

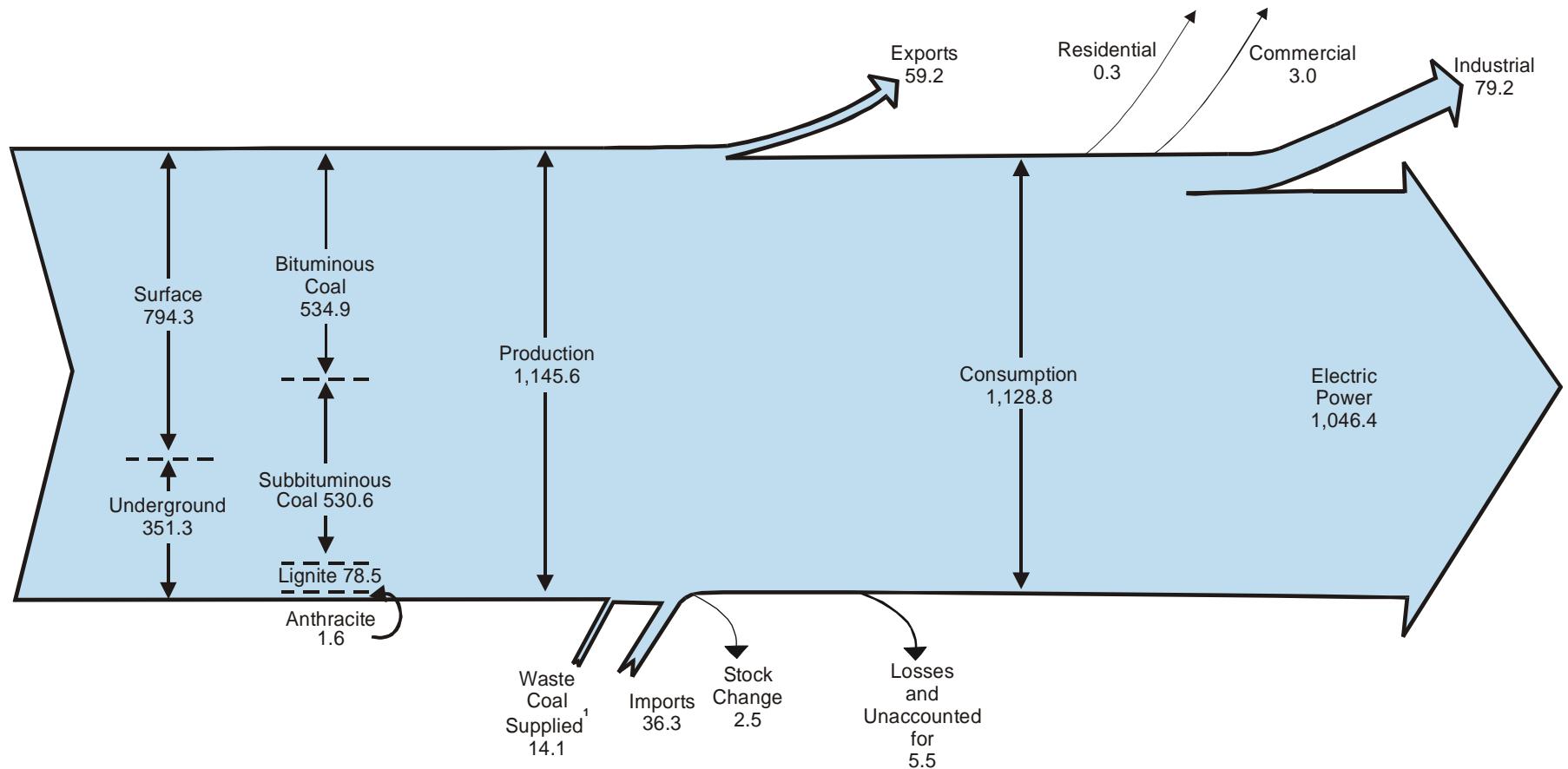
7

Coal



Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

Diagram 4. Coal Flow, 2007
 (Million Short Tons)



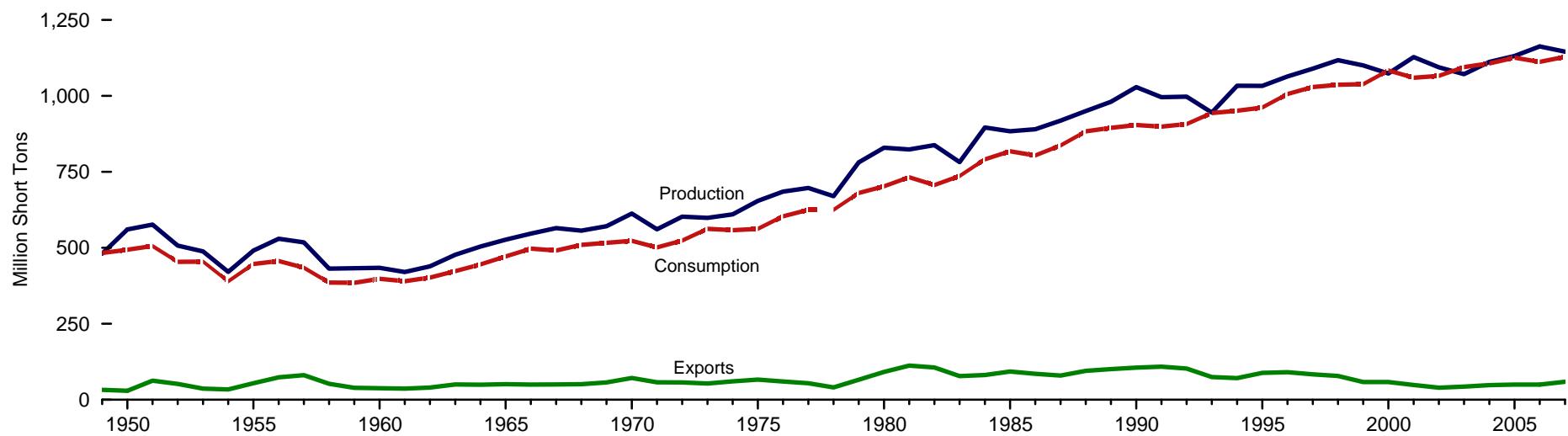
¹ Includes fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste that are consumed by the electric power industrial sectors.

Notes: • Production categories are estimated; other data are preliminary. • Values are derived from source data prior to rounding for publication. • Totals may not equal sum of components due to independent rounding.

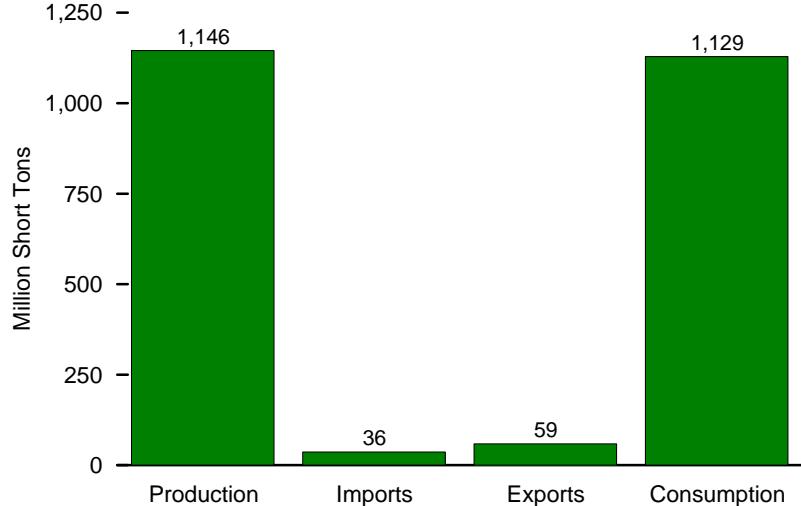
Sources: Tables 7.1, 7.2, and 7.3.

Figure 7.1 Coal Overview

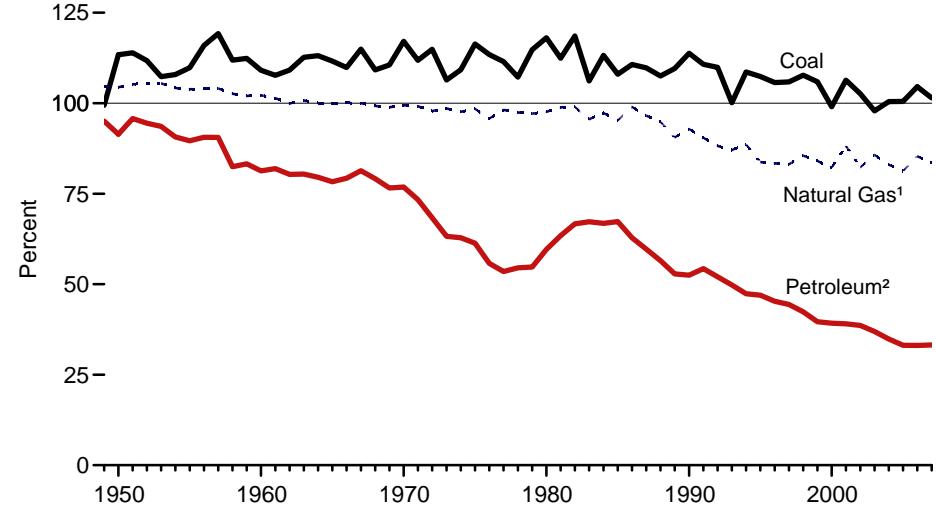
Overview, 1949-2007



Overview, 2007



Production as Share of Consumption by Type of Fossil Fuel, 1949-2007



¹ Dry natural gas production as share of natural gas consumption.

² Crude oil and natural gas plant liquids production as share of petroleum products supplied.

Sources: Tables 5.1, 6.1, and 7.1.

Table 7.1 Coal Overview, Selected Years, 1949-2007
(Million Short Tons)

Year	Production ¹	Waste Coal Supplied ²	Trade			Stock Change ⁴	Losses and Unaccounted for ⁵	Consumption
			Imports	Exports	Net Imports ³			
1949	480.6	NA	0.3	32.8	-32.5	(6)	⁶ -84.6	483.2
1950	560.4	NA	.4	29.4	-29.0	(6)	⁶ 9.5	494.1
1955	490.8	NA	.3	54.4	-54.1	(6)	⁶ -6.3	447.0
1960	434.3	NA	.3	38.0	-37.7	(6)	⁶ 1.7	398.1
1965	527.0	NA	.2	51.0	-50.8	(6)	⁶ 2.2	472.0
1970	612.7	NA	(s)	71.7	-71.7	(6)	⁶ 6.6	523.2
1971	560.9	NA	.1	57.3	-57.2	(6)	⁶ 4.2	501.6
1972	602.5	NA	(s)	56.7	-56.7	(6)	⁶ -4.3	524.3
1973	598.6	NA	.1	53.6	-53.5	(6)	⁶ -17.9	562.6
1974	610.0	NA	2.1	60.7	-58.6	-8.9	2.0	558.4
1975	654.6	NA	.9	66.3	-65.4	32.2	-5.5	562.6
1976	684.9	NA	1.2	60.0	-58.8	8.5	13.8	603.8
1977	697.2	NA	1.6	54.3	-52.7	22.6	-3.4	625.3
1978	670.2	NA	3.0	40.7	-37.8	-4.9	12.1	625.2
1979	781.1	NA	2.1	66.0	-64.0	36.2	.4	680.5
1980	829.7	NA	1.2	91.7	-90.5	25.6	10.8	702.7
1981	823.8	NA	1.0	112.5	-111.5	-19.0	-1.4	732.6
1982	838.1	NA	.7	106.3	-105.5	22.6	3.1	706.9
1983	782.1	NA	1.3	77.8	-76.5	-29.5	-1.6	736.7
1984	895.9	NA	1.3	81.5	-80.2	28.7	-4.3	791.3
1985	883.6	NA	2.0	92.7	-90.7	-27.9	2.8	818.0
1986	890.3	NA	2.2	85.5	-83.3	4.0	-1.2	804.2
1987	918.8	NA	1.7	79.6	-77.9	6.5	-2.5	836.9
1988	950.3	NA	2.1	95.0	-92.9	-24.9	-1.3	883.6
1989	980.7	1.4	2.9	100.8	-98.0	-13.7	2.9	895.0
1990	1,029.1	3.3	2.7	105.8	-103.1	26.5	-1.7	904.5
1991	996.0	4.0	3.4	109.0	-105.6	-.9	-3.9	899.2
1992	997.5	6.3	3.8	102.5	-98.7	-3.0	.5	907.7
1993	945.4	8.1	8.2	74.5	-66.3	-51.9	-4.9	944.1
1994	1,033.5	8.2	8.9	71.4	-62.5	23.6	4.3	951.3
1995	1,033.0	8.6	9.5	88.5	-79.1	-.3	.6	962.1
1996	1,063.9	8.8	8.1	90.5	-82.4	-17.5	1.4	1,006.3
1997	1,089.9	8.1	7.5	83.5	-76.1	-11.3	3.7	1,029.5
1998	1,117.5	8.7	8.7	78.0	-69.3	24.2	-4.4	1,037.1
1999	1,100.4	8.7	9.1	58.5	-49.4	24.0	-2.9	1,038.6
2000	1,073.6	9.1	12.5	58.5	-46.0	-48.3	.9	1,084.1
2001	¹ 1,127.7	10.1	19.8	48.7	-28.9	41.6	7.1	1,060.1
2002	1,094.3	9.1	16.9	39.6	-22.7	10.2	4.0	1,066.4
2003	1,071.8	10.0	25.0	43.0	-18.0	-26.7	-4.4	1,094.9
2004	1,112.1	11.3	27.3	48.0	-20.7	-11.5	6.9	1,107.3
2005	1,131.5	13.4	30.5	49.9	-19.5	-9.7	^R 9.1	^R 1,126.0
2006	^R 1,162.7	^R 14.4	36.2	49.6	-13.4	^R 42.6	^R 8.8	^R 1,112.3
2007 ^P	1,145.6	14.1	36.3	59.2	-22.8	2.5	5.5	1,128.8

¹ Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine, and cleaned to reduce the concentration of noncombustible materials).

² Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

³ Net imports equal imports minus exports. Minus sign indicates exports are greater than imports.

⁴ A negative value indicates a decrease in stocks; a positive value indicates an increase.

⁵ "Losses and Unaccounted for" is calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

⁶ Through 1973, stock change is included in "Losses and Unaccounted for."

R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.05 million short tons.

Notes: • See Note 1, "Coal Consumption," at end of section. • Totals may not equal sum of components due to independent rounding.

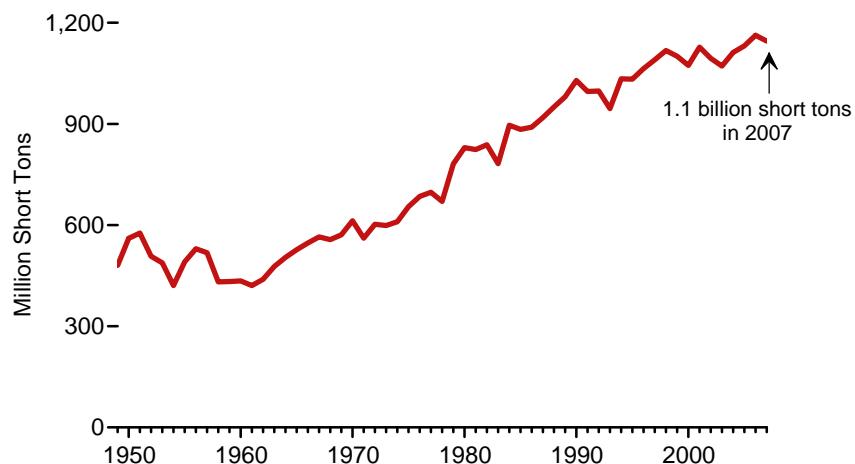
Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.

• For related information, see <http://www.eia.doe.gov/fuelcoal.html>.

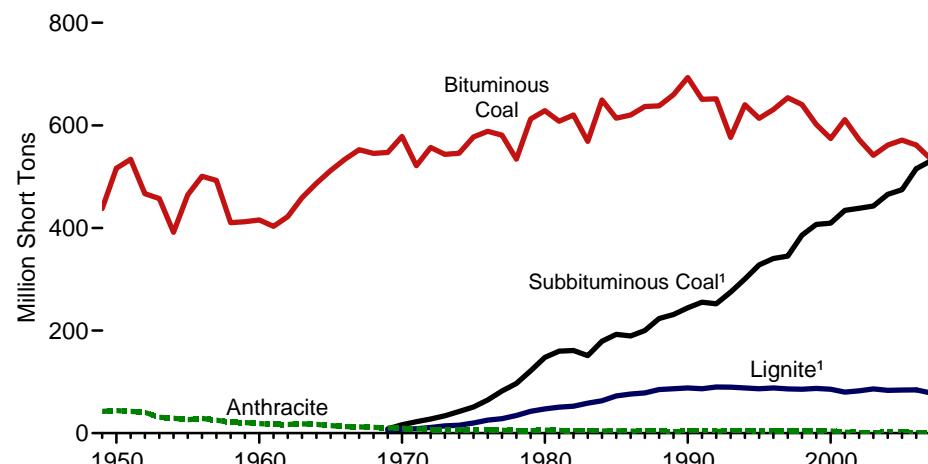
Sources: **Production:** Table 7.2. **Waste Coal Supplied:** • 1989-1997—Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000—EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001 forward—EIA, *Quarterly Coal Report October-December 2007* (March 2008), Table ES-1. **Imports:** • 1949-2000—U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM145." • 2001 forward—EIA, *Quarterly Coal Report October-December 2007* (March 2008), Table ES-1. **Exports:** Table 7.4. **Stock Change:** Table 7.5. **Losses and Unaccounted for:** Calculated. **Consumption:** Table 7.3.

Figure 7.2 Coal Production, 1949-2007

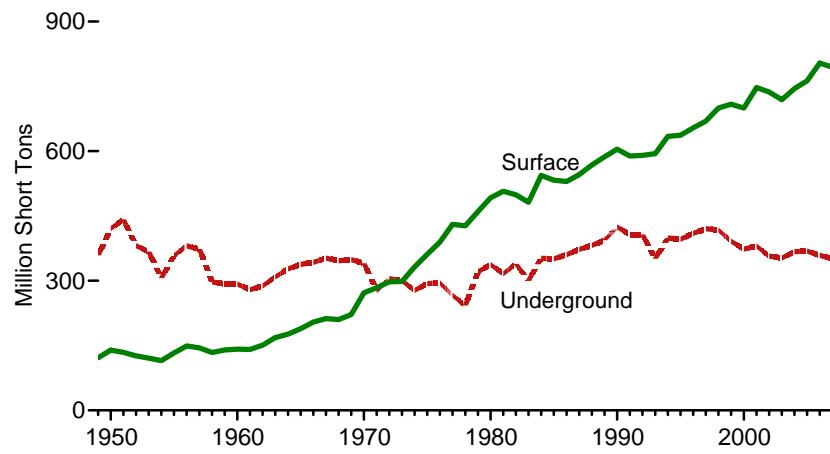
Total



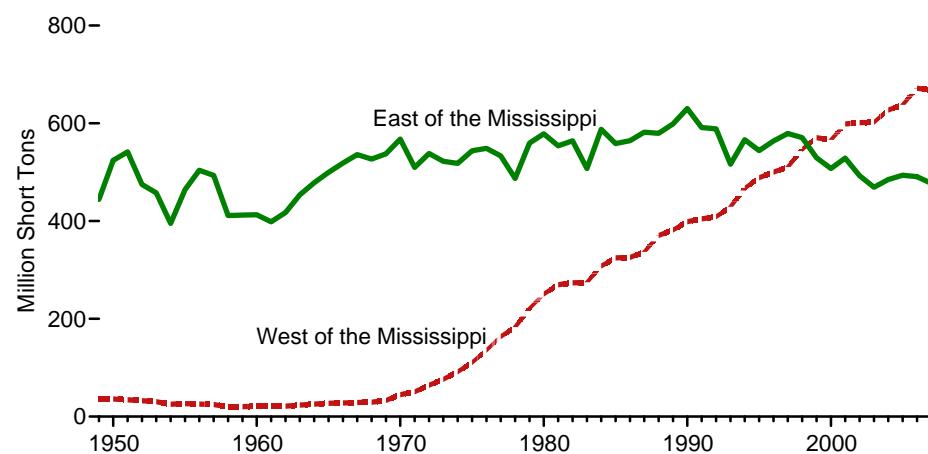
By Rank



By Mining Method



By Location



¹ Included in bituminous coal prior to 1969.

Note: Because vertical scales differ, graphs should not be compared.

Source: Table 7.2.

Table 7.2 Coal Production, Selected Years, 1949-2007

(Million Short Tons)

Year	Rank				Mining Method		Location		Total ¹
	Bituminous Coal ¹	Subbituminous Coal	Lignite	Anthracite ¹	Underground	Surface ¹	East of the Mississippi ¹	West of the Mississippi ¹	
1949	437.9	(²)	(²)	42.7	358.9	121.7	444.2	36.4	480.6
1950	516.3	(²)	(²)	44.1	421.0	139.4	524.4	36.0	560.4
1955	464.6	(²)	(²)	26.2	358.0	132.9	464.2	26.6	490.8
1960	415.5	(²)	(²)	18.8	292.6	141.7	413.0	21.3	434.3
1965	512.1	(²)	(²)	14.9	338.0	189.0	499.5	27.4	527.0
1970	578.5	16.4	8.0	9.7	340.5	272.1	567.8	44.9	612.7
1971	521.3	22.2	8.7	8.7	277.2	283.7	509.9	51.0	560.9
1972	556.8	27.5	11.0	7.1	305.0	297.4	538.2	64.3	602.5
1973	543.5	33.9	14.3	6.8	300.1	298.5	522.1	76.4	598.6
1974	545.7	42.2	15.5	6.6	278.0	332.1	518.1	91.9	610.0
1975	577.5	51.1	19.8	6.2	293.5	361.2	543.7	110.9	654.6
1976	588.4	64.8	25.5	6.2	295.5	389.4	548.8	136.1	684.9
1977	581.0	82.1	28.2	5.9	266.6	430.6	533.3	163.9	697.2
1978	534.0	96.8	34.4	5.0	242.8	427.4	487.2	183.0	670.2
1979	612.3	121.5	42.5	4.8	320.9	460.2	559.7	221.4	781.1
1980	628.8	147.7	47.2	6.1	337.5	492.2	578.7	251.0	829.7
1981	608.0	159.7	50.7	5.4	316.5	507.3	553.9	269.9	823.8
1982	620.2	160.9	52.4	4.6	339.2	499.0	564.3	273.9	838.1
1983	568.6	151.0	58.3	4.1	300.4	481.7	507.4	274.7	782.1
1984	649.5	179.2	63.1	4.2	352.1	543.9	587.6	308.3	895.9
1985	613.9	192.7	72.4	4.7	350.8	532.8	558.7	324.9	883.6
1986	620.1	189.6	76.4	4.3	360.4	529.9	564.4	325.9	890.3
1987	636.6	200.2	78.4	3.6	372.9	545.9	581.9	336.8	918.8
1988	638.1	223.5	85.1	3.6	382.2	568.1	579.6	370.7	950.3
1989	659.8	231.2	86.4	3.3	393.8	586.9	599.0	381.7	980.7
1990	693.2	244.3	88.1	3.5	424.5	604.5	630.2	398.9	1,029.1
1991	650.7	255.3	86.5	3.4	407.2	588.8	591.3	404.7	996.0
1992	651.8	252.2	90.1	3.5	407.2	590.3	588.6	409.0	997.5
1993	576.7	274.9	89.5	4.3	351.1	594.4	516.2	429.2	945.4
1994	640.3	300.5	88.1	4.6	399.1	634.4	566.3	467.2	1,033.5
1995	613.8	328.0	86.5	4.7	396.2	636.7	544.2	488.7	1,033.0
1996	630.7	340.3	88.1	4.8	409.8	654.0	563.7	500.2	1,063.9
1997	653.8	345.1	86.3	4.7	420.7	669.3	579.4	510.6	1,089.9
1998	640.6	385.9	85.8	5.3	417.7	699.8	570.6	547.0	1,117.5
1999	601.7	406.7	87.2	4.8	391.8	708.6	529.6	570.8	1,100.4
2000	574.3	409.2	85.6	4.6	373.7	700.0	507.5	566.1	1,073.6
2001	1 ⁶ 111.3	434.4	80.0	1 ¹ .9	380.6	1 ⁷ 474.1	1 ⁵ 28.8	1 ⁵ 98.9	1 ¹ ,127.7
2002	572.1	438.4	82.5	1.4	357.4	736.9	492.9	601.4	1,094.3
2003	541.5	442.6	86.4	1.3	352.8	719.0	469.2	602.5	1,071.8
2004	561.5	465.4	83.5	1.7	367.6	744.5	484.8	627.3	1,112.1
2005	571.2	474.7	83.9	1.7	368.6	762.9	493.8	637.7	1,131.5
2006	R561.6	R515.3	84.2	1.5	R359.0	R803.7	R490.8	672.0	R1,162.7
2007	E534.9	E530.6	E78.5	E1.6	E351.3	E794.3	E477.2	E668.4	P ¹ 1,145.6

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

² Included in "Bituminous Coal."

R=Revised. P=Preliminary. E=Estimate.

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

Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.

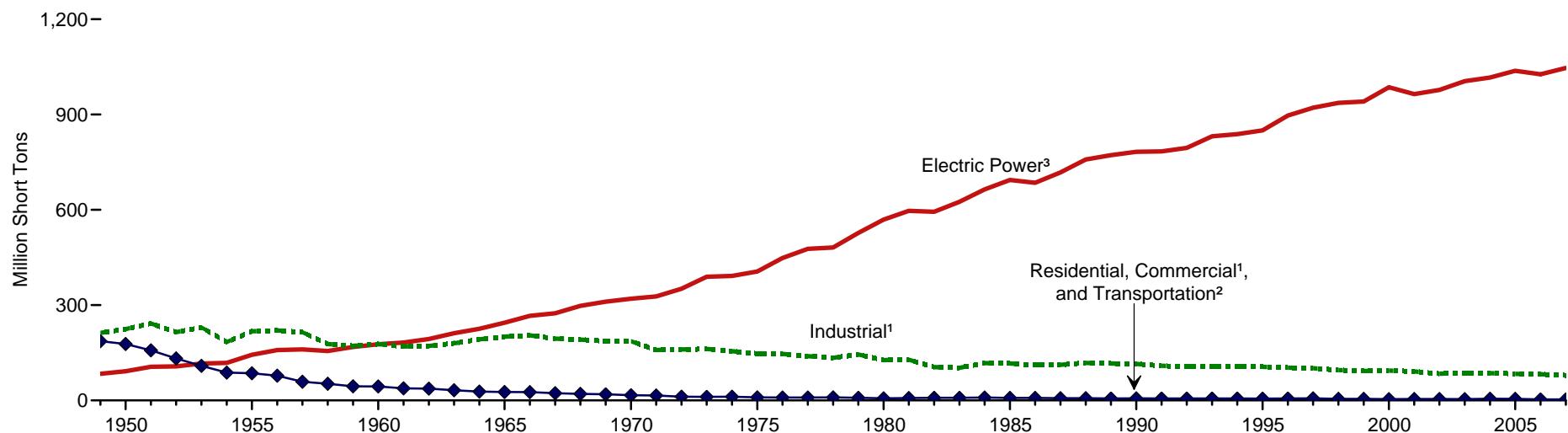
• For related information, see <http://www.eia.doe.gov/fuelcoal.html>.

Sources: • 1949-1975—Bureau of Mines, *Minerals Yearbook*, "Coal—Bituminous and Lignite" and "Coal—Pennsylvania Anthracite" chapters. • 1976—Energy Information Administration (EIA), Energy Data Reports, *Coal—Bituminous and Lignite* in 1976 and *Coal—Pennsylvania Anthracite* 1976. • 1977 and

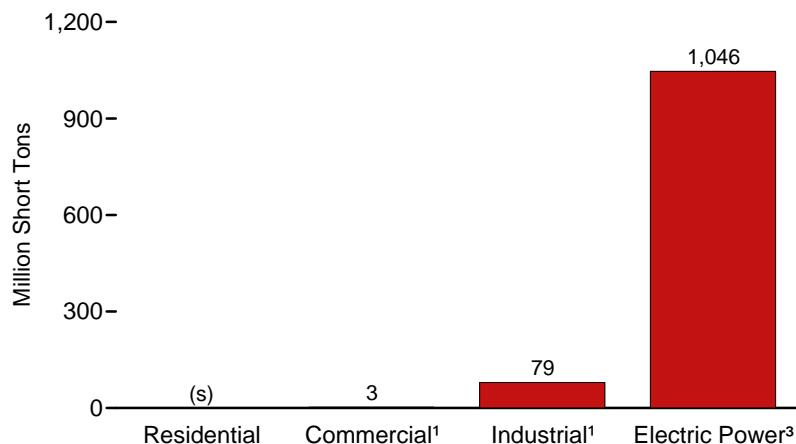
1978—EIA, Energy Data Reports, *Bituminous Coal and Lignite Production and Mine Operations*—1977; 1978, *Coal—Pennsylvania Anthracite* 1977; 1978, and *Coal Production*, annual reports. • 1979 and 1980—EIA, Energy Data Reports, *Weekly Coal Report* and *Coal Production*, annual reports. • 1981-1988—EIA, *Weekly Coal Production* and *Coal Production*, annual reports. • 1989-2000—EIA, *Coal Industry Annual*, annual reports. • 2001-2006—EIA, *Annual Coal Report*, annual reports. • 2007—EIA, *Quarterly Coal Report October-December 2007* (March 2008), Table 1; EIA, Form EIA-7A, "Coal Production Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Figure 7.3 Coal Consumption by Sector

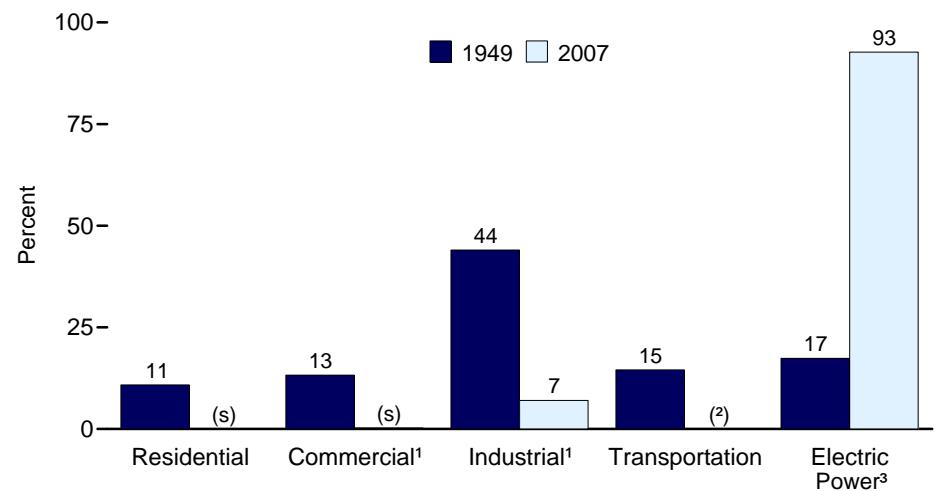
By Sector, 1949-2007



By Sector, 2007



Sector Shares, 1949 and 2007



¹ Includes combined-heat-and-power (CHP) plants and a small number of electricity-only plants.

² For 1978 forward, small amounts of transportation sector use are included in "Industrial."

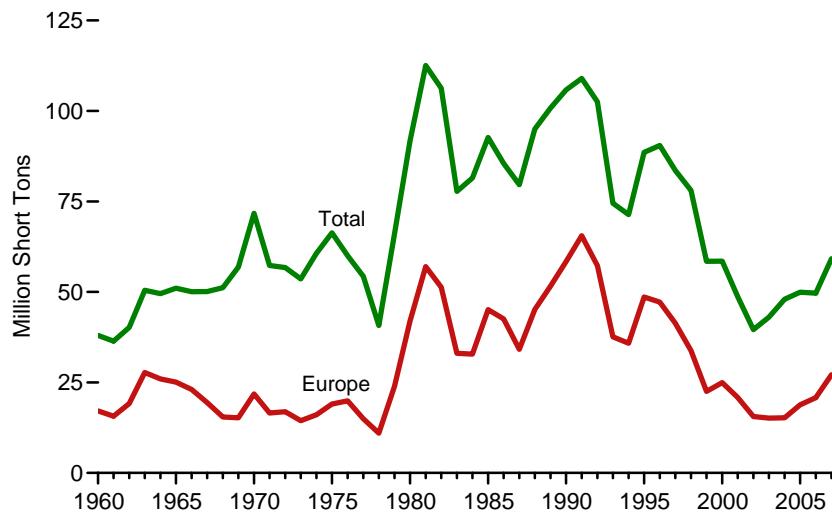
³ Electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

(s)=Less than 0.5.

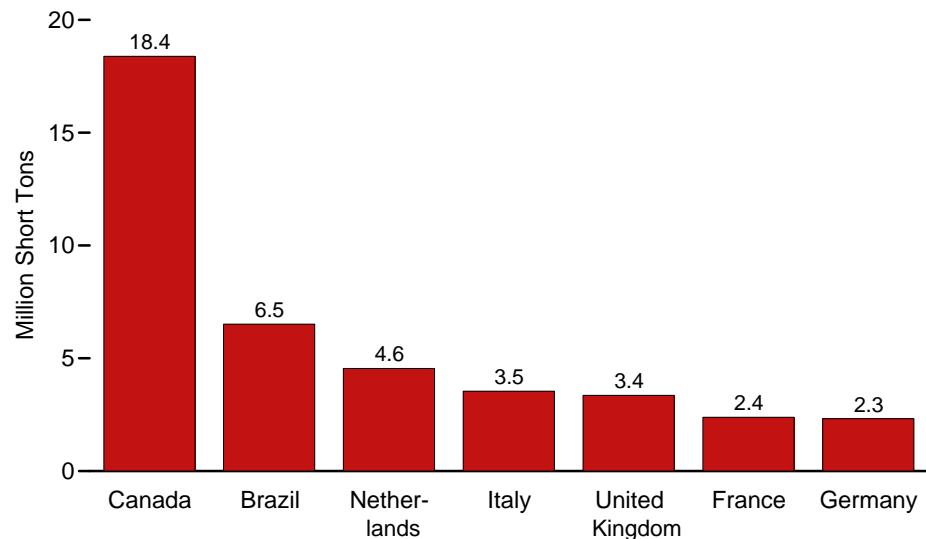
Source: Table 7.3.

Figure 7.4 Coal Exports by Country of Destination

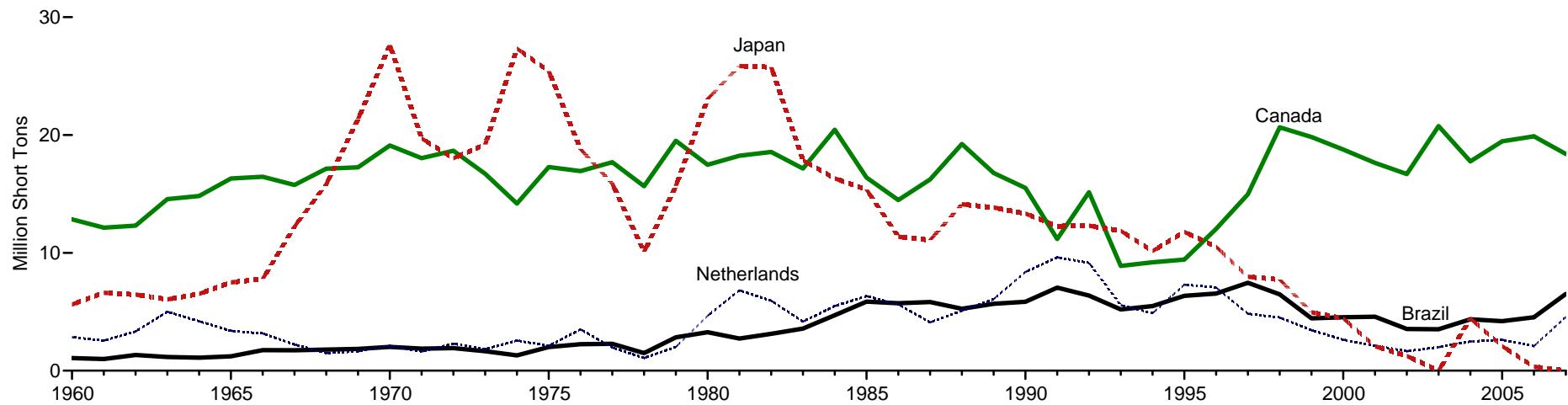
Total and Europe, 1960-2007



By Selected Country, 2007



By Selected Country, 1960-2007

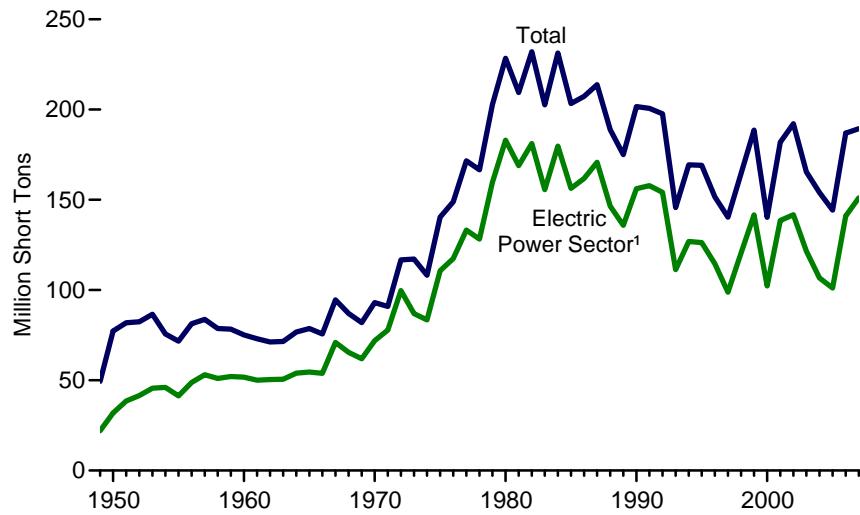


Note: Because vertical scales differ, graphs should not be compared.

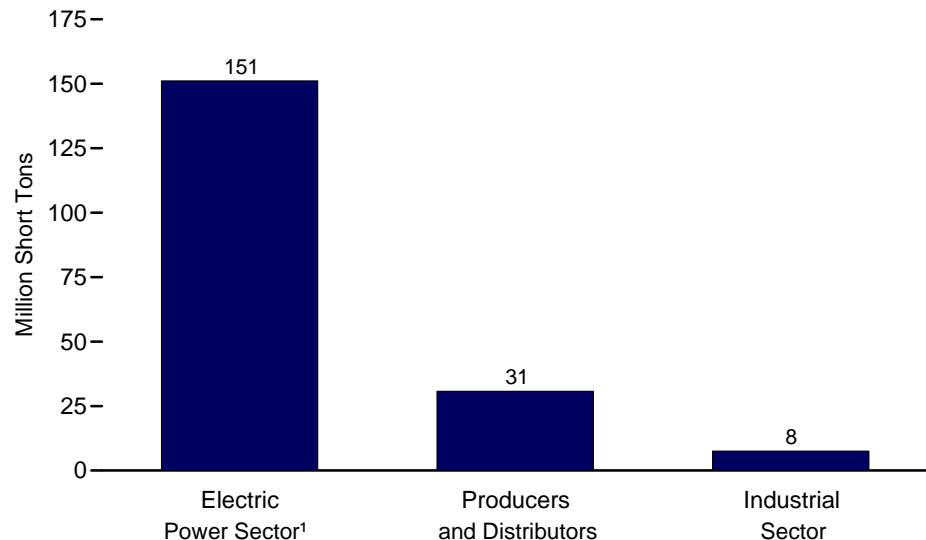
Source: Table 7.4.

Figure 7.5 Coal Stocks

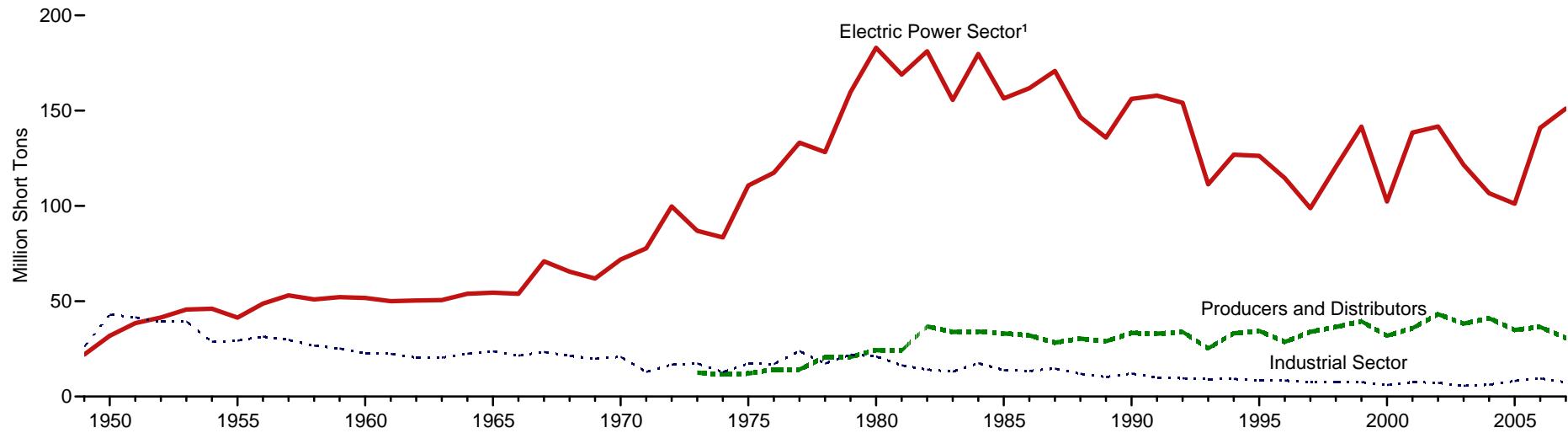
Total and Electric Power Sector Stocks, 1949-2007



By Holding Entity, 2007



By Holding Entity, 1949-2007



¹ Electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

Notes: • Stocks are at end of year. • Because vertical scales differ, graphs should not be compared.

Source: Table 7.5.

Table 7.5 Coal Stocks by Sector, Selected Years, 1949-2007
 (Million Short Tons)

Year	Producers and Distributors	Consumers							Total	
		Residential and Commercial Sectors	Industrial Sector			Transportation Sector	Electric Power Sector ²			
			Coke Plants	Other ¹	Total					
1949	NA	1.4	10.0	16.1	26.0	(³)	22.1	49.5	49.5	
1950	NA	2.5	16.8	26.2	43.0	(³)	31.8	77.3	77.3	
1955	NA	1.0	13.4	15.9	29.3	(³)	41.4	71.7	71.7	
1960	NA	.7	11.1	11.6	22.8	(³)	51.7	75.2	75.2	
1965	NA	.4	10.6	13.1	23.8	(³)	54.5	78.6	78.6	
1970	NA	.3	9.0	11.8	20.8	(³)	71.9	93.0	93.0	
1971	NA	.3	7.3	5.6	12.9	(³)	77.8	91.0	91.0	
1972	NA	.3	9.1	7.6	16.7	(³)	99.7	116.8	116.8	
1973	12.5	.3	7.0	10.4	17.4	(³)	87.0	104.6	117.2	
1974	11.6	.3	6.2	6.6	12.8	(³)	83.5	96.6	108.2	
1975	12.1	.2	8.8	8.5	17.3	(³)	110.7	128.3	140.4	
1976	14.2	.2	9.9	7.1	17.0	(³)	117.4	134.7	148.9	
1977	14.2	.2	12.8	11.1	23.9	(³)	133.2	157.3	171.5	
1978	20.7	.4	8.3	9.0	17.3	NA	128.2	145.9	166.6	
1979	20.8	.3	10.2	11.8	21.9	NA	159.7	182.0	202.8	
1980	24.4	NA	9.1	12.0	21.0	NA	183.0	204.0	228.4	
1981	24.1	NA	6.5	9.9	16.4	NA	168.9	185.3	209.4	
1982	36.8	NA	4.6	9.5	14.1	NA	181.1	195.3	232.0	
1983	33.9	NA	4.3	8.7	13.1	NA	155.6	168.7	202.6	
1984	34.1	NA	6.2	11.3	17.5	NA	179.7	197.2	231.3	
1985	33.1	NA	3.4	10.4	13.9	NA	156.4	170.2	203.4	
1986	32.1	NA	3.0	10.4	13.4	NA	161.8	175.2	207.3	
1987	28.3	NA	3.9	10.8	14.7	NA	170.8	185.5	213.8	
1988	30.4	NA	3.1	8.8	11.9	NA	146.5	158.4	188.8	
1989	29.0	NA	2.9	7.4	10.2	NA	135.9	146.1	175.1	
1990	33.4	NA	3.3	8.7	12.0	NA	156.2	168.2	201.6	
1991	33.0	NA	2.8	7.1	9.8	NA	157.9	167.7	200.7	
1992	34.0	NA	2.6	7.0	9.6	NA	154.1	163.7	197.7	
1993	25.3	NA	2.4	6.7	9.1	NA	111.3	120.5	145.7	
1994	33.2	NA	2.7	6.6	9.2	NA	126.9	136.1	169.4	
1995	34.4	NA	2.6	5.7	8.3	NA	126.3	134.6	169.1	
1996	28.6	NA	2.7	5.7	8.4	NA	114.6	123.0	151.6	
1997	34.0	NA	2.0	5.6	7.6	NA	98.8	106.4	140.4	
1998	36.5	NA	2.0	5.5	7.6	NA	120.5	128.1	164.6	
1999	39.5	NA	1.9	5.6	7.5	NA	141.6	149.1	188.6	
2000	31.9	NA	1.5	4.6	6.1	NA	102.3	108.4	140.3	
2001	35.9	NA	1.5	6.0	7.5	NA	138.5	146.0	181.9	
2002	43.3	NA	1.4	5.8	7.2	NA	141.7	148.9	192.1	
2003	38.3	NA	.9	4.7	5.6	NA	121.6	127.2	165.5	
2004	41.2	NA	1.3	4.8	6.2	NA	106.7	112.9	154.0	
2005	35.0	NA	2.6	5.6	8.2	NA	101.1	109.3	144.3	
2006	R36.5	NA	2.9	6.5	9.4	NA	R141.0	R150.4	R186.9	
2007 ^P	E30.8	NA	1.9	5.6	7.6	NA	151.1	158.7	189.4	

¹ Through 1977, data are for stocks held by the manufacturing and transportation sectors. Beginning in 1978, data are for stocks held at manufacturing plants only.

² 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. Through 1998, data are for electric utilities only; beginning in 1999, data are for electric utilities and independent power producers.

³ Included in "Industrial Sector Other."

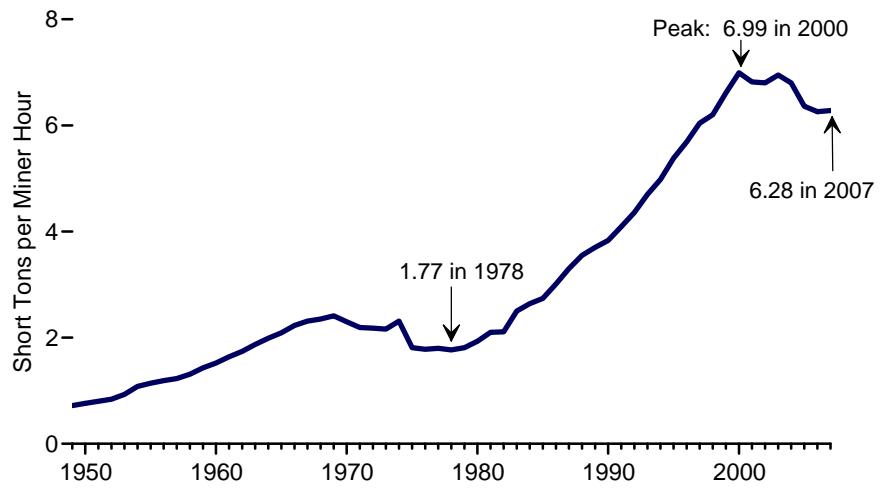
R=Revised. P=Preliminary. E=Estimate. NA=Not available.

Notes: • Stocks are at end of year. • Totals may not equal sum of components due to independent rounding.

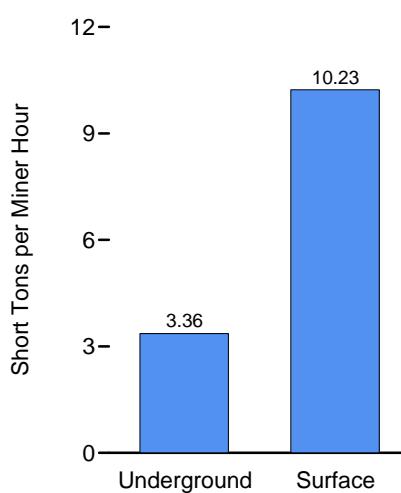
Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.
 • For related information, see <http://www.eia.doe.gov/fuelcoal.html>.
 Sources: **Electric Power Sector:** Table 8.8. **All Other Data:** • 1949-1975—Bureau of Mines, Minerals Yearbook, "Coal—Bituminous and Lignite" and "Coal—Pennsylvania Anthracite" chapters. • 1976—Energy Information Administration (EIA), Energy Data Reports, *Coal—Bituminous and Lignite in 1976* and *Coal—Pennsylvania Anthracite 1976*. • 1977 and 1978—EIA, Energy Data Reports, *Coal—Pennsylvania Anthracite 1977; 1978*, and *Weekly Coal Report*. • 1979—EIA, Energy Data Report, *Weekly Coal Report*. • 1980-2000—EIA, *Quarterly Coal Report (QCR) October-December*, quarterly reports. • 2001 forward—EIA, *QCR October-December 2007* (March 2008), Table 29.

Figure 7.6 Coal Mining Productivity

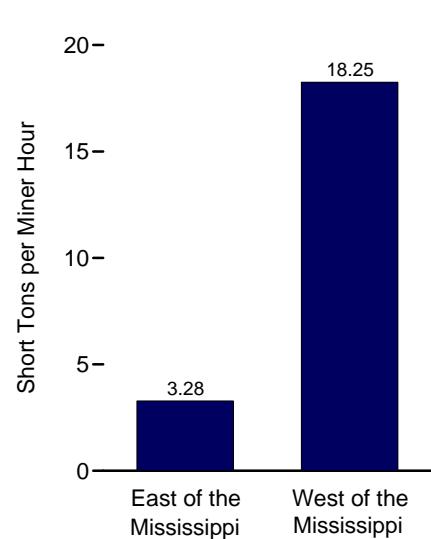
Total, 1949-2007



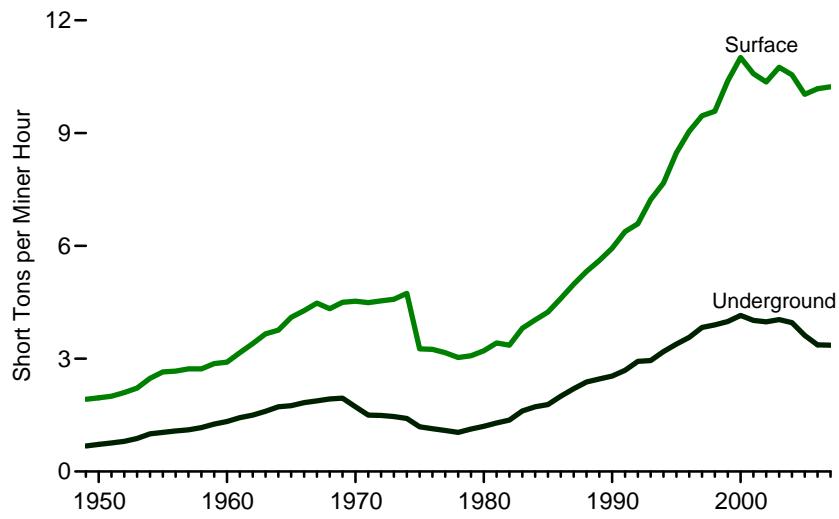
Mining Methods, 2007



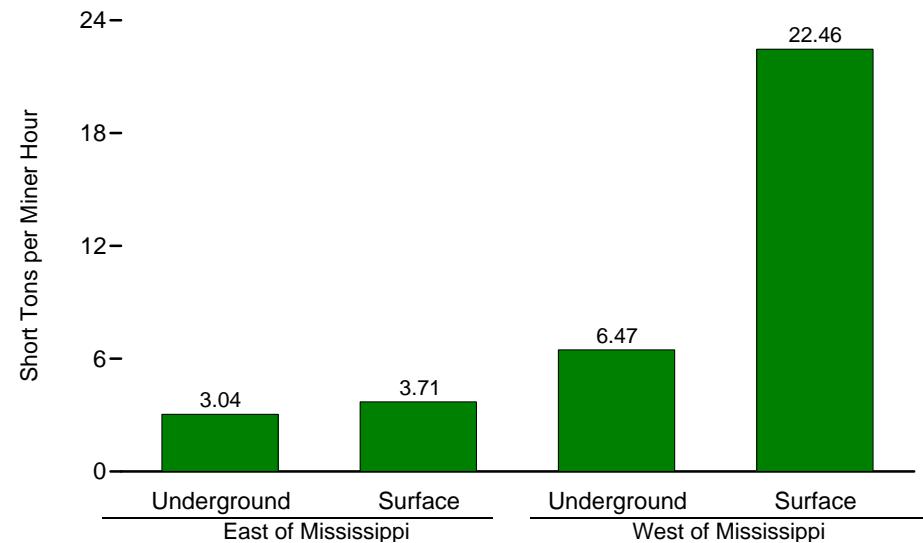
Location, 2007



Mining Method,¹ 1949-2007



By Region and Mining Method, 2007



¹ For 1979 forward, includes all coal; prior to 1979, excludes anthracite.

Notes: • Beginning in 2001, surface mining includes a small amount of refuse recovery.

• Because vertical scales differ, graphs should not be compared.

Source: Table 7.6.

Table 7.6 Coal Mining Productivity, Selected Years, 1949-2007

(Short Tons per Miner Hour¹)

Year	Mining Method		Location						Total ²	
	Underground	Surface ²	East of the Mississippi			West of the Mississippi				
			Underground	Surface ²	Total ²	Underground	Surface ²	Total ²		
1949	30.68	31.92	NA	NA	NA	NA	NA	NA	0.72	
1950	3.72	31.96	NA	NA	NA	NA	NA	NA	.76	
1955	31.04	32.65	NA	NA	NA	NA	NA	NA	1.14	
1960	31.33	32.91	NA	NA	NA	NA	NA	NA	1.52	
1965	31.75	34.10	NA	NA	NA	NA	NA	NA	2.09	
1970	31.72	34.53	NA	NA	NA	NA	NA	NA	2.30	
1971	31.50	34.49	NA	NA	NA	NA	NA	NA	2.19	
1972	31.49	34.54	NA	NA	NA	NA	NA	NA	2.18	
1973	31.46	34.58	NA	NA	NA	NA	NA	NA	2.16	
1974	31.41	34.74	NA	NA	NA	NA	NA	NA	2.31	
1975	31.19	33.26	NA	NA	NA	NA	NA	NA	1.81	
1976	31.14	33.25	NA	NA	NA	NA	NA	NA	1.78	
1977	31.09	33.16	NA	NA	NA	NA	NA	NA	1.80	
1978	31.04	33.03	NA	NA	NA	NA	NA	NA	1.77	
1979	1.13	3.08	NA	NA	NA	NA	NA	NA	1.81	
1980	1.20	3.21	NA	NA	NA	NA	NA	NA	1.93	
1981	1.29	3.42	NA	NA	NA	NA	NA	NA	2.10	
1982	1.37	3.36	NA	NA	NA	NA	NA	NA	2.11	
1983	1.61	3.81	NA	NA	NA	NA	NA	NA	2.50	
1984	1.72	4.03	1.69	2.56	1.98	2.49	8.15	7.07	2.64	
1985	1.78	4.24	1.75	2.52	2.00	2.45	8.61	7.40	2.74	
1986	2.00	4.60	1.96	2.75	2.21	2.80	9.02	7.90	3.01	
1987	2.20	4.98	2.16	2.97	2.42	3.39	9.86	8.73	3.30	
1988	2.38	5.32	2.32	2.99	2.54	3.55	10.73	9.38	3.55	
1989	2.46	5.61	2.39	3.13	2.63	3.92	11.86	10.21	3.70	
1990	2.54	5.94	2.46	3.32	2.73	4.01	12.26	10.41	3.83	
1991	2.69	6.38	2.59	3.49	2.86	4.53	12.36	10.79	4.09	
1992	2.93	6.59	2.82	3.61	3.07	4.85	12.49	11.03	4.36	
1993	2.95	7.23	2.81	3.74	3.11	5.18	13.94	12.14	4.70	
1994	3.19	7.67	3.02	3.85	3.28	5.93	15.19	13.22	4.98	
1995	3.39	8.48	3.19	4.03	3.45	6.32	16.23	14.18	5.38	
1996	3.57	9.05	3.36	4.25	3.63	7.03	17.89	15.66	5.69	
1997	3.83	9.46	3.63	4.49	3.89	6.82	18.63	16.04	6.04	
1998	3.90	9.58	3.69	4.31	3.89	6.76	18.82	16.27	6.20	
1999	3.99	10.39	3.74	4.48	3.97	7.45	19.57	17.18	6.61	
2000	4.15	11.01	3.89	4.82	4.18	7.66	20.04	17.62	6.99	
2001	4.02	² 10.58	3.71	² 4.53	² 3.98	8.39	² 20.63	² 18.32	² 6.82	
2002	3.98	10.36	3.67	4.22	3.86	7.80	20.67	18.06	6.80	
2003	4.04	10.75	3.68	4.18	3.85	8.33	21.42	18.67	6.95	
2004	3.96	10.55	3.59	3.95	3.72	8.22	22.04	19.00	6.80	
2005	3.62	10.03	3.28	3.75	3.44	7.48	21.98	18.50	6.36	
2006	R3.37	R10.18	R3.06	R3.74	3.29	R6.62	R22.26	18.33	R6.26	
2007 ^P	3.36	10.23	3.04	3.71	3.28	6.47	22.46	18.25	6.28	

¹ Data through 1973 for bituminous coal, subbituminous coal, and lignite mines, and data through 1978 for anthracite mines, were originally reported in short tons per miner day. The data were converted to short tons per miner hour by assuming an eight-hour day. All remaining data were calculated by dividing total production by total labor hours worked by all mine employees except office workers.

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

³ Anthracite mining productivity is unavailable by underground and surface but is included in "Total."

R=Revised. P=Preliminary. NA=Not available.

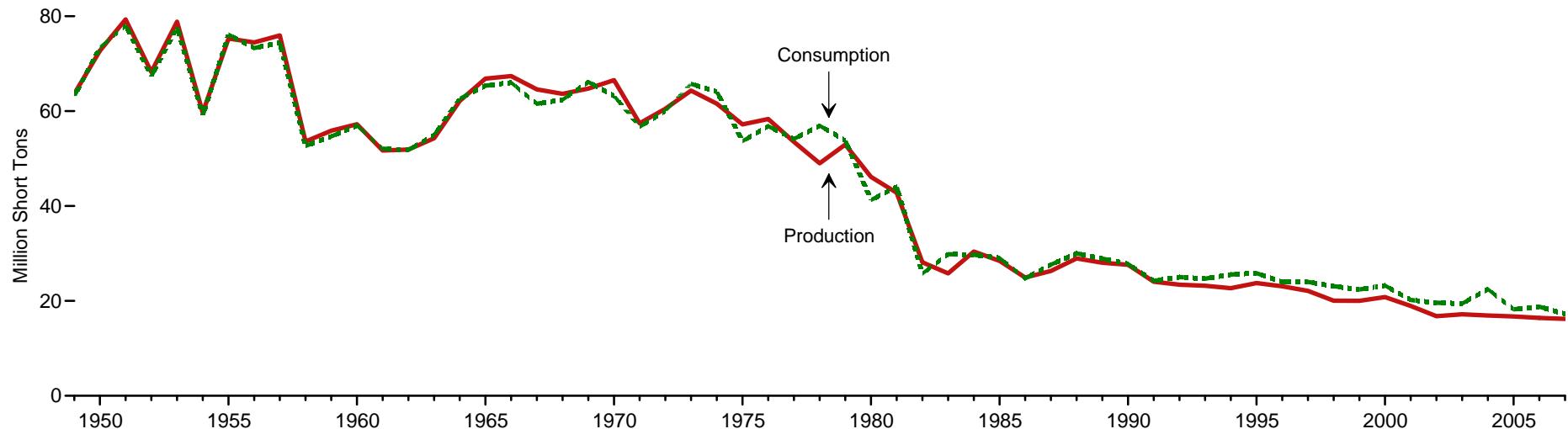
Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.

• For related information, see <http://www.eia.doe.gov/fuelcoal.html>.

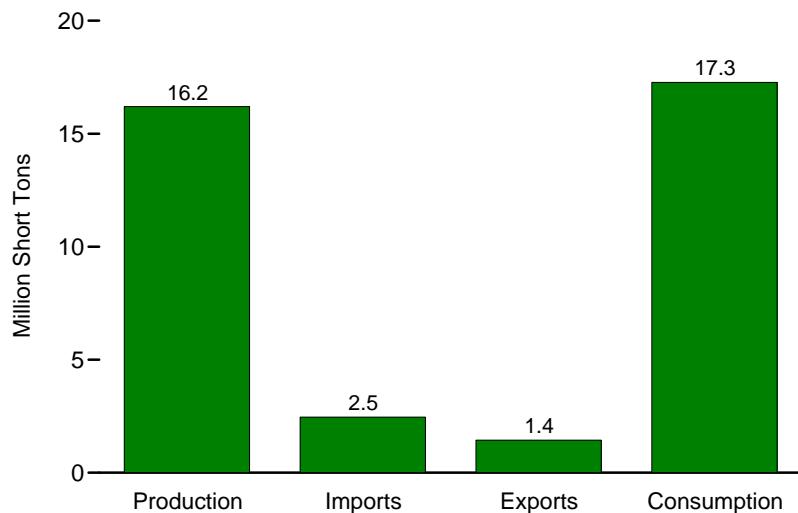
Sources: • 1949-1975—Bureau of Mines, *Minerals Yearbook*, "Coal—Bituminous and Lignite" and "Coal—Pennsylvania Anthracite" chapters. • 1976—Energy Information Administration (EIA), Energy Data Reports, *Coal—Bituminous and Lignite in 1976* and *Coal—Pennsylvania Anthracite 1976*. • 1977 and 1978—EIA, Energy Data Reports, *Bituminous Coal and Lignite Production and Mine Operations—1977; 1978* and *Coal—Pennsylvania Anthracite 1977; 1978*. • 1979—EIA, Energy Data Report, *Coal Production—1979*. • 1980-1988—EIA, *Coal Production*, annual reports. • 1989-2000—EIA, *Coal Industry Annual*, annual reports. • 2001-2006—EIA, *Annual Coal Report*, annual reports. • 2007—EIA, Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Figure 7.7 Coke Overview

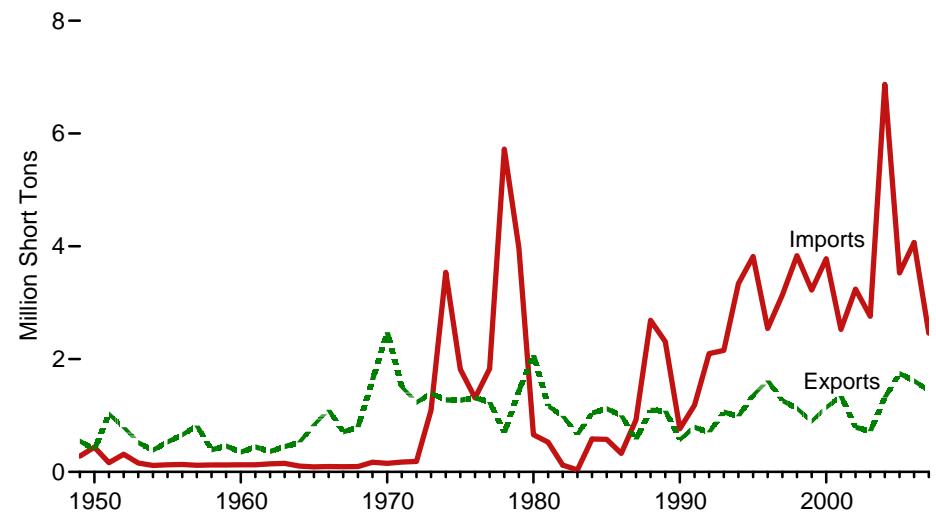
Production and Consumption, 1949-2007



Overview, 2007



Trade, 1949-2007



Note: Because vertical scales differ, graphs should not be compared.

Source: Table 7.7.

Table 7.7 Coke Overview, Selected Years, 1949-2007
 (Million Short Tons)

Year	Production	Trade			Stock Change ²	Consumption ³
		Imports	Exports	Net Imports ¹		
1949	63.6	0.3	0.5	-0.3	0.2	63.2
1950	72.7	.4	.4	(s)	-.7	73.4
1955	75.3	.1	.5	-.4	-1.2	76.1
1960	57.2	.1	.4	-.2	.1	56.9
1965	66.9	.1	.8	-.7	.7	65.4
1970	66.5	.2	2.5	-2.3	1.0	63.2
1971	57.4	.2	1.5	-1.3	-.6	56.7
1972	60.5	.2	1.2	-1.0	-.6	60.0
1973	64.3	1.1	1.4	-.3	-1.7	65.8
1974	61.6	3.5	1.3	2.3	-.2	64.1
1975	57.2	1.8	1.3	.5	4.1	53.7
1976	58.3	1.3	1.3	(s)	1.5	56.8
1977	53.5	1.8	1.2	.6	(s)	54.1
1978	49.0	5.7	.7	5.0	-2.9	56.9
1979	52.9	4.0	1.4	2.5	1.7	53.8
1980	46.1	.7	2.1	-1.4	3.4	41.3
1981	42.8	.5	1.2	-.6	-1.9	44.0
1982	28.1	.1	1.0	-.9	1.5	25.8
1983	25.8	(s)	.7	-.6	-4.7	29.9
1984	30.4	.6	1.0	-.5	.2	29.7
1985	28.4	.6	1.1	-.5	-1.2	29.1
1986	24.9	.3	1.0	-.7	-.5	24.7
1987	26.3	.9	.6	.3	-1.0	27.7
1988	28.9	2.7	1.1	1.6	.5	30.0
1989	28.0	2.3	1.1	1.2	.3	28.9
1990	27.6	.8	.6	.2	(s)	27.8
1991	24.0	1.2	.8	.4	.2	24.2
1992	23.4	2.1	.7	1.4	-.2	25.0
1993	23.2	2.2	1.1	1.1	-.4	24.7
1994	22.7	3.3	1.0	2.4	-.5	25.6
1995	23.7	3.8	1.4	2.5	.4	25.8
1996	23.1	2.5	1.6	.9	(s)	24.0
1997	22.1	3.1	1.3	1.9	(s)	24.0
1998	20.0	3.8	1.1	2.7	-.4	23.1
1999	20.0	3.2	.9	2.3	-.1	22.4
2000	20.8	3.8	1.1	2.6	.2	23.2
2001	18.9	2.5	1.3	1.2	-.1	20.2
2002	16.8	3.2	.8	2.5	-.4	19.6
2003	17.2	2.8	.7	2.0	-.2	19.4
2004	16.9	6.9	1.3	5.6	(s)	22.5
2005	16.7	3.5	1.7	1.8	.3	18.2
2006	16.4	4.1	1.6	2.5	.1	18.8
2007 ^P	16.2	2.5	1.4	1.0	-.1	17.3

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

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

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

P=Preliminary. (s)=Less than 0.05 million short tons.

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

Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.

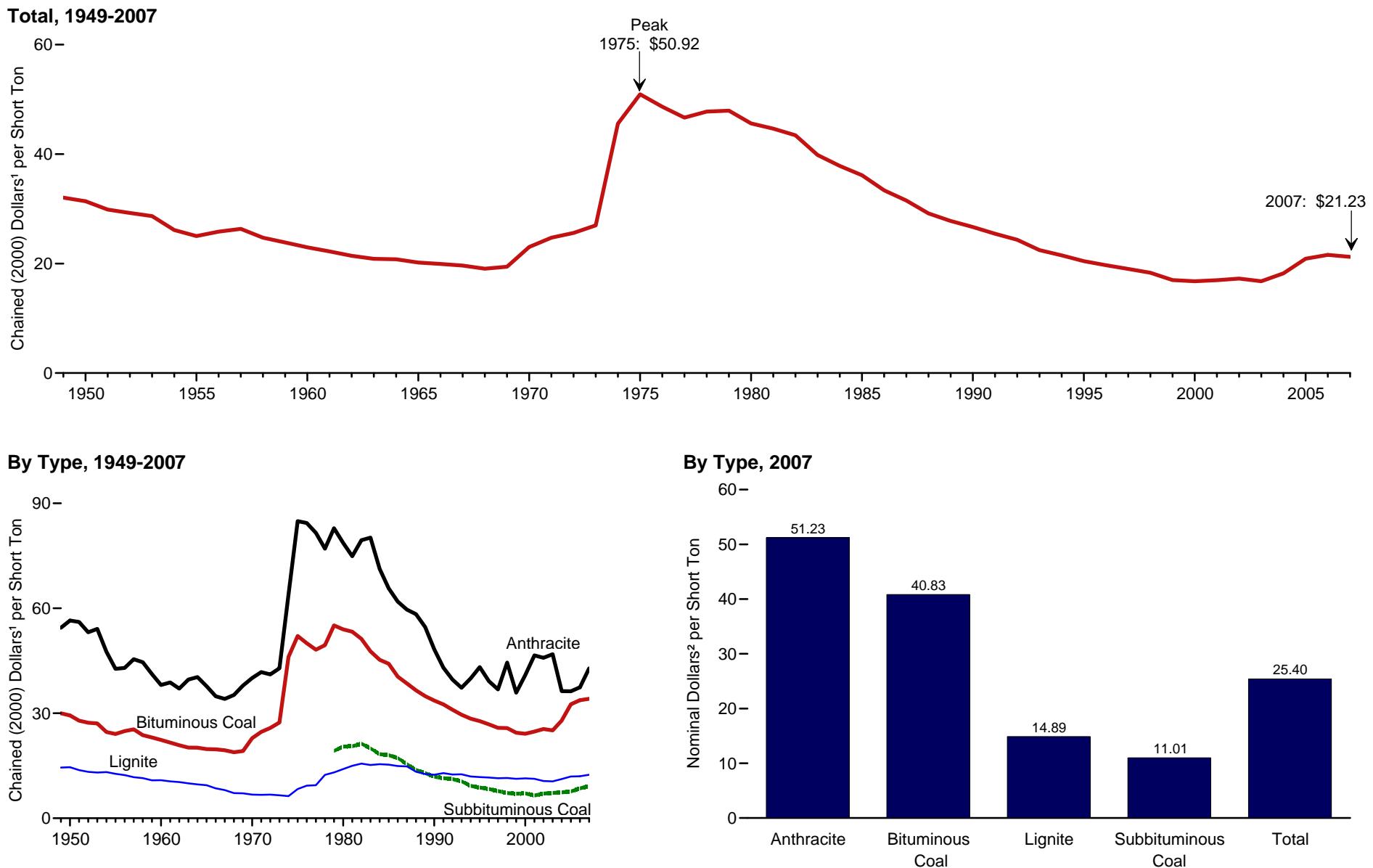
Sources: • For related information, see <http://www.eia.doe.gov/fuelcoal.html>.

• 1949-1975—Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter.

• 1976-1980—Energy Information Administration (EIA), Energy Data Report, *Coke and Coal Chemicals*, annual reports. • 1981-2000—EIA, *Quarterly Coal Report (QCR) October-December*, quarterly reports.

• 2001 forward—EIA, *QCR October-December 2007* (March 2008), Table ES-2.

Figure 7.8 Coal Prices



¹ Calculated by using gross domestic product implicit price deflators. See Table D1.

² See "Nominal Dollars" in Glossary.

Note: Because vertical scales differ, graphs should not be compared.

Source: Table 7.8.

Table 7.8 Coal Prices, Selected Years, 1949-2007

(Dollars per Short Ton)

Year	Bituminous Coal		Subbituminous Coal		Lignite ¹		Anthracite		Total	
	Nominal ²	Real ³								
1949	4.90	29.97	(⁴)	(⁴)	2.37	14.49	8.90	54.43	5.24	32.05
1950	4.86	29.40	(⁴)	(⁴)	2.41	14.58	9.34	56.50	5.19	31.40
1955	4.51	24.06	(⁴)	(⁴)	2.38	12.70	8.00	42.68	4.69	25.02
1960	4.71	22.38	(⁴)	(⁴)	2.29	10.88	8.01	38.07	4.83	22.96
1965	4.45	19.75	(⁴)	(⁴)	2.13	9.45	8.51	37.76	4.55	20.19
1970	6.30	22.88	(⁴)	(⁴)	1.86	6.76	11.03	40.06	6.34	23.03
1971	7.13	24.66	(⁴)	(⁴)	1.93	6.68	12.08	41.78	7.15	24.73
1972	7.78	25.79	(⁴)	(⁴)	2.04	6.76	12.40	41.11	7.72	25.59
1973	8.71	27.35	(⁴)	(⁴)	2.09	6.56	13.65	42.86	8.59	26.97
1974	16.01	46.11	(⁴)	(⁴)	2.19	6.31	22.19	63.90	15.82	45.56
1975	19.79	52.08	(⁴)	(⁴)	3.17	8.34	32.26	84.89	19.35	50.92
1976	20.11	50.03	(⁴)	(⁴)	3.74	9.30	33.92	84.39	19.56	48.66
1977	20.59	48.16	(⁴)	(⁴)	4.03	9.43	34.86	81.54	19.95	46.66
1978	22.64	49.48	(⁴)	(⁴)	5.68	12.41	35.25	77.04	21.86	47.77
1979	27.31	55.12	9.55	19.27	6.48	13.08	41.06	82.87	23.75	47.93
1980	29.17	53.98	11.08	20.50	7.60	14.06	42.51	78.66	24.65	45.61
1981	31.51	53.30	12.18	20.60	8.85	14.97	44.28	74.90	26.40	44.66
1982	32.15	51.25	13.37	21.31	9.79	15.61	49.85	79.47	27.25	43.44
1983	31.11	47.71	13.03	19.98	9.91	15.20	52.29	80.19	25.98	39.84
1984	30.63	45.27	12.41	18.34	10.45	15.45	48.22	71.27	25.61	37.85
1985	30.78	44.15	12.57	18.03	10.68	15.32	45.80	65.70	25.20	36.15
1986	28.84	40.48	12.26	17.21	10.64	14.93	44.12	61.92	23.79	33.39
1987	28.19	38.51	11.32	15.47	10.85	14.82	43.65	59.63	23.07	31.52
1988	27.66	36.54	10.45	13.81	10.06	13.29	44.16	58.34	22.07	29.16
1989	27.40	34.88	10.16	12.93	9.91	12.62	42.93	54.65	21.82	27.78
1990	27.43	33.62	9.70	11.89	10.13	12.42	39.40	48.29	21.76	26.67
1991	27.49	32.55	9.68	11.46	10.89	12.90	36.34	43.03	21.49	25.45
1992	26.78	31.00	9.68	11.21	10.81	12.51	34.24	39.64	21.03	24.34
1993	26.15	29.59	9.33	10.56	11.11	12.57	32.94	37.27	19.85	22.46
1994	25.68	28.45	8.37	9.27	10.77	11.93	36.07	39.96	19.41	21.50
1995	25.56	27.75	8.10	8.79	10.83	11.76	39.78	43.19	18.83	20.44
1996	25.17	26.82	7.87	8.39	10.92	11.64	36.78	39.19	18.50	19.71
1997	24.64	25.82	7.42	7.78	10.91	11.43	35.12	36.81	18.14	19.01
1998	24.87	25.78	6.96	7.21	11.08	11.49	42.91	44.48	17.67	18.32
1999	23.92	24.44	6.87	7.02	11.04	11.28	35.13	35.90	16.63	16.99
2000	24.15	24.15	7.12	7.12	11.41	11.41	40.90	40.90	16.78	16.78
2001	25.36	24.77	6.67	6.51	11.52	11.25	47.67	46.55	17.38	16.97
2002	26.57	25.50	7.34	7.05	11.07	10.63	47.78	45.86	17.98	17.26
2003	26.73	25.12	7.73	7.26	11.20	10.53	49.87	46.87	17.85	16.78
2004	30.56	R27.92	8.12	7.42	12.27	11.21	39.77	R36.33	19.93	18.21
2005	36.80	R32.57	8.68	R7.68	13.49	R11.94	41.00	R36.28	23.59	R20.88
2006	R39.32	R33.73	R9.95	R8.54	R14.00	R12.01	R43.61	R37.41	R25.16	R21.58
2007 ^E	40.83	34.12	11.01	9.20	14.89	12.44	51.23	42.81	25.40	21.23

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

² See "Nominal Dollars" in Glossary.

³ In chained (2000) dollars, calculated by using gross domestic product implicit price deflators in Table D1. See "Chained Dollars" in Glossary.

⁴ Through 1978, subbituminous coal is included in "Bituminous Coal."

R=Revised. E=Estimate.

Note: Prices are free-on-board (F.O.B.) rail/barge prices, which are the F.O.B. prices of coal at the point of first sale, excluding freight or shipping and insurance costs. See "Free on Board (F.O.B.)" in Glossary.

Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/coal.html>.

• For related information, see <http://www.eia.doe.gov/fuelcoal.html>.

Sources: • 1949-1975—Bureau of Mines (BOM), *Minerals Yearbook*. • 1976—Energy Information Administration (EIA), Energy Data Report, *Coal—Bituminous and Lignite in 1976*, and BOM, *Minerals Yearbook*. • 1977 and 1978—EIA, Energy Data Reports, *Bituminous Coal and Lignite Production and Mine Operations*, and *Coal—Pennsylvania Anthracite*. • 1979—EIA, *Coal Production*, and Energy Data Report, *Coal—Pennsylvania Anthracite*. • 1980-1992—EIA, *Coal Production*, annual reports. • 1993-2000—EIA, *Coal Industry Annual*, annual reports and unpublished revisions. • 2001-2006—EIA, *Annual Coal Report*, annual reports. • 2007—EIA, Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Coal

Note 1. Coal Consumption. Data in this report on the consumption of bituminous coal, subbituminous coal, lignite, anthracite, and waste coal are developed primarily from consumption data reported in surveys. Included are data reported by all electric power companies and coke plant companies. Data on coal consumption by all industrial and manufacturing establishments are based on consumption data obtained quarterly from coal users. Data on coal consumption by the residential and commercial sectors are based on distribution data obtained annually from coal distributors. Included in each sector's data are the following: Residential and Commercial Sectors—retail dealer sales to households and small commercial establishments; Industrial Sector—consumption at manufacturing plants, large commercial establishments, coking plants, and by agriculture, mining (other than coal mining), and construction industries; Transportation Sector—sales to railroads and for vessel bunkering; Electric Power Sector (electric utilities and independent power producers)—consumption for electricity generation and useful thermal output at electricity-only and CHP plants within the North American Industry Classification System (NAICS) 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

Note 2. Residential and Commercial Coal Consumption Estimates. 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. Previously, the breakdown was 40 percent residential and 60 percent commercial for each year. The current method results in variation over time. Beginning in 1949, a larger portion of the coal, 45 percent, is assigned to the residential sector; the share falls gradually over time and has been 11 percent since 2000. To create the estimate, 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 (1950, 1960, 1970, 1973–1981, and subsequent odd-numbered years (Table 2.7)), residential use 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 housing units heated by oil; the ratio is multiplied by the Btu quantity of oil used by the residential sector to estimate the Btu quantity of coal used by the residential sector; and the residential sector's share of residential and commercial use is calculated. The 1950 share is applied to 1949, and the other missing years' shares are interpolated.