735	719,588	412,136	2,548,372	2,091,984	21.8
Ukraine	1,131,268	1,251,606	1,816,755	4,589,983	4,329,574	6.0
United Kingdom	374,661	273,318	176,980	1,252,191	1,015,101	23.4
Other**	69,939	63,235	170,360	133,174	17,948	23.4 NM
	3,701,234		2 447 006			8.0
Asia Total		2,918,048	3,447,086	16,780,195	15,541,934	-22.8
China India	143,300	244,713	375,316	2,243,406	2,905,307	
	914,688	675,249	1,148,975	5,655,812	3,924,860	44.1
Japan	1,858,415	1,119,357	1,068,771	5,990,196	4,974,498	20.4
Pakistan	704 724	070.424	130,760	2 000 004	130,760	- 10.2
South Korea (Republic of Korea)	784,721	878,424	723,111	2,890,061	3,582,730	-19.3
Thailand	110	153	153	416	459	-9.4
Other**	-	152	-	304	23,320	-98.7
Australia and Oceania Total	-	-	-	-	47,413	-
Other**	-	-	-	-	47,413	-
Africa Total	852,223	845,580	624,890	2,810,849	2,033,424	38.2
Egypt	252,249	77,161	313,519	595,363	727,561	-18.2
Morocco	522,812	598,955	311,371	1,968,860	1,187,683	65.8
South Africa	77,162	79,918	-	157,080	118,180	32.9
Other**	-	89,546	-	89,546	-	-
Total	15,172,587	14,520,714	14,788,270	61,513,174	55,254,566	11.3

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

NM = Not meaningful due to changes of 500 percent or more.

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

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

Table 12. Average price of U.S. metallurgical coal exports

(dollars per short ton)

				Y	ear to date	
Continent and country of destination	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent
North America Total	108.59	115.51	98.52	111.47	103.75	change 7.4
Canada*	103.81	105.63	106.76	107.68	102.73	4.8
Dominican Republic	103.61	103.03	100.70	107.08	99.79	4.0
Mexico	175.38	146.46	72.10	121.18		7.7
	1/5.38		72.10		112.48	
Trinidad and Tobago	140.70	172.37	122.70	172.37	54.43	216.7
South America Total	149.78	137.40	123.79	142.91	135.63	5.4
Argentina	180.02	168.39	154.69	178.74	154.90	15.4
Brazil	146.46	135.12	120.72	139.98	134.12	4.4
Europe Total	156.12	141.62	129.55	147.28	141.39	4.2
Austria	188.58	164.65	151.64	181.43	195.64	-7.3
Belgium	158.96	158.04	149.51	159.95	139.84	14.4
Croatia	183.44	158.86	137.50	157.14	147.87	6.3
Finland	168.18	162.91	163.61	158.31	163.37	-3.1
France	173.54	166.68	115.62	164.37	149.58	9.9
Germany, Federal	88.10	157.61	161.99	155.61	147.60	5.4
Republic of						
Ireland	-	-	-	-	73.48	
Italy	127.36	132.78	126.43	145.50	145.86	-0.2
Netherlands	137.37	104.72	112.91	114.16	103.10	10.7
Norway	139.36	151.58	135.24	144.15	132.04	9.2
Poland	176.16	170.21	147.82	170.19	145.91	16.6
Portugal	-	-	-	63.50	39.19	62.0
Romania	115.31	68.63	134.04	89.24	137.94	-35.3
Slovakia	-	-	146.52	143.87	150.26	-4.3
Slovenia	-	-	76.39	63.50	76.39	-16.9
Spain	187.19	180.38	125.79	168.03	149.35	12.5
Sweden	167.68	137.42	141.59	147.05	160.35	-8.3
Turkey	146.93	146.24	130.71	141.57	140.31	0.9
Ukraine	177.41	161.67	119.98	168.68	150.71	11.9
United Kingdom	143.82	156.87	133.55	154.46	140.97	9.6
Other**	144.07	158.31	-	150.83	127.91	17.9
Asia Total	142.94	134.74	116.69	141.91	139.38	1.8
China	108.86	108.86	113.38	132.95	131.07	1.4
India	139.17	145.75	111.90	142.36	157.94	-9.9
Japan	156.37	139.26	129.03	151.83	130.30	16.5
Pakistan	-	-	47.13	-	47.13	-
South Korea (Republic of	121.76	127.72	120.37	127.44	141.59	-10.0
Korea)						
Thailand	166.35	99.71	99.71	117.31	99.71	17.7
Other**	-	100.00	-	100.00	169.56	-41.0
Australia and Oceania Total	-	-	-	-	168.28	_
Other**	-	-	-	-	168.28	
Africa Total	77.25	92.69	69.84	82.24	87.50	-6.0
Egypt	96.05	171.46	76.13	117.39	110.04	6.7
Morocco	63.51	62.97	63.50	63.72	68.86	-7.5
South Africa	108.86	181.44	-	145.79	136.08	7.1
Other**	-	144.38	-	144.38	-	
Total	142.31	133.77	119.39	138.98	134.55	3.3

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Note: Average price is based on the free alongside ship (f.a.s) value, including value for shipments of specialty coal not used as a fuel source (about 0.05 percent of all shipments). Total may not equal sum of components because of independent rounding.

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

Table 13. U.S. coal exports by customs district

					Year to date	
Customs district	October - December	July - September	October - December			Percent
	2018	2018	2017	2018	2017	change
Eastern Total	15,726,786	16,279,437	16,910,738	66,046,409	57,892,030	14.1
Baltimore, MD	4,699,727	5,407,066	6,487,687	21,526,000	20,804,995	3.5
Buffalo, NY	945,330	1,026,817	709,786	3,045,373	1,714,010	77.7
New York City, NY	1,046	3,115	174,009	91,805	341,902	-73.1
Norfolk, VA	9,968,505	9,793,975	9,465,580	41,160,205	34,768,195	18.4
Ogdensburg, NY	64,381	25,251	63,186	133,370	147,255	-9.4
Philadelphia, PA	47,496	22,994	10,383	88,472	115,257	-23.2
Portland, ME	120	47	53	609	172	254.1
St. Albans, VT	181	172	-	530	190	178.9
Washington, DC	-	-	54	45	54	-16.7
Southern Total	9,434,922	8,959,101	7,417,745	35,021,787	25,451,285	37.6
Charleston, SC	19	80	19	277	505	-45.1
Dallas/Fort Worth, TX	-	-	-	83	-	-
El Paso, TX	42,479	38,577	30,807	166,025	175,589	-5.4
Houston-Galveston, TX	121,617	310,248	198,101	968,086	399,920	142.1
Laredo, TX	587,544	520,585	671,244	2,280,955	2,463,862	-7.4
Miami, FL	831	2,053	193	6,101	761	NM
Mobile, AL	3,191,884	2,551,057	1,836,910	11,351,779	9,958,629	14.0
New Orleans, LA	5,490,292	5,535,164	4,679,751	20,184,157	12,450,529	62.1
Port Arthur, TX	-	-	-	60,627	-	-
Savannah, GA	225	1,258	494	2,968	1,125	163.8
Tampa, FL	31	79	226	729	365	99.7
Western Total	2,536,246	3,321,126	3,084,679	12,362,998	10,432,390	18.5
Anchorage, AK	-	-	1	50	273	-81.7
Great Falls, MT	171	138	106	2,590	245	NM
Honolulu, HI	-	-	-	1	75	-98.7
Los Angeles, CA	317,025	405,164	330,586	1,391,732	1,194,891	16.5
Nogales, AZ	383,812	390,133	161,002	1,399,049	197,230	NM
Portland, OR	-	3	-	6	2	200.0
San Diego, CA	74	22	21	536	77	NM
San Francisco, CA	726,816	636,329	905,054	2,940,389	3,046,263	-3.5
Seattle, WA	1,108,348	1,889,337	1,687,909	6,628,645	5,993,334	10.6
Northern Total	762,649	502,411	769,067	2,180,512	3,130,298	-30.3
Chicago, IL	-	79	-	79	32,661	-99.8
Cleveland, OH	642,028	349,043	715,935	1,628,634	2,593,236	-37.2
Detroit, MI	114,902	81,315	51,131	327,946	258,920	26.7
Duluth, MN	140	<del>.</del>	<del>.</del>	3,865	9,336	-58.6
Minneapolis, MN	-	67,200	-	202,785	220,511	-8.0
Pembina, ND	5,579	4,774	2,001	17,203	15,634	10.0
Other Ports	8,365	4,626	23,731	20,346	47,382	-57.1
Total	28,468,968	29,066,701	28,205,960	115,632,052	96,953,385	19.3

<sup>- =</sup> No data reported.

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

NM = Not meaningful due to changes of 500 percent or more.

Table 14. Steam coal exports by customs district

		July - September 2018	October - December 2017	Year to date		
Customs district	October - December 2018					Percent
				2018	2017	change
Eastern Total	4,286,620	4,481,082	5,448,752	17,623,743	16,209,775	8.7
Baltimore, MD	2,620,330	2,888,523	3,388,163	11,143,855	10,176,848	9.5
Buffalo, NY	35,438	2,802	32,626	43,429	44,057	-1.4
New York City, NY	1,046	3,115	174,009	91,717	341,853	-73.2
Norfolk, VA	1,519,702	1,540,198	1,788,981	6,144,168	5,394,393	13.9
Ogdensburg, NY	62,307	23,294	54,483	111,023	136,951	-18.9
Philadelphia, PA	47,496	22,994	10,383	88,472	115,257	-23.2
Portland, ME	120	47	53	609	172	254.1
St. Albans, VT	181	109	-	425	190	123.7
Washington, DC	-	-	54	45	54	-16.7
Southern Total	6,327,000	6,606,930	4,758,087	23,575,322	14,344,043	64.4
Charleston, SC	19	80	19	277	101	174.3
El Paso, TX	42,479	38,577	30,807	166,025	175,589	-5.4
Houston-Galveston, TX	121,617	310,163	198,101	968,001	399,920	142.0
Laredo, TX	586,785	520,069	670,876	2,247,035	2,430,940	-7.6
Miami, FL	831	2,053	193	6,101	761	NM
Mobile, AL	244,740	215,054	112,831	690,685	223,390	209.2
New Orleans, LA	5,330,283	5,519,902	3,744,843	19,433,491	11,112,690	74.9
Port Arthur, TX	-	-	-	60,627	-	-
Savannah, GA	215	953	191	2,351	287	NM
Tampa, FL	31	79	226	729	365	99.7
Western Total	2,536,057	3,321,126	3,084,662	12,362,809	10,432,321	18.5
Anchorage, AK	-	-	1	50	221	-77.4
Great Falls, MT	171	138	89	2,590	228	NM
Honolulu, HI	-	-	-	1	75	-98.7
Los Angeles, CA	316,836	405,164	330,586	1,391,543	1,194,891	16.5
Nogales, AZ	383,812	390,133	161,002	1,399,049	197,230	NM
Portland, OR	-	3	-	6	2	200.0
San Diego, CA	74	22	21	536	77	NM
San Francisco, CA	726,816	636,329	905,054	2,940,389	3,046,263	-3.5
Seattle, WA	1,108,348	1,889,337	1,687,909	6,628,645	5,993,334	10.6
Northern Total	138,339	132,223	102,458	536,658	665,308	-19.3
Chicago, IL	-	79	-	79	47	68.1
Cleveland, OH	101,629	60,706	68,602	222,872	281,634	-20.9
Detroit, MI	30,991	32,811	31,855	153,417	138,146	11.1
Duluth, MN	140	-	-	3,865	9,336	-58.6
Minneapolis, MN	-	33,853	-	139,676	220,511	-36.7
Pembina, ND	5,579	4,774	2,001	16,749	15,634	7.1
Other Ports	8,365	4,626	23,731	20,346	47,372	-57.1
Total	13,296,381	14,545,987	13,417,690	54,118,878	41,698,819	29.8

<sup>- =</sup> No data reported.

NM = Not meaningful due to changes of 500 percent or more.

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

Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report EM 545.'

Table 15. Metallurgical coal exports by customs district

			_			
Customs district	October - December	July - September	October - December			Percent
Customs district	2018	2018	2017	2018	2017	change
Eastern Total	11,440,166	11,798,355	11,461,986	48,422,666	41,682,255	16.2
Baltimore, MD	2,079,397	2,518,543	3,099,524	10,382,145	10,628,147	-2.3
Buffalo, NY	909,892	1,024,015	677,160	3,001,944	1,669,953	79.8
New York City, NY	-	-	-	88	49	79.6
Norfolk, VA	8,448,803	8,253,777	7,676,599	35,016,037	29,373,802	19.2
Ogdensburg, NY	2,074	1,957	8,703	22,347	10,304	116.9
St. Albans, VT	-	63	-	105	-	-
Southern Total	3,107,922	2,352,171	2,659,658	11,446,465	11,107,242	3.1
Charleston, SC	-	-	-	-	404	-
Dallas/Fort Worth, TX	-	-	-	83	-	-
Houston-Galveston, TX	-	85	-	85	-	-
Laredo, TX	759	516	368	33,920	32,922	3.0
Mobile, AL	2,947,144	2,336,003	1,724,079	10,661,094	9,735,239	9.5
New Orleans, LA	160,009	15,262	934,908	750,666	1,337,839	-43.9
Savannah, GA	10	305	303	617	838	-26.4
Western Total	189	-	17	189	69	173.9
Anchorage, AK	=	-	-	-	52	-
Great Falls, MT	-	-	17	-	17	-
Los Angeles, CA	189	-	-	189	-	-
Northern Total	624,310	370,188	666,609	1,643,854	2,464,990	-33.3
Chicago, IL	-	-	-	-	32,614	-
Cleveland, OH	540,399	288,337	647,333	1,405,762	2,311,602	-39.2
Detroit, MI	83,911	48,504	19,276	174,529	120,774	44.5
Minneapolis, MN	-	33,347	-	63,109	-	-
Pembina, ND	-	-	-	454	-	-
Other Ports	-	-	-	-	10	-
Total	15,172,587	14,520,714	14,788,270	61,513,174	55,254,566	11.3

<sup>- =</sup> No data reported.

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

#### **Table 16. U.S. coke exports**

(short tons)

				Year to date		
Continent and country	October - December	July - September	October - December			Percent
of destination	2018	2018	2017	2018	2017	change
North America Total	346,104	205,873	387,738	1,020,382	1,066,195	-4.3
Canada*	299,335	161,579	244,822	789,752	772,477	2.2
Mexico	46,702	44,032	142,081	229,731	291,871	-21.3
Other**	67	262	835	899	1,847	-51.3
South America Total	-	20	-	41	95	-56.8
Other**	-	20	-	41	95	-56.8
Europe Total	7,597	13	69,855	108,062	102,002	5.9
Other**	7,597	13	69,855	108,062	102,002	5.9
Asia Total	233	368	126	1,316	22,233	-94.1
Other**	233	368	126	1,316	22,233	-94.1
Australia and Oceania Total	209	214	86	604	334	80.8
Other**	209	214	86	604	334	80.8
Africa Total	-	-	-	20,478	18,188	12.6
Other**	-	-	-	20,478	18,188	12.6
Total	354,143	206,488	457,805	1,150,883	1,209,047	-4.8

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

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

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

**Table 17. Average Price of U.S. coke exports** 

(dollars per short ton)

					Year to date	
Continent and country	October - December	July - September	October - December			Percent
of destination	2018	2018	2017	2018	2017	change
North America Total	237.98	289.71	235.26	266.79	243.55	9.5
Canada*	230.75	284.76	219.52	256.78	229.52	11.9
Mexico	283.48	306.08	261.78	299.89	279.56	7.3
Other**	792.72	592.53	336.67	601.86	419.06	43.6
South America Total	-	530.00	-	515.22	526.36	-2.1
Other**	-	530.00	-	515.22	526.36	-2.1
Europe Total	155.61	453.85	151.46	233.02	137.64	69.3
Other**	155.61	453.85	151.46	233.02	137.64	69.3
Asia Total	539.08	801.85	892.87	714.10	180.17	296.3
Other**	539.08	801.85	892.87	714.10	180.17	296.3
Australia and Oceania Total	455.49	546.26	446.52	445.43	412.89	7.9
Other**	455.49	546.26	446.52	445.43	412.89	7.9
Africa Total	-	-	-	90.72	90.72	S
Other**	-	=	-	90.72	90.72	S
Total	236.54	290.93	222.69	261.10	231.22	12.9

<sup>\*</sup> Based on the U.S. - Canada Free Trade Agreement; as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

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

<sup>\*\*</sup> Includes countries with coal exports less than or equal to 50,000 short tons in 2017.

<sup>- =</sup> No data reported.

s = Absolute percentage less than 0.05.

**Table 18. U.S. coal imports** 

				•		
Continent and country	October - December	July - September	October - December			Percent
of origin	2018	2018	2017	2018	2017	change
North America Total	198,220	256,680	175,464	770,984	891,826	-13.5
Canada	198,038	256,680	175,442	770,359	891,734	-13.6
Mexico	182	-	22	625	92	NM
South America Total	1,130,165	840,050	879,648	4,061,012	6,086,896	-33.3
Colombia	1,130,042	839,988	879,451	4,060,581	6,086,612	-33.3
Peru	123	62	151	431	238	81.1
Venezuela	-	-	46	-	46	-
Europe Total	48,877	32,537	11,567	109,145	47,211	131.2
Germany, Federal Republic of	375	574	626	1,183	1,762	-32.9
Luxembourg	-	1,102	-	1,102	-	-
Netherlands	-		10,941		10,941	_
Russia	48,502	30,316		78,908	34,449	129.1
Ukraine		-	-	27,377	-	-
United Kingdom	-	545	-	575	59	NM
Asia Total	213,788	273,067	252,577	965,605	712,710	35.5
China	6,372	13,312	2,515	28,624	6,474	342.1
Hong Kong	9,989	3,920	5,512	21,602	6,339	240.8
India	-	-	164	-	444	-
Indonesia	197,427	255,835	244,386	915,188	699,453	30.8
Japan	-	-	-	10	-	-
Philippines	-	-	-	181	-	-
Australia and Oceania Total	-	-	-	-	700	-
Australia	-	-	-	-	700	-
Africa Total	11,028	36,376	37,829	47,404	37,829	25.3
South Africa	11,028	36,376	37,829	47,404	37,829	25.3
Total	1,602,078	1,438,710	1,357,085	5,954,150	7,777,172	-23.4

<sup>- =</sup> No data reported.

Note: Coal imports include coal to Puerto Rico and the Virgin Islands. Total may not equal sum of components because of independent rounding.

NM = Not meaningful due to changes of 500 percent or more.

Table 19. Average price of U.S. coal imports

(dollars per short ton)

			_	١		
Continent and country	October - December	July - September	October - December			Percent
of origin	2018	2018	2017	2018	2017	change
North America Total	179.98	186.35	181.33	191.22	189.84	0.7
Canada	180.03	186.35	181.32	191.25	189.83	0.7
Mexico	119.73	-	199.68	160.05	302.68	-47.1
South America Total	65.26	61.94	68.16	61.28	64.44	-4.9
Colombia	65.24	61.92	68.13	61.26	64.44	-4.9
Peru	271.59	268.21	265.01	264.59	264.87	-0.1
Venezuela	-	-	103.33	-	103.33	-
Europe Total	106.35	171.14	183.79	126.07	137.88	-8.6
Germany, Federal Republic of	74.87	74.75	74.76	75.65	83.13	-9.0
Luxembourg	-	490.09	-	490.09	-	-
Netherlands	-	-	190.03	-	190.03	-
Russia	106.59	162.38	-	128.21	124.17	3.3
Ukraine	-	-	-	107.41	-	-
United Kingdom	-	115.05	-	125.95	106.53	18.2
Asia Total	80.30	77.95	73.63	77.09	64.68	19.2
China	146.86	74.93	73.22	132.01	97.33	35.6
Hong Kong	74.93	74.94	74.93	74.93	94.38	-20.6
India	-	-	65.85	-	77.77	-
Indonesia	78.42	78.15	73.61	75.42	64.11	17.6
Japan	-	-	-	221.00	-	-
Philippines	-	-	-	65.78	-	-
Australia and Oceania Total	-	-	-	-	74.89	-
Australia	-	-	-	-	74.89	-
Africa Total	117.93	116.57	130.64	116.89	130.64	-10.5
South Africa	117.93	116.57	130.64	116.89	130.64	-10.5
U.S. Total*	83.07	91.02	86.54	82.30	79.62	3.4

<sup>\*</sup> U.S. Total is the average price of all coal imports.

Note: Average price is based on the customs import value, including value for shipments of specialty coal not used as a fuel source (about 0.05 percent of all shipments). 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 incured in bringing the merchandise to the United States. Coal imports include coal to Puerto Rico and the Virgin Islands. Total may not equal sum of components because of independent rounding.

<sup>- =</sup> No data reported.

**Table 20. Coal imports by customs district** 

(short tons)

Customs district	October - December	July - September	October - December			Percent
customs district	2018	2018	2017	2018	2017	change
Eastern Total	84,281	53,093	41,215	283,756	167,986	68.9
Baltimore, MD	460	139	-	1,114	278	300.7
Boston, MA	-	52,922	-	120,163	45,176	166.0
Buffalo, NY	-	32	11,180	207	12,452	-98.3
New York City, NY	323	-	273	1,094	2,065	-47.0
Ogdensburg, NY	-	-	-	-	187	-
Philadelphia, PA	-	-	-	-	21	-
Portland, ME	83,498	-	29,762	161,178	107,807	49.5
Southern Total	1,121,957	924,937	895,656	4,102,634	6,017,839	-31.8
Houston-Galveston, TX	123	390	315	4,542	1,804	151.8
Laredo, TX	182	-	22	239	92	159.8
Miami, FL	33,135	-	-	104,240	70,599	47.7
Mobile, AL	467,318	547,596	393,365	2,303,784	1,726,130	33.5
New Orleans, LA	26,540	17,867	7,755	54,871	10,078	444.5
San Juan, PR	475,594	325,040	46	1,318,785	1,217,179	8.3
Tampa, FL	119,065	34,044	494,153	316,173	2,991,957	-89.4
Western Total	256,858	267,824	285,979	1,031,012	1,019,188	1.2
Columbia-Snake, OR	-	-	-	181	-	-
Great Falls, MT	57,885	63,615	40,363	231,679	250,993	-7.7
Honolulu, HI	197,427	202,913	244,386	795,025	765,487	3.9
Los Angeles, CA	-	-	-	-	10	-
Nogales, AZ	-	-	-	386	-	-
San Francisco, CA	=	60	-	150	59	154.2
Seattle, WA	1,546	1,236	1,230	3,591	2,639	36.1
Northern Total	138,982	192,856	134,235	536,748	572,159	-6.2
Chicago, IL	-	-	-	215	10	NM
Cleveland, OH	375	574	626	1,166	1,395	-16.4
Detroit, MI	64,161	123,659	62,580	284,411	255,696	11.2
Duluth, MN	258	-	102	1,066	354	201.1
Pembina, ND	74,188	68,623	70,927	249,890	314,704	-20.6
Total	1,602,078	1,438,710	1,357,085	5,954,150	7,777,172	-23.4

<sup>- =</sup> No data reported.

Note: Coal imports include coal to Puerto Rico and the Virgin Islands. Total may not equal sum of components because of independent rounding. Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.'

NM = Not meaningful due to changes of 500 percent or more.

**Table 21. U.S. coke imports** 

(short tons)

			_		Year to date	
Continent and country	October - December	July - September	October - December			Percent
of origin	2018	2018	2017	2018	2017	change
North America Total	14,586	709	272	37,829	3,063	NM
Canada	14,586	709	272	37,829	3,052	NM
Mexico	-	-	-	-	11	-
South America Total	-	6,063	18,585	38,094	18,585	105.0
Chile	-	-	-	16,819	-	-
Colombia	-	6,063	18,585	21,275	18,585	14.5
Europe Total	17,668	43	443	26,322	23,301	13.0
Czech Republic	17,649	-	-	25,933	-	-
Germany, Federal	11	43	-	159	8	NM
Republic of						
Italy	-	-	433	196	1,037	-81.1
Poland	-	-	-	-	22,220	-
United Kingdom	8	-	10	34	36	-5.6
Asia Total	412	1,015	2,306	2,957	3,386	-12.7
China	107	-	1,482	155	1,905	-91.9
Indonesia	-	-	24	56	200	-72.0
Japan	305	618	800	2,349	1,281	83.4
Saudi Arabia	-	397	-	397	-	-
Africa Total	2,322	2,053	3,478	11,533	10,145	13.7
Egypt	-	-	-	14	-	-
South Africa	2,322	2,053	3,478	11,519	10,145	13.5
U.S. Total	34,988	9,883	25,084	116,735	58,480	99.6

<sup>- =</sup> No data reported.

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

Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.'

NM = Not meaningful due to changes of 500 percent or more.

Table 22. Average price of U.S. coke imports

(dollars per short ton)

Year to date October - December October - December Percent **Continent and country** July - September 2018 2018 of origin 2018 2017 2017 change 233.65 150.93 **North America Total** 205.42 271.09 161.34 68.0 Canada 233.65 205.42 150.93 271.09 160.59 68.8 Mexico 367.73 **South America Total** 298.00 150.02 131.79 150.02 -12.2 Chile 122.96 Colombia -7.5 298.00 150.02 138.76 150.02 **Europe Total** 332.93 532.67 307.19 331.87 111.15 198.6 Czech Republic 332.39 330.53 Germany, Federal 890.64 532.67 505.68 617.50 -18.1 Republic of Italy 293.49 286.97 287.49 -0.2 Poland 101.61 **United Kingdom** 750.00 900.00 797.06 808.33 -1.4 **Asia Total** 425.14 420.60 304.62 390.69 393.77 -0.8 China 731.40 276.43 724.06 366.65 97.5 Indonesia 1,603.50 1,183.13 1,140.44 3.7 Japan 317.70 317.77 317.70 317.52 0.1 317.86 Saudi Arabia 580.69 580.69 **Africa Total** 621.75 566.99 267.40 494.73 306.50 61.4 3,405.00 Egypt South Africa 621.75 566.99 267.40 491.19 306.50 60.3 **U.S. Total** 311.79 360.85 183.29 264.46 176.38 49.9

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

Source: U.S. Department of Commerce, Bureau of the Census, 'Monthly Report IM 145.'

<sup>- =</sup> No data reported.

# **Receipts and prices**

Table 23. Coal receipts at coke plants by census division

				Year to date			
Census division	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change	
Middle Atlantic	1,487	1,616	1,531	5,812	5,366	8.3	
East North Central	2,505	2,584	2,293	9,688	9,325	3.9	
South Atlantic	424	421	424	1,691	1,651	2.4	
East South Central	309	348	287	1,291	1,244	3.7	
U.S. Total	4,726	4,970	4,535	18,482	17,587	5.1	

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

### Table 24. Average price of coal receipts at coke plants by census division

(dollars per short ton)

				Year to date			
Census division	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change	
Middle Atlantic	w	W	W	W	W	W	
East North Central	140.71	137.89	134.93	138.28	133.27	3.8	
South Atlantic	w	W	W	w	w	w	
East South Central	w	W	W	W	w	W	
U.S. Total	131.42	129.97	122.73	129.07	122.14	5.7	

w = Data withheld to avoid disclosure.

Note: Average price is based on the cost, insurance, and freight (c.i.f. value). Total may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 25. Open market sales and average price of coke and breeze

(thousand short tons and dollars per short ton)

Commodity				,		
	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
Coke						
Sales	1,700	1,735	1,627	6,830	6,384	7.0
Average Price	293.72	301.44	293.25	301.58	277.21	8.8
Breeze						
Sales	149	159	146	555	525	5.8
Average Price	100.79	74.40	80.57	88.05	75.71	16.3

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 26. Coal receipts at other industrial plants by census division and state

				Year to date			
Census division and state	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change	
New England	6	5	6	25	22	12.6	
Maine	5	4	5	22	18	20.3	
Massachusetts		1		4	4	-18.4	
Middle Atlantic	217	191	239	879	1,093	-10.4	
New York	63	54	83	296	318	- <b>13.0</b> -7.0	
Pennsylvania	154	136	157	583	775	-24.7	
East North Central	1,761	1,534	1,520	6,455	6,623	-24.7	
Illinois	643	605	576	2,586	2,560	1.0	
Indiana	550	448	443	1,805	1,940	-6.9	
Michigan	160	166	143	652	668	-0.9	
Ohio	121	118	143	505	555	-9.0	
	288	118	214	906	899	0.8	
Wisconsin West North Central						-2.8	
	3,284	3,009	3,230	12,189	12,535		
lowa	546	621	597	2,374	2,429	-2.3	
Kansas	29	27	26	101	106	-5.1	
Minnesota	348	216	344	963	1,194	-19.4	
Missouri	223	227	191	855	893	-4.2	
Nebraska	318	275	307	1,163	1,160	0.3	
North Dakota	1,774	1,600	1,716	6,544	6,518	0.4	
South Dakota	45	43	49	189	236	-19.9	
South Atlantic	764	710	771	2,892	3,038	-4.8	
Florida	155	142	147	529	584	-9.4	
Georgia	79	82	75	345	314	10.1	
Maryland	165	121	150	542	565	-4.0	
North Carolina	97	93	112	402	462	-12.9	
South Carolina	52	57	64	204	252	-19.1	
Virginia	131	111	125	493	487	1.4	
West Virginia	85	103	99	376	375	0.1	
East South Central	783	765	655	3,132	3,186	-1.7	
Alabama	240	221	206	925	889	4.0	
Kentucky	222	184	192	784	831	-5.6	
Tennessee	322	360	257	1,424	1,466	-2.9	
West South Central	329	316	362	1,324	1,504	-12.0	
Arkansas	50	45	46	190	192	-1.2	
Louisiana	58	63	57	245	234	4.9	
Oklahoma	66	59	102	323	446	-27.5	
Texas	155	150	157	566	632	-10.5	
Mountain	866	718	891	3,143	3,318	-5.3	
Arizona	75	75	57	288	202	42.8	
Colorado	59	22	78	195	265	-26.5	
Idaho	20	28	16	90	88	2.2	
Montana	95	35	99	241	265	-9.3	
Nevada	91	62	67	302	267	12.9	
New Mexico	19	20	22	72	71	0.9	
Utah	88	83	119	366	503	-27.4	
Wyoming	419	391	434	1,589	1,655	-4.0	
Pacific	367	421	415	1,537	1,548	-0.7	
Alaska	S	S	S	1	1	S	
California	332	402	377	1,418	1,437	-1.4	
Oregon	11	6	19	46	29	55.3	
Washington	23	13	19	73	80	-8.8	
U.S. Total	8,378	7,669	8,089	31,576	32,867	-3.9	

<sup>- =</sup> No data reported.

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

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users' and Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 27. Average price of coal receipts at other industrial plants by census division and state

(dollars per short ton)

			_	Year to date		
Census division and state	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
New England	w	w	w	w	w	w
Maine	W	W	W	W	w	w
Massachusetts	W	W	W	W	w	W
Middle Atlantic	96.42	94.00	94.38	94.64	83.76	13.0
New York	W	W	127.23	W	W	w
Pennsylvania	W	W	76.79	W	W	w
East North Central	75.25	72.54	73.56	72.68	71.99	1.0
Illinois	W	45.25	W	W	44.11	w
Indiana	W	94.02	W	W	91.57	w
Michigan	93.75	85.41	91.07	86.96	86.17	0.9
Ohio	98.24	94.69	100.08	99.33	101.33	-2.0
Wisconsin	86.83	83.41	81.29	84.49	80.48	5.0
West North Central	26.81	29.30	27.86	28.32	30.80	-8.1
lowa	34.60	41.60	40.20	39.53	42.41	-6.8
Kansas	W	W	W	W	w	w
Minnesota	47.01	48.46	46.85	48.04	60.31	-20.3
Missouri	47.56	48.88	51.76	49.57	49.44	0.3
Nebraska	25.41	31.29	26.72	27.57	29.67	-7.1
North Dakota	W	W 91.25	W	27.37 W	23.07 W	,. <u>.</u>
South Dakota	W	W	W	W	W	w
South Atlantic	98.68	99.07	94.91	99.44	94.46	5.3
Florida						
Georgia	102.91	105.68	95.32	102.08	93.15	9.6
Maryland	102.31 W	103.08 W	93.32 W	102.08 W	93.13 W	
North Carolina	95.93	96.01	94.14	96.36	93.57	3.0
South Carolina	99.45	98.08	97.41	99.37	97.23	2.2
Virginia	93.66	96.02	89.12	92.13	91.47	0.7
West Virginia	155.73	133.44	155.23	157.83	154.15	2.4
East South Central	89.41	86.73	85.42	87.70	87.44	0.3
Alabama	93.75	94.04		94.89	93.50	1.5
Kentucky	89.55	84.45	87.11	88.68	89.26	-0.6
	86.08	83.40		82.48	82.73	-0.8
Tennessee			W 67.95			
West South Central	77.87	79.04	67.85	76.23	65.06	17.2
Arkansas	W	W	W	W	W	W
Louisiana	W CO 10	W 92.26	C4.25	W C9 70	W 56.54	W
Oklahoma	69.19	82.26	64.25	68.79	56.54	21.7
Texas	85.86	88.35	73.96	87.01	73.23	18.8
Mountain	56.00	59.30	52.33	56.37	53.03	6.3
Arizona	W	W	W	W	W	W
Colorado	W	W	40.30	W	W	W
Idaho	W 20.17	109.59	152.98	W	W 27.40	W
Montana	38.17	49.46	33.42	41.29	37.48	10.2
Nevada	71.79	75.48	73.38	75.09	71.55	4.9
New Mexico	W 52.61	W 54.60	W 52.77	W 52.65	W 52.00	W
Utah	53.61	54.68	52.77	53.65	52.90	1.4
Wyoming	47.12	47.31	45.76	46.59	44.66	4.3
Pacific	77.50	77.54	83.53	81.53	86.26	-5.5
California	77.46	77.49	84.21	81.83	87.02	-6.0
Oregon	W	W	W	W	W	W
Washington	W	W	W	W	W	W
U.S. Total	58.47	59.26	56.82	59.05	58.67	0.6

<sup>- =</sup> No data reported.

Note: Average price is based on the cost, insurance, and freight (c.i.f. value). Total may not equal sum of components because of independent rounding. Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

w = Data withheld to avoid disclosure.

Table 28. U.S. coal receipts at manufacturing plants by North American Industry Classification System (NAICS) code

					Year to date		
NAIC	6 code	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
311	Food Manufacturing	2,064	1,755	2,010	7,573	7,807	-3.0
312	Beverage and Tobacco Product Mfg.	4	3	4	17	23	-26.5
313	Textile Mills	22	13	22	84	99	-15.2
322	Paper Manufacturing	652	537	706	2,602	2,967	-12.3
324	Petroleum and Coal Products	1,633	1,515	1,595	6,113	6,076	0.6
325	Chemical Manufacturing	796	893	800	3,475	3,689	-5.8
327	Nonmetallic Mineral Products Mfg.	2,331	2,112	2,072	8,419	8,489	-0.8
331	Primary Metal Manufacturing	539	521	547	2,019	2,268	-11.0
333	Machinery Manufacturing	11	2	3	23	17	34.7
339	Miscellaneous Manufacturing	327	321	329	1,250	1,432	-12.7
U.S. T	otal	8,378	7,669	8,089	31,576	32,867	-3.9

<sup>\*</sup> Includes coal gasification projects.

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

Table 29. Average price of U.S. coal receipts at manufacturing plants by North American Industry Classification System (NAICS) code

(dollars per short ton)

					Year to date		
NAIC	S code	October - December <b>201</b> 8	July - September 2018	October - December 2017	2018	2017	Percent change
311	Food Manufacturing	41.19	43.31	42.16	42.19	44.89	-6.0
312	Beverage and Tobacco Product Mfg.	W	W	W	W	W	W
313	Textile Mills	113.58	115.25	112.67	113.89	110.06	3.5
322	Paper Manufacturing	86.58	88.40	81.57	84.78	79.80	6.2
324	Petroleum and Coal Products	W	W	W	W	W	W
325	Chemical Manufacturing	75.97	74.29	66.00	74.44	70.75	5.2
327	Nonmetallic Mineral Products Mfg.	77.26	77.25	74.56	77.00	74.36	3.6
331	Primary Metal Manufacturing	115.93	109.72	120.26	118.03	113.07	4.4
333	Machinery Manufacturing	W	W	W	W	W	W
339	Miscellaneous Manufacturing	52.03	52.82	52.75	52.84	53.95	-2.1
U.S. T	otal	58.47	59.26	56.82	59.05	58.67	0.6

<sup>\*</sup> Includes coal gasification projects.

Note: Average price is based on the cost, insurance, and freight (c.i.f. value). Total may not equal sum of components because of independent rounding. Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

<sup>\*\*</sup> Excludes coke plants.

<sup>- =</sup> No data reported.

<sup>\*\*</sup> Excludes coke plants.

<sup>- =</sup> No data reported.

w = Data withheld to avoid disclosure.

Table 30. Coal receipts at commercial and institutional users by census division and state

					Year to date			
Census division	October - December	July - September	October - December			Percent		
and state	2018	2018	2017	2018	2017	change		
Middle Atlantic	3	-	9	14	28	-50.7		
Pennsylvania	3	-	9	14	28	-50.7		
East North Central	36	34	48	180	165	9.1		
Illinois	21	19	27	108	101	6.5		
Indiana	9	15	16	52	44	17.1		
Wisconsin	6	-	5	20	19	4.8		
West North Central	54	28	56	172	198	-13.4		
Iowa	23	26	25	95	115	-17.1		
Minnesota	1	-	1	3	8	-58.1		
Missouri	7	-	6	13	24	-46.7		
North Dakota	23	2	23	60	51	17.2		
South Atlantic	34	20	39	95	128	-25.6		
District of Columbia	-	-	-	-	2	-		
North Carolina	25	14	26	71	98	-27.7		
Virginia	9	6	12	24	28	-13.4		
East South Central	S	S	2	5	10	-51.4		
Kentucky	S	S	2	5	10	-51.4		
Mountain	2	2	6	11	15	-25.5		
Colorado	-	-	1	-	1	-		
Montana	-	2	1	3	2	53.3		
Wyoming	2	S	4	8	12	-34.6		
Pacific	111	88	106	431	473	-8.8		
Alaska	111	88	106	431	473	-8.8		
U.S. Total	241	173	264	908	1,017	-10.7		

<sup>- =</sup> No data reported.

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

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

Table 31. Average price of coal receipts at commercial and institutional users by census division and state (dollars per short ton)

					Year to date		
Census division	October - December	July - September	October - December			Percent	
and state	2018	2018	2017	2018	2017	change	
Middle Atlantic	107.76	-	121.96	105.17	119.40	-11.9	
Pennsylvania	107.76	-	121.96	105.17	119.40	-11.9	
East North Central	72.07	51.94	67.68	66.67	66.85	-0.3	
Illinois	w	W	W	W	W	w	
Indiana	w	W	W	w	w	w	
Wisconsin	153.50	-	152.59	154.28	153.92	0.2	
West North Central	76.88	90.38	73.69	79.36	77.97	1.8	
lowa	w	W	W	W	W	w	
Minnesota	w	-	W	w	w	w	
Missouri	w	-	w	w	w	w	
North Dakota	w	W	W	w	w	w	
South Atlantic	139.13	126.26	106.34	123.18	108.52	13.5	
District of Columbia	-	-	-	-	156.97	-	
North Carolina	w	W	W	w	w	w	
Virginia	w	W	W	W	107.58	w	
East South Central	w	w	w	w	w	w	
Kentucky	w	W	W	w	W	w	
Mountain	w	w	w	w	w	w	
Colorado	-	-	W	-	w	-	
Montana	-	W	W	w	W	w	
Wyoming	w	W	W	w	w	w	
Pacific	w	w	w	w	w	w	
Alaska	W	W	W	w	w	w	
U.S. Total	89.41	82.90	82.54	83.83	82.97	1.0	

<sup>- =</sup> No data reported.

Note: Average price is based on the cost, insurance, and freight (c.i.f. value). Total may not equal sum of components because of independent rounding. Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

w = Data withheld to avoid disclosure.

## Consumption

Table 32. U.S. coal consumption by end-use sector, 2012 - 2018

		_	Oth	er Industrial	Other Industrial			ional	
Year and quarter	Electric power sector <sup>1</sup>	Coke plants	CHP <sup>2</sup>	Non- CHP <sup>3</sup>	Total	CHP⁴	Non- CHP⁵	Total	Total
2012			:						
January - March	190,664	5,283	5,531	5,667	11,198	418	270	688	207,833
April - June	185,721	5,296	4,598	5,528	10,125	319	94	414	201,555
July - September	238,076	5,044	4,950	5,521	10,470	347	46	393	253,984
October - December	209,091	5,128	4,987	6,057	11,044	366	184	550	225,813
Total	823,551	20,751	20,065	22,773	42,838	1,450	595	2,045	889,185
2013									
January - March	211,971	5,280	5,115	5,942	11,057	418	260	679	228,987
April - June	199,845	5,471	4,747	5,554	10,301	307	91	397	216,014
July - September	237,205	5,429	4,830	5,538	10,368	299	57	355	253,357
October - December	208,942	5,294	5,069	6,260	11,329	333	187	520	226,084
Total	857,962	21,474	19,761	23,294	43,055	1,356	595	1,951	924,442
2014									
January - March	231,534	4,886	5,153	6,029	11,181	381	348	729	248,329
April - June	195,922	5,174	4,561	5,853	10,414	232	140	372	211,881
July - September	231,066	5,636	4,683	5,743	10,425	221	105	326	247,453
October - December	193,081	5,601	4,680	6,245	10,925	229	231	460	210,068
Total	851,602	21,297	19,076	23,870	42,946	1,063	824	1,887	917,731
2015									
January - March	196,656	5,156	4,602	5,791	10,393	277	290	567	212,772
April - June	174,376	4,987	4,095	5,216	9,311	166	136	302	188,975
July - September	214,811	5,030	4,316	4,957	9,273	173	105	278	229,393
October - December	152,601	4,535	3,971	5,511	9,482	183	174	357	166,974
Total	738,444	19,708	16,984	21,475	38,459	798	706	1,503	798,115
2016									
January - March	152,744	4,124	3,954	5,177	9,131	225	224	448	166,448
April - June	147,491	4,096	3,496	4,986	8,482	128	81	209	160,278
July - September	210,512	4,163	3,771	4,713	8,483	145	55	200	223,358
October - December	167,807	4,102	3,499	5,253	8,752	185	141	326	180,987
Total	678,554	16,485	14,720	20,129	34,849	683	500	1,183	731,071
2017									
January - March	160,569	4,236	3,482	5,052	8,534	194	179	373	173,712
April - June	154,230	4,325	3,096	5,012	8,107	121	82	203	166,866
July - September	190,545	4,491	3,083	5,168	8,251	136	59	195	203,482
October - December	159,649	4,485	3,314	5,057	8,371	159	130	290	172,796
Total	664,993	17,538	12,975	20,289	33,264	610	451	1,061	716,856
2018									
January - March	154,803	4,228	3,496	4,650	8,146	175	180	354	167,531
April - June	144,176	4,610	3,045	4,646	7,691	128	65	193	156,669
July - September	181,600	4,762	2,897	4,651	7,548	147	26	173	194,083
October - December	155,920	4,737	3,030	5,122	8,152	138	111	248	169,057
Total	636,498	18,337	12,468	19,069	31,538	587	381	968	687,340
2017 January - December	664,993	17,538	12,975	20,289	33,264	610	451	1,061	716,856
2016 January - December	678,554	16,485	14,720	20,129	34,849	683	500	1,183	731,071

<sup>1</sup> 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). The reported coal consumption is the total for producing electricity and useful thermal output.

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

<sup>2</sup> Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. The reported coal consumption is the total for producing electricity and useful thermal output.

<sup>3</sup> All industrial sector fuel use other than in 'Coke Plants' and 'Industrial CHP.'

<sup>4</sup> Includes commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as hospitals and universities. The reported coal consumption is the total for producing electricity and useful thermal output.

 $<sup>5\,</sup>$  All commercial sector fuel use other than that in 'Commercial CHP.' Excludes residential use.

Source: U.S. Energy Information Administration (EIA). \*Electric Power Sector and CHP: Form EIA-923, 'Power Plant Operations Report.' \*Coke Plants: Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' \*Other Industrial: Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users,' Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and Form EIA-923, 'Power Plant Operations Report.' \*Commercial and Institutional: Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 33. Coal carbonized at coke plants by census division

					Year to date		
Census division	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change	
Middle Atlantic	1,513	1,542	1,380	5,731	5,347	7.2	
East North Central	2,477	2,488	2,363	9,694	9,295	4.3	
South Atlantic	445	426	405	1,671	1,587	5.2	
East South Central	302	306	337	1,242	1,308	-5.1	
U.S. Total	4,737	4,762	4,485	18,337	17,538	4.6	

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 34. Coal consumption at other industrial plants by census division and state

Census division and state	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
New England	6	5	6	25	22	12.0
Maine	5	4	5	21	18	15.0
Massachusetts	1	1	1	4	4	-1.2
Middle Atlantic	206	191	247	857	1,160	-26.2
New York	58	49	87	281	386	-27.3
Pennsylvania	147	142	160	576	774	-25.6
East North Central	1,555	1,549	1,602	6,318	6,776	-6.8
Illinois	621	606	572	2,560	2,590	-1.1
Indiana	442	459	466	1,730	2,004	-13.7
Michigan	119	168	184	621	706	-12.1
Ohio	120	119	146	508	561	-9.6
Wisconsin	252	197	235	900	915	-1.6
West North Central	3,288	2,925	3,371	12,349	12,558	-1.7
lowa	565	588	621	2,399	2,412	-0.5
Kansas	40	28	33	117	112	4.9
Minnesota	338	203	363	1,076	1,201	-10.4
Missouri	206	224	201	838	898	-6.7
Nebraska	304	270	327	1,138	1,173	-3.0
North Dakota	1,785	1,586	1,764	6,599	6,540	0.9
South Dakota	49	26	62	181	224	-19.2
South Atlantic	755	658	740	2,853	3,029	-5.8
Florida	136	134	123	514	562	-8.5
Georgia	83	68	89	336	335	0.4
Maryland	158	124	150	540	562	-3.9
North Carolina	101	87	108	398	454	-12.3
South Carolina	58	39	55	200	251	-20.3
Virginia	128	114	122	494	503	-1.9
West Virginia	91	93	93	371	363	2.4
East South Central	739	792	726	3,111	3,279	-5.1
Alabama	229	232	251	932	955	-2.4
Kentucky	205	188	191	767	834	-8.1
Tennessee	305	372	283	1,412	1,490	-5.2
West South Central	319	309	358	1,305	1,542	-15.4
Arkansas	42	44	50	175	198	-11.6
Louisiana	58	63	56	245	241	1.8
Oklahoma	79	72	111	356	474	-25.0
Texas	140	129	140	530	630	-15.9
Mountain	885	719	887	3,146	3,316	-5.1
Arizona	84	66	61	280	227	23.6
Colorado	61	28	71	179	295	-39.5
Idaho	35	21	36	122	114	6.6
Montana	90	41	92	235	252	-6.7
Nevada	74	76	64	295	258	14.2
New Mexico	20	20	21	73	72	1.1
Utah	99	97	111	378	485	-22.0
Wyoming	422	370	433	1,583	1,611	-1.8
Pacific	400	401	434	1,574	1,582	-0.5
Alaska	S	S	S	1	1	S
California	348	385	390	1,438	1,464	-1.7
Oregon	33	-	27	61	41	48.2
Washington	20	16	17	74	76	-2.7
U.S. Total	8,152	7,548	8,371	31,538	33,264	-5.2

<sup>- =</sup> No data reported.

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

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users' and Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 35. U.S. coal consumption at manufacturing plants by North American Industry Classification System (NAICS) code (thousand short tons)

					Ye	ear to date	
NAICS code		October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
311	Food Manufacturing	2,054	1,713	2,060	7,646	7,862	-2.8
312	Beverage and Tobacco Product Mfg.	4	2	4	17	24	-27.3
313	Textile Mills	21	13	23	83	99	-16.1
322	Paper Manufacturing	652	549	746	2,632	3,001	-12.3
324	Petroleum and Coal Products	1,629	1,523	1,611	6,127	6,068	1.0
325	Chemical Manufacturing	819	890	832	3,530	3,740	-5.6
327	Nonmetallic Mineral Products Mfg.	2,174	2,015	2,123	8,187	8,605	-4.9
331	Primary Metal Manufacturing	471	537	587	2,053	2,358	-13.0
333	Machinery Manufacturing	6	10	35	45	67	-32.9
336	Transportation Equipment Mfg.	-	-	1	2	3	-14.7
339	Miscellaneous Manufacturing	323	296	349	1,216	1,438	-15.4
U.S. T	otal	8,152	7,548	8,371	31,538	33,264	-5.2

<sup>\*</sup> Includes coal gasification projects.

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

<sup>\*\*</sup> Excludes coke plants.

<sup>- =</sup> No data reported.

Table 36. Coal consumption at commercial and institutional users by census division and state

Year to date **Census division** October - December July - September October - December Percent 2018 2018 2017 and state 2018 2017 change **Middle Atlantic** 2 6 14 25 -42.8 2 -42.8 Pennsylvania 6 14 25 **East North Central** 6.5 35 35 47 192 180 Illinois 19 17 23 109 103 6.0 18 Indiana 19 57 10.7 11 63 Ohio 1 5 Wisconsin 5 20 20 0.9 **West North Central** 49 29 208 53 181 -13.0 Iowa 25 29 25 104 122 -14.2 Minnesota 2 3 6 8 -19.0 Missouri 6 6 12 25 -51.2 North Dakota 17 s 19 58 54 8.2 27 40 107 143 -25.4 **South Atlantic** 15 **District of Columbia** 23.0 1 1 North Carolina 20 14 29 78 105 -25.9 Virginia 27 37 -25.3 6 1 11 **East South Central** 2 5 14 s S -61.7 Kentucky 2 5 14 -61.7 S S 4 5 11 15 Mountain -25.8 s Colorado S Montana 1 1 3 2 33.3 4 Wyoming 2 S 8 12 -34.6 **Pacific** 131 93 136 458 476 -3.8 Alaska 131 93 136 458 476 -3.8 U.S. Total 248 173 290 968 1,061 -8.8

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

 $Source: U.S.\ Energy\ Information\ Administration\ (EIA),\ Form\ EIA-3,\ 'Quarterly\ Survey\ of\ Industrial,\ Commercial\ \&\ Institutional\ Coal\ Users.'$ 

<sup>- =</sup> No data reported.

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

### **Stocks**

Table 37. U.S. coal stocks, 2012 - 2018

Coal consumers Commercial **Coal producers** Electric and Coke Other institutional power and Last day of quarter **Total Total** industrial<sup>2</sup> sector1 plants users distributors 2012 March 31 195,380 2,300 3,929 557 202,166 51,141 253,307 June 30 197,924 2,295 4,219 585 205,023 50,374 255,397 September 30 182,020 2,396 4,518 596 189,530 46,231 235,761 238,853 December 31 185,116 2,522 4,475 192,696 46,157 583 2013 March 31 2,207 3,946 530 48,422 171,736 178,419 226,841 June 30 2,500 171,124 3,957 529 178,110 50,129 228,239 September 30 152.694 2,546 4,308 530 160,079 47,135 207,214 December 31 495 200,328 147,884 2,200 4,097 154,676 45,652 2014 168,718 March 31 118,260 1,791 3,534 405 123,990 44,728 June 30 133,479 1,937 3,626 429 139,471 42,682 182,153 September 30 124,546 2,307 4,070 462 131,386 38,828 170,214 December 31 151,548 449 38,894 2,640 4,196 158,833 197,727 2015 March 31 154,347 2,135 3,639 388 160,509 39,610 200,119 June 30 166,437 2,627 3,864 386 173,314 39,399 212,713 September 30 36,213 205,997 162,109 3,013 4,271 392 169,784 December 31 195,548 2,236 4,382 394 202.560 35,871 238.431 2016 March 31 191,553 1,914 3,956 332 197,755 35,207 232.962 June 30 182,086 1,802 3,834 337 188,060 32,932 220,992 September 30 156,567 1,660 3,720 370 162,318 27,282 189,600 December 31 162,009 1,675 3,637 360 167,681 25,309 192,990 2017 March 31 161,815 1,388 3,236 335 166,774 25,190 191,964 June 30 158,014 1,626 3,295 329 163,264 23,430 186,694 September 30 337 139,571 1,670 3,482 145,060 23,430 168,490 December 31 137,687 142,957 1,718 3,242 310 23,999 166,956 2018 275 March 31 126,532 1,508 2,891 131,206 26,775\* 157,981 June 30 121,529 1,616 2,897 257 126,298 24,524\* 150,822 September 30 100,781 1,811 3,022 263 105,877 23,413\* 129,290 December 31 102,786 1,807 3,270 250 23,978\* 132,092 108,114

Note: Beginning in 1999, the first three quarters of each year's data for coal producers and distributors are estimated. Electric power sector stocks include anthracite, bituminous coal, sub-bituminous coal, and lignite, and exclude waste coal. Total may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration (EIA). \*Electric Power Sector: Form EIA-923, 'Power Plant Operations Report.' \*Coke Plants: Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' \*Other Industrial and Commercial and Institutional Users: Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' \*Producers and Distributors: 'Short Term Energy Outlook' estimates, 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.'

<sup>1</sup> 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).

<sup>2</sup> Manufacturing plants only.

<sup>\*</sup> Estimated.

<sup>- =</sup> No data reported.

#### Table 38. Coal stocks at coke plants by census division

(thousand short tons)

Percent change (December 31) December 31, 2017 2018 versus 2017 **Census division** December 31, 2018 September 30, 2018 Middle Atlantic 444 459 355 25.3 East North Central 1,015 993 1,042 -2.6 South Atlantic 151 170 177 -14.4 **East South Central** 197 189 145 36.0 **U.S. Total** 1,807 1,811 1,718 5.2

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 39. Coal stocks at other industrial plants by census division and state

Census division and state	December 31, 2018	September 30, 2018	December 31, 2017	Percent change (December 31) 2018 versus 2017
New England	5	5	5	0.9
Maine	1	1	S	122.2
Massachusetts	4	4	4	-10.1
Middle Atlantic	248	237	231	7.6
New York	91	87	78	16.6
Pennsylvania	157	150	152	3.0
East North Central	790	596	653	20.9
Illinois	140	118	114	22.8
Indiana	269	175	212	26.9
Michigan	237	196	195	21.2
Ohio	19	19	23	-14.2
Wisconsin	126	88	110	13.7
West North Central	567	550	692	-18.1
lowa	117	136	144	-18.9
Kansas	10	24	29	-64.7
Minnesota	95	64	186	-48.9
Missouri	87	70	65	34.1
Nebraska	78	63	53	48.5
North Dakota	148	160	192	-22.5
South Dakota	31	34	23	31.1
South Atlantic	409	378	372	10.0
Florida	104	63	72	44.2
	59	64	55	6.0
Georgia		7	13	11.1
Maryland North Carolina	39	42	35	11.7
South Carolina	72	78	68	5.0
	57	54	69	-17.5
Virginia Wast Virginia	65	70	60	8.5
West Virginia East South Central	206	160		21.7
Alabama	84	72	<b>169</b>	15.4
	36	20	23	58.6
Kentucky	86		74	
Tennessee West South Central		68		16.5
	392	392	413	-5.1
Arkansas	46	38	31	48.8
Louisiana	9	8	5	78.6
Oklahoma	84	97	113	-25.9
Texas	253	249	264	-4.1
Mountain	539	555	554	-2.7
Arizona	35	43	27	30.0
Colorado	29	32	19	54.5
Idaho	244	258	266	-8.1
Montana	45	40	56	-20.3
Nevada	36	19	30	20.6
New Mexico	2	2	3	-44.2
Utah	42	54	59	-29.8
Wyoming	107	106	94	13.3
Pacific	116	149	154	-24.6
California	103	118	125	-17.6
Oregon	7	29	23	-66.9
Washington	5	1	6	-13.9
U.S. Total	3,270	3,022	3,242	0.9

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

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

Table 40. U.S. coal stocks at manufacturing plants by North American Industry Classification System (NAICS) code

Percent change (December 31) **NAICS** code December 31, 2018 September 30, 2018 December 31, 2017 2018 versus 2017 311 **Food Manufacturing** 637 626 708 -10.0 -57.7 312 Beverage and Tobacco Product Mfg. 1 2 3 313 **Textile Mills** 14 13 13 2.5 322 Paper Manufacturing 321 321 350 -8.1 324 **Petroleum and Coal Products** 164 159 178 -7.9 325 **Chemical Manufacturing** 245 -22.4 224 288 327 Nonmetallic Mineral Products Mfg. 1,495 1,326 1,281 16.7 331 Primary Metal Manufacturing 270 198 -13.7 313 333 Machinery Manufacturing 19 14 24 -19.3 336 Transportation Equipment Mfg. 2 -100.0 339 Miscellaneous Manufacturing 125 82 53.0 118 **U.S. Total** 3,270 3,022 3,242 0.9

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

Table 41. Coke and breeze stocks at coke plants by census division

(thousand short tons)

Percent change (December 31) 2018 versus 2017 Census division December 31, 2018 September 30, 2018 December 31, 2017 Middle Atlantic 85 79 -7.9 224 277 421 East North Central -46.8 South Atlantic 47 46 85 -45.3 East South Central 99 85 101 -1.5 **U.S. Total** 488 700 455 -34.9 **Coke Total** 354 396 558 -36.6 **Breeze Total** 102 92 142 -28.3

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

<sup>\*</sup> Includes coal gasification projects.

<sup>\*\*</sup> Excludes coke plants.

<sup>- =</sup> No data reported.

Table 42. Coal stocks at commercial and institutional users by census division and state

Census division				Percent change (December 31)
and state	December 31, 2018	September 30, 2018	December 31, 2017	2018 versus 2017
Middle Atlantic	42	42	42	-0.2
Pennsylvania	42	42	42	-0.2
East North Central	34	38	51	-34.1
Illinois	22	20	23	-3.6
Indiana	9	11	21	-55.3
Ohio	-	5	5	-100.0
Wisconsin	3	2	3	2.6
West North Central	35	30	48	-26.5
Iowa	15	17	28	-47.4
Minnesota	5	6	7	-18.0
Missouri	1	-	1	0.4
North Dakota	14	8	12	12.5
South Atlantic	41	34	48	-15.1
District of Columbia	3	3	4	-32.4
North Carolina	23	18	26	-11.7
Virginia	15	12	18	-15.9
East South Central	8	8	8	1.1
Kentucky	8	8	8	1.1
Mountain	3	4	3	5.4
Colorado	1	1	1	S
Montana	2	3	2	7.6
Wyoming	S	S	S	S
Pacific	87	107	110	-20.5
Alaska	87	107	110	-20.5
U.S. Total	250	263	310	-19.3

<sup>- =</sup> No data reported.

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

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

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

# Quality

Table 43. Average quality of coal received at manufacturing and coke Plants by census division and state

			_	Y	Year to date	
Census division and state <sup>1</sup>	October - December 2018	July - September 2018	October - December	2010	2017	Percent
	2018	2018	2017	2018	2017	change
New England	12.659	12.705	12.661	12.692	12.610	0.5
Btu Sulfur	12,658 0.76	12,705 0.75	12,661 0.83	12,682 0.77	12,619 0.81	0.5
Ash	7.18	7.27	7.96			-4.1 -6.9
Maine	7.10	1.21	7.90	7.59	8.15	-0.9
Btu	12,773	12,773	12,714	12,748	12,684	0.5
Sulfur	0.73	0.73	0.67	0.75	0.71	5.5
Ash	7.39	7.39	7.11	7.29	7.48	-2.5
Massachusetts	7.35	7.33	7.11	7.23	7.40	-2.5
Btu	12,189	12,267	12,479	12,290	12,358	-0.5
Sulfur	0.90	0.89	1.37	0.94	1.21	-22.0
Ash	6.32	6.53	10.84	9.33	10.81	-13.7
Middle Atlantic	0.52	0.55	10.04	9.55	10.81	-13.7
Btu	14,079	14,095	13,996	14,080	13,873	1.5
Sulfur	1.09	1.07	1.13	1.10	1.14	-2.8
Ash	7.44	7.48	8.07	7.68	8.52	-9.8
New York	,,,,,	7.40	0.07	7.00	0.52	5.0
Btu	13,072	13,425	13,345	13,371	13,402	-0.2
Sulfur	1.89	1.68	1.65	1.77	1.64	7.5
Ash	7.93	7.62	6.95	7.75	7.13	8.6
Pennsylvania	, 1,55	7.02	0.33	7.75	7.13	0.0
Btu	14,118	14,125	14,038	14,123	13,906	1.6
Sulfur	1.06	1.04	1.10	1.06	1.10	-3.4
Ash	7.42	7.48	8.15	7.68	8.61	-10.8
East North Central						
Btu	13,126	13,284	13,337	13,184	13,221	-0.3
Sulfur	1.16	1.14	1.24	1.16	1.39	-16.2
Ash	7.52	7.29	7.31	7.33	7.12	2.9
Illinois						
Btu	11,382	11,522	11,758	11,390	11,507	-1.0
Sulfur	2.27	2.20	2.42	2.14	2.21	-3.3
Ash	7.49	7.54	7.66	7.47	7.57	-1.3
Indiana						
Btu	13,784	14,067	13,887	13,973	13,950	0.2
Sulfur	0.83	0.83	0.89	0.84	0.88	-4.1
Ash	7.39	7.11	7.27	7.21	7.37	-2.2
Michigan						
Btu	13,139	13,127	14,123	13,150	13,556	-3.0
Sulfur	0.80	0.74	0.78	0.84	2.44	-65.4
Ash	7.75	7.21	7.11	7.40	5.42	36.6
Ohio						
Btu	14,190	14,198	14,076	14,167	14,090	0.5
Sulfur	1.04	1.00	1.01	1.01	1.00	1.4
Ash	7.60	7.43	7.25	7.37	7.28	1.3
Wisconsin						
Btu	10,983	10,833	10,770	10,879	10,792	0.8
Sulfur	0.79	0.81	0.94	0.83	0.82	1.2
Ash	7.55	7.18	6.90	7.16	6.78	5.6
West North Central						
Btu	8,213	8,281	8,255	8,229	8,306	-0.9
Sulfur	0.73	0.85	0.78	0.81	0.86	-6.4
Ash	6.23	6.36	6.20	6.29	6.30	-0.1
lowa						
Btu	9,016	9,271	9,154	9,153	9,253	-1.1
Sulfur	0.57	0.94	0.76	0.78	0.86	-8.8
Ash	4.93	5.35	5.18	5.15	5.52	-6.8
Kansas						

	October December				Year to date	
Census division and state 1	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent change
Btu	10,494	10,861	10,954	10,792	10,908	-1.1
Sulfur	1.93	1.83	1.83	2.04	1.76	15.9
Ash	13.28	12.07	10.59	12.77	10.30	23.9
Minnesota	13.20	12.07	10.33	12.77	10.30	23.3
Btu	9,133	9,105	9,097	9,113	9,130	-0.2
Sulfur	0.31	0.30	0.30	0.30	0.31	-2.4
Ash	4.50	4.64	4.53	4.52	4.58	-1.4
Missouri	4.50	4.04	4.33	4.32	4.36	-1.4
Btu	11,137	11,148	11,549	11,225	11,290	-0.6
Sulfur	2.31	2.39	2.29	2.34	2.29	2.2
Ash						
-	8.78	8.72	8.87	8.72	8.91	-2.2
Nebraska	0.067	0.007	0.004	0.022	0.003	0.2
Btu	8,867	9,097	8,861	8,932	8,962	-0.3
Sulfur	0.23	0.25	0.23	0.24	0.24	-0.3
Ash	4.75	4.93	4.93	4.80	4.83	-0.6
North Dakota						
Btu	7,259	7,191	7,256	7,204	7,231	-0.4
Sulfur	0.73	0.76	0.81	0.78	0.88	-11.0
Ash	6.80	6.81	6.73	6.81	6.73	1.3
South Dakota						
Btu	8,334	8,399	8,313	8,357	8,375	-0.2
Sulfur	0.52	0.55	0.57	0.56	0.59	-4.6
Ash	5.96	6.12	6.67	6.33	6.65	-4.8
South Atlantic						
Btu	13,178	13,359	13,332	13,345	13,361	-0.1
Sulfur	1.14	1.12	1.19	1.11	1.17	-4.9
Ash	10.12	9.74	9.59	9.75	9.63	1.2
Florida						
Btu	12,402	12,648	12,471	12,575	12,604	-0.2
Sulfur	1.13	0.93	1.13	1.01	1.32	-23.2
Ash	9.58	10.58	8.90	10.23	9.05	13.1
Georgia						
Btu	12,532	12,329	12,803	12,546	12,498	0.4
Sulfur	1.01	1.06	1.02	0.97	0.99	-2.1
Ash	9.98	11.50	8.79	9.97	10.27	-2.9
Maryland	3.33		0.75	3.37	20.27	
Btu	10,811	11,133	10,927	11,035	10,929	1.0
Sulfur	1.85	1.69	1.86	1.80	1.85	-2.5
Ash	24.34	23.71	24.13	23.51	23.47	0.2
North Carolina	24.34	25.71	24.13	23.31	25.47	0.2
Btu	13,508	13,633	13,607	13,532	13,646	-0.8
Sulfur	0.93		·			
		0.97	0.94	0.93	0.95	-2.4
Ash Caralina	7.11	7.05	7.03	7.40	6.98	6.1
South Carolina	42.247	42.042	42.206	42.245	42.422	
Btu	13,317	13,042	13,206	13,315	13,433	-0.9
Sulfur	1.75	1.49	1.53	1.65	1.34	22.5
Ash	8.68	10.55	7.65	8.44	9.33	-9.6
Virginia						
Btu	14,047	14,133	14,142	14,118	14,160	-0.3
Sulfur	0.83	0.84	0.86	0.85	0.87	-2.3
Ash	7.29	7.11	7.13	7.31	7.10	2.9
West Virginia						
Btu	13,939	14,001	14,089	14,029	14,116	-0.6
Sulfur	1.16	1.32	1.39	1.24	1.29	-3.9
Ash	6.86	6.71	6.99	6.86	6.99	-1.9
East South Central						
Btu	13,378	13,388	13,578	13,401	13,541	-1.0
Sulfur	1.23	1.20	1.08	1.21	1.17	3.1
Ash	7.26	7.46	7.54	7.35	7.30	0.7
Alabama						
Btu	13,708	13,838	13,881	13,802	13,887	-0.6
	==,: =0	,	,	- /	-,	

	Ostobou Dosombou		October - December 2017		Year to date		
Census division and state 1	October - December 2018	July - September 2018		2018	2017	Percent change	
Sulfur	1.03	0.99	1.11	1.04	1.07	-2.4	
Ash	6.90	6.87	7.31	6.93	7.21	-3.8	
Kentucky							
Btu	13,051	12,779	13,451	12,949	13,255	-2.3	
Sulfur	1.10	1.02	1.09	1.07	1.03	4.0	
Ash	8.43	8.66	7.73	8.08	7.61	6.2	
Tennessee							
Btu	13,049	12,989	13,090	13,028	13,198	-1.3	
Sulfur	1.66	1.63	1.01	1.54	1.41	9.9	
Ash	7.06	7.79	7.86	7.61	7.27	4.6	
West South Central							
Btu	10,019	10,146	9,929	9,910	9,677	2.4	
Sulfur	0.65	0.67	0.57	0.62	0.57	9.6	
Ash	8.28	8.58	8.61	8.35	8.19	2.0	
Arkansas							
Btu	11,745	11,773	11,529	11,633	11,846	-1.8	
Sulfur	1.20	1.29	1.31	1.20	1.27	-5.7	
Ash	10.29	10.33	12.09	10.50	10.69	-1.8	
Louisiana							
Btu	8,172	8,117	8,214	8,083	7,855	2.9	
Sulfur	0.78	0.70	0.64	0.74	0.67	10.7	
Ash	6.16	6.46	6.87	6.34	6.81	-6.8	
Oklahoma							
Btu	9,991	10,750	9,642	9,868	9,332	5.7	
Sulfur	0.32	0.46	0.31	0.33	0.28	16.1	
Ash	4.98	6.19	5.43	5.31	4.86	9.2	
Texas	10.155	10.270	40.274	10.110	0.026	2.4	
Btu	10,165	10,270	10,274	10,148	9,936	2.1	
Sulfur	0.55	0.56	0.51	0.55	0.52	5.4	
Ash	9.82	9.87	10.29	10.23	10.29	-0.5	
Mountain	10.411	10 522	10.220	10.502	10.204	1.1	
Btu	10,411	10,522	10,339	10,502	10,384	1.1	
Sulfur Ash	0.59 6.96	7.20	0.58	0.60	0.53 7.22	14.3	
Arizona	0.96	7.20	7.16	7.08	7.22	-2.0	
	11 502	11 720	11 71/	11 654	11 642	0.1	
Btu Sulfur	11,582 0.66	11,720 0.70	11,714 0.60	11,654 0.68	11,642 0.61	0.1 12.1	
Ash	12.19	11.50	11.36	11.54	11.31	2.0	
Colorado	12.19	11.50	11.30	11.54	11.31	2.0	
Btu	10,674	11,144	10,721	10,730	10,855	-1.2	
Sulfur	0.59	0.47	0.50	0.50	0.49	1.2	
Ash	8.08	8.14	8.62	8.09	8.26	-2.0	
Idaho	0.00	0.14	0.02	0.03	0.20	2.0	
Btu	11,898	11,630	11,914	11,593	11,454	1.2	
Sulfur	0.51	0.48	0.57	0.49	0.53	-8.1	
Ash	9.99	9.90	9.94	10.01	10.87	-7.9	
Montana	3.33	3.30	3.34	10.01	10.07	7.5	
Btu	8,664	9,174	8,634	9,109	8,991	1.3	
Sulfur	0.36	0.40	0.33	0.38	0.36	5.3	
Ash	5.77	5.22	5.53	5.73	5.46	4.9	
Nevada	3.77	5.22	5.55	3.73	3.40	4.3	
Btu	11,594	11,475	11,497	11,596	11,225	3.3	
Sulfur	0.43	0.40	0.52	0.43	0.50	-14.1	
Ash	9.92	9.55	8.97	9.32	8.78	6.1	
New Mexico	5.52	5.55	5.57	3.32	3.70	0.1	
Btu	12,255	12,253	12,277	12,230	12,261	-0.2	
Sulfur	0.95	0.64	0.74	0.78	0.71	10.8	
Ash	10.41	10.43	10.83	10.62	10.43	1.8	
Utah	10.11	10.13	10.03	20.02	20.10	1.0	
Btu	11,410	11,581	11,432	11,513	11,462	0.4	
Sulfur	0.46	0.45	0.53	0.46	0.54	-14.0	
	5.10	0.19	0.55	0.10	5.51	± 1.0	

				Year to date		
Census division	October - December	July - September	October - December			Percent
and state 1	2018	2018	2017	2018	2017	change
Ash	10.62	10.22	10.81	10.53	11.24	-6.3
Wyoming		•	-	:		
Btu	9,935	9,828	9,847	9,894	9,776	1.2
Sulfur	0.69	0.70	0.67	0.70	0.54	28.7
Ash	4.42	5.11	5.15	4.80	5.02	-4.5
Pacific						
Btu	11,242	11,568	11,417	11,462	11,392	0.6
Sulfur	0.42	0.41	0.58	0.45	0.58	-22.1
Ash	10.95	10.28	11.13	10.44	11.22	-7.0
California						
Btu	11,370	11,638	11,501	11,560	11,497	0.5
Sulfur	0.43	0.41	0.60	0.45	0.59	-23.2
Ash	11.39	10.48	11.51	10.77	11.62	-7.3
Oregon						
Btu	11,459	11,837	11,795	11,687	11,650	0.3
Sulfur	0.38	0.36	0.53	0.45	0.53	-16.0
Ash	11.47	9.30	9.80	10.09	10.07	0.2
Washington						
Btu	9,329	9,275	9,328	9,395	9,386	0.1
Sulfur	0.36	0.34	0.33	0.35	0.33	4.8
Ash	4.41	4.53	4.70	4.19	4.45	-5.9
U.S. Total						
Btu	11,730	11,930	11,772	11,821	11,774	0.4
Sulfur	0.98	1.00	1.00	1.00	1.08	-7.7
Ash	7.48	7.46	7.52	7.45	7.51	-0.7

<sup>1</sup> Quality units are Btu (per pound); sulfur (percent by weight); and ash (percent by weight).

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

<sup>- =</sup> No data reported.

Table 44. Average quality of coal received at commercial and institutional users by census division and state

	Ostobou Dosambau			Year to date		
Census division and state <sup>1</sup>	October - December 2018	July - September 2018	October - December 2017	2018	2017	Percent
Middle Atlantic	2018	2018	2017	2018	2017	change
Btu	12,777	-	13,107	12,890	13,111	-1.7
Sulfur	0.86		0.78	0.84	0.77	8.5
Ash	6.92		7.31	7.02	8.14	-13.7
Pennsylvania	0.52		7.51	7.02	0.14	-13.7
Btu	12,777		13,107	12,890	13,111	-1.7
Sulfur	0.86		0.78	0.84	0.77	8.5
Ash	6.92	-	7.31	7.02	8.14	-13.7
East North Central	0.52		7.51	7.02	0.14	13.7
Btu	11,661	11,432	11,638	11,584	11,577	0.1
Sulfur	2.51	3.14	2.65	2.73	2.71	0.8
Ash	9.50	9.65	9.10	9.22	9.25	-0.3
Illinois	3.30	3.03	5.10	J.22	3.23	0.3
Btu	11,360	11,520	11,533	11,392	11,342	0.4
Sulfur	3.34	3.32	3.23	3.21	3.19	0.8
Ash	9.99	10.02	9.37	9.59	9.57	0.8
Indiana	3.33	10.02	3.37	9.33	9.37	0.2
Btu	11,319	11,317	11,219	11,286	11,331	-0.4
Sulfur	1.69	2.90	2.30	2.49	2.45	1.4
Ash	9.48	9.17	9.12	9.08	9.22	-1.6
Wisconsin	3.46	3.17	9.12	3.08	3.22	-1.0
Btu	13,375		13,375	13,375	13,375	S
Sulfur	0.78	-	0.78	0.78	0.78	S
Ash	7.65		7.65	7.65	7.65	s
West North Central	7.03		7.03	7.03	7.03	
Btu	10,380	11,304	10,331	10,450	10,624	-1.6
Sulfur	1.79	2.29	1.88	1.87	2.11	-11.3
Ash	8.41	8.66	8.69	8.87	8.63	2.8
lowa	0.41	0.00	0.03	0.07	0.03	2.0
Btu	11,788	11,490	11,655	11,525	11,446	0.7
Sulfur	2.71	2.45	2.88	2.59	2.71	-4.6
Ash	8.27	8.73	8.32	8.54	8.60	-0.7
Minnesota	0.27	0.70	0.02		0.00	0.7
Btu	9,209		9,308	9,241	8,913	3.7
Sulfur	0.42	-	0.33	0.39	0.28	39.9
Ash	4.83		4.67	4.63	5.58	-17.1
Missouri	1.03		1107		3.30	
Btu	11,290		11,405	11,327	11,407	-0.7
Sulfur	2.97	_	3.00	3.04	2.99	1.6
Ash	8.57		8.66	8.62	8.50	1.5
North Dakota						
Btu	8,716	9,025	8,671	8,623	8,672	-0.6
Sulfur	0.56	0.34	0.60	0.56	0.61	-8.4
Ash	8.71	7.75	9.35	9.68	9.21	5.1
South Atlantic	0.7.2	,,,,	3.03	3.00	3.22	0.2
Btu	12,913	12,847	12,936	12,966	13,029	-0.5
Sulfur	1.65	1.65	1.52	1.66	1.45	14.9
Ash	9.18	9.97	9.09	9.13	9.15	-0.2
District of Columbia	3.20	3.37	3.03			J.L
Btu	-	-	-	-	13,156	-
Sulfur	-	-	-	-	0.58	-
Ash	-		-	-	6.85	-
North Carolina					2.33	
Btu	12,805	12,951	12,892	12,879	13,072	-1.5
Sulfur	1.99	1.99	1.85	1.97	1.65	19.6
Ash	9.95	9.81	9.87	9.69	9.48	2.2
	3.33	5.01	5.57	3.03	5	

		_	Year to date			
Census division	October - December	July - September	October - December			Percent
and state <sup>1</sup>	2018	2018	2017	2018	2017	change
Btu	13,208	12,594	13,026	13,223	12,871	2.7
Sulfur	0.73	0.83	0.82	0.77	0.80	-4.7
Ash	7.07	10.36	7.46	7.49	8.14	-8.0
East South Central						
Btu	13,509	13,569	13,293	13,567	13,109	3.5
Sulfur	0.79	0.76	0.78	0.78	0.77	1.4
Ash	6.29	6.12	6.66	4.62	6.12	-24.5
Kentucky						
Btu	13,509	13,569	13,293	13,567	13,109	3.5
Sulfur	0.79	0.76	0.78	0.78	0.77	1.4
Ash	6.29	6.12	6.66	4.62	6.12	-24.5
Mountain						
Btu	11,475	11,259	11,504	11,433	11,404	0.3
Sulfur	0.45	0.46	0.44	0.44	0.45	-0.9
Ash	11.70	8.09	9.96	9.66	10.26	-5.9
Colorado						
Btu	-	-	11,881	-	11,783	-
Sulfur	-	-	0.45	-	0.45	-
Ash	-	-	10.66	-	10.67	-
Montana						
Btu	-	11,290	10,511	11,021	10,480	5.2
Sulfur	-	0.46	0.37	0.41	0.43	-4.6
Ash	-	7.81	6.94	7.63	7.02	8.7
Wyoming						
Btu	11,475	10,710	11,676	11,594	11,537	0.5
Sulfur	0.45	0.38	0.46	0.46	0.45	1.4
Ash	11.70	13.08	10.53	10.45	10.78	-3.1
Pacific						
Btu	7,595	7,448	7,541	7,563	7,498	0.9
Sulfur	0.14	0.18	0.15	0.15	0.13	16.6
Ash	6.50	7.50	4.81	6.68	5.56	20.1
Alaska						
Btu	7,595	7,448	7,541	7,563	7,498	0.9
Sulfur	0.14	0.18	0.15	0.15	0.13	16.6
Ash	6.50	7.50	4.81	6.68	5.56	20.1
U.S. Total						
Btu	9,681	9,542	9,965	9,634	9,734	-1.0
Sulfur	1.09	1.28	1.20	1.16	1.13	3.1
Ash	7.81	8.40	7.23	7.89	7.36	7.2

<sup>1</sup> Quality units are Btu (per pound); sulfur (percent by weight); and ash (percent by weight).

Source: U.S. Energy Information Administration (EIA), Form EIA-3, 'Quarterly Survey of Industrial, Commercial & Institutional Coal Users.'

<sup>- =</sup> No data reported.

s = Absolute percentage less than 0.05.