Section 6. Coal

Coal production in September 2004 totaled 93 million short tons, 3 percent higher than in September 2003.

Coal consumed by the electric power sector in July 2004 was 93 million short tons, 1 percent lower than the level in July 2003.

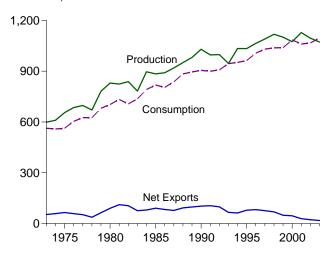
Electric power sector coal stocks were 111 million short

tons at the end of July 2004, 16 percent lower than the level a year earlier.

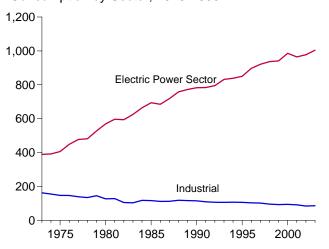
Coal exports in August 2004 totaled 4 million short tons, 2 percent lower than exports in August 2003. Coal imports in August 2004 totaled 2 million short tons, 17 percent higher than imports in August 2003.

Figure 6.1 Coal (Million Short Tons)

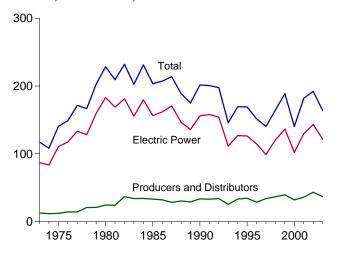
Overview, 1973-2003



Consumption by Sector, 1973-2003

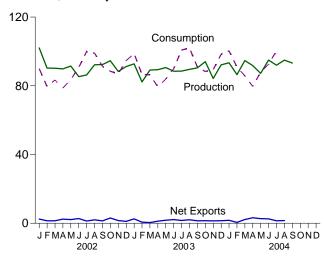


Stocks, End of Year, 1973-2003

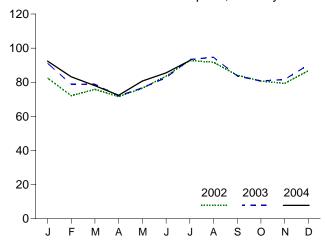


Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html. Sources: Tables 6.1, 6.2, and 6.3.

Overview, Monthly



Electric Power Sector Consumption, Monthly



Electric Power Sector Stocks, End of Month

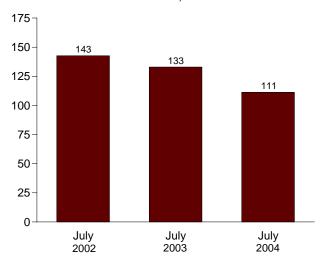


Table 6.1 Coal Overview

(Thousand Short Tons)

		1		ı	1		
	Production ^a	Waste Coal ^{b,c}	Imports	Exports	Stock Changed	Losses and Unaccounted for ^e	Consumption
1973 Total	598,568	NA	127	53,587	(f)	g-17.476	562,584
1974 Total	610,023	NA NA	2,080	60,661	-8,918	1,958	558,402
1975 Total	654,641	NA	940	66,309	32,154	-5,522	562,640
1976 Total	684,913	NA	1,203	60,021	8,508	13,797	603,790
1977 Total	697,205	NA	1,647	54,312	22,644	-3,395	625,291
1978 Total	670,164	NA	2,953	40,714	-4,938	12,116	625,225
1979 Total	781,134	NA	2,059	66,042	36,206	421	680,524
1980 Total	829,700	NA	1,194	91,742	25,595	10,827	702,730
1981 Total	823,775	NA	1,043	112,541	-18,983	-1,366	732,627
1982 Total	838,112	NA	742	106,277	22,614	3,052	706,911
1983 Total	782,091	NA	1,271	77,772	-29,453	-1,629 -4,288	736,672 791,296
1984 Total 1985 Total	895,921 883,638	NA NA	1,286 1,952	81,483 92,680	28,716 -27,934	-4,200 2,796	818,049
1986 Total	890,315	NA NA	2,212	85,518	3,953	-1,175	804,231
1987 Total	918,762	NA NA	1,747	79,607	6,461	-2,499	836,941
1988 Total	950,265	NA	2,134	95,023	-24,949	-1,316	883,642
1989 Total	980,729	1,407	2,851	100,815	-13,744	2,916	895,000
1990 Total	1.029.076	3,339	2,699	105,804	26.542	-1.730	904,498
1991 Total	995,984	3,950	3,390	108,969	-947	-3,925	899,227
1992 Total	997,545	6,287	3.803	102,516	-2.997	461	907,655
1993 Total	945,424	8,137	8,181	74,519	-51,943	-4,916	944,081
1994 Total	1,033,504	8,227	8,870	71,359	23,617	4,340	951,286
1995 Total	1,032,974	8,561	9,473	88,547	-275	632	962,104
1996 Total	1,063,856	8,778	8,115	90,473	-17,456	1,411	1,006,321
1997 Total	1,089,932	8,096	7,487	83,545	-11,253	3,678	1,029,544
1998 Total	1,117,535	8,690	8,724	78,048	24,228	-4,430	1,037,103
1999 Total	1,100,431	8,683	9,089	58,476	23,988	-2,906	1,038,647
2000 Total	1,073,612	9,089	12,513	58,489	-48,309	938	1,084,095
2001 Total	1,127,689	(°)	19,787	48,666	41,630	-2,966	1,060,146
2002 January	102,056	(c)	1,439	3,873	4,081	5,537	90,004
February	90,311	(c)	1,222	2,630	5,364	3,970	79,569
March	90,206	(c)	1,339	2,749	1,572	3,829	83,395
April	89,849	(c)	1,208	3,584	11,722	-2,938	78,688
May	91,478	(c)	1,227	3,330	1,035	4,681	83,658
June	85,341	(°)	1,422	4,128	-5,678	-2,301	90,613
July	86,326 92,203	(°)	1,573 1,555	2,843 3,529	-10,022	-4,898 457	99,977 99,012
August September	92,203	(c)	1,535	2,884	-9,241 -1,726	1.431	91,305
October	94,608	\ c \	1,369	4,407	4,288	-1,186	88,469
November	88,352	} c ⟨	1,393	2,930	5,490	-5,690	87,016
December	91,184	} c ⟨	1,602	2,712	3,330	-7,905	94,648
Total	1,094,283	\c}	16,875	39,601	10,215	-5,012	1,066,355
2003 January	92,804	(c)	1,134	3,680	-13,191	4,615	98,834
February	82,264	(c)	1,804	2,428	-6,474	1,633	86,481
March	89,134	(0)	2,017	2,410	11,818	-9,531 7,096	86,455 79,364
April	89,378	(0)	2,390	3,571	1,746	7,086	
May June	90,610 88,511	(0)	2,109 1,894	3,875 4,003	308 6,708	4,646 -10.220	83,890 89,914
	88,534	\ c \	2,619	4,223	-18,891	5,049	100,771
July August	89.586	(c)	2,619	4,223	-10,091	-4.348	102,015
September	90.444	\ c \	2,133	3.707	2.581	-4,546 -4.512	90.969
October	94,058	\c\	2,545	3,997	1,689	2,611	88,307
November	84,266	} c {	2,358	3,737	2,118	-8,656	89,424
December	92,163	} c {	1,742	3,219	-5,155	-2,475	98,316
Total	1,071,753	(°)	25,044	43,014	-26,856	-14,103	1,094,742
2004 January	93,380	(°)	1,748	3,447	-11,770	3,101	100,350
February	86,490	\ c\	1,789	2,276	-3,076	-1,830	90,909
March	94,698	(c)	1,788	3,965	4,690	1,988	85,844
April	91,759 87,229	(c)	2,157 2,232	5,359 4,910	9,148 38	-230 -3,368	79,639 87,880
May June	94,961	(0)	2,232 2,464	4,910 4,987	-2,596	-3,368 R 2,442	87,880 R 92,592
July	91,998	(c)	2,464	3,957	E-6,271	E -3,489	E 100,332
August	94,928	\ c \	2,494	4,067	0,271 NA	3,469 NA	- 100,332 NA
September	93.250	\c\	NA NA	4,007 NA	NA	NA NA	NA NA
9-Month Total	828,692	(c)	NA	NA	NA	NA	NA
2003 9-Month Total 2002 9-Month Total	801,266 820,138	(°)	18,399 12,511	32,062 29,552	-25,508 -2,893	-5,583 9,769	818,694 796,221

Beginning in 2001, includes bituminous refuse.
 Waste coal (including anthracite culm, bituminous gob, fine coal, and lignite waste) consumed by independent power producers. For 1989-2000, waste coal is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."
 Beginning in 2001, bituminous refuse is included in "Production"; to avoid double counting, waste coal is not counted as a separate supply-side item for 2001 forward

forward.

d A negative value indicates a decrease in stocks; a positive value indicates an increase.

e "Losses and Unaccounted for" is calculated as the sum of production, imports,

and waste coal, minus exports, stock change, and consumption.

f Included in "Losses and Unaccounted for."

losses and Unaccounted for."

Includes stock change.

R=Revised. E=Estimate. NA=Not available.

Notes:

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

Geographic coverage is the 50 States and the District of Columbia.

For methodology used to calculate production, consumption, and stock, see Notes 1, 2, and 3 at end of section.

Web Page: http://www.eia.doe.gov/emeu/mer/coal.html.

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
	Resi-				Coke	Other Industrial			Trans-	Electric Power		
	dential	CHPa	Otherb	Total	Plants	CHPC	Non-CHPd	Total	Total	portation	Sector ^{e,f}	Total
1973 Total 1974 Total 1975 Total 1975 Total 1976 Total 1977 Total 1978 Total 1979 Total 1988 Total 1998 Total 1998 Total 1999 Total 1999 Total 1991 Total 1992 Total 1993 Total 1994 Total 1995 Total 1997 Total 1997 Total 1998 Total 1997 Total 1998 Total 1997 Total 1998 Total 1999 Total 1998 Total 1999 Total 1999 Total 1998 Total 1999 Total 1998 Total	4,113 3,653 2,823 2,586 2,507 2,188 1,678 1,356 1,401 1,352 1,711 1,763 1,590 1,590 1,345 1,107 1,107 1,100 755 721 711 534 585 484	(9) (9) (9) (9) (9) (9) (9) (9) (9) (9)	7,004 7,764 6,587 6,330 6,447 7,323 6,710 5,097 6,085 6,839 7,096 5,324 5,561 3,747 4,189 3,769 3,767 3,633 3,633 3,625 4,015 2,803 2,126	7,004 7,764 6,587 6,330 6,447 7,323 6,770 6,085 6,839 7,096 7,395 6,068 5,904 5,324 5,561 4,872 5,379 4,997 5,045 5,101 5,111 5,052 4,322 4,223 3,673 3,888	94,101 90,191 83,598 84,704 77,739 71,394 66,657 61,014 40,908 37,033 44,022 41,056 35,924 36,957 41,888 40,508 38,877 33,854 32,366 31,323 31,740 33,011 31,706 30,203 28,189 28,108 28,939 26,075	(h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	68,038 64,903 63,646 61,787 61,463 63,085 67,717 67,395 64,097 65,980 73,745 75,372 75,583 75,175 76,252 51,268 48,549 48,384 45,799 46,000 45,471 43,693 42,254 41,661 38,887 36,975 37,177	68,038 64,903 63,646 61,746 61,463 63,087 60,347 60,347 65,980 75,372 75,372 76,252 76,134 76,330 74,042 74,892 71,515 67,439 71,515 67,439 71,515 67,439	162,139 155,094 147,244 146,491 139,202 134,479 145,085 127,004 105,005 103,013 117,767 116,429 111,508 112,132 118,140 116,643 115,207 106,408 106,215 106,919 106,067 103,395 101,718 95,826 92,846 94,147 91,344	116 80 24 9 (hh) hh (hh) (hh) (hh) (hh) (hh) (hh)	389,212 391,811 405,962 448,371 477,126 481,235 527,051 569,274 596,797 593,666 625,211 664,399 693,841 685,056 717,894 758,372 772,190 782,567 783,874 795,094 831,645 838,354 850,230 896,921 921,364 936,619 940,922 985,821 964,433	562,584 558,402 562,640 603,790 625,291 625,225 680,524 702,730 736,627 791,296 818,042 804,231 836,94
2002 January February March April May June July August September October November December Total	54 47 45 40 30 28 39 34 25 33 49 65	127 102 124 100 105 112 126 127 116 114 116 134 1,405	313 282 239 222 139 113 187 151 84 150 281 391 2,551	440 384 363 322 245 225 313 279 200 264 397 525 3,956	1,861 1,763 1,917 1,932 1,995 1,910 1,973 2,054 2,041 2,186 2,015 2,009 23,656	2,278 1,990 2,150 2,115 2,110 2,101 2,439 2,153 2,150 2,231 2,237 2,279 26,232	2,946 3,240 3,097 2,721 2,750 2,785 2,448 2,739 2,745 3,041 3,016 2,986 34,515	5,224 5,230 5,247 4,835 4,860 4,886 4,893 4,895 5,272 5,253 5,265 60,747	7,085 6,993 7,164 6,767 6,856 6,796 6,860 6,947 7,268 7,268 7,274	(h)	82,424 72,144 75,823 71,560 76,528 83,565 92,766 91,752 84,144 80,714 79,301 86,784 977,507	90,004 79,569 83,395 78,688 83,658 90,613 99,977 99,012 91,305 88,469 87,016 94,648 1,066,355
Pebruary February March April May June July August September October November December Total	57 48 35 40 28 25 35 35 23 28 44 68	146 127 125 110 94 118 137 144 121 114 118 137 1,492	315 259 159 212 136 84 149 141 61 110 237 415 2,277	461 386 284 323 230 202 287 285 183 224 355 551 3,770	1,941 1,958 2,105 2,047 1,964 2,059 2,079 2,007 2,024 2,001 1,976 2,087	2,484 2,169 2,254 2,089 1,952 2,139 2,391 2,397 1,995 2,247 2,180 2,431 26,728	2,782 3,083 3,008 2,873 3,002 2,830 2,654 2,642 3,051 3,097 3,250 2,977 35,248	5,265 5,252 5,261 4,962 4,969 5,044 5,039 5,046 5,344 5,430 5,409 61,976	7,207 7,210 7,366 7,009 6,918 7,028 7,124 7,046 7,070 7,345 7,405 7,495 86,223	(h) (h) (h) (h) (h) (h) (h) (h) (h) (h)	91,109 78,838 78,770 71,993 76,714 82,659 93,326 94,649 83,695 80,710 81,620 90,201 1,004,283	98,834 86,481 86,455 79,364 83,890 89,914 100,771 102,015 90,969 88,307 89,424 98,316 1,094,742
2004 January	60 48 32 39 28 27 F 40 E 273	157 148 143 113 127 126 128 943	327 241 115 201 97 90 F 192 E 1,262	484 389 258 314 224 216 E 320 E 2,205	1,996 1,829 2,080 2,023 1,974 1,934 F 2,260 E 14,095	2,760 2,305 2,278 2,128 1,914 R 2,226 2,404 16,013	2,666 3,155 3,192 2,787 3,031 R 2,715 F 2,578 E 20,123	5,425 5,460 5,470 4,915 4,945 4,941 E 4,982 E 36,136	7,421 7,289 7,550 6,938 6,919 6,875 E 7,242 E 50,232	(h) (h) (h) (h) (h) (h)	92,386 83,183 78,005 72,349 80,710 R 85,475 92,731 584,838	100,350 90,909 85,844 79,639 87,880 R 92,592 E 100,332 E 637,548
2003 7-Month Total 2002 7-Month Total	268 283	858 796	1,314 1,495	2,171 2,291	14,154 13,350	15,477 15,182	20,231 19,987	35,708 35,169	49,861 48,520	{ '' }	573,408 554,811	625,709 605,904

a Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See note at end of Section 7.

b All commercial sector fuel use other than that in "Commercial CHP."
c Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See note at end of Section 7.
d All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."
e The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.
f Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

g Included in "Commercial Other."

h Included in "Industrial Non-CHP."

R=Revised. E=Estimate. F=Forecast.

Notes: • CHP monthly data are from Table 7.3c; electric power sector monthly data are from Table 7.3b; all other monthly values are estimated. See Note 2 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Independent founding. • Geographic Science of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/coal.html.

Sources: See end of section. Forecast values: Energy Information Administration, Short-Term Integrated Forecasting System. See Note 4 at end

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers	Residential		Industrial			Electric Power	
	and Distributors	and Commercial	Coke Plants	Othera	Total	Total	Sector ^{b,c}	Total
973 Year	12,530	290	6,998	10,370	17,368	17,658	86,967	117,155
974 Year	11,634	280 280	6,209	6,605	12,814	13,094	83,509	108,237
	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391
975 Year								
1976 Year	14,221	240	9,902	7,100	17,002	17,242	117,436	148,899
1977 Year	14,225	220	12,816	11,063	23,879	24,099	133,219	171,543
978 Year	20,695	360	8,278	9,048	17,326	17,686	128,225	166,606
1979 Year	20,826	340	10,155	11,777	21,932	22,272	159,714	202,812
1980 Year	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407
1981 Year	24,149	NA	6,475	9,906	16,381	16,381	168,893	209,423
1982 Year	36,784	NA	4,642	9,479	14,121	14,121	181,132	232,038
1983 Year	33,931	NA	4.346	8,710	13,056	13,056	155,598	202,584
1984 Year	34,090	NA	6,166	11,317	17,483	17,483	179,727	231,300
1985 Year	33,133	NA	3,420	10,438	13,857	13,857	156,376	203,367
1986 Year	32,093	NA.	2.992	10,429	13,420	13,420	161,806	207,319
1987 Year	28,321	NA NA	3,884	10,777	14,662	14,662	170,797	213,780
1988 Year	30,418	NA NA	3,137	8,768	11.906	11.906	146.507	188,831
1989 Year	29,000	NA NA	2,864	7,363	10,227	10,227	135,860	175,087
		NA NA						
1990 Year	33,418		3,329	8,716	12,044	12,044	156,166	201,629
1991 Year	32,971	NA	2,773	7,061	9,835	9,835	157,876	200,682
1992 Year	33,993	NA	2,597	6,965	9,562	9,562	154,130	197,685
1993 Year	25,284	NA	2,401	6,716	9,117	9,117	111,341	145,742
1994 Year	33,219	NA	2,657	6,585	9,243	9,243	126,897	169,358
1995 Year	34,444	NA	2,632	5,702	8,334	8,334	126,304	169,083
1996 Year	28,648	NA	2,667	5,688	8,355	8,355	114,623	151,627
1997 Year	33,973	NA	1,978	5,597	7,576	7,576	98,826	140,374
1998 Year	36,530	NA	2,026	5,545	7,571	7,571	120,501	164,602
1999 Year	39,475	NA.	1.943	5,569	7.511	7,511	°141.604	188,590
2000 Year	31,905	NA NA	1,494	4,587	6.081	6.081	102,296	140,282
2001 Year	35,900	NA NA	1,510	6,006	7,516	7,516	138,496	181,912
	00,000		.,	0,000	.,	.,	100,100	,
2002 January	39,548	NA	1,427	5,618	7,045	7,045	139,400	185,992
February	41,589	NA	1,387	5,230	6,616	6,616	143,151	191,356
March	40,284	NA	1,360	4,842	6,202	6,202	146,443	192,929
April	44,961	NA	1,399	4,916	6,314	6,314	153,375	204,651
May	43,946	NA	1,437	4.990	6,427	6,427	155,313	205,686
June	41,288	NA	1,522	5,064	6,586	6,586	152,134	200,008
July	40,496	NA	1,535	5,321	6,856	6,856	142,634	189,985
August	36.489	NA	1,548	5.578	7.125	7,125	137.130	180,745
September	35,662	NA NA	1,540	5,834	7,125	7,123	135,962	179,019
October		NA NA	1,495				140.800	
October	35,191			5,820	7,315	7,315		183,307
November	36,954	NA	1,430	5,806	7,236	7,236	144,608	188,797
December	43,257	NA	1,364	5,792	7,156	7,156	141,714	192,127
2003 January	36,498	NA	1,353	5,314	6,667	6,667	135,771	178,935
February	37,456	NA	1,341	4,837	6,177	6,177	128,828	172,461
March	47,429	NA NA	1,329	4,359	5,688	5,688	131,162	184,279
April	41,456	NA NA	1,377	4,339	5,674	5,674	138,895	186,025
	36,789	NA NA	1,426	4,234	5,660		143,884	186,333
May						5,660		
June	45,070	NA	1,474	4,172	5,646	5,646	142,325	193,041
July	35,435	NA	1,345	4,407	5,751	5,751	132,964	174,150
August	32,456	NA	1,215	4,642	5,857	5,857	125,725	164,038
September	38,231	NA	1,085	4,878	5,963	5,963	122,425	166,618
October	36,456	NA	1,025	4,824	5,849	5,849	126,002	168,307
November	38,489	NA	965	4,771	5,736	5,736	126,200	170,425
December	38,277	NA	905	4,718	5,623	5,623	121,371	165,271
2004 Januari	F 22 400	NIA	1.000	4.450	E 470	E 470	114 507	150 501
2004 January	F 33,486	NA	1,020	4,458	5,478	5,478	114,537	153,501
February	F 34,947	NA	1,134	4,198	5,332	5,332	110,145	150,425
March	F 36,618	NA	1,249	3,938	5,187	5,187	113,310	155,115
April	F 37,489	NA	1,278	4,056	5,334	5,334	121,440	164,263
May	F 34,587	NA	1,307	4,175	5,482	5,482	124,232	164,301
June	F 35,299	NA	1,336	4,294	5,630	5,630	120,777	161,705
July	F 38,147	NA	F 1,639	F 4,302	F 5,942	E 5,942	111,346	E 155,434

 $^{^{\}rm a}$ Through 1977, data are for stocks held by the manufacturing and transportation sectors. Beginning in 1978, data are for stocks held at manufacturing

Notes: • Stocks are at end of period. • Producer and distributor monthly values

are estimates derived from collected annual data; end-use sector monthly values are estimates derived from collected quarterly data; and electric power sector monthly values are data from Table 7.4. See Note 3 at end of section.

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

• Geographic coverage is the 50 States and the District of Columbia. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html.

Sources: See end of section. Forecast values: Energy Information Administration, Short-Term Integrated Forecasting System. See Note 4 at end of section.

plants only.

^b The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^c Through 1998, data are for stocks at electric utilities only. Beginning in 1999,

data also include stocks at independent power producers. E=Estimate. NA=Not available. F=Forecast.

Coal

Note 1. Production: Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and published in the Weekly Coal Production report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads data showing the number of railcars loaded with coal during the week by Class I and certain other railroads. number is converted into tons of coal by EIA by using the average number of tons of coal per railcar loaded reported in the most recent "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail tonnage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this ratio. This method ensures that the seasonal variations are preserved in the production estimates.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in EIA's Quarterly Coal Report. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the Monthly Energy Review in the fall of the following year.

Note 2. Consumption: Coal consumption data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the EIA *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Mid World Oil Price Case." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to the Energy Information Administration (EIA) for the two sectors combined; EIA estimates the amount consumed by the

sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973-1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied times the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 2003 share is applied to 2004 and succeeding years, and the other missing years' shares are interpolated.

Industrial Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. From 1980-1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. From 1980-1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthlyto-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption data were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts were the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction consumption data were included where appropriate. Starting in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are

used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 333; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; nonmetallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights.

Electric Power Sector—Monthly consumption data for electric power plants are taken directly from reported data.

Note 3. Stocks: Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the EIA *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Mid World Oil Price Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Prior to 1998, quarterly stocks at producers and distributors were taken directly from reported data. Monthly data were estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Beginning in 1998, end-of-year stocks are taken from reported data. Monthly stocks are estimated by a model.

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. Beginning in 1980, stock estimates for the sector were considered to be statistically insignificant and are no longer collected.

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. From 1980 forward, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. From 1983 forward, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power—Monthly stocks data at electric power plants are taken directly from reported data.

Note 4. Forecast Values: Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published monthly in EIA's *Short-Term Energy Outlook*, which is available from the National Energy Information Center (202-586-8800) and accessible on the Web at http://www.eia.doe.gov. Documentation for the model and instructions for downloading and operating it on a personal computer are provided.

Note 5. Additional Information: EIA's *Quarterly Coal Report* provides additional information about coal data and estimation procedures.

Table 6.1 Sources

Production

1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward: Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal

EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility" and predecessor form.

Imports and Exports

U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM-145 (Imports) and EM-545 (Exports).

Stock Change

Calculated from data in Table 6.3.

Losses and Unaccounted for

Calculated as the sum of production, imports, and waste coal, minus exports, stock change, and consumption.

Consumption

Table 6.2.

Table 6.2 Sources

Residential and Commercial

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks." October 1977–1979: Energy Information Administration (EIA), Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."

Industrial Coke Plants

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual Supplement."

1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report-Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Industrial Other

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants."

1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6A, "Coal Distribution Report," annual.

Transportation

1973–1976: DOI, BOM, Minerals Yearbook.

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks." October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Electric Power

1973–1988: Table 7.3e. 1989 forward: Table 7.3b

Table 6.3 Sources

Producers and Distributors

1973–1979: DOI, BOM, Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."

1980–1997: Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly."

1998 forward: EIA, Form EIA-6A, "Coal Distribution Report," annual.

Residential and Commercial

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January-September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks." October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

Industrial Coke Plants

1973–September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: Energy Information Administration (EIA), Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual."

1981–1984: EIA, Form EIA 5/5A, "Coke Plant Report-Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Industrial Other

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants."

1980 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants."

Electric Power

Table 7.4.