



State Energy Consumption Estimates 1960 Through 2004



2004 Consumption Summary Tables

Table S1. Energy Consumption Estimates by Source and End-Use Sector, 2004
(Trillion Btu)

State	Total Energy ^b	Sources								End-Use Sectors ^a			
		Coal	Natural Gas ^c	Petroleum	Nuclear Electric Power	Hydro-electric Power ^d	Biomass ^e	Other ^f	Net Interstate Flow of Electricity/Losses ^g	Residential	Commercial	Industrial ^b	Transportation
Alabama	2,159.7	853.9	404.0	638.5	329.9	106.5	185.0	0.1	-358.2	393.7	270.2	1,001.1	494.7
Alaska	779.1	14.1	411.8	334.8	0.0	15.0	3.3	0.1	0.0	56.4	63.4	393.4	266.0
Arizona	1,436.6	425.4	354.9	562.8	293.1	69.9	8.7	3.6	-281.7	368.5	326.0	231.2	511.0
Arkansas	1,135.9	270.2	228.9	388.3	161.1	36.5	76.0	0.6	-25.7	218.3	154.7	473.9	288.9
California	8,364.6	68.9	2,474.2	3,787.8	315.6	342.2	160.7	348.0	867.2	1,556.1	1,556.3	2,052.7	3,199.6
Colorado	1,383.9	390.2	437.5	500.4	0.0	12.0	7.4	3.2	33.4	308.0	285.3	373.4	417.2
Connecticut	923.8	44.0	163.1	470.8	172.5	4.6	38.3	3.9	26.6	304.0	211.2	123.3	285.4
Delaware	304.8	53.6	49.9	140.8	0.0	0.0	1.3	0.2	59.0	69.3	57.1	109.4	69.1
Dist. of Col.	190.3	0.7	33.1	30.6	0.0	0.0	0.9	(s)	124.9	38.0	121.2	4.2	26.8
Florida	4,452.5	699.1	755.2	2,119.9	325.5	2.7	176.1	31.6	342.4	1,306.7	1,041.6	554.1	1,550.0
Georgia	3,141.1	835.0	410.3	1,117.6	351.9	37.0	191.5	0.4	197.4	719.7	534.3	959.6	927.5
Hawaii	323.5	19.3	2.9	282.6	0.0	0.9	11.8	6.0	0.0	35.4	47.2	69.1	171.7
Idaho	499.8	12.3	77.2	156.6	0.0	84.8	25.8	1.7	141.5	109.7	77.9	189.8	122.4
Illinois	3,960.5	1,069.5	956.2	1,374.5	959.8	1.5	48.5	2.0	-451.6	958.2	746.2	1,252.5	1,003.6
Indiana	2,945.7	1,614.2	542.5	885.2	0.0	4.4	40.7	1.7	-143.2	531.5	373.0	1,400.2	641.0
Iowa	1,205.8	443.2	228.6	439.4	51.4	9.5	34.6	11.0	-12.0	230.4	182.3	496.0	297.1
Kansas	1,103.5	385.5	273.3	427.9	105.7	0.1	8.8	4.0	-101.8	217.4	196.9	408.2	281.0
Kentucky	1,956.4	961.8	231.8	727.8	0.0	37.9	26.7	1.0	-30.5	353.7	254.7	862.7	485.3
Louisiana	3,816.3	256.7	1,400.0	1,651.1	178.1	11.0	178.1	0.8	140.6	369.3	285.9	2,403.1	758.1
Maine	480.3	7.3	76.3	260.6	0.0	34.4	107.4	13.1	-18.7	123.4	81.4	153.8	121.7
Maryland	1,526.6	327.2	198.7	581.6	152.0	25.1	34.5	0.3	207.0	437.1	281.2	367.9	440.3
Massachusetts	1,542.9	105.1	387.4	748.7	61.9	10.0	54.5	2.2	173.0	467.8	395.0	205.1	475.0
Michigan	3,119.4	773.8	918.4	1,033.9	318.7	15.4	90.6	-8.8	-22.7	799.2	628.9	884.5	806.8
Minnesota	1,826.3	378.8	363.3	714.9	138.6	7.4	57.2	17.6	148.6	401.8	335.4	559.3	529.8
Mississippi	1,214.3	185.0	293.6	488.0	106.7	0.0	60.9	0.4	79.7	230.3	167.4	451.9	364.8
Missouri	1,849.3	807.5	268.0	746.5	81.7	14.8	19.0	0.2	-88.4	489.4	391.1	390.4	578.3
Montana	402.9	195.6	66.7	185.8	0.0	88.8	12.6	0.2	-146.7	73.8	66.2	152.8	110.2
Nebraska	651.9	223.6	115.1	238.4	106.8	9.2	9.4	0.9	-51.5	144.3	127.9	205.6	174.1
Nevada	693.7	193.6	219.5	264.3	0.0	16.2	3.4	30.0	-33.3	158.6	120.7	186.0	228.4
New Hampshire	340.7	43.4	64.5	205.4	106.1	13.2	23.0	1.5	-116.5	99.6	75.6	56.2	109.2
New Jersey	2,630.2	112.7	647.1	1,270.0	282.4	0.4	32.8	1.5	283.3	625.7	617.3	484.2	903.0
New Mexico	682.3	309.4	230.0	259.8	0.0	1.4	2.9	6.3	-127.4	106.8	121.4	227.8	226.3
New York	4,254.0	276.5	1,119.9	1,885.4	423.8	240.4	133.8	20.1	154.1	1,215.3	1,399.4	534.9	1,104.5
North Carolina	2,715.6	782.7	232.7	992.9	418.0	54.5	86.3	0.4	148.2	701.9	553.6	722.6	737.6
North Dakota	402.3	398.4	60.3	133.8	0.0	15.5	3.4	2.9	-212.0	62.9	59.3	188.0	92.1
Ohio	4,022.8	1,391.3	845.0	1,368.3	166.3	7.3	42.9	1.2	200.5	941.7	705.2	1,359.7	1,016.3
Oklahoma	1,485.9	372.1	555.9	532.5	0.0	29.8	27.9	5.8	-38.1	288.7	230.1	554.1	413.1
Oregon	1,093.6	36.5	243.2	390.8	0.0	331.5	46.4	16.4	28.8	261.3	207.4	301.1	323.7
Pennsylvania	4,049.4	1,474.3	732.5	1,518.6	807.7	31.6	87.4	3.7	-606.4	995.0	706.8	1,328.4	1,019.3
Rhode Island	226.4	0.1	74.6	99.3	0.0	0.1	3.8	1.1	47.6	79.1	58.8	26.3	62.3
South Carolina	1,717.5	433.9	163.8	595.3	533.9	24.5	75.6	0.2	-109.8	353.9	251.6	663.0	448.9
South Dakota	263.6	43.6	42.5	115.1	0.0	36.1	1.8	2.3	22.3	60.6	52.9	63.3	86.7
Tennessee	2,297.7	648.0	239.2	799.8	298.3	104.3	72.7	0.1	135.1	511.7	378.3	776.0	631.7
Texas	11,971.4	1,626.0	3,941.2	5,801.3	421.6	13.0	75.3	32.2	60.7	1,555.0	1,314.9	6,400.4	2,701.0
Utah	740.2	399.7	164.9	278.8	0.0	4.5	4.1	4.8	-116.7	150.2	144.4	212.3	233.2
Vermont	169.3	(s)	8.7	95.1	40.2	11.9	10.0	6.8	-3.4	51.4	32.9	31.5	53.5
Virginia	2,558.2	452.5	284.9	1,038.5	295.2	15.9	105.2	0.9	365.0	617.4	578.4	590.6	771.8
Washington	2,004.8	112.5	268.5	842.4	93.7	717.3	94.3	-8.5	-115.4	469.2	371.3	559.2	605.1
West Virginia	821.3	937.1	143.2	280.3	0.0	13.2	4.5	1.7	-558.7	164.8	113.4	361.4	181.8
Wisconsin	1,847.7	499.2	384.9	630.7	124.0	19.9	74.1	1.4	113.6	419.3	314.7	675.7	437.9
Wyoming	454.4	500.5	111.6	158.8	0.0	5.9	0.9	6.9	-330.3	41.1	52.6	245.4	115.3
United States	100,278.6	22,465.6	22,901.6	40,592.9	8,222.0	2,690.1	2,682.8	585.9	0.0	21,242.6	17,720.9	33,415.0	27,900.0

^a End-use sector data include electricity sales and associated electrical system energy losses.^b U.S. total energy and U.S. industrial sector include 137.8 trillion Btu of net imports of coal coke that is not allocated to the States.^c Includes supplemental gaseous fuels.^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^e Wood and waste.^f "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.^g Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within

a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S2. Energy Consumption Estimates for Major Energy Sources in Physical Units, 2004

State			Petroleum											Nuclear Electric Power	Hydro- electric Power ^c
	Coal	Natural Gas ^a	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kerosene	LPG	Lubricants	Motor Gasoline	Residual Fuel	Other ^b	Total		
	Million Short Tons	Billion Cubic Feet	Million Barrels											Billion Kilowatthours	
Alabama	38.9	388.5	6.7	0.1	31.3	2.6	0.1	4.5	0.9	62.1	1.7	7.2	117.1	31.6	10.6
Alaska	0.9	406.2	0.3	0.2	14.1	31.0	(s)	0.2	0.1	6.9	0.7	5.4	58.9	0.0	1.5
Arizona	20.8	351.7	4.8	0.2	22.5	8.3	(s)	1.6	0.5	65.2	(s)	0.5	103.6	28.1	7.0
Arkansas	15.7	219.6	0.9	0.1	23.4	0.7	(s)	3.5	0.6	34.6	1.2	6.7	71.7	15.4	3.6
California	2.8	2,423.3	13.8	0.5	94.0	105.4	0.4	14.8	4.3	376.1	27.8	55.9	693.1	30.3	34.1
Colorado	19.8	440.2	3.9	0.1	16.6	12.4	0.1	7.2	0.6	50.8	(s)	2.1	93.7	0.0	1.2
Connecticut	2.1	162.6	1.8	0.1	28.9	2.4	0.8	3.1	0.4	43.7	4.1	1.0	86.1	16.5	0.5
Delaware	2.2	48.1	0.7	0.1	3.4	0.2	0.1	1.4	0.1	10.1	2.9	6.6	25.5	0.0	0.0
Dist. of Col.	(s)	32.2	(s)	(s)	2.0	0.0	(s)	(s)	0.1	3.6	0.0	0.0	5.6	0.0	0.0
Florida	28.7	733.9	6.7	0.4	57.7	29.2	0.2	7.5	1.2	201.7	62.5	15.5	382.7	31.2	0.3
Georgia	37.9	393.4	6.6	0.2	45.7	9.2	0.2	6.5	1.1	120.7	6.8	9.2	206.2	33.7	3.7
Hawaii	0.9	2.8	0.1	(s)	8.6	13.3	(s)	0.5	0.1	10.7	13.1	2.5	49.0	0.0	0.1
Idaho	0.6	75.3	1.7	0.1	9.5	0.8	(s)	1.4	0.2	15.0	0.0	(s)	28.8	0.0	8.5
Illinois	58.5	956.2	9.5	0.2	46.7	21.5	0.2	17.6	3.1	125.4	1.5	29.4	255.1	92.0	0.2
Indiana	73.7	526.7	7.0	0.1	41.2	8.6	0.4	8.2	1.6	77.2	0.8	17.3	162.2	0.0	0.4
Iowa	25.0	226.8	3.0	0.1	20.4	0.9	(s)	19.0	0.6	39.4	0.3	2.7	86.5	4.9	0.9
Kansas	22.3	262.8	3.6	0.1	17.2	3.1	(s)	14.8	0.9	31.8	2.2	8.1	81.8	10.1	(s)
Kentucky	41.9	225.5	3.3	0.1	30.3	9.0	0.3	9.6	0.9	55.3	0.1	25.3	134.2	0.0	3.8
Louisiana	16.1	1,346.1	1.2	0.1	33.2	35.8	2.1	52.2	1.8	55.7	15.3	113.1	310.5	17.1	1.1
Maine	0.3	72.6	0.7	(s)	19.5	1.1	2.0	1.2	0.2	17.0	4.7	(s)	46.6	0.0	3.4
Maryland	13.0	193.0	3.2	0.1	22.8	3.1	0.7	2.9	0.6	63.6	6.6	3.1	106.7	14.6	2.5
Massachusetts	4.4	372.5	1.4	0.1	37.9	8.2	0.4	2.0	0.7	68.2	14.2	2.3	135.5	5.9	1.0
Michigan	38.5	916.5	6.1	0.1	31.1	3.7	0.3	20.8	2.9	119.0	2.1	11.3	197.4	30.6	1.5
Minnesota	21.4	359.7	6.6	0.1	26.5	12.5	0.1	11.7	1.0	64.8	1.5	8.4	133.0	13.3	0.7
Mississippi	10.1	282.1	3.2	0.1	21.1	6.1	0.1	3.9	0.6	39.2	6.4	7.8	88.5	10.2	0.0
Missouri	45.6	263.5	6.0	0.1	34.0	4.0	0.1	12.2	1.4	77.0	0.2	5.1	140.1	7.8	1.5
Montana	11.5	66.8	0.9	(s)	10.0	1.0	(s)	2.4	0.2	11.9	(s)	7.2	33.7	0.0	8.9
Nebraska	13.0	115.6	1.3	0.1	16.4	0.9	(s)	4.0	0.3	20.8	0.2	0.3	44.5	10.2	0.9
Nevada	8.7	215.0	1.9	0.1	11.4	7.9	(s)	0.6	0.1	26.0	0.1	0.1	48.3	0.0	1.6
New Hampshire ..	1.7	61.2	0.9	0.1	10.9	0.9	0.6	2.9	0.1	17.1	4.3	(s)	37.7	10.2	1.3
New Jersey	4.4	622.8	5.2	0.1	40.3	25.0	1.1	3.0	2.1	103.8	14.1	35.1	229.8	27.1	(s)
New Mexico	16.7	223.3	2.0	0.1	14.2	2.3	(s)	2.8	0.3	23.2	0.1	2.9	47.8	0.0	0.1
New York	11.3	1,097.9	7.7	0.2	95.3	19.3	3.2	8.6	1.9	137.4	51.5	12.0	337.1	40.6	24.0
North Carolina	31.7	224.8	6.0	0.1	36.6	5.4	2.1	12.1	1.1	105.4	5.9	10.7	185.5	40.1	5.4
North Dakota	30.1	60.0	1.0	0.1	9.4	1.1	(s)	3.3	0.2	8.6	0.1	1.2	25.0	0.0	1.5
Ohio	59.0	824.4	10.5	0.1	55.8	18.6	0.9	11.0	3.4	124.9	0.8	25.3	251.2	16.0	0.7
Oklahoma	21.0	538.1	4.1	0.1	22.8	6.9	(s)	7.3	1.2	45.4	0.6	9.8	98.3	0.0	3.0
Oregon	2.1	235.0	3.6	0.1	17.8	5.2	0.2	1.0	0.7	36.8	2.1	3.3	70.7	0.0	33.1
Pennsylvania	62.8	696.3	8.8	0.1	71.9	16.4	2.4	11.0	3.6	124.6	11.9	25.5	276.1	77.5	3.2
Rhode Island	(s)	72.6	0.2	(s)	6.5	1.0	0.1	0.4	0.1	9.1	0.7	(s)	18.1	0.0	(s)
South Carolina	17.4	163.8	3.2	0.1	22.1	1.7	0.7	3.1	0.5	61.7	5.5	10.9	109.5	51.2	2.4
South Dakota	2.6	41.7	1.2	(s)	6.6	0.8	(s)	2.4	0.1	10.4	0.1	(s)	21.6	0.0	3.6
Tennessee	28.1	231.1	4.8	0.1	33.3	13.6	0.4	4.6	1.1	73.0	0.3	15.6	146.8	28.6	10.4
Texas	105.9	3,941.2	13.0	0.5	120.6	88.8	0.3	446.6	4.7	275.7	21.5	226.6	1,198.4	40.4	1.3
Utah	18.2	155.9	1.7	0.1	12.3	7.1	(s)	0.8	0.3	24.7	0.2	3.5	50.6	0.0	0.4
Vermont	(s)	8.7	0.5	(s)	5.9	0.3	0.5	2.0	0.1	8.4	0.3	0.0	17.9	3.9	1.2
Virginia	18.2	277.4	4.3	0.1	45.6	16.8	1.8	5.5	0.8	94.8	11.5	8.5	189.7	28.3	1.6
Washington	7.0	262.5	3.3	0.2	24.0	19.2	0.1	2.8	0.6	64.3	6.5	30.0	151.1	9.0	71.6
West Virginia	38.7	122.1	0.6	(s)	13.8	0.3	0.4	1.6	0.6	20.3	0.3	13.5	51.4	0.0	1.3
Wisconsin	26.7	383.4	6.6	0.2	28.2	2.6	0.1	11.6	0.9	61.1	1.2	5.8	118.3	11.9	2.0
Wyoming	28.2	107.1	0.6	0.2	14.1	0.2	(s)	1.0	0.2	8.0	0.1	4.0	28.4	0.0	0.6
United States	1,107.3	22,430.2	196.5	6.2	1,485.3	596.6	23.5	780.5	51.6	3,332.6	316.5	798.3	7,587.6	788.5	268.4

^a Includes supplemental gaseous fuels.^b "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."^c Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

(s) = Value less than 0.05.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S3. Energy Consumption Estimates by Source, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum											Nuclear Electric Power	Hydro-electric Power ^c	Biomass ^d	Other ^e	Net Inter-state Flow of Electricity/Losses ^f	Total ^g
			Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kero-sene	LPG	Lubri-cants	Motor Gasoline	Residual Fuel	Other ^b	Total						
Alabama	853.9	404.0	44.6	0.4	182.4	14.5	0.7	16.1	5.3	323.9	10.7	39.7	638.5	329.9	106.5	185.0	0.1	-358.2	2,159.7
Alaska	14.1	411.8	1.8	0.9	81.9	175.5	0.1	0.8	0.6	36.2	4.4	32.5	334.8	0.0	15.0	3.3	0.1	0.0	779.1
Arizona	425.4	354.9	31.9	0.8	131.1	46.8	(s)	5.7	3.3	340.3	0.3	2.6	562.8	293.1	69.9	8.7	3.6	-281.7	1,436.6
Arkansas	270.2	228.9	5.9	0.7	136.0	4.1	0.2	12.6	3.8	180.6	7.5	37.1	388.3	161.1	36.5	76.0	0.6	-25.7	1,135.9
California	68.9	2,474.2	91.6	2.5	547.7	597.7	2.2	53.7	26.3	1,961.2	174.7	330.3	3,787.8	315.6	342.2	160.7	348.0	867.2	8,364.6
Colorado	390.2	437.5	25.6	0.6	96.8	70.0	0.4	25.9	3.4	265.0	(s)	12.5	500.4	0.0	12.0	7.4	3.2	33.4	1,383.9
Connecticut	44.0	163.1	11.6	0.3	168.1	13.5	4.4	11.1	2.4	228.1	25.7	5.6	470.8	172.5	4.6	38.3	3.9	26.6	923.8
Delaware	53.6	49.9	4.3	0.4	19.9	0.9	0.8	4.9	0.7	52.5	18.3	38.0	140.8	0.0	0.0	1.3	0.2	59.0	304.8
Dist. of Col.	0.7	33.1	0.1	(s)	11.4	0.0	(s)	(s)	0.3	18.7	0.0	0.0	30.6	0.0	0.0	0.9	(s)	124.9	190.3
Florida	699.1	755.2	44.5	2.0	336.2	165.8	0.9	27.1	7.6	1,051.9	392.8	91.2	2,119.9	325.5	2.7	176.1	31.6	342.4	4,452.5
Georgia	835.0	410.3	44.0	1.0	266.4	52.0	1.2	23.5	6.7	629.7	42.5	50.6	1,117.6	351.9	37.0	191.5	0.4	197.4	3,141.1
Hawaii	19.3	2.9	0.8	0.2	50.3	75.5	(s)	1.7	0.5	56.0	82.4	15.2	282.6	0.0	0.9	11.8	6.0	0.0	323.5
Idaho	12.3	77.2	11.5	0.4	55.6	4.7	0.1	5.1	1.0	78.1	0.0	0.1	156.6	0.0	84.8	25.8	1.7	141.5	499.8
Illinois	1,069.5	956.2	63.3	0.9	272.3	122.2	1.2	63.5	18.6	653.8	9.5	169.2	1,374.5	959.8	1.5	48.5	2.0	-451.6	3,960.5
Indiana	1,614.2	542.5	46.7	0.5	239.8	48.5	2.0	29.6	9.6	402.4	5.1	101.1	885.2	0.0	4.4	40.7	1.7	-143.2	2,945.7
Iowa	443.2	228.6	20.0	0.4	118.9	5.2	0.3	68.6	3.8	205.7	1.8	14.7	439.4	51.4	9.5	34.6	11.0	-12.0	1,205.8
Kansas	385.5	273.3	23.7	0.6	99.9	17.6	0.1	53.6	5.4	165.9	13.7	47.3	427.9	105.7	0.1	8.8	4.0	-101.8	1,103.5
Kentucky	961.8	231.8	22.1	0.4	176.4	51.3	1.6	34.8	5.7	288.2	0.4	147.0	727.8	0.0	37.9	26.7	1.0	-30.5	1,956.4
Louisiana	256.7	1,400.0	7.8	0.3	193.3	203.2	11.9	188.8	10.7	290.7	96.0	648.2	1,651.1	178.1	11.0	178.1	0.8	140.6	3,816.3
Maine	7.3	76.3	4.9	0.2	113.8	6.2	11.5	4.5	1.1	88.7	29.7	0.1	260.6	0.0	34.4	107.4	13.1	-18.7	480.3
Maryland	327.2	198.7	21.0	0.4	133.0	17.8	4.0	10.4	3.9	331.7	41.3	18.1	581.6	152.0	25.1	34.5	0.3	207.0	1,526.6
Massachusetts ..	105.1	387.4	9.6	0.5	220.9	46.7	2.2	7.1	4.5	355.9	89.0	12.4	748.7	61.9	10.0	54.5	2.2	173.0	1,542.9
Michigan	773.8	918.4	40.2	0.4	181.4	21.2	1.6	75.3	17.6	620.4	13.2	62.8	1,033.9	318.7	15.4	90.6	-8.8	-22.7	3,119.4
Minnesota	378.8	363.3	44.0	0.5	154.1	70.9	0.3	42.2	6.0	337.9	9.2	49.8	714.9	138.6	7.4	57.2	17.6	148.6	1,826.3
Mississippi	185.0	293.6	20.9	0.6	123.1	34.7	0.5	14.0	3.5	204.5	40.5	45.7	488.0	106.7	0.0	60.9	0.4	79.7	1,214.3
Missouri	807.5	268.0	39.6	0.6	197.8	22.7	0.7	44.3	8.6	401.8	1.0	29.4	746.5	81.7	14.8	19.0	0.2	-88.4	1,849.3
Montana	195.6	66.7	6.2	0.2	58.2	5.7	(s)	8.6	1.3	62.2	0.3	43.1	185.8	0.0	88.8	12.6	0.2	-146.7	402.9
Nebraska	223.6	115.1	8.6	0.3	95.7	5.2	0.1	14.6	2.1	108.7	1.5	1.6	238.4	106.8	9.2	9.4	0.9	-51.5	651.9
Nevada	193.6	219.5	12.7	0.4	66.3	44.9	0.1	2.2	0.6	135.8	0.9	0.3	264.3	0.0	16.2	3.4	30.0	-33.3	693.7
New Hampshire ..	43.4	64.5	5.7	0.3	63.6	5.1	3.3	10.4	0.4	89.0	27.3	0.2	205.4	106.1	13.2	23.0	1.5	-116.5	340.7
New Jersey	112.7	647.1	34.3	0.6	234.9	142.0	6.3	11.0	12.7	541.2	88.4	198.7	1,270.0	282.4	0.4	32.8	1.5	283.3	2,630.2
New Mexico	309.4	230.0	13.2	0.5	82.4	12.9	0.1	10.0	1.8	121.2	0.7	17.1	259.8	0.0	1.4	2.9	6.3	-127.4	682.3
New York	276.5	1,119.9	50.9	1.2	555.1	109.4	18.0	31.3	11.2	716.5	323.6	68.3	1,885.4	423.8	240.4	133.8	20.1	154.1	4,254.0
North Carolina ..	782.7	232.7	40.1	0.6	213.5	30.6	11.9	43.9	6.5	549.7	37.2	59.0	992.9	418.0	54.5	86.3	0.4	148.2	2,715.6
North Dakota	398.4	60.3	6.8	0.3	54.8	6.2	(s)	12.0	1.0	44.9	0.4	7.4	133.8	0.0	15.5	3.4	2.9	-212.0	402.3
Ohio	1,391.3	845.0	69.5	0.6	324.8	105.7	5.3	39.7	20.5	651.2	4.7	146.4	1,368.3	166.3	7.3	42.9	1.2	200.5	4,022.8
Oklahoma	372.1	555.9	27.1	0.7	132.6	39.1	0.2	26.6	7.3	236.8	3.9	58.3	532.5	0.0	29.8	27.9	5.8	-38.1	1,485.9
Oregon	36.5	243.2	23.9	0.6	103.6	29.3	1.0	3.7	4.0	192.0	13.0	19.5	390.8	0.0	331.5	46.4	16.4	28.8	1,093.6
Pennsylvania	1,474.3	732.5	58.3	0.5	418.6	92.9	13.8	39.9	21.8	649.6	74.6	148.6	1,518.6	807.7	31.6	87.4	3.7	-606.4	4,049.4
Rhode Island	0.1	74.6	1.2	0.1	38.0	5.9	0.3	1.3	0.7	47.5	4.2	0.2	99.3	0.0	0.1	3.8	1.1	47.6	226.4
South Carolina ..	433.9	163.8	21.2	0.4	128.6	9.4	3.8	11.3	2.9	321.7	34.8	61.2	595.3	533.9	24.5	75.6	0.2	-109.8	1,717.5
South Dakota	43.6	42.5	7.7	0.2	38.2	4.4	(s)	8.8	0.9	54.2	0.6	0.1	115.1	0.0	36.1	1.8	2.3	22.3	263.6
Tennessee	648.0	239.2	31.8	0.5	194.0	77.2	2.2	16.7	6.7	380.5	2.1	88.0	799.8	298.3	104.3	72.7	0.1	135.1	2,297.7
Texas	1,626.0	3,941.2	86.2	2.4	702.6	503.6	1.8	1,615.8	28.7	1,437.9	135.5	1,286.9	5,801.3	421.6	13.0	75.3	32.2	60.7	11,971.4
Utah	399.7	164.9	11.1	0.4	71.4	40.5	0.1	2.9	1.6	129.0	1.1	20.7	278.8	0.0	4.5	4.1	4.8	-116.7	740.2
Vermont	(s)	8.7	3.1	0.1	34.1	1.8	2.8	7.2	0.4	43.8	1.9	0.0	95.1	40.2	11.9	10.0	6.8	-3.4	169.3
Virginia	452.5	284.9	28.6	0.7	265.8	95.0	9.9	19.7	5.1	494.5	72.5	46.6	1,038.5	295.2	15.9	105.2	0.9	365.0	2,558.2
Washington	112.5	268.5	22.0	1.0	139.8	109.0	0.7	10.0	3.8	335.3	41.1	179.7	842.4	93.7	717.3	94.3	-8.5	-115.4	2,004.8
West Virginia	937.1	143.2	4.1	0.1	80.2	1.4	2.0	5.9	3.6	106.1	2.2	74.7	280.3	0.0	13.2	4.5	1.7	-558.7	821.3
Wisconsin	499.2	384.9	43.8	0.8	164.5	15.0	0.6	41.8	5.5	318.8	7.3	32.7	630.7	124.0	19.9	74.1	1.4	113.6	1,847.7
Wyoming	500.5	111.6	3.8	1.1	82.2	1.4	(s)	3.6	1.1	41.6	0.7	23.4	158.8	0.0	5.9	0.9	6.9	-330.3	454.4
United States	22,465.6	22,901.6	1,303.8	31.2	8,652.0	3,382.5	133.5	2,823.8	313.1	17,379.4	1,989.7	4,583.7	40,592.9	8,222.0	2,690.1	2,682.8	585.9	0.0	100,278.6

^a Includes supplemental gaseous fuels.^b "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."^c Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^d Wood and waste.^e "Other" geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.^f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive

number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

^g U.S. total includes 137.8 trillion Btu of net imports of coal coke that has not been allocated to the States.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S4. Residential Sector Energy Consumption Estimates, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum				Wood	Geothermal	Solar/PV ^b	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^c	Total
			Distillate Fuel	Kerosene	LPG	Total							
Alabama	(s)	45.9	0.1	0.4	10.1	10.5	5.8	(s)	0.1	102.7	165.1	228.7	393.7
Alaska	0.9	18.5	9.8	0.1	0.5	10.5	2.7	0.1	(s)	7.0	39.6	16.7	56.4
Arizona	(s)	37.7	(s)	(s)	3.1	3.2	6.2	(s)	3.0	98.7	148.8	219.6	368.5
Arkansas	(s)	36.3	(s)	0.1	7.0	7.1	2.4	0.3	0.3	53.3	99.7	118.6	218.3
California	(s)	532.7	0.8	1.6	29.4	31.8	38.9	0.2	17.2	289.9	910.8	645.3	1,556.1
Colorado	0.5	118.4	0.1	0.3	12.2	12.6	5.2	0.2	0.2	53.0	190.0	118.0	308.0
Connecticut	(s)	44.0	99.1	2.0	6.2	107.4	6.7	(s)	0.5	45.1	203.6	100.3	304.0
Delaware	0.0	10.8	5.6	0.7	3.6	9.9	1.0	0.1	(s)	14.7	36.6	32.7	69.3
Dist. of Col.	0.1	14.7	2.3	(s)	(s)	2.3	0.8	0.0	(s)	6.3	24.1	13.9	38.0
Florida	0.0	15.7	0.7	0.5	18.8	20.1	5.2	2.8	28.0	382.8	454.5	852.1	1,306.7
Georgia	(s)	132.0	0.2	0.5	13.9	14.7	9.9	0.1	0.3	174.4	331.5	388.3	719.7
Hawaii	0.0	0.5	(s)	(s)	0.0	(s)	0.0	0.0	1.5	10.8	12.8	22.6	35.4
Idaho	(s)	21.2	2.4	(s)	4.0	6.4	1.5	0.1	(s)	25.0	54.2	55.5	109.7
Illinois	0.6	442.8	1.8	0.6	16.0	18.3	17.0	0.7	0.6	148.2	628.3	329.9	958.2
Indiana	1.1	153.1	5.9	1.5	16.3	23.7	8.9	1.3	0.1	106.4	294.6	236.9	531.5
Iowa	0.5	68.9	1.9	0.2	14.8	16.8	5.2	0.2	(s)	43.1	134.6	95.9	230.4
Kansas	0.0	67.7	0.1	0.1	8.1	8.2	4.8	0.1	(s)	42.4	123.1	94.3	217.4
Kentucky	0.7	58.0	2.6	1.2	8.2	11.9	5.2	0.6	(s)	85.9	162.4	191.3	353.7
Louisiana	0.0	44.3	(s)	0.1	3.0	3.1	3.8	0.3	0.1	98.5	150.1	219.2	369.3
Maine	(s)	1.3	57.6	9.9	3.7	71.1	3.1	(s)	0.1	14.8	90.5	32.9	123.4
Maryland	0.2	88.4	23.9	3.1	7.3	34.3	6.4	0.2	0.1	95.4	224.8	212.3	437.1
Massachusetts	0.1	117.4	112.6	1.6	5.7	119.9	12.6	(s)	0.2	67.5	317.6	150.1	467.8
Michigan	0.5	357.6	11.9	1.3	47.1	60.2	14.7	1.5	0.3	112.9	547.8	251.4	799.2
Minnesota	(s)	134.1	13.7	0.2	18.8	32.7	8.7	0.4	0.2	70.0	246.1	155.7	401.8
Mississippi	0.0	25.3	(s)	0.1	7.9	8.0	3.5	(s)	(s)	60.0	96.8	133.5	230.3
Missouri	0.5	111.6	1.1	0.5	20.2	21.8	10.3	0.1	0.1	107.0	251.3	238.1	489.4
Montana	0.2	19.9	1.1	(s)	6.7	7.8	1.1	0.1	(s)	13.8	43.0	30.8	73.8
Nebraska	(s)	38.5	0.6	(s)	5.7	6.3	3.0	0.1	(s)	29.9	77.8	66.5	144.3
Nevada	(s)	35.3	1.0	0.1	1.3	2.4	2.4	0.3	0.7	36.4	77.5	81.1	158.6
New Hampshire ..	(s)	7.6	31.1	3.0	8.2	42.2	2.6	(s)	(s)	14.6	67.1	32.5	99.6
New Jersey	(s)	242.4	57.7	0.9	6.1	64.7	8.7	0.2	1.4	95.6	412.9	212.8	625.7
New Mexico	(s)	35.2	(s)	(s)	7.0	7.1	2.2	(s)	0.3	19.2	64.0	42.8	106.8
New York	0.4	399.3	199.6	11.7	21.6	232.9	60.3	0.1	0.7	161.7	855.4	359.8	1,215.3
North Carolina	1.0	65.1	16.7	10.7	28.2	55.6	10.6	0.3	0.1	176.5	309.1	392.8	701.9
North Dakota	0.5	11.2	3.4	(s)	6.1	9.5	1.2	0.2	(s)	12.5	35.1	27.8	62.9
Ohio	1.1	328.7	19.5	2.7	18.3	40.6	16.6	0.9	0.2	171.6	559.7	382.0	941.7
Oklahoma	0.0	61.3	(s)	0.1	7.3	7.4	3.1	(s)	(s)	67.2	139.1	149.6	288.7
Oregon	0.0	40.2	4.4	0.5	1.4	6.4	15.4	0.4	0.8	61.4	124.6	136.7	261.3
Pennsylvania	1.9	261.1	130.6	11.0	18.1	159.7	13.7	0.5	0.5	172.9	610.2	384.8	995.0
Rhode Island	(s)	20.1	22.7	0.3	0.9	23.8	2.1	(s)	(s)	10.2	56.3	22.8	79.1
South Carolina	0.0	28.9	1.7	3.1	7.6	12.4	5.3	0.2	(s)	95.2	142.0	212.0	353.9
South Dakota	(s)	12.5	1.4	(s)	4.4	5.9	1.4	0.1	(s)	12.6	32.5	28.1	60.6
Tennessee	0.2	67.6	0.7	1.7	10.1	12.5	7.3	0.1	(s)	131.4	219.1	292.6	511.7
Texas	(s)	189.1	0.8	0.1	26.6	27.5	12.9	0.6	0.6	410.6	641.2	913.8	1,555.0
Utah	0.6	64.3	0.5	(s)	2.1	2.6	2.2	(s)	(s)	25.0	94.6	55.6	150.2
Vermont	(s)	3.1	15.7	2.3	5.6	23.6	1.4	(s)	(s)	7.2	35.4	16.0	51.4
Virginia	0.3	85.0	32.6	8.2	14.3	55.1	8.6	0.3	0.2	145.0	294.6	322.8	617.4
Washington	0.1	71.0	7.9	0.4	6.4	14.7	26.1	(s)	0.2	110.7	222.7	246.5	469.2
West Virginia	0.2	35.6	2.5	1.4	4.2	8.1	2.5	(s)	(s)	36.7	83.1	81.7	164.8
Wisconsin	0.4	135.8	17.0	0.2	24.2	41.4	8.1	0.2	0.2	72.3	258.4	160.9	419.3
Wyoming	0.2	12.6	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.7	23.9	17.2	41.1
United States	12.6	4,970.3	923.8	84.8	530.9	1,539.4	410.0	14.0	58.7	4,413.7	11,418.7	9,823.9	21,242.6

^a Includes supplemental gaseous fuels.

^b Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S5. Commercial Sector Energy Consumption Estimates, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum						Hydro-electric Power ^c	Biomass ^d	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel	Kerosene	LPG ^b	Motor Gasoline	Residual Fuel	Total							
Alabama	(s)	27.6	6.4	0.1	1.8	0.2	0.0	8.6	0.0	1.0	0.0	72.2	109.4	160.7	270.2
Alaska	6.9	18.6	6.7	(s)	0.1	0.5	0.0	7.3	0.0	0.5	(s)	8.9	42.3	21.1	63.4
Arizona	(s)	34.7	2.0	(s)	0.6	0.2	0.0	2.8	0.0	1.0	0.1	89.1	127.7	198.3	326.0
Arkansas	(s)	31.2	3.0	0.1	1.2	0.5	(s)	4.9	0.0	0.5	0.0	36.6	73.2	81.5	154.7
California	0.2	233.5	9.7	0.4	5.2	1.4	0.0	16.7	(s)	11.0	0.9	401.2	663.4	892.9	1,556.3
Colorado	4.4	60.8	1.9	0.1	2.2	0.2	0.0	4.3	0.0	0.9	0.3	66.5	137.2	148.1	285.3
Connecticut	0.1	35.4	20.7	1.0	1.1	1.7	2.1	26.5	0.0	1.1	0.0	45.9	109.0	102.2	211.2
Delaware	0.0	8.8	1.8	0.1	0.6	(s)	1.2	3.7	0.0	0.2	0.0	13.8	26.4	30.6	57.1
Dist. of Col.	0.7	17.9	2.7	(s)	(s)	0.9	0.0	3.6	0.0	0.1	0.0	30.7	52.9	68.3	121.2
Florida	0.0	55.6	23.2	0.1	3.3	1.5	0.7	28.8	0.0	1.4	0.9	296.0	382.7	658.9	1,041.6
Georgia	0.2	57.5	6.3	0.1	2.5	0.4	0.0	9.2	0.0	1.7	(s)	144.4	212.9	321.4	534.3
Hawaii	0.0	1.9	2.2	(s)	0.0	0.1	(s)	2.3	0.0	4.6	(s)	12.4	21.2	26.0	47.2
Idaho	0.1	13.3	2.3	(s)	0.7	0.1	0.0	3.1	0.0	0.2	0.7	18.7	36.3	41.6	77.9
Illinois	5.1	206.7	4.9	0.3	2.8	2.1	0.3	10.3	(s)	2.8	0.0	161.6	386.6	359.7	746.2
Indiana	8.5	87.5	9.8	0.2	2.9	1.4	0.7	15.1	0.0	8.9	0.3	78.3	198.6	174.3	373.0
Iowa	3.7	46.4	2.7	(s)	2.6	5.3	0.0	10.9	0.0	1.6	0.3	37.0	100.0	82.3	182.3
Kansas	0.0	38.3	3.4	(s)	1.4	0.4	0.0	5.3	0.0	0.8	0.4	47.2	91.9	105.0	196.9
Kentucky	5.9	38.0	4.7	0.2	1.4	0.2	0.0	6.5	0.0	0.9	0.4	62.9	114.6	140.1	254.7
Louisiana	0.0	25.7	1.7	0.4	0.5	7.7	0.4	10.7	0.0	0.6	0.4	77.0	114.5	171.4	285.9
Maine	(s)	5.4	20.3	1.4	0.7	0.1	2.2	24.7	0.0	3.6	0.0	14.8	48.5	32.8	81.4
Maryland	1.2	71.6	12.3	0.7	1.3	0.2	0.5	15.0	0.0	3.3	0.0	58.9	150.1	131.1	281.2
Massachusetts	0.8	59.2	25.1	0.5	1.0	0.4	17.4	44.4	(s)	3.8	0.3	88.8	197.4	197.6	395.0
Michigan	3.9	173.0	6.2	0.1	8.3	1.0	0.3	15.9	0.0	10.5	0.4	131.8	335.6	293.4	628.9
Minnesota	(s)	97.5	4.7	0.1	3.3	0.3	2.8	11.2	0.0	2.2	0.0	69.6	180.4	155.0	335.4
Mississippi	0.0	23.2	1.2	0.1	1.4	0.2	0.1	2.9	0.0	0.6	0.4	43.5	70.5	96.8	167.4
Missouri	4.0	62.8	5.0	0.2	3.6	1.2	0.1	10.0	0.0	1.8	0.0	96.9	175.5	215.6	391.1
Montana	1.7	13.4	1.7	(s)	1.2	0.1	0.0	3.0	0.0	0.2	0.2	14.8	33.3	32.9	66.2
Nebraska	0.1	29.7	1.1	(s)	1.0	1.1	0.3	3.5	0.0	0.7	0.4	29.0	63.4	64.6	127.9
Nevada	(s)	26.0	2.2	(s)	0.2	0.1	0.0	2.5	0.0	0.4	0.7	28.2	57.9	62.8	120.7
New Hampshire ..	(s)	9.6	10.7	0.3	1.4	0.1	5.1	17.5	0.0	0.4	0.0	14.9	42.5	33.1	75.6
New Jersey	0.1	175.8	15.6	1.6	1.1	0.4	2.2	20.8	0.0	1.5	0.0	129.9	328.1	289.2	617.3
New Mexico	0.1	26.1	2.3	(s)	1.2	0.4	0.0	4.0	0.0	0.4	0.1	28.1	58.8	62.6	121.4
New York	3.6	365.1	116.0	4.2	3.8	1.0	71.9	196.9	(s)	14.7	0.4	253.8	834.6	564.9	1,399.4
North Carolina	7.8	47.0	9.8	1.0	5.0	7.6	1.7	25.1	0.2	1.8	0.0	146.3	228.0	325.5	553.6
North Dakota	3.8	10.5	1.0	(s)	1.1	0.1	0.1	2.3	0.0	0.2	0.2	13.1	30.1	29.2	59.3
Ohio	8.7	174.4	11.3	1.5	3.2	2.8	0.6	19.4	0.0	3.6	0.4	154.6	361.0	344.1	705.2
Oklahoma	0.0	38.2	1.7	(s)	1.3	1.0	(s)	4.1	0.0	0.5	0.0	58.1	100.9	129.3	230.1
Oregon	0.0	27.4	3.5	0.3	0.3	0.2	0.3	4.5	0.0	2.6	0.6	53.5	88.4	119.0	207.4
Pennsylvania	15.2	150.3	36.2	2.3	3.2	1.1	3.8	46.6	0.0	6.1	0.3	151.3	369.9	336.9	706.8
Rhode Island	0.1	11.7	5.0	(s)	0.2	0.1	2.5	7.7	0.0	0.4	0.0	12.1	31.9	26.9	58.8
South Carolina	0.0	21.9	3.2	0.1	1.3	0.2	0.3	5.2	(s)	3.1	0.0	68.6	98.9	152.7	251.6
South Dakota	(s)	10.2	1.1	(s)	0.8	0.1	0.1	2.1	0.0	0.2	0.5	12.4	25.4	27.5	52.9
Tennessee	1.5	56.1	6.2	0.2	1.8	0.3	0.1	8.6	0.0	1.2	0.0	96.4	163.8	214.5	378.3
Texas	0.2	199.0	10.5	0.2	4.7	0.9	0.0	16.3	0.0	2.5	0.4	339.9	558.4	756.5	1,314.9
Utah	4.5	33.1	2.9	(s)	0.4	0.1	0.0	3.4	0.0	0.4	0.2	31.9	73.4	71.0	144.4
Vermont	(s)	2.7	6.0	0.2	1.0	(s)	0.9	8.2	0.0	0.2	0.0	6.7	17.9	15.0	32.9
Virginia	2.1	66.3	17.6	1.4	2.5	0.7	2.0	24.2	0.0	12.0	0.4	146.8	251.6	326.8	578.4
Washington	0.5	48.5	4.3	0.2	1.1	0.4	0.0	6.1	0.7	4.4	0.5	96.3	156.9	214.4	371.3
West Virginia	1.2	29.6	1.4	0.5	0.7	0.1	0.0	2.7	0.0	0.4	(s)	24.6	58.5	54.8	113.4
Wisconsin	3.3	82.3	7.7	0.2	4.3	0.4	1.6	14.2	(s)	2.0	0.0	66.0	167.8	146.9	314.7
Wyoming	1.6	10.3	0.6	(s)	0.4	1.2	0.0	2.3	0.0	0.1	0.9	11.6	26.8	25.8	52.6
United States	101.7	3,197.3	470.3	20.5	93.7	48.6	122.5	755.8	1.1	125.8	12.0	4,193.5	8,387.1	9,333.8	17,720.9

^a Includes supplemental gaseous fuels.^b Liquefied petroleum gases.^c Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^d Wood and waste.^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S6. Industrial Sector Energy Consumption Estimates, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum									Hydro-electric power ^c	Biomass ^d	Geo-thermal	Retail Electricity Sales	Net Energy ^e	Electrical System Energy Losses ^f	Total ^e
			Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG	Lubricants	Motor Gasoline	Residual Fuel	Other ^b	Total							
Alabama	100.5	193.8	44.6	39.7	0.2	3.6	2.7	6.7	2.7	39.7	140.0	0.0	175.0	(s)	121.5	730.8	270.3	1,001.1
Alaska	(s)	333.0	1.8	12.2	(s)	0.1	0.1	0.6	0.0	32.5	47.3	0.0	0.1	0.0	3.8	384.2	9.1	393.4
Arizona	16.2	20.4	31.9	18.3	(s)	1.6	1.4	6.3	0.2	2.6	62.3	0.0	1.0	0.2	40.6	140.8	90.4	231.2
Arkansas	10.1	112.1	5.9	32.5	(s)	4.1	1.4	6.6	2.8	37.1	90.5	0.0	70.6	(s)	59.1	342.4	131.6	473.9
California	46.2	883.0	91.6	82.8	0.2	17.4	11.3	29.8	0.1	309.3	542.6	0.0	35.1	1.1	168.8	1,676.9	375.8	2,052.7
Colorado	6.7	160.6	25.6	19.0	(s)	11.3	1.3	7.3	0.0	12.5	77.1	0.0	0.3	0.2	39.8	284.7	88.7	373.4
Connecticut	0.0	20.4	11.6	6.4	1.4	3.6	1.1	3.3	6.9	5.6	40.0	0.0	3.9	0.0	18.3	82.6	40.7	123.3
Delaware	3.1	16.7	4.3	2.7	(s)	0.7	0.4	0.7	4.9	38.0	51.8	0.0	0.1	0.0	11.7	83.4	26.0	109.4
Dist. of Col.	0.0	0.0	0.1	0.3	0.0	(s)	(s)	0.7	0.0	0.0	1.1	0.0	0.0	0.0	1.0	2.1	2.1	4.2
Florida	27.0	63.9	44.5	48.9	0.2	4.1	3.2	15.0	19.3	21.0	156.2	0.0	92.2	0.0	66.6	405.9	148.2	554.1
Georgia	45.5	166.2	44.0	35.9	0.6	6.5	3.4	14.7	17.9	50.6	173.5	0.2	179.7	(s)	122.3	687.4	272.2	959.6
Hawaii	1.3	0.5	0.8	2.4	(s)	1.7	0.1	0.9	2.5	15.2	23.5	0.4	1.9	(s)	13.4	40.9	28.2	69.1
Idaho	12.2	24.5	11.5	14.8	(s)	0.3	0.2	3.7	0.0	0.1	30.6	0.0	22.6	0.7	30.7	121.4	68.4	189.8
Illinois	93.6	263.2	63.3	46.9	0.4	44.0	10.5	14.2	2.1	168.0	349.4	0.0	17.8	0.0	163.8	887.9	364.6	1,252.5
Indiana	360.2	271.0	46.7	36.6	0.3	9.7	5.9	8.0	3.3	98.1	208.5	0.0	21.9	0.0	166.9	1,028.6	371.6	1,400.2
Iowa	59.2	94.7	20.0	26.6	0.1	51.1	1.0	8.9	1.8	14.1	123.6	0.0	26.6	0.0	59.5	363.6	132.4	496.0
Kansas	5.0	120.6	23.7	31.5	(s)	43.9	2.2	6.7	4.2	47.3	159.5	0.0	3.3	0.0	37.1	325.5	82.6	408.2
Kentucky	60.4	120.2	22.1	24.2	0.3	24.9	2.9	11.5	0.4	104.2	190.4	0.0	19.6	0.0	146.3	537.0	325.7	862.7
Louisiana	2.1	1,030.8	7.8	30.8	11.4	185.1	6.9	7.8	8.6	628.0	886.4	0.0	172.4	(s)	96.5	2,188.2	214.9	2,403.1
Maine	3.0	3.0	4.9	8.6	0.2	0.1	0.3	1.5	19.8	0.1	35.6	5.6	65.8	0.0	12.7	125.7	28.2	153.8
Maryland	34.5	23.4	21.0	12.0	0.2	1.6	2.2	5.4	4.5	18.1	65.1	0.0	11.6	0.0	72.3	207.0	161.0	367.9
Massachusetts	1.5	45.3	9.6	11.3	0.1	0.2	2.0	5.1	4.5	12.4	45.3	(s)	3.5	0.0	33.9	129.6	75.5	205.1
Michigan	78.2	216.0	40.2	21.3	0.2	18.5	9.6	12.0	4.3	62.7	168.7	0.3	37.5	0.0	119.0	619.7	264.8	884.5
Minnesota	24.9	98.0	44.0	34.1	0.1	19.7	1.7	7.3	4.1	42.5	153.5	1.3	34.8	0.0	76.5	389.1	170.2	559.3
Mississippi	3.7	111.5	20.9	24.3	0.3	4.5	1.8	7.4	1.9	45.7	107.0	0.0	56.9	(s)	53.6	332.7	119.3	451.9
Missouri	24.4	65.1	39.6	33.6	0.1	20.1	3.6	11.8	0.8	28.1	137.6	0.0	5.8	0.0	48.8	281.8	108.6	390.4
Montana	1.4	25.0	6.2	18.9	(s)	0.6	0.3	3.6	0.3	35.1	64.8	0.0	11.2	0.1	15.6	118.0	34.7	152.8
Nebraska	7.5	39.6	8.6	32.2	0.1	7.7	0.2	6.8	1.1	1.6	58.4	0.0	5.3	0.0	29.4	140.1	65.4	205.6
Nevada	4.9	11.4	12.7	16.2	(s)	0.5	0.1	3.0	(s)	0.3	32.8	0.0	0.6	0.3	42.2	92.1	93.9	186.0
New Hampshire ..	0.0	7.9	5.7	4.5	0.1	0.8	0.1	1.9	2.7	0.2	16.0	0.1	6.7	0.0	7.9	38.6	17.7	56.2
New Jersey	0.2	80.6	34.3	18.3	3.9	3.6	8.9	6.3	3.4	198.7	277.2	(s)	2.8	0.0	38.2	399.1	85.1	484.2
New Mexico	2.0	108.9	13.2	13.3	(s)	1.5	0.6	3.9	0.7	17.1	50.3	0.0	0.3	0.5	20.4	182.4	45.4	227.8
New York	38.9	80.2	50.9	20.3	2.1	5.6	5.5	11.2	9.3	65.2	170.1	0.8	17.3	0.0	70.5	377.8	157.0	534.9
North Carolina	38.1	93.4	40.1	20.3	0.2	10.2	3.1	10.3	32.9	59.0	176.1	6.9	66.1	0.0	106.0	486.6	236.0	722.6
North Dakota	84.8	24.4	6.8	20.6	(s)	4.7	0.1	3.7	0.3	7.4	43.6	0.0	2.0	0.0	10.3	165.1	22.9	188.0
Ohio	93.7	309.3	69.5	38.3	1.1	17.3	12.9	12.6	4.1	135.0	290.6	0.0	21.5	0.0	199.8	914.9	444.7	1,359.7
Oklahoma	15.1	217.9	27.1	21.2	0.1	17.8	3.1	8.8	3.8	58.3	140.3	0.0	24.2	0.0	48.5	446.1	108.0	554.1
Oregon	1.4	74.9	23.9	12.9	0.3	1.7	1.2	5.4	1.9	19.5	66.8	0.0	26.3	0.2	40.8	210.4	90.8	301.1
Pennsylvania	273.4	210.8	58.3	31.7	0.5	18.1	14.8	9.5	12.1	142.3	287.2	0.0	32.4	0.0	162.6	966.4	361.9	1,328.4
Rhode Island	0.0	5.7	1.2	1.5	0.0	0.3	0.3	0.5	1.7	0.2	5.7	0.0	0.1	0.0	4.6	16.1	10.2	26.3
South Carolina	46.6	77.2	21.2	15.2	0.6	2.0	1.5	5.5	21.6	56.3	124.0	0.0	64.2	0.0	108.8	420.8	242.2	663.0
South Dakota	4.1	11.8	7.7	10.2	(s)	3.6	(s)	4.3	0.5	0.1	26.4	0.0	0.2	(s)	6.5	49.0	14.4	63.3
Tennessee	84.0	102.2	31.8	20.6	0.3	4.2	3.0	6.3	1.8	88.0	156.1	7.6	64.0	0.0	112.2	526.2	249.7	776.0
Texas	70.9	2,069.3	86.2	98.3	1.6	1,582.5	18.4	31.4	6.8	1,271.0	3,096.1	0.0	57.0	0.0	343.2	5,636.5	763.9	6,400.4
Utah	28.0	48.7	11.1	12.2	(s)	0.3	0.6	3.1	1.1	20.7	49.1	0.0	0.2	0.3	26.7	152.9	59.4	212.3
Vermont	0.0	2.8	3.1	3.4	0.3	0.5	0.1	1.2	0.9	0.0	9.6	0.2	1.5	0.0	5.4	19.5	12.0	31.5
Virginia	86.1	77.6	28.6	39.4	0.3	2.8	2.3	9.1	15.4	46.6	144.4	(s)	65.3	0.0	67.3	440.8	149.9	590.6
Washington	1.8	67.9	22.0	14.2	0.2	2.1	1.1	6.6	0.1	179.7	225.9	(s)	51.6	0.0	65.7	412.9	146.3	559.2
West Virginia	70.7	54.2	4.1	21.0	0.1	1.0	2.3	2.2	2.2	74.7	107.5	7.1	1.5	0.0	37.3	278.3	83.1	361.4
Wisconsin	40.9	142.0	43.8	32.5	0.2	12.9	2.7	8.8	5.7	27.5	134.0	2.0	54.9	0.0	93.6	467.4	208.4	675.7
Wyoming	32.4	75.0	3.8	19.6	(s)	0.5	0.3	2.8	0.7	23.4	51.0	0.0	0.2	(s)	26.9	185.5	59.9	245.4
United States	2,046.4	8,476.6	1,303.8	1,214.4	28.2	2,181.2	161.0	372.3	248.7	4,361.3	9,871.1	32.6	1,637.6	3.8	3,475.2	25,681.0	7,734.0	33,415.0

^a Includes supplemental gaseous fuels.

^b "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^c Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^d Wood and waste.

^e U.S. total includes 137.8 trillion Btu of net imports of coal coke that has not been allocated to the States.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S7. Transportation Sector Energy Consumption Estimates, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum								Ethanol ^b	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^c	Total
			Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG	Lubricants	Motor Gasoline	Residual Fuel	Total					
Alabama	0.0	16.7	0.4	134.8	14.5	0.7	2.6	317.0	8.0	478.0	2.6	(s)	494.7	(s)	494.7
Alaska	0.0	3.9	0.9	50.1	175.5	(s)	0.5	35.1	0.0	262.2	0.4	0.0	266.0	0.0	266.0
Arizona	0.0	17.0	0.8	110.3	46.8	0.4	1.9	333.8	0.0	494.0	1.1	0.0	511.0	0.0	511.0
Arkansas	0.0	8.0	0.7	100.1	4.1	0.2	2.3	173.5	0.0	280.9	0.0	(s)	288.9	(s)	288.9
California	0.0	16.9	2.5	453.0	597.7	1.7	15.0	1,929.9	174.6	3,174.5	73.7	2.5	3,194.0	5.6	3,199.6
Colorado	0.0	10.8	0.6	75.6	70.0	0.3	2.2	257.5	0.0	406.2	6.9	0.1	417.1	0.1	417.2
Connecticut	0.0	3.6	0.3	41.2	13.5	0.1	1.3	223.1	0.1	279.7	13.0	0.6	283.9	1.4	285.4
Delaware	0.0	0.1	0.4	9.3	0.9	(s)	0.3	51.8	6.2	68.9	0.0	0.0	69.1	0.0	69.1
Dist. of Col.	0.0	0.6	(s)	5.5	0.0	(s)	0.3	17.1	0.0	22.9	0.0	1.0	24.5	2.3	26.8
Florida	0.0	11.1	2.0	249.1	165.8	1.0	4.3	1,035.4	80.2	1,537.8	(s)	0.3	1,549.3	0.7	1,550.0
Georgia	0.0	7.3	1.0	222.5	52.0	0.7	3.3	614.7	24.0	918.2	0.0	0.6	926.1	1.4	927.5
Hawaii	0.0	0.0	0.2	31.2	75.5	0.0	0.4	55.1	9.4	171.7	0.0	0.0	171.7	0.0	171.7
Idaho	0.0	6.0	0.4	36.0	4.7	0.2	0.7	74.3	0.0	116.4	0.0	0.0	122.4	0.0	122.4
Illinois	0.0	11.6	0.9	217.5	122.2	0.7	8.1	637.6	0.1	987.1	34.5	1.5	1,000.2	3.4	1,003.6
Indiana	0.0	7.6	0.5	185.8	48.5	0.6	3.7	393.1	1.0	633.3	11.5	0.1	640.9	0.1	641.0
Iowa	0.0	10.3	0.4	86.6	5.2	0.2	2.8	191.6	0.0	286.8	9.6	(s)	297.1	(s)	297.1
Kansas	0.0	36.2	0.6	64.4	17.6	0.2	3.2	158.8	(s)	244.8	0.4	0.0	281.0	0.0	281.0
Kentucky	0.0	10.5	0.4	143.5	51.3	0.3	2.8	276.5	(s)	474.8	4.3	0.0	485.3	0.0	485.3
Louisiana	0.0	47.0	0.3	159.7	203.2	0.2	3.9	275.2	68.4	710.9	4.1	0.1	758.0	0.1	758.1
Maine	0.0	0.7	0.2	26.6	6.2	(s)	0.7	87.1	0.2	120.9	0.0	(s)	121.7	(s)	121.7
Maryland	0.0	2.8	0.4	78.2	17.8	0.1	1.7	326.2	7.8	432.2	(s)	1.6	436.7	3.7	440.3
Massachusetts	0.0	2.0	0.5	68.3	46.7	0.1	2.5	350.5	(s)	468.5	0.7	1.4	471.9	3.1	475.0
Michigan	0.0	27.1	0.4	139.8	21.2	1.4	7.9	607.4	1.6	779.6	13.6	(s)	806.8	(s)	806.8
Minnesota	0.0	20.6	0.5	100.9	70.9	0.4	4.3	330.4	1.9	509.1	22.7	(s)	529.7	0.1	529.8
Mississippi	0.0	22.9	0.6	97.3	34.7	0.2	1.7	196.9	10.6	341.8	0.0	(s)	364.8	(s)	364.8
Missouri	0.0	3.5	0.6	157.2	22.7	0.4	5.0	388.8	0.1	574.8	8.2	(s)	578.3	0.1	578.3
Montana	0.0	8.3	0.2	36.3	5.7	0.1	1.1	58.5	0.0	102.0	0.1	0.0	110.2	0.0	110.2
Nebraska	0.0	4.0	0.3	61.7	5.2	0.2	1.9	100.8	0.0	170.0	3.0	0.0	174.1	0.0	174.1
Nevada	0.0	2.8	0.4	46.9	44.9	0.2	0.4	132.8	0.0	225.6	3.7	0.0	228.4	0.0	228.4
New Hampshire ..	0.0	(s)	0.3	16.3	5.1	(s)	0.3	87.1	0.0	109.2	0.0	0.0	109.2	0.0	109.2
New Jersey	0.0	2.0	0.6	139.2	142.0	0.3	3.8	534.5	77.5	897.9	0.5	1.0	900.8	2.2	903.0
New Mexico	0.0	28.2	0.5	66.5	12.9	0.3	1.1	116.9	0.0	198.2	0.6	0.0	226.3	0.0	226.3
New York	0.0	8.7	1.2	209.2	109.4	0.2	5.7	704.3	36.6	1,066.6	24.9	9.0	1,084.4	20.1	1,104.5
North Carolina	0.0	5.2	0.6	162.9	30.6	0.5	3.4	531.8	2.5	732.3	8.0	0.0	737.6	0.0	737.6
North Dakota	0.0	14.2	0.3	29.3	6.2	0.1	0.8	41.1	0.0	77.9	0.9	0.0	92.1	0.0	92.1
Ohio	0.0	13.8	0.6	251.4	105.7	0.8	7.6	635.8	(s)	1,001.9	15.7	0.2	1,015.9	0.4	1,016.3
Oklahoma	0.0	32.5	0.7	109.4	39.1	0.2	4.2	226.9	0.0	380.5	0.0	0.0	413.1	0.0	413.1
Oregon	0.0	10.2	0.6	82.6	29.3	0.3	2.8	186.4	10.8	312.9	2.4	0.2	323.3	0.4	323.7
Pennsylvania	0.0	31.3	0.5	213.8	92.9	0.6	7.0	639.0	25.2	979.0	7.6	2.8	1,013.0	6.3	1,019.3
Rhode Island	0.0	0.4	0.1	8.7	5.9	(s)	0.4	46.9	0.0	61.9	0.7	0.0	62.3	0.0	62.3
South Carolina	0.0	2.5	0.4	106.4	9.4	0.3	1.4	316.0	12.5	446.4	0.0	0.0	448.9	0.0	448.9
South Dakota	0.0	6.4	0.2	25.1	4.4	(s)	0.8	49.8	0.0	80.4	2.0	0.0	86.7	0.0	86.7
Tennessee	0.0	11.0	0.5	164.6	77.2	0.6	3.6	373.9	0.3	620.7	0.0	(s)	631.7	(s)	631.7
Texas	0.0	57.5	2.4	591.3	503.6	2.1	10.2	1,405.5	127.5	2,642.6	2.4	0.3	2,700.4	0.6	2,701.0
Utah	0.0	9.5	0.4	55.5	40.5	0.2	1.0	125.8	0.0	223.5	0.1	0.1	233.0	0.2	233.2
Vermont	0.0	(s)	0.1	8.7	1.8	(s)	0.3	42.6	0.0	53.5	0.0	0.0	53.5	0.0	53.5
Virginia	0.0	6.0	0.7	169.1	95.0	0.2	2.8	484.8	11.5	764.0	7.3	0.6	770.6	1.2	771.8
Washington	0.0	9.2	1.0	113.1	109.0	0.4	2.7	328.3	41.0	595.4	1.9	0.1	604.7	0.3	605.1
West Virginia	0.0	22.4	0.1	52.6	1.4	(s)	1.3	103.8	0.0	159.3	1.6	(s)	181.7	(s)	181.8
Wisconsin	0.0	3.6	0.8	105.7	15.0	0.4	2.8	309.6	(s)	434.3	8.9	(s)	437.9	(s)	437.9
Wyoming	0.0	13.1	1.1	61.3	1.4	0.1	0.8	37.5	0.0	102.2	0.0	0.0	115.3	0.0	115.3
United States	0.0	607.7	31.2	5,932.2	3,382.5	18.0	152.1	16,958.6	739.5	27,214.2	299.3	24.2	27,846.1	53.9	27,900.0

^a Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and gas consumed as vehicle fuel.

^b Ethanol blended into motor gasoline is included in motor gasoline, but is also shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total.

^c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table S8. Electric Power Sector Consumption Estimates, 2004
(Trillion Btu)

State	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^d	Biomass ^e	Geothermal	Solar/PV ^f	Wind	Electricity Net Imports ^g	Total
			Residual Fuel ^b	Distillate Fuel ^c	Petroleum Coke	Total								
Alabama	753.4	119.9	0.0	1.4	0.0	1.4	329.9	106.5	3.2	0.0	0.0	0.0	0.0	1,314.3
Alaska	6.3	37.9	4.4	3.1	0.0	7.5	0.0	15.0	0.0	0.0	0.0	0.0	(s)	66.7
Arizona	409.2	245.0	(s)	0.4	0.0	0.5	293.1	69.9	0.4	0.0	(s)	0.0	0.3	1,018.4
Arkansas	260.1	41.3	4.7	0.4	0.0	5.0	161.1	36.5	2.4	0.0	0.0	0.0	0.0	506.4
California	22.5	808.0	0.0	1.4	20.9	22.3	315.6	342.2	75.7	275.4	5.7	43.2	4.2	1,914.9
Colorado	378.5	86.9	(s)	0.2	0.0	0.2	0.0	12.0	1.0	0.0	0.0	2.2	0.1	480.9
Connecticut	43.9	59.7	16.6	0.7	0.0	17.2	172.5	4.6	26.6	0.0	0.0	0.0	3.4	328.0
Delaware	50.5	13.5	6.0	0.5	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.4
Dist. of Col.	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Florida	672.0	608.9	292.6	14.2	70.2	377.0	325.5	2.7	77.4	0.0	0.0	0.0	0.0	2,063.5
Georgia	789.3	47.3	0.5	1.5	0.0	2.0	351.9	36.8	0.2	0.0	0.0	0.0	0.0	1,227.5
Hawaii	18.0	0.0	70.5	14.5	0.0	85.0	0.0	0.6	5.2	4.5	0.0	0.1	0.0	113.4
Idaho	0.0	12.2	0.0	(s)	0.0	(s)	0.0	84.8	1.4	0.0	0.0	0.0	0.1	98.6
Illinois	970.2	31.8	7.0	1.2	1.2	9.4	959.8	1.5	10.9	0.0	0.0	0.8	-0.1	1,984.3
Indiana	1,244.5	23.3	(s)	1.6	3.0	4.7	0.0	4.4	1.0	0.0	0.0	0.0	0.0	1,277.9
Iowa	379.9	8.3	0.0	1.0	0.4	1.4	51.4	9.5	1.2	0.0	0.0	10.5	(s)	462.2
Kansas	380.5	10.5	9.5	0.6	0.0	10.1	105.7	0.1	0.0	0.0	0.0	3.6	(s)	510.5
Kentucky	894.7	5.0	0.0	1.5	42.7	44.2	0.0	37.9	1.0	0.0	0.0	0.0	0.0	982.8
Louisiana	254.7	252.1	18.7	1.1	20.2	40.0	178.1	11.0	1.2	0.0	0.0	0.0	0.0	737.0
Maine	4.3	65.7	7.5	0.8	0.0	8.3	0.0	28.7	34.8	0.0	0.0	0.0	13.0	154.8
Maryland	291.3	12.5	28.4	6.6	0.0	35.0	152.0	25.1	13.2	0.0	0.0	0.0	0.0	529.2
Massachusetts	102.7	163.6	67.0	3.5	0.0	70.5	61.9	10.0	34.6	0.0	0.0	0.0	1.6	444.9
Michigan	691.2	144.7	7.0	2.3	0.1	9.4	318.7	15.1	27.9	0.0	0.0	(s)	-10.9	1,196.0
Minnesota	353.8	13.1	0.4	0.7	7.3	8.4	138.6	6.1	11.5	0.0	0.0	8.1	8.9	548.6
Mississippi	181.2	110.8	28.0	0.3	0.0	28.2	106.7	0.0	0.0	0.0	0.0	0.0	0.0	426.9
Missouri	778.5	25.1	0.0	0.9	1.3	2.2	81.7	14.8	1.1	0.0	0.0	0.0	(s)	903.4
Montana	192.3	0.2	0.0	0.2	8.0	8.2	0.0	88.8	0.0	0.0	0.0	0.0	-0.1	289.3
Nebraska	216.1	3.3	(s)	0.3	0.0	0.3	106.8	9.2	0.3	0.0	0.0	0.4	(s)	336.3
Nevada	188.7	144.0	0.9	0.1	0.0	1.1	0.0	16.2	0.0	27.3	0.0	0.0	0.6	377.9
New Hampshire ..	43.4	39.4	19.5	1.0	0.0	20.5	106.1	13.1	13.2	0.0	0.0	0.0	1.4	237.2
New Jersey	112.4	146.4	5.3	4.0	0.0	9.3	282.4	0.4	19.8	0.0	0.0	0.0	(s)	570.7
New Mexico	307.4	31.5	0.0	0.3	0.0	0.3	0.0	1.4	0.0	0.0	0.0	5.1	0.2	345.9
New York	233.6	266.5	205.7	10.1	3.1	219.0	423.8	239.6	41.5	0.0	0.0	1.2	17.7	1,442.7
North Carolina	735.8	22.0	0.0	3.8	0.0	3.8	418.0	47.4	7.8	0.0	0.0	0.0	0.0	1,234.9
North Dakota	309.3	(s)	0.0	0.4	0.0	0.4	0.0	15.5	0.0	0.0	0.0	2.1	0.4	327.7
Ohio	1,287.9	18.8	0.0	4.3	11.4	15.7	166.3	7.3	1.1	0.0	0.0	0.0	-0.2	1,496.9
Oklahoma	357.0	206.0	0.1	0.2	0.0	0.3	0.0	29.8	0.0	0.0	0.0	5.7	(s)	598.8
Oregon	35.1	90.5	0.0	0.2	0.0	0.2	0.0	331.5	2.1	0.0	0.0	6.2	8.3	473.9
Pennsylvania	1,183.9	79.0	33.5	6.2	6.3	46.1	807.7	31.6	35.1	0.0	0.0	3.1	-0.6	2,185.8
Rhode Island	0.0	36.7	0.0	0.1	0.0	0.1	0.0	0.1	1.2	0.0	0.0	0.0	1.0	39.2
South Carolina	387.2	33.3	0.4	2.0	4.8	7.3	533.9	24.5	3.0	0.0	0.0	0.0	0.0	989.3
South Dakota	39.5	1.6	0.0	0.3	0.0	0.3	0.0	36.1	0.0	0.0	0.0	1.6	(s)	79.1
Tennessee	562.3	2.3	0.0	1.8	0.0	1.8	298.3	96.7	0.2	0.0	0.0	(s)	(s)	961.8
Texas	1,554.8	1,426.3	1.2	1.8	15.8	18.8	421.6	13.0	2.9	0.0	0.0	31.4	-0.7	3,468.1
Utah	366.7	9.4	0.0	0.3	0.0	0.3	0.0	4.5	1.4	4.1	0.0	0.0	0.1	386.5
Vermont	0.0	0.1	0.0	0.3	0.0	0.3	40.2	11.7	6.8	0.0	0.0	0.1	6.6	65.8
Virginia	364.2	50.1	43.6	7.1	0.0	50.7	295.2	15.9	19.3	0.0	0.0	0.0	0.0	795.3
Washington	110.2	71.9	0.0	0.3	0.0	0.3	93.7	716.6	12.3	0.0	0.0	7.4	-16.5	995.7
West Virginia	865.0	1.5	0.0	2.7	0.0	2.7	0.0	6.1	0.2	0.0	0.0	1.6	0.0	877.0
Wisconsin	454.6	21.2	0.0	1.6	5.2	6.7	124.0	17.9	9.2	0.0	0.0	1.0	0.0	634.6
Wyoming	466.3	0.5	0.0	0.5	0.0	0.5	0.0	5.9	0.0	0.0	0.0	6.2	-0.2	479.3
United States	20,304.9	5,649.7	879.0	111.2	222.1	1,212.3	8,222.0	2,656.5	509.4	311.3	5.8	141.7	38.6	39,052.2

^a Includes supplemental gaseous fuels.

^b Residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

^c Distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity

^e Wood and waste.

^f Solar thermal and photovoltaic energy.

^g Electricity traded with Canada and Mexico.

(s) = Value less than 0.05 trillion Btu.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

2004 Consumption Ranking Tables

Table R1. Energy Consumption by Sector, Ranked by State, 2004

Rank	Residential Sector		Commercial Sector		Industrial Sector		Transportation Sector		Total Consumption	
	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu
1	California	1,556.1	California	1,556.3	Texas	6,400.4	California	3,199.6	Texas	11,971.4
2	Texas	1,555.0	New York	1,399.4	Louisiana	2,403.1	Texas	2,701.0	California	8,364.6
3	Florida	1,306.7	Texas	1,314.9	California	2,052.7	Florida	1,550.0	Florida	4,452.5
4	New York	1,215.3	Florida	1,041.6	Indiana	1,400.2	New York	1,104.5	New York	4,254.0
5	Pennsylvania	995.0	Illinois	746.2	Ohio	1,359.7	Pennsylvania	1,019.3	Pennsylvania	4,049.4
6	Illinois	958.2	Pennsylvania	706.8	Pennsylvania	1,328.4	Ohio	1,016.3	Ohio	4,022.8
7	Ohio	941.7	Ohio	705.2	Illinois	1,252.5	Illinois	1,003.6	Illinois	3,960.5
8	Michigan	799.2	Michigan	628.9	Alabama	1,001.1	Georgia	927.5	Louisiana	3,816.3
9	Georgia	719.7	New Jersey	617.3	Georgia	959.6	New Jersey	903.0	Georgia	3,141.1
10	North Carolina	701.9	Virginia	578.4	Michigan	884.5	Michigan	806.8	Michigan	3,119.4
11	New Jersey	625.7	North Carolina	553.6	Kentucky	862.7	Virginia	771.8	Indiana	2,945.7
12	Virginia	617.4	Georgia	534.3	Tennessee	776.0	Louisiana	758.1	North Carolina	2,715.6
13	Indiana	531.5	Massachusetts	395.0	North Carolina	722.6	North Carolina	737.6	New Jersey	2,630.2
14	Tennessee	511.7	Missouri	391.1	Wisconsin	675.7	Indiana	641.0	Virginia	2,558.2
15	Missouri	489.4	Tennessee	378.3	South Carolina	663.0	Tennessee	631.7	Tennessee	2,297.7
16	Washington	469.2	Indiana	373.0	Virginia	590.6	Washington	605.1	Alabama	2,159.7
17	Massachusetts	467.8	Washington	371.3	Minnesota	559.3	Missouri	578.3	Washington	2,004.8
18	Maryland	437.1	Minnesota	335.4	Washington	559.2	Minnesota	529.8	Kentucky	1,956.4
19	Wisconsin	419.3	Arizona	326.0	Florida	554.1	Arizona	511.0	Missouri	1,849.3
20	Minnesota	401.8	Wisconsin	314.7	Oklahoma	554.1	Alabama	494.7	Wisconsin	1,847.7
21	Alabama	393.7	Louisiana	285.9	New York	534.9	Kentucky	485.3	Minnesota	1,826.3
22	Louisiana	369.3	Colorado	285.3	Iowa	496.0	Massachusetts	475.0	South Carolina	1,717.5
23	Arizona	368.5	Maryland	281.2	New Jersey	484.2	South Carolina	448.9	Massachusetts	1,542.9
24	South Carolina	353.9	Alabama	270.2	Arkansas	473.9	Maryland	440.3	Maryland	1,526.6
25	Kentucky	353.7	Kentucky	254.7	Mississippi	451.9	Wisconsin	437.9	Oklahoma	1,485.9
26	Colorado	308.0	South Carolina	251.6	Kansas	408.2	Colorado	417.2	Arizona	1,436.6
27	Connecticut	304.0	Oklahoma	230.1	Alaska	393.4	Oklahoma	413.1	Colorado	1,383.9
28	Oklahoma	288.7	Connecticut	211.2	Missouri	390.4	Mississippi	364.8	Mississippi	1,214.3
29	Oregon	261.3	Oregon	207.4	Colorado	373.4	Oregon	323.7	Iowa	1,205.8
30	Iowa	230.4	Kansas	196.9	Maryland	367.9	Iowa	297.1	Arkansas	1,135.9
31	Mississippi	230.3	Iowa	182.3	West Virginia	361.4	Arkansas	288.9	Kansas	1,103.5
32	Arkansas	218.3	Mississippi	167.4	Oregon	301.1	Connecticut	285.4	Oregon	1,093.6
33	Kansas	217.4	Arkansas	154.7	Wyoming	245.4	Kansas	281.0	Connecticut	923.8
34	West Virginia	164.8	Utah	144.4	Arizona	231.2	Alaska	266.0	West Virginia	821.3
35	Nevada	158.6	Nebraska	127.9	New Mexico	227.8	Utah	233.2	Alaska	779.1
36	Utah	150.2	New Mexico	121.4	Utah	212.3	Nevada	228.4	Utah	740.2
37	Nebraska	144.3	District of Columbia	121.2	Nebraska	205.6	New Mexico	226.3	Nevada	693.7
38	Maine	123.4	Nevada	120.7	Massachusetts	205.1	West Virginia	181.8	New Mexico	682.3
39	Idaho	109.7	West Virginia	113.4	Idaho	189.8	Nebraska	174.1	Nebraska	651.9
40	New Mexico	106.8	Maine	81.4	North Dakota	188.0	Hawaii	171.7	Idaho	499.8
41	New Hampshire	99.6	Idaho	77.9	Nevada	186.0	Idaho	122.4	Maine	480.3
42	Rhode Island	79.1	New Hampshire	75.6	Maine	153.8	Maine	121.7	Wyoming	454.4
43	Montana	73.8	Montana	66.2	Montana	152.8	Wyoming	115.3	Montana	402.9
44	Delaware	69.3	Alaska	63.4	Connecticut	123.3	Montana	110.2	North Dakota	402.3
45	North Dakota	62.9	North Dakota	59.3	Delaware	109.4	New Hampshire	109.2	New Hampshire	340.7
46	South Dakota	60.6	Rhode Island	58.8	Hawaii	69.1	North Dakota	92.1	Hawaii	323.5
47	Alaska	56.4	Delaware	57.1	South Dakota	63.3	South Dakota	86.7	Delaware	304.8
48	Vermont	51.4	South Dakota	52.9	New Hampshire	56.2	Delaware	69.1	South Dakota	263.6
49	Wyoming	41.1	Wyoming	52.6	Vermont	31.5	Rhode Island	62.3	Rhode Island	226.4
50	District of Columbia	38.0	Hawaii	47.2	Rhode Island	26.3	Vermont	53.5	District of Columbia	190.3
51	Hawaii	35.4	Vermont	32.9	District of Columbia	4.2	District of Columbia	26.8	Vermont	169.3
United States		21,242.6	United States	17,720.9	United States	^a 33,415.0	United States	27,900.0	United States	100,278.6

^a Includes 137.8 trillion Btu of coal coke net imports that are not allocated to the States.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table R2. Energy Consumption by Source and Total Consumption per Capita, Ranked by State, 2004

Rank	Coal		Natural Gas		Petroleum		Retail Electricity Sales		Total Consumption per Capita	
	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Million Btu
1	Texas	1,626.0	Texas	3,941.2	Texas	5,801.3	Texas	1,093.9	Alaska	1,186.2
2	Indiana	1,614.2	California	2,474.2	California	3,787.8	California	862.4	Wyoming	898.8
3	Pennsylvania	1,474.3	Louisiana	1,400.0	Florida	2,119.9	Florida	745.8	Louisiana	848.9
4	Ohio	1,391.3	New York	1,119.9	New York	1,885.4	Ohio	526.2	North Dakota	632.7
5	Illinois	1,069.5	Illinois	956.2	Louisiana	1,651.1	New York	495.0	Texas	531.6
6	Kentucky	961.8	Michigan	918.4	Pennsylvania	1,518.6	Pennsylvania	489.6	Alabama	478.1
7	West Virginia	937.1	Ohio	845.0	Illinois	1,374.5	Illinois	475.1	Indiana	473.3
8	Alabama	853.9	Florida	755.2	Ohio	1,368.3	Georgia	441.7	Kentucky	472.5
9	Georgia	835.0	Pennsylvania	732.5	New Jersey	1,270.0	North Carolina	428.7	West Virginia	453.5
10	Missouri	807.5	New Jersey	647.1	Georgia	1,117.6	Michigan	363.7	Montana	435.0
11	North Carolina	782.7	Oklahoma	555.9	Virginia	1,038.5	Virginia	359.7	Oklahoma	421.8
12	Michigan	773.8	Indiana	542.5	Michigan	1,033.9	Indiana	351.8	Mississippi	419.8
13	Florida	699.1	Colorado	437.5	North Carolina	992.9	Tennessee	340.0	Arkansas	413.5
14	Tennessee	648.0	Alaska	411.8	Indiana	885.2	Alabama	296.4	South Carolina	409.4
15	Wyoming	500.5	Georgia	410.3	Washington	842.4	Kentucky	295.2	Iowa	408.2
16	Wisconsin	499.2	Alabama	404.0	Tennessee	799.8	Washington	272.9	Kansas	403.0
17	Virginia	452.5	Massachusetts	387.4	Massachusetts	748.7	South Carolina	272.6	Tennessee	390.4
18	Iowa	443.2	Wisconsin	384.9	Missouri	746.5	Louisiana	272.1	Nebraska	373.1
19	South Carolina	433.9	Minnesota	363.3	Kentucky	727.8	New Jersey	264.7	Delaware	367.7
20	Arizona	425.4	Arizona	354.9	Minnesota	714.9	Missouri	252.7	Maine	365.6
21	Utah	399.7	Mississippi	293.6	Alabama	638.5	Wisconsin	231.9	New Mexico	359.0
22	North Dakota	398.4	Virginia	284.9	Wisconsin	630.7	Arizona	228.4	Minnesota	358.5
23	Colorado	390.2	Kansas	273.3	South Carolina	595.3	Maryland	228.2	Idaho	358.4
24	Kansas	385.5	Washington	268.5	Maryland	581.6	Minnesota	216.1	Georgia	351.5
25	Minnesota	378.8	Missouri	268.0	Arizona	562.8	Massachusetts	191.6	Ohio	351.0
26	Oklahoma	372.1	Oregon	243.2	Oklahoma	532.5	Oklahoma	173.8	Virginia	342.4
27	Maryland	327.2	Tennessee	239.2	Colorado	500.4	Colorado	159.4	South Dakota	342.2
28	New Mexico	309.4	North Carolina	232.7	Mississippi	488.0	Mississippi	157.1	Wisconsin	336.0
29	New York	276.5	Kentucky	231.8	Connecticut	470.8	Oregon	155.8	District of Columbia	328.2
30	Arkansas	270.2	New Mexico	230.0	Iowa	439.4	Arkansas	149.0	Pennsylvania	327.2
31	Louisiana	256.7	Arkansas	228.9	Kansas	427.9	Iowa	139.6	Washington	323.1
32	Nebraska	223.6	Iowa	228.6	Oregon	390.8	Kansas	126.7	Missouri	321.5
33	Montana	195.6	Nevada	219.5	Arkansas	388.3	Connecticut	109.9	North Carolina	318.3
34	Nevada	193.6	Maryland	198.7	Alaska	334.8	Nevada	106.8	Illinois	311.5
35	Mississippi	185.0	Utah	164.9	Hawaii	282.6	West Virginia	98.7	Michigan	309.1
36	New Jersey	112.7	South Carolina	163.8	West Virginia	280.3	Nebraska	88.3	Utah	305.7
37	Washington	112.5	Connecticut	163.1	Utah	278.8	Utah	83.6	Oregon	304.7
38	Massachusetts	105.1	West Virginia	143.2	Nevada	264.3	Idaho	74.4	New Jersey	303.2
39	California	68.9	Nebraska	115.1	Maine	260.6	New Mexico	67.7	Colorado	301.0
40	Delaware	53.6	Wyoming	111.6	New Mexico	259.8	Wyoming	46.2	Nevada	297.4
41	Connecticut	44.0	Idaho	77.2	Nebraska	238.4	Montana	44.2	Maryland	274.9
42	South Dakota	43.6	Maine	76.3	New Hampshire	205.4	Maine	42.2	Vermont	272.8
43	New Hampshire	43.4	Rhode Island	74.6	Montana	185.8	Delaware	40.1	Connecticut	264.4
44	Oregon	36.5	Montana	66.7	Wyoming	158.8	District of Columbia	38.9	New Hampshire	262.5
45	Hawaii	19.3	New Hampshire	64.5	Idaho	156.6	New Hampshire	37.4	Hawaii	256.9
46	Alaska	14.1	North Dakota	60.3	Delaware	140.8	Hawaii	36.6	Florida	256.4
47	Idaho	12.3	Delaware	49.9	North Dakota	133.8	North Dakota	35.9	Arizona	250.0
48	Maine	7.3	South Dakota	42.5	South Dakota	115.1	South Dakota	31.4	Massachusetts	239.7
49	District of Columbia	0.7	District of Columbia	33.1	Rhode Island	99.3	Rhode Island	26.9	California	233.4
50	Rhode Island	0.1	Vermont	8.7	Vermont	95.1	Alaska	19.8	New York	220.5
51	Vermont	(s)	Hawaii	2.9	District of Columbia	30.6	Vermont	19.3	Rhode Island	209.9
United States		22,465.6	United States	22,901.6	United States	40,592.9	United States	12,106.7	United States	341.5

(s) = Value less than 0.05 trillion Btu.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

United States Consumption Tables

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, United States

Year	Coal	Net Imports of Coal Coke	Natural Gas ^a	Petroleum											Nuclear Electric Power	Hydro- electric Power ^d			
				Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kero- sene	LPG ^b	Lubri- cants	Motor Gasoline	Residual Fuel	Other ^c	Total					
	Million Short Tons		Billion Cubic Feet	Million Barrels											Billion Kilowatthours		Biomass ^{e,g}	Other ^{f,g}	Total ^h
1960	398	(s)	11,967	111	59	685	136	99	227	43	1,453	559	214	3,586	1	149	--	--	--
1965	472	-1	15,280	134	44	776	220	98	307	47	1,676	587	313	4,202	4	197	--	--	--
1970	523	-2	21,139	163	20	927	353	96	447	50	2,111	804	393	5,364	22	251	--	--	--
1975	563	1	19,538	153	14	1,041	365	58	486	50	2,436	899	455	5,958	173	303	--	--	--
1980	703	-1	19,877	145	13	1,049	391	58	538	58	2,408	918	665	6,242	251	279	--	--	--
1985	818	-1	17,281	155	10	1,047	445	42	584	53	2,493	439	473	5,740	384	284	--	--	--
1990	904	(s)	19,174	176	9	1,103	556	16	568	60	2,641	449	625	6,201	577	293	--	--	--
1995	962	2	22,207	178	8	1,170	553	20	693	57	2,843	311	637	6,469	673	311	--	--	--
1996	1,006	1	22,609	177	7	1,232	578	23	736	55	2,888	311	695	6,701	675	347	--	--	--
1997	1,030	2	22,737	184	8	1,254	583	24	744	58	2,926	291	724	6,796	629	356	--	--	--
1998	1,037	3	22,246	190	7	1,263	592	28	713	61	3,012	324	714	6,905	674	323	--	--	--
1999	1,039	2	22,405	200	8	1,304	611	27	801	62	3,077	303	733	7,125	728	320	--	--	--
2000	1,084	3	23,333	192	7	1,362	631	25	816	61	3,101	333	682	7,211	754	276	--	--	--
2001	1,060	1	22,239	189	7	1,404	604	26	746	56	3,143	296	700	7,172	769	217	--	--	--
2002	1,066	2	23,007	187	7	1,378	589	16	789	55	3,229	255	707	7,213	780	264	--	--	--
2003	1,095	2	^R 22,350	184	6	1,433	576	20	757	51	3,261	282	742	7,312	764	276	--	--	--
2004	1,107	6	22,430	196	6	1,485	597	24	780	52	3,333	316	798	7,588	789	268	--	--	--

Trillion Btu																			
1960	9,831	-6	12,385	734	298	3,992	739	563	912	259	7,631	3,517	1,276	19,919	6	1,608	1,320	16	45,080
1965	11,582	-18	15,779	890	222	4,519	1,215	553	1,232	286	8,806	3,691	1,833	23,246	43	2,059	1,335	4	54,030
1970	12,269	-58	21,693	1,082	100	5,401	1,973	544	1,689	301	11,091	5,057	2,283	29,522	239	2,634	1,431	18	67,747
1975	12,656	14	19,977	1,014	71	6,061	2,047	329	1,807	304	12,798	5,649	2,651	32,732	1,900	3,155	1,499	91	72,023
1980	15,461	-35	20,384	962	64	6,110	2,190	329	1,976	354	12,648	5,772	3,799	34,204	2,739	2,900	2,471	181	78,306
1985	17,540	-13	17,843	1,029	50	6,098	2,497	236	2,103	322	13,098	2,759	2,733	30,925	4,076	2,970	2,923	338	76,653
1990	19,168	5	19,752	1,170	45	6,422	3,129	88	2,059	362	13,872	2,820	3,584	33,552	6,104	3,046	ⁱ 2,626	ⁱ 432	ⁱ 84,749
1995	20,099	61	22,833	1,178	40	6,818	3,132	112	2,512	346	14,825	1,955	3,639	34,556	7,075	3,205	2,901	530	91,261
1996	21,002	23	23,262	1,176	37	7,175	3,274	128	2,660	335	15,064	1,952	3,958	35,759	7,087	3,590	3,014	557	94,294
1997	21,444	46	23,477	1,224	40	7,304	3,308	136	2,690	354	15,254	1,828	4,127	36,266	6,597	3,640	2,919	545	94,934
1998	21,583	67	23,016	1,263	35	7,359	3,357	162	2,575	371	15,701	2,036	4,075	36,933	7,068	3,297	2,726	517	95,208
1999	21,582	58	23,026	1,324	39	7,595	3,462	151	2,897	375	16,036	1,905	4,177	37,960	7,610	3,268	2,764	545	96,813
2000	22,576	65	23,803	1,276	36	7,935	3,580	140	2,945	369	16,155	2,091	3,874	38,402	7,862	2,811	2,783	555	98,857
2001	^R 21,906	29	22,836	1,257	35	8,179	3,426	150	2,697	338	16,373	1,861	4,017	38,333	8,033	2,242	2,524	521	^R 96,424
2002	21,903	61	23,806	1,240	34	8,028	3,340	90	2,852	334	16,819	1,605	4,058	38,400	8,143	2,689	2,571	570	98,143
2003	22,324	51	^R 23,266	1,220	30	8,349	3,265	113	2,747	309	16,981	1,772	4,264	39,051	7,959	2,825	2,573	531	^R 98,579
2004	22,466	138	22,902	1,304	31	8,652	3,383	133	2,824	313	17,379	1,990	4,584	40,593	8,222	2,690	2,683	586	100,279

^a Includes supplemental gaseous fuels.^b Liquefied petroleum gases.^c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."^d Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^e Wood and waste.^f "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.^g The continuity of these data series estimates may be affected by the changing data sources and estimation

methodologies. See the Technical Notes for each type of energy.

^h From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the motor gasoline column.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.^R = Revised data. -- = Not applicable.

(s) = Value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, United States

Year	Coal	Natural Gas ^a	Petroleum				Wood ^b	Geothermal	Solar/PV ^d	Retail Electricity Sates	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^b	Kerosene ^b	LPG ^{b,c}	Total							
	Million Short Tons	Billion Cubic Feet	Million Barrels				Million Cords			Billion Kilowatthours		Billion Kilowatthours	
1960	24	3,103	269	62	85	417	31	--	--	201	--	499	--
1965	15	3,903	294	59	108	461	23	--	--	291	--	695	--
1970	9	4,837	322	53	153	528	20	--	--	466	--	1,129	--
1975	3	4,924	310	28	142	481	21	--	--	588	--	1,415	--
1980	1	4,752	226	19	88	333	42	--	--	717	--	1,731	--
1985	2	4,433	188	28	91	306	51	--	--	794	--	1,830	--
1990	1	4,391	168	11	101	280	29	--	--	924	--	2,139	--
1995	1	4,850	155	13	112	280	26	--	--	1,043	--	2,369	--
1996	1	5,241	159	16	131	306	27	--	--	1,083	--	2,463	--
1997	1	4,984	150	16	127	294	21	--	--	1,076	--	2,439	--
1998	1	4,520	133	19	120	272	19	--	--	1,130	--	2,564	--
1999	1	4,726	142	20	148	309	20	--	--	1,145	--	2,619	--
2000	(s)	4,996	155	17	156	328	22	--	--	1,192	--	2,713	--
2001	(s)	4,771	156	17	148	321	19	--	--	1,201	--	^R 2,702	--
2002	1	4,889	148	11	150	308	19	--	--	1,265	--	2,836	--
2003	1	^R 5,079	155	12	155	323	20	--	--	1,274	--	2,829	--
2004	1	4,885	159	15	147	320	21	--	--	1,294	--	2,879	--
Trillion Btu													
1960	578	3,212	1,568	354	343	2,265	627	0	0	687	7,370	1,702	9,071
1965	348	4,019	1,713	334	434	2,481	468	0	0	993	8,309	2,372	10,681
1970	207	4,953	1,878	298	579	2,755	401	0	0	1,591	9,907	3,853	13,760
1975	62	5,024	1,807	161	528	2,495	425	0	0	2,007	10,014	4,829	14,842
1980	31	4,855	1,316	107	325	1,748	846	0	0	2,448	9,929	5,908	15,836
1985	39	4,566	1,092	159	327	1,578	1,010	0	0	2,709	9,902	6,242	16,144
1990	31	4,519	978	64	365	1,407	582	^f 6	^f 56	3,153	^f 9,753	7,299	^f 17,052
1995	17	4,984	905	74	404	1,383	520	7	65	3,557	10,533	8,082	18,615
1996	16	5,391	926	89	473	1,488	540	7	65	3,694	11,201	8,403	19,604
1997	16	5,125	874	93	461	1,428	428	7	65	3,671	10,740	8,322	19,062
1998	12	4,671	772	108	434	1,314	380	8	65	3,856	10,306	8,749	19,054
1999	14	4,857	828	111	534	1,473	400	9	64	3,906	10,722	8,938	19,660
2000	11	5,100	905	95	564	1,563	430	9	61	4,069	11,242	9,258	20,500
2001	11	4,907	908	95	535	1,539	374	9	60	4,098	10,998	^R 9,219	^R 20,217
2002	12	4,994	860	60	543	1,463	380	10	59	4,318	11,235	9,675	20,911
2003	12	^R 5,231	905	70	564	1,539	400	13	58	4,346	^R 11,599	9,654	^R 21,253
2004	13	4,970	924	85	531	1,539	410	14	59	4,414	11,419	9,824	21,243

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Liquefied petroleum gases.^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, United States

Year	Coal	Natural Gas ^a	Petroleum						Hydro-electric Power ^d	Biomass ^b	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^b	Kerosene ^b	LPG ^{b,c}	Motor Gasoline	Residual Fuel ^b	Total							
	Million Short Tons	Billion Cubic Feet	Million Barrels						Billion kWh			Billion kWh		Billion kWh	
1960	17	1,020	85	8	15	13	89	210	0	--	--	159	--	394	--
1965	11	1,444	92	9	19	15	103	238	0	--	--	231	--	552	--
1970	7	2,399	101	11	27	16	114	269	0	--	--	352	--	853	--
1975	7	2,508	101	9	25	17	78	230	0	--	--	468	--	1,127	--
1980	5	2,611	89	7	16	20	90	222	0	--	--	559	--	1,348	--
1985	6	2,432	108	6	16	18	36	185	0	--	--	689	--	1,588	--
1990	5	2,623	92	2	18	21	37	170	^g (s)	--	--	838	--	1,941	--
1995	5	3,031	82	4	20	3	23	132	(s)	--	--	953	--	2,166	--
1996	5	3,158	83	4	23	5	22	137	(s)	--	--	980	--	2,230	--
1997	6	3,215	76	4	22	8	18	129	(s)	--	--	1,027	--	2,327	--
1998	4	2,999	74	5	21	7	14	121	(s)	--	--	1,078	--	2,446	--
1999	4	3,045	75	5	26	5	12	123	(s)	--	--	1,104	--	2,525	--
2000	4	3,182	84	5	28	9	15	140	(s)	--	--	1,159	--	2,638	--
2001	4	3,023	87	6	26	7	11	137	(s)	--	--	1,191	--	^R 2,679	--
2002	4	3,144	76	3	27	9	13	127	(s)	--	--	1,205	--	2,701	--
2003	4	^R 3,179	83	3	27	12	18	143	(s)	--	--	1,197	--	2,660	--
2004	5	3,142	81	4	26	9	19	139	(s)	--	--	1,229	--	2,736	--

Trillion Btu															
1960	402	1,056	494	48	61	67	559	1,228	0	12	0	543	3,240	1,344	4,584
1965	263	1,483	534	54	77	77	645	1,386	0	9	0	789	3,930	1,884	5,814
1970	163	2,455	587	61	102	86	714	1,551	0	8	0	1,201	5,377	2,910	8,287
1975	146	2,556	587	49	93	89	492	1,310	0	8	0	1,598	5,617	3,845	9,462
1980	117	2,666	518	41	57	107	565	1,287	0	21	0	1,906	5,997	4,599	10,596
1985	138	2,503	631	33	58	96	228	1,045	0	24	0	2,351	6,061	5,419	11,481
1990	124	2,698	536	12	64	111	230	953	^g 1	^g 94	^g 3	2,860	^g 6,733	6,622	^g 13,355
1995	116	3,117	479	22	71	18	141	732	1	113	5	3,252	7,335	7,390	14,725
1996	120	3,251	483	21	84	27	137	751	1	129	5	3,344	7,602	7,609	15,210
1997	129	3,306	444	25	81	43	111	704	1	131	6	3,503	7,780	7,941	15,721
1998	101	3,098	429	31	77	39	85	661	1	118	7	3,678	7,664	8,345	16,009
1999	102	3,132	438	27	94	28	73	661	1	121	7	3,766	7,790	8,616	16,407
2000	86	3,254	491	30	99	45	92	756	1	119	8	3,956	8,180	9,001	17,181
2001	88	3,112	508	31	94	37	70	742	1	106	8	4,064	8,120	^R 9,141	^R 17,261
2002	88	3,224	444	16	96	45	80	681	(s)	111	9	4,111	8,223	9,214	17,438
2003	83	^R 3,293	481	19	100	60	111	771	1	119	11	4,085	^R 8,362	9,075	^R 17,437
2004	102	3,197	470	20	94	49	122	756	1	126	12	4,194	8,387	9,334	17,721

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Liquefied petroleum gases.^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be

separately identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, United States

Year	Coal	Net Imports of Coal Coke	Natural Gas ^a	Petroleum									Hydro-electric Power ^e	Biomass ^b	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
				Asphalt and Road Oil ^b	Distillate Fuel ^b	Kero-sene ^b	LPG ^{b,c}	Lubri-cants ^b	Motor Gasoline	Residual Fuel ^b	Other ^d	Total							
	Million Short Tons		Billion Cubic Feet	Million Barrels									Billion kWh			Billion kWh		Billion kWh	
1960	177	(s)	5,771	111	174	28	122	18	73	252	214	991	4	--	--	324	--	803	--
1965	201	-1	7,112	134	197	29	172	23	65	252	313	1,185	3	--	--	429	--	1,024	--
1970	187	-2	9,249	163	211	33	255	26	55	258	390	1,390	3	--	--	571	--	1,382	--
1975	147	1	8,365	153	230	21	308	25	43	240	455	1,474	3	--	--	688	--	1,654	--
1980	127	-1	8,198	145	227	32	429	30	30	215	664	1,772	3	--	--	815	--	1,966	--
1985	116	-1	6,867	155	192	8	469	27	41	119	472	1,484	3	--	--	837	--	1,927	--
1990	115	(s)	8,255	176	198	2	444	31	35	65	620	1,571	⁹ 3	--	--	946	--	2,189	--
1995	106	2	9,384	178	194	3	557	29	38	54	624	1,677	5	--	--	1,013	--	2,301	--
1996	103	1	9,685	177	204	3	578	28	38	53	681	1,764	6	--	--	1,034	--	2,352	--
1997	102	2	9,714	184	207	3	590	30	41	46	707	1,808	6	--	--	1,038	--	2,354	--
1998	96	3	9,493	190	208	4	567	31	38	37	693	1,768	5	--	--	1,051	--	2,385	--
1999	93	2	9,158	200	204	2	624	32	29	33	714	1,838	5	--	--	1,058	--	2,421	--
2000	94	3	9,293	192	206	3	630	31	29	38	666	1,795	4	--	--	1,064	--	2,422	--
2001	91	1	8,463	189	223	4	568	29	57	32	683	1,786	3	--	--	985	--	^R 2,215	--
2002	84	2	8,620	187	207	2	609	28	59	30	678	1,801	4	--	--	990	--	2,219	--
2003	86	2	^R 8,273	184	195	4	570	26	62	35	713	1,790	4	--	--	1,012	--	2,247	--
2004	86	6	8,349	196	208	5	603	27	71	40	761	1,912	3	--	--	1,019	--	2,267	--

Trillion Btu																			
1960	4,548	-6	5,973	734	1,016	161	489	107	381	1,584	1,276	5,748	39	680	0	1,107	18,089	2,738	20,827
1965	5,134	-18	7,350	890	1,150	165	688	137	342	1,582	1,833	6,789	33	855	0	1,463	21,606	3,493	25,099
1970	4,664	-58	9,498	1,082	1,226	185	964	155	288	1,624	2,264	7,788	34	1,019	0	1,948	24,892	4,714	29,607
1975	3,658	14	8,571	1,014	1,339	119	1,144	149	223	1,509	2,649	8,148	32	1,063	0	2,346	23,832	5,643	29,475
1980	3,155	-35	8,409	962	1,324	181	1,577	182	158	1,349	3,794	9,527	33	1,600	0	2,781	25,471	6,708	32,178
1985	2,777	-13	7,096	1,029	1,119	44	1,690	166	218	748	2,726	7,741	33	1,875	0	2,855	22,363	6,576	28,939
1990	2,754	5	8,520	1,170	1,150	12	1,608	186	185	411	3,554	8,277	⁹ 31	⁹ 1,634	⁹ 2	3,226	⁹ 24,449	7,469	⁹ 31,918
1995	2,500	61	9,678	1,178	1,131	15	2,019	178	200	337	3,558	8,617	55	1,847	3	3,455	26,216	7,852	34,068
1996	2,438	23	9,999	1,176	1,187	18	2,089	173	200	335	3,878	9,056	61	1,907	3	3,527	27,013	8,024	35,037
1997	2,396	46	10,109	1,224	1,203	19	2,134	182	212	291	4,026	9,290	58	1,915	3	3,542	27,360	8,030	35,390
1998	2,254	67	9,882	1,263	1,211	22	2,048	191	199	230	3,951	9,116	55	1,784	3	3,587	26,748	8,138	34,886
1999	2,188	58	9,438	1,324	1,187	13	2,256	193	152	207	4,064	9,396	49	1,791	4	3,611	26,534	8,262	34,796
2000	2,259	65	9,459	1,276	1,200	16	2,271	190	150	241	3,775	9,119	42	1,781	4	3,631	26,362	8,263	34,625
2001	2,194	29	8,684	1,257	1,300	23	2,054	174	295	203	3,914	9,220	33	1,593	5	3,359	25,116	^R 7,556	^R 32,672
2002	2,020	61	9,088	1,240	1,204	14	2,200	172	309	190	3,882	9,211	39	1,565	5	3,378	25,367	7,571	32,938
2003	2,044	51	^R 8,771	1,220	1,136	24	2,068	159	324	220	4,089	9,240	43	1,533	3	3,452	^R 25,137	7,668	^R 32,805
2004	2,046	138	8,477	1,304	1,214	28	2,181	161	372	249	4,361	9,871	33	1,638	4	3,475	25,681	7,734	33,415

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Liquefied petroleum gases.^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, United States

Year	Coal	Natural Gas ^a	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^b	Distillate Fuel ^b	Jet Fuel ^b	LPG ^{b,c}	Lubricants ^b	Motor Gasoline	Residual Fuel ^b	Total		Billion Kilowatthours		Billion Kilowatthours	
	Million Short Tons	Billion Cubic Feet	Million Barrels								Million Barrels	Million Barrels		Million Barrels	
1960	3	347	59	153	136	5	25	1,367	134	1,880	0	3	--	8	--
1965	1	501	44	188	220	8	24	1,596	123	2,203	0	3	--	7	--
1970	(s)	722	20	269	353	12	24	2,040	121	2,839	0	3	--	8	--
1975	(s)	583	14	364	362	11	26	2,377	113	3,267	0	3	--	7	--
1980	0	635	13	480	389	5	28	2,357	222	3,494	0	3	--	8	--
1985	0	504	10	544	445	8	26	2,434	125	3,591	^f 15	4	--	10	--
1990	0	660	9	629	556	6	29	2,584	162	3,974	18	5	--	11	--
1995	0	705	8	720	553	5	28	2,801	145	4,259	33	5	--	11	--
1996	0	718	7	767	578	4	27	2,845	135	4,363	24	5	--	11	--
1997	0	760	8	802	583	4	28	2,877	113	4,416	30	5	--	11	--
1998	0	645	7	826	592	5	30	2,967	107	4,533	33	5	--	11	--
1999	0	657	8	859	611	4	30	3,043	106	4,659	34	5	--	12	--
2000	0	655	7	887	631	3	30	3,063	141	4,762	39	5	--	12	--
2001	0	640	7	908	604	4	27	3,079	93	4,722	41	5	--	12	--
2002	0	682	7	926	589	4	27	3,161	108	4,821	49	6	--	12	--
2003	0	683	6	973	576	4	25	3,187	91	4,862	67	7	--	15	--
2004	0	592	6	1,018	597	5	25	3,252	118	5,021	85	7	--	16	--

Trillion Btu															
1960	76	359	298	892	739	20	152	7,183	844	10,126	0	10	10,572	26	10,597
1965	16	518	222	1,093	1,215	33	149	8,386	770	11,868	0	10	12,412	24	12,435
1970	7	740	100	1,569	1,973	44	147	10,716	761	15,310	0	11	16,068	26	16,094
1975	1	595	71	2,121	2,029	42	155	12,485	711	17,614	0	10	18,219	24	18,244
1980	0	650	64	2,795	2,179	17	172	12,383	1,398	19,009	0	11	19,669	27	19,696
1985	0	521	50	3,170	2,497	28	156	12,784	786	19,471	^f 52	14	^f 20,057	33	^f 20,090
1990	0	683	45	3,661	3,129	22	176	13,575	1,016	21,625	63	16	22,387	38	22,424
1995	0	728	40	4,195	3,132	17	168	14,607	911	23,069	117	17	23,814	39	23,853
1996	0	740	37	4,469	3,274	15	163	14,837	851	23,647	84	17	24,404	38	24,442
1997	0	790	40	4,672	3,308	13	172	14,999	712	23,917	106	17	24,723	38	24,761
1998	0	667	35	4,812	3,357	17	180	15,463	674	24,537	117	17	25,221	38	25,259
1999	0	675	39	5,001	3,462	13	182	15,855	665	25,218	122	17	25,911	40	25,951
2000	0	672	36	5,165	3,580	11	179	15,960	888	25,820	139	18	26,510	42	26,551
2001	0	657	35	5,292	3,426	13	164	16,041	586	25,556	147	19	26,232	42	26,274
2002	0	711	34	5,392	3,340	13	162	16,465	677	26,084	175	19	26,814	42	26,856
2003	0	712	30	5,666	3,265	16	150	16,597	571	26,296	238	24	27,032	52	27,084
2004	0	608	31	5,932	3,383	18	152	16,959	740	27,214	299	24	27,846	54	27,900

^a Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^c Liquefied petroleum gases

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but

is counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, United States

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Million Short Tons	Billion Cubic Feet	Million Barrels				Billion Kilowatthours			Billion Kilowatthours				
1960	177	1,725	84	4	0	88	1	146	--	(s)	0	0	5	--
1965	245	2,321	110	5	0	115	4	194	--	(s)	0	0	(s)	--
1970	320	3,932	311	24	3	339	22	248	--	1	0	0	2	--
1975	406	3,158	467	39	(s)	506	173	300	--	3	0	0	6	--
1980	569	3,682	391	29	1	421	251	276	--	5	0	0	21	--
1985	694	3,044	159	15	1	175	384	281	--	9	(s)	(s)	41	--
1990	783	3,245	185	17	5	207	577	290	--	ⁱ 15	ⁱ (s)	ⁱ 3	2	--
1995	850	4,237	90	19	13	122	673	305	--	13	(s)	3	39	--
1996	897	3,807	100	19	13	132	675	341	--	14	1	3	40	--
1997	921	4,065	114	19	17	150	629	351	--	15	1	3	34	--
1998	937	4,588	167	23	21	210	674	318	--	15	1	3	26	--
1999	941	4,820	152	24	19	195	728	315	--	15	(s)	4	29	--
2000	986	5,206	139	30	16	185	754	271	--	14	(s)	6	34	--
2001	964	5,342	160	29	17	206	769	214	--	14	1	7	22	--
2002	978	5,672	105	22	29	156	780	260	--	14	1	10	21	--
2003	1,005	5,135	138	28	29	195	764	272	--	14	1	11	6	--
2004	1,016	5,463	140	19	37	196	789	265	--	15	1	14	11	--
Trillion Btu														
1960	4,227	1,785	530	22	0	553	6	1,569	2	1	0	0	15	8,157
1965	5,821	2,408	693	29	0	722	43	2,026	3	4	0	0	(s)	11,028
1970	7,228	4,048	1,958	141	19	2,117	239	2,600	4	11	0	0	7	16,254
1975	8,789	3,232	2,937	226	2	3,166	1,900	3,122	2	70	0	0	21	20,302
1980	12,158	3,804	2,459	169	5	2,634	2,739	2,867	4	110	0	0	71	24,387
1985	14,586	3,157	998	85	7	1,090	4,076	2,937	14	198	(s)	(s)	140	26,199
1990	16,259	3,333	1,163	97	30	1,289	6,104	3,014	ⁱ 317	ⁱ 326	ⁱ 4	ⁱ 29	8	ⁱ 30,683
1995	17,465	4,327	566	108	81	755	7,075	3,149	422	280	5	33	134	33,644
1996	18,428	3,882	628	109	80	817	7,087	3,528	438	300	5	33	137	34,656
1997	18,903	4,147	715	111	102	927	6,597	3,581	446	309	5	34	116	35,064
1998	19,216	4,698	1,047	136	124	1,306	7,068	3,241	444	311	5	31	88	36,408
1999	19,279	4,924	959	140	112	1,211	7,610	3,218	453	312	5	46	99	37,157
2000	20,220	5,318	871	175	99	1,144	7,862	2,768	453	296	5	57	115	38,238
2001	^R 19,614	5,477	1,003	171	103	1,277	8,033	2,209	450	289	6	70	75	^R 37,498
2002	19,783	5,789	659	127	175	961	8,143	2,650	516	305	6	105	72	38,329
2003	20,185	5,259	869	161	175	1,205	7,959	2,781	522	303	5	115	22	38,355
2004	20,305	5,650	879	111	222	1,212	8,222	2,656	509	311	6	142	39	39,052

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in the Technical Notes.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

State Consumption Tables

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Alabama

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	15,578	184	2,160	280	5,393	1,126	1,046	3,211	661	24,578	4,292	752	43,498	0	6,239	--	--	-20,024	--
1965	21,473	229	2,749	446	5,251	1,156	908	4,207	741	28,919	2,553	2,142	49,072	0	7,103	--	--	-32,009	--
1970	27,653	298	3,176	349	8,512	1,799	1,310	7,583	812	37,003	3,290	2,877	66,710	0	7,632	--	--	-21,756	--
1975	26,609	264	2,706	249	14,697	1,707	673	6,540	1,049	45,174	12,953	3,910	89,656	2,722	12,213	--	--	-28,813	--
1980	27,042	269	3,132	248	15,190	2,048	1,253	4,949	992	44,296	7,296	4,532	83,937	23,497	9,408	--	--	-69,875	--
1985	27,145	219	3,757	172	14,520	3,516	108	3,648	903	43,476	2,249	6,215	78,565	14,313	6,886	--	--	-52,584	--
1990	27,713	245	4,321	116	21,579	1,899	64	4,160	1,016	49,199	3,915	6,693	92,962	12,052	10,367	--	--	-37,216	--
1995	34,389	323	4,994	97	23,653	3,843	121	5,115	969	55,472	3,110	6,017	103,390	20,752	9,502	--	--	-73,034	--
1996	37,140	327	5,704	93	23,628	3,508	121	4,845	941	54,999	3,154	3,647	100,639	29,708	11,082	--	--	-111,065	--
1997	36,692	324	5,467	103	23,057	2,183	127	4,269	994	55,694	2,542	3,838	98,274	29,573	11,521	--	--	-101,962	--
1998	36,415	329	4,455	82	22,409	3,522	101	3,252	1,040	57,416	1,440	3,525	97,241	28,663	10,565	--	--	-89,267	--
1999	38,216	337	4,597	102	24,061	1,963	83	7,025	1,051	57,669	1,461	3,599	101,611	30,892	7,760	--	--	-83,392	--
2000	40,103	354	5,129	83	24,607	2,348	78	7,381	1,036	57,162	4,229	3,353	105,406	31,369	5,818	--	--	-84,603	--
2001	R 37,694	333	4,335	82	23,337	2,343	75	7,163	949	57,718	1,517	6,391	103,910	30,357	8,356	--	--	R -100,243	--
2002	R 37,072	379	4,540	54	22,718	2,257	43	5,273	938	61,607	3,989	6,676	108,095	31,857	8,825	--	--	-110,636	--
2003	R 39,306	351	4,643	74	27,155	2,569	104	4,195	867	59,207	1,284	6,998	107,095	31,677	12,665	--	--	R -119,664	--
2004	38,908	388	6,725	80	31,319	2,554	128	4,458	878	62,116	1,699	7,162	117,119	31,636	10,626	--	--	-104,980	--

Trillion Btu																			
1960	395.4	190.7	14.3	1.4	31.4	6.1	5.9	12.9	4.0	129.1	27.0	4.5	236.6	0.0	67.1	45.7	0.0	-68.3	867.2
1965	533.1	236.9	18.2	2.3	30.6	6.2	5.2	16.9	4.5	151.9	16.0	12.7	264.4	0.0	74.2	47.6	0.0	-109.2	1,047.2
1970	675.6	307.8	21.1	1.8	49.6	9.9	7.4	28.7	4.9	194.4	20.7	16.9	355.3	0.0	80.1	52.4	0.0	-74.2	1,396.9
1975	640.1	271.7	18.0	1.3	85.6	9.4	3.8	24.3	6.4	237.3	81.4	23.1	490.6	30.0	127.1	57.6	0.0	-98.3	1,518.7
1980	661.0	278.4	20.8	1.3	88.5	11.3	7.1	18.2	6.0	232.7	45.9	26.2	457.9	256.3	97.7	141.0	0.0	-238.4	1,654.0
1985	662.9	227.8	24.9	0.9	84.6	19.7	0.6	13.1	5.5	228.4	14.1	35.3	427.2	152.0	71.9	175.4	0.0	-179.4	1,539.1
1990	682.5	252.5	28.7	0.6	125.7	10.6	0.4	15.1	6.2	258.4	24.6	37.2	507.4	127.5	107.8	143.7	0.2	-127.0	1,696.2
1995	828.3	332.4	33.1	0.5	137.8	21.8	0.7	18.5	5.9	289.3	19.6	33.4	560.5	218.0	98.0	222.0	0.2	-249.2	2,010.1
1996	890.7	337.8	37.9	0.5	137.6	19.9	0.7	17.5	5.7	286.9	19.8	20.7	547.2	312.0	114.6	208.6	0.2	-379.0	2,032.1
1997	867.3	337.5	36.3	0.5	134.3	12.4	0.7	15.4	6.0	290.3	16.0	21.9	533.8	310.3	117.7	181.9	0.2	-347.9	2,000.7
1998	856.5	342.0	29.6	0.4	130.5	20.0	0.6	11.8	6.3	299.3	9.1	20.0	527.4	300.7	107.7	209.2	0.2	-304.6	2,039.1
1999	866.5	349.1	30.5	0.5	140.2	11.1	0.5	25.4	6.4	300.5	9.2	20.3	544.6	322.8	79.3	210.8	0.2	-284.5	2,088.8
2000	904.2	368.5	34.0	0.4	143.3	13.3	0.4	26.6	6.3	297.8	26.6	18.9	567.8	327.1	59.3	203.9	0.2	-288.7	2,142.4
2001	R 842.3	344.0	28.8	0.4	135.9	13.3	0.4	25.9	5.8	300.7	9.5	35.4	556.1	317.2	86.3	R 165.8	0.2	R -342.0	R 1,969.9
2002	R 846.0	399.6	30.1	0.3	132.3	12.8	0.2	19.1	5.7	320.9	25.1	37.1	583.5	332.6	89.8	R 163.2	0.2	-377.5	R 2,037.3
2003	R 873.7	R 351.0	30.8	0.4	158.2	14.6	0.6	15.2	5.3	308.3	8.1	39.0	580.3	330.1	129.7	R 156.2	0.1	-408.3	R 2,012.9
2004	853.9	404.0	44.6	0.4	182.4	14.5	0.7	16.1	5.3	323.9	10.7	39.7	638.5	329.9	106.5	185.0	0.1	-358.2	2,159.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alabama

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	162	41	36	163	2,101	2,300	1,084	--	--	4,129	--	10,212	--
1965	56	48	24	169	2,672	2,865	765	--	--	6,150	--	14,686	--
1970	71	56	36	236	4,920	5,192	515	--	--	11,527	--	27,901	--
1975	6	52	74	134	3,916	4,124	530	--	--	13,409	--	32,247	--
1980	48	52	13	198	2,589	2,800	817	--	--	16,469	--	39,709	--
1985	27	44	24	73	2,088	2,184	1,456	--	--	17,182	--	39,582	--
1990	21	45	17	38	2,688	2,743	757	--	--	20,719	--	47,927	--
1995	1	50	10	66	2,849	2,926	602	--	--	24,314	--	55,232	--
1996	5	57	10	64	2,922	2,996	625	--	--	25,634	--	58,307	--
1997	8	48	40	57	3,008	3,106	329	--	--	24,893	--	56,413	--
1998	1	47	6	40	2,591	2,638	292	--	--	27,327	--	61,992	--
1999	3	43	6	44	4,669	4,720	307	--	--	27,048	--	61,884	--
2000	6	47	12	46	4,925	4,983	330	--	--	28,756	--	65,425	--
2001	2	49	39	39	3,970	4,047	266	--	--	27,802	--	^R 62,529	--
2002	(s)	46	37	22	3,372	3,430	270	--	--	30,022	--	67,257	--
2003	(s)	47	7	49	2,633	2,690	284	--	--	29,416	--	^R 65,344	--
2004	(s)	44	13	67	2,783	2,863	291	--	--	30,109	--	67,018	--
Trillion Btu													
1960	4.0	42.3	0.2	0.9	8.4	9.6	21.7	0.0	0.0	14.1	91.6	34.8	126.5
1965	1.4	49.7	0.1	1.0	10.7	11.8	15.3	0.0	0.0	21.0	99.2	50.1	149.3
1970	1.7	57.5	0.2	1.3	18.6	20.1	10.3	0.0	0.0	39.3	129.0	95.2	224.2
1975	0.1	53.8	0.4	0.8	14.5	15.7	10.6	0.0	0.0	45.8	126.0	110.0	236.1
1980	1.2	54.1	0.1	1.1	9.5	10.7	16.3	0.0	0.0	56.2	138.5	135.5	274.0
1985	0.7	45.4	0.1	0.4	7.5	8.1	29.1	0.0	0.0	58.6	141.8	135.1	276.9
1990	0.5	46.7	0.1	0.2	9.7	10.1	15.1	^f (s)	^f 0.1	70.7	^f 143.3	163.5	^f 306.8
1995	(s)	51.0	0.1	0.4	10.3	10.8	12.0	(s)	0.2	83.0	157.0	188.5	345.4
1996	0.1	58.4	0.1	0.4	10.6	11.0	12.5	(s)	0.2	87.5	169.6	198.9	368.6
1997	0.2	50.5	0.2	0.3	10.9	11.4	6.6	(s)	0.1	84.9	153.8	192.5	346.3
1998	(s)	48.4	(s)	0.2	9.4	9.6	5.8	(s)	0.1	93.2	157.3	211.5	368.8
1999	0.1	44.2	(s)	0.2	16.9	17.2	6.1	(s)	0.1	92.3	160.0	211.1	371.2
2000	0.1	49.5	0.1	0.3	17.8	18.1	6.6	(s)	0.1	98.1	172.6	223.2	395.9
2001	(s)	50.8	0.2	0.2	14.3	14.8	5.3	(s)	0.1	94.9	166.0	^R 213.3	^R 379.3
2002	(s)	49.5	0.2	0.1	12.2	12.5	5.4	(s)	0.1	102.4	170.0	229.5	399.5
2003	(s)	46.2	(s)	0.3	9.6	9.9	5.7	(s)	0.1	100.4	162.2	223.0	385.2
2004	(s)	45.9	0.1	0.4	10.1	10.5	5.8	(s)	0.1	102.7	165.1	228.7	393.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alabama

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowattsales	Million Kilowattlosses ^e							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	112	17	264	294	371	327	(s)	1,257	0	--	--	2,390	--	5,910	--
1965	42	32	175	306	472	327	(s)	1,280	0	--	--	3,443	--	8,222	--
1970	56	36	264	426	868	391	(s)	1,950	0	--	--	5,144	--	12,452	--
1975	14	33	547	242	691	453	1	1,934	0	--	--	6,493	--	15,614	--
1980	180	29	641	176	457	258	3	1,535	0	--	--	7,190	--	17,336	--
1985	96	26	913	16	368	251	514	2,061	0	--	--	8,805	--	20,285	--
1990	84	24	739	11	474	258	606	2,088	^g 0	--	--	11,589	--	26,809	--
1995	6	26	644	10	503	42	3	1,201	0	--	--	12,845	--	29,180	--
1996	39	29	556	9	516	42	1	1,123	0	--	--	13,948	--	31,726	--
1997	65	32	537	9	531	41	0	1,118	0	--	--	17,043	--	38,624	--
1998	8	26	567	21	457	41	0	1,086	0	--	--	18,307	--	41,528	--
1999	20	28	570	6	824	41	0	1,441	0	--	--	18,820	--	43,060	--
2000	47	26	748	9	869	41	(s)	1,668	0	--	--	19,734	--	44,897	--
2001	14	26	837	26	701	43	0	1,606	0	--	--	19,607	--	^R 44,097	--
2002	3	25	783	16	595	43	0	1,438	0	--	--	20,430	--	45,769	--
2003	3	25	1,059	24	465	43	0	1,592	0	--	--	20,411	--	^R 45,339	--
2004	(s)	26	1,105	25	491	44	0	1,665	0	--	--	21,166	--	47,112	--
Trillion Btu															
1960	2.8	18.1	1.5	1.7	1.5	1.7	(s)	6.4	0.0	0.4	0.0	8.2	35.9	20.2	56.0
1965	1.1	33.0	1.0	1.7	1.9	1.7	(s)	6.4	0.0	0.3	0.0	11.7	52.5	28.1	80.6
1970	1.3	37.4	1.5	2.4	3.3	2.1	(s)	9.3	0.0	0.2	0.0	17.6	65.8	42.5	108.2
1975	0.3	34.4	3.2	1.4	2.6	2.4	(s)	9.5	0.0	0.2	0.0	22.2	66.6	53.3	119.9
1980	4.3	29.5	3.7	1.0	1.7	1.4	(s)	7.8	0.0	0.4	0.0	24.5	66.5	59.2	125.7
1985	2.3	26.8	5.3	0.1	1.3	1.3	3.2	11.3	0.0	0.7	0.0	30.0	71.2	69.2	140.4
1990	2.1	25.0	4.3	0.1	1.7	1.4	3.8	11.2	^g 0.0	^g 1.7	^g 0.0	39.5	^g 79.5	91.5	^g 171.0
1995	0.2	27.0	3.8	0.1	1.8	0.2	(s)	5.9	0.0	1.6	0.0	43.8	78.5	99.6	178.0
1996	1.0	30.0	3.2	0.1	1.9	0.2	(s)	5.4	0.0	1.7	0.0	47.6	85.6	108.2	193.8
1997	1.6	33.7	3.1	0.1	1.9	0.2	0.0	5.3	0.0	1.1	0.0	58.2	99.9	131.8	231.6
1998	0.2	26.7	3.3	0.1	1.7	0.2	0.0	5.3	0.0	1.0	0.0	62.5	95.6	141.7	237.3
1999	0.5	28.6	3.3	(s)	3.0	0.2	0.0	6.5	0.0	1.0	0.0	64.2	100.9	146.9	247.8
2000	1.2	26.7	4.4	0.1	3.1	0.2	(s)	7.8	0.0	1.1	0.0	67.3	104.1	153.2	257.3
2001	0.3	27.2	4.9	0.1	2.5	0.2	0.0	7.8	0.0	0.9	0.0	66.9	103.1	^R 150.5	^R 253.6
2002	0.1	26.6	4.6	0.1	2.1	0.2	0.0	7.0	0.0	1.0	0.0	69.7	104.4	156.2	260.6
2003	0.1	^R 25.1	6.2	0.1	1.7	0.2	0.0	8.2	0.0	1.0	0.0	69.6	104.1	154.7	^R 258.7
2004	(s)	27.6	6.4	0.1	1.8	0.2	0.0	8.6	0.0	1.0	0.0	72.2	109.4	160.7	270.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alabama

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	7,904	109	2,160	2,511	589	708	265	382	2,014	752	9,380	26	--	--	8,966	--	22,173
1965	8,774	132	2,749	1,962	434	1,020	311	372	945	2,142	9,935	25	--	--	13,636	--	32,563
1970	11,177	171	3,176	2,833	648	1,696	391	204	1,611	2,428	12,987	25	--	--	18,041	--	43,667
1975	9,288	156	2,706	4,475	297	1,846	440	198	5,814	3,910	19,686	25	--	--	20,473	--	49,235
1980	7,221	171	3,132	3,356	879	1,857	506	104	3,787	4,532	18,154	24	--	--	26,708	--	64,397
1985	5,476	138	3,757	2,597	19	1,031	461	507	96	6,215	14,683	24	--	--	24,179	--	55,699
1990	5,525	156	4,321	4,580	15	901	519	443	444	6,693	17,916	⁹ 0	--	--	27,618	--	63,886
1995	5,543	218	4,994	4,397	45	1,670	495	674	504	6,017	18,795	0	--	--	32,847	--	74,617
1996	5,792	215	5,704	5,086	48	1,330	480	678	705	3,647	17,677	0	--	--	33,523	--	76,251
1997	5,694	211	5,467	4,407	61	661	507	719	600	3,838	16,261	0	--	--	32,617	--	73,918
1998	4,846	209	4,455	3,726	40	187	531	519	613	3,525	13,596	0	--	--	33,539	--	76,084
1999	4,645	220	4,597	3,735	34	1,517	537	443	594	3,599	15,054	0	--	--	34,533	--	79,010
2000	4,415	216	5,129	2,938	22	1,548	529	443	1,338	3,353	15,300	0	--	--	35,034	--	79,709
2001	^R 3,877	168	4,335	3,212	11	2,481	484	1,002	796	6,391	18,712	0	--	--	31,949	--	^R 71,856
2002	^R 3,523	174	4,540	3,281	5	1,290	479	1,068	1,871	6,676	19,208	0	--	--	32,615	--	73,067
2003	^R 3,703	174	4,643	6,817	30	1,035	442	1,133	274	6,998	21,373	0	--	--	34,017	--	^R 75,564
2004	3,824	185	6,725	6,823	36	997	448	1,278	431	7,162	23,900	0	--	--	35,595	--	79,229

Trillion Btu																	
1960	209.9	112.8	14.3	14.6	3.3	2.8	1.6	2.0	12.7	4.5	55.9	0.3	23.6	0.0	30.6	433.0	508.7
1965	232.0	136.0	18.2	11.4	2.5	4.1	1.9	2.0	5.9	12.7	58.7	0.3	32.1	0.0	46.5	505.5	616.6
1970	291.4	176.5	21.1	16.5	3.7	6.4	2.4	1.1	10.1	14.2	75.4	0.3	41.9	0.0	61.6	647.0	796.0
1975	238.8	160.0	18.0	26.1	1.7	6.9	2.7	1.0	36.6	23.1	115.9	0.3	46.8	0.0	69.9	631.7	799.7
1980	187.0	176.3	20.8	19.6	5.0	6.8	3.1	0.5	23.8	26.2	105.8	0.2	124.3	0.0	91.1	684.7	904.5
1985	140.4	143.0	24.9	15.1	0.1	3.7	2.8	2.7	0.6	35.3	85.3	0.2	145.6	0.0	82.5	597.0	787.0
1990	143.3	160.0	28.7	26.7	0.1	3.3	3.1	2.3	2.8	37.2	104.2	⁹ 0.0	⁹ 100.9	⁹ 0.0	94.2	⁹ 602.7	⁹ 820.6
1995	144.1	224.7	33.1	25.6	0.3	6.1	3.0	3.5	3.2	33.4	108.1	0.0	187.7	0.0	112.1	776.7	1,031.3
1996	150.1	221.8	37.9	29.6	0.3	4.8	2.9	3.5	4.4	20.7	104.2	0.0	174.3	0.0	114.4	764.8	1,025.0
1997	146.8	219.5	36.3	25.7	0.3	2.4	3.1	3.7	3.8	21.9	97.1	0.0	155.7	0.0	111.3	730.3	982.5
1998	126.7	217.5	29.6	21.7	0.2	0.7	3.2	2.7	3.9	20.0	81.9	0.0	184.2	0.0	114.4	724.8	984.4
1999	121.4	227.4	30.5	21.8	0.2	5.5	3.3	2.3	3.7	20.3	87.6	0.0	191.5	(s)	117.8	745.8	1,015.3
2000	116.7	225.2	34.0	17.1	0.1	5.6	3.2	2.3	8.4	18.9	89.7	0.0	193.0	(s)	119.5	744.1	1,016.1
2001	^R 102.1	173.6	28.8	18.7	0.1	9.0	2.9	5.2	5.0	35.4	105.1	0.0	^R 156.0	(s)	109.0	^R 645.8	^R 891.0
2002	^R 92.8	185.0	30.1	19.1	(s)	4.7	2.9	5.6	11.8	37.1	111.2	0.0	^R 153.8	(s)	111.3	^R 654.1	^R 903.4
2003	^R 97.8	172.4	30.8	39.7	0.2	3.8	2.7	5.9	1.7	39.0	123.7	0.0	^R 146.5	(s)	116.1	^R 656.5	^R 914.3
2004	100.5	193.8	44.6	39.7	0.2	3.6	2.7	6.7	2.7	39.7	140.0	0.0	175.0	(s)	121.5	730.8	1,001.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alabama

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	136	8	280	2,582	1,126	31	396	23,869	2,278	30,562	0	0	--	0	--
1965	29	12	446	3,090	1,156	43	430	28,220	1,608	34,993	0	0	--	0	--
1970	18	20	349	5,353	1,799	98	421	36,408	1,679	46,107	0	0	--	0	--
1975	2	17	249	9,087	1,707	87	609	44,523	7,039	63,300	0	0	--	0	--
1980	0	16	248	11,049	2,048	46	486	43,934	3,506	61,318	0	0	--	0	--
1985	0	11	172	10,899	3,516	161	442	42,718	1,640	59,548	^f 369	0	--	0	--
1990	0	15	116	16,110	1,899	96	497	48,498	2,865	70,082	467	0	--	0	--
1995	0	20	97	18,421	3,843	93	475	54,756	2,603	80,288	581	(s)	--	(s)	--
1996	0	19	93	17,676	3,508	78	461	54,279	2,448	78,543	101	(s)	--	(s)	--
1997	0	21	103	17,842	2,183	68	487	54,934	1,942	77,559	99	0	--	0	--
1998	0	20	82	17,637	3,522	17	509	56,856	826	79,448	82	0	--	0	--
1999	0	22	102	19,453	1,963	15	515	57,185	868	80,100	11	0	--	0	--
2000	0	23	83	20,440	2,348	40	507	56,678	2,891	82,986	0	0	--	0	--
2001	0	20	82	18,709	2,343	11	465	56,673	721	79,004	373	0	--	0	--
2002	0	22	54	18,259	2,257	16	459	60,496	2,118	83,661	254	0	--	0	--
2003	0	19	74	18,810	2,569	61	424	58,031	1,010	80,980	367	(s)	--	(s)	--
2004	0	16	80	23,139	2,554	186	430	60,795	1,268	88,452	726	(s)	--	(s)	--
Trillion Btu															
1960	3.4	7.9	1.4	15.0	6.1	0.1	2.4	125.4	14.3	164.7	0.0	0.0	176.0	0.0	176.0
1965	0.7	12.4	2.3	18.0	6.2	0.2	2.6	148.2	10.1	187.6	0.0	0.0	200.7	0.0	200.7
1970	0.4	20.5	1.8	31.2	9.9	0.4	2.6	191.3	10.6	247.6	0.0	0.0	268.5	0.0	268.5
1975	(s)	17.3	1.3	52.9	9.4	0.3	3.7	233.9	44.3	345.8	0.0	0.0	363.1	0.0	363.1
1980	0.0	17.0	1.3	64.4	11.3	0.2	2.9	230.8	22.0	332.9	0.0	0.0	349.9	0.0	349.9
1985	0.0	11.5	0.9	63.5	19.7	0.6	2.7	224.4	10.3	322.0	^f 1.3	0.0	^f 334.8	0.0	^f 334.8
1990	0.0	15.1	0.6	93.8	10.6	0.3	3.0	254.8	18.0	381.1	1.7	0.0	397.8	0.0	397.8
1995	0.0	20.7	0.5	107.3	21.8	0.3	2.9	285.6	16.4	434.7	2.1	(s)	455.4	(s)	455.4
1996	0.0	19.8	0.5	103.0	19.9	0.3	2.8	283.1	15.4	424.9	0.4	(s)	444.7	(s)	444.7
1997	0.0	21.6	0.5	103.9	12.4	0.2	3.0	286.4	12.2	418.6	0.4	0.0	440.2	0.0	440.2
1998	0.0	20.8	0.4	102.7	20.0	0.1	3.1	296.3	5.2	427.8	0.3	0.0	448.6	0.0	448.6
1999	0.0	23.0	0.5	113.3	11.1	0.1	3.1	298.0	5.5	431.6	(s)	0.0	454.5	0.0	454.5
2000	0.0	23.7	0.4	119.1	13.3	0.1	3.1	295.3	18.2	449.5	0.0	0.0	473.2	0.0	473.2
2001	0.0	20.7	0.4	109.0	13.3	(s)	2.8	295.3	4.5	425.3	1.3	0.0	446.0	0.0	446.0
2002	0.0	23.3	0.3	106.4	12.8	0.1	2.8	315.1	13.3	450.7	0.9	0.0	473.9	0.0	473.9
2003	0.0	18.8	0.4	109.6	14.6	0.2	2.6	302.2	6.4	435.8	1.3	(s)	454.7	(s)	454.7
2004	0.0	16.7	0.4	134.8	14.5	0.7	2.6	317.0	8.0	478.0	2.6	(s)	494.7	(s)	494.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Alabama

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	7,264	9	0	(s)	0	(s)	0	6,213	--	0	0	0	0	--
1965	12,572	6	0	0	0	0	0	7,078	--	0	0	0	0	--
1970	16,331	15	0	26	448	474	0	7,607	--	0	0	0	0	--
1975	17,301	6	99	514	0	613	2,722	12,188	--	0	0	0	0	--
1980	19,593	1	0	131	0	131	23,497	9,385	--	0	0	0	0	--
1985	21,545	1	0	88	0	88	14,313	6,862	--	0	0	0	0	--
1990	22,084	5	0	133	0	133	12,052	10,367	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	28,839	9	0	181	0	181	20,752	9,502	--	0	0	0	0	--
1996	31,303	8	0	300	0	300	29,708	11,082	--	0	0	0	0	--
1997	30,925	12	0	230	0	230	29,573	11,521	--	0	0	0	0	--
1998	31,560	28	0	473	0	473	28,663	10,565	--	0	0	0	0	--
1999	33,548	25	0	296	0	296	30,892	7,760	--	0	0	0	0	--
2000	35,636	42	0	469	0	469	31,369	5,818	--	0	0	0	0	--
2001	33,801	69	0	541	0	541	30,357	8,356	--	0	0	0	0	--
2002	33,545	112	0	359	0	359	31,857	8,825	--	0	0	0	0	--
2003	35,600	86	0	460	0	460	31,677	12,665	--	0	0	0	0	--
2004	35,083	117	0	240	0	240	31,636	10,626	--	0	0	0	0	--
Trillion Btu														
1960	175.3	9.7	0.0	(s)	0.0	(s)	0.0	66.9	0.0	0.0	0.0	0.0	0.0	251.8
1965	298.0	5.8	0.0	0.0	0.0	0.0	0.0	74.0	0.0	0.0	0.0	0.0	0.0	377.7
1970	380.7	15.9	0.0	0.2	2.7	2.9	0.0	79.8	0.0	0.0	0.0	0.0	0.0	479.3
1975	400.7	6.2	0.6	3.0	0.0	3.6	30.0	126.8	0.0	0.0	0.0	0.0	0.0	567.4
1980	468.5	1.6	0.0	0.8	0.0	0.8	256.3	97.5	0.0	0.0	0.0	0.0	0.0	824.6
1985	519.5	1.2	0.0	0.5	0.0	0.5	152.0	71.7	0.0	0.0	0.0	0.0	0.0	744.9
1990	536.6	5.7	0.0	0.8	0.0	0.8	127.5	107.8	ⁱ 26.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 804.4
1995	684.0	9.0	0.0	1.1	0.0	1.1	218.0	98.0	20.6	0.0	0.0	0.0	0.0	1,030.7
1996	739.6	7.8	0.0	1.7	0.0	1.7	312.0	114.6	20.1	0.0	0.0	0.0	0.0	1,195.7
1997	718.7	12.2	0.0	1.3	0.0	1.3	310.3	117.7	18.5	0.0	0.0	0.0	0.0	1,178.7
1998	729.6	28.6	0.0	2.8	0.0	2.8	300.7	107.7	18.2	0.0	0.0	0.0	0.0	1,187.5
1999	744.5	26.0	0.0	1.7	0.0	1.7	322.8	79.3	12.2	0.0	0.0	0.0	0.0	1,186.5
2000	786.2	43.4	0.0	2.7	0.0	2.7	327.1	59.3	3.3	0.0	0.0	0.0	0.0	1,222.0
2001	740.0	71.6	0.0	3.1	0.0	3.1	317.2	86.3	3.5	0.0	0.0	0.0	0.0	1,221.8
2002	753.1	115.2	0.0	2.1	0.0	2.1	332.6	89.8	3.1	0.0	0.0	0.0	0.0	1,295.9
2003	775.8	88.5	0.0	2.7	0.0	2.7	330.1	129.7	3.0	0.0	0.0	0.0	0.0	1,329.8
2004	753.4	119.9	0.0	1.4	0.0	1.4	329.9	106.5	3.2	0.0	0.0	0.0	0.0	1,314.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Alaska

Year	Coal ^a	Natural Gas ^b	Petroleum										Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels										Million kWh				Million kWh	
1960	376	2	47	1,032	2,636	1,972	90	46	7	1,657	711	0	8,197	0	290	--	--	0
1965	525	8	132	293	3,788	3,005	10	91	41	2,450	881	284	10,975	0	350	--	--	0
1970	740	64	274	462	5,100	6,735	33	151	60	2,621	1,020	523	16,979	0	363	--	--	0
1975	868	85	319	466	7,090	7,420	123	211	145	4,179	1,075	771	21,800	0	357	--	--	0
1980	273	153	309	498	6,677	9,618	19	191	115	3,676	371	1,446	22,919	0	539	--	--	0
1985	733	213	485	490	10,198	15,231	7	331	104	5,638	3,072	5,925	41,482	0	748	--	--	0
1990	784	343	269	491	10,548	17,367	3	384	117	5,854	426	4,582	40,041	0	975	--	--	0
1995	815	430	83	389	12,803	16,921	1	272	112	7,148	746	3,195	41,670	0	1,372	--	--	0
1996	706	448	26	142	11,837	18,652	1	241	109	6,735	906	4,138	42,786	0	1,266	--	--	0
1997	740	425	55	407	11,979	21,099	1	326	115	6,312	864	4,104	45,261	0	1,099	--	--	0
1998	1,012	435	65	152	11,503	21,865	1	320	120	6,737	828	4,056	45,649	0	1,113	--	--	0
1999	1,019	423	131	529	12,164	23,612	17	266	122	6,426	1,068	4,217	48,552	0	817	--	--	0
2000	1,024	427	310	521	10,875	25,872	14	221	120	5,973	788	3,805	48,500	0	1,002	--	--	0
2001	989	409	1,898	245	11,675	24,262	17	261	110	6,383	1,129	5,119	51,099	0	1,346	--	--	0
2002	1,034	419	362	179	10,815	25,110	(s)	318	108	5,923	1,057	4,828	48,702	0	1,439	--	--	0
2003	790	^R 414	59	156	9,725	27,355	15	314	100	5,919	864	5,500	50,009	0	1,583	--	--	0
2004	891	406	268	184	14,059	30,954	20	209	102	6,947	702	5,421	58,867	0	1,498	--	--	0

Trillion Btu																		
1960	7.2	2.0	0.3	5.2	15.4	10.6	0.5	0.2	(s)	8.7	4.5	0.0	45.4	0.0	3.1	3.7	0.0	61.4
1965	9.9	7.7	0.9	1.5	22.1	16.5	0.1	0.4	0.3	12.9	5.5	1.7	61.7	0.0	3.7	4.9	0.0	87.8
1970	13.2	64.0	1.8	2.3	29.7	37.7	0.2	0.6	0.4	13.8	6.4	3.1	96.0	0.0	3.8	5.0	(s)	182.0
1975	15.3	85.2	2.1	2.4	41.3	41.7	0.7	0.8	0.9	22.0	6.8	4.6	123.1	0.0	3.7	4.9	0.0	232.2
1980	4.3	153.8	2.1	2.5	38.9	54.0	0.1	0.7	0.7	19.3	2.3	8.7	129.3	0.0	5.6	2.7	0.0	295.8
1985	11.6	214.0	3.2	2.5	59.4	85.8	(s)	1.2	0.6	29.6	19.3	35.3	237.0	0.0	7.8	4.0	(s)	474.4
1990	12.4	326.8	1.8	2.5	61.4	97.9	(s)	1.4	0.7	30.8	2.7	27.2	226.4	0.0	10.1	^j 8.2	^j 0.1	^j 584.0
1995	12.9	432.8	0.5	2.0	74.6	95.9	(s)	1.0	0.7	37.3	4.7	19.3	236.0	0.0	14.1	8.3	0.1	704.2
1996	11.2	443.6	0.2	0.7	68.9	105.8	(s)	0.9	0.7	35.1	5.7	24.9	242.8	0.0	13.1	8.0	0.1	718.8
1997	11.7	425.4	0.4	2.1	69.8	119.6	(s)	1.2	0.7	32.9	5.4	24.6	256.7	0.0	11.2	3.7	0.1	708.8
1998	16.5	434.4	0.4	0.8	67.0	124.1	(s)	1.2	0.7	35.1	5.2	24.5	259.0	0.0	11.4	1.9	0.1	723.2
1999	16.4	422.8	0.9	2.7	70.9	134.1	0.1	1.0	0.7	33.5	6.7	25.5	276.0	0.0	8.4	1.8	0.1	725.4
2000	16.5	333.7	2.1	2.6	63.3	146.7	0.1	0.8	0.7	31.1	5.0	23.1	275.5	0.0	10.2	1.9	0.1	637.9
2001	15.9	413.0	12.6	1.2	68.0	137.6	0.1	0.9	0.7	33.3	7.1	30.7	292.2	0.0	13.9	3.0	0.1	738.2
2002	16.4	425.0	2.4	0.9	63.0	143.2	(s)	1.1	0.7	30.8	6.6	29.0	277.8	0.0	14.6	3.2	0.1	737.1
2003	12.6	^R 420.0	0.4	0.8	56.7	155.2	0.1	1.1	0.6	30.8	5.4	33.0	284.1	0.0	16.2	3.3	0.1	^R 736.2
2004	14.1	411.8	1.8	0.9	81.9	175.5	0.1	0.8	0.6	36.2	4.4	32.5	334.8	0.0	15.0	3.3	0.1	779.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alaska

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	38	(s)	866	0	36	902	90	--	--	151	--	539	--
1965	20	1	1,110	10	77	1,197	80	--	--	292	--	1,139	--
1970	13	6	1,362	19	77	1,458	65	--	--	527	--	2,073	--
1975	5	10	1,621	91	69	1,781	71	--	--	898	--	3,227	--
1980	0	8	1,172	0	58	1,231	47	--	--	1,092	--	4,397	--
1985	96	13	1,274	1	192	1,466	93	--	--	1,674	--	4,834	--
1990	99	14	1,557	3	300	1,860	76	--	--	1,661	--	4,512	--
1995	68	15	2,024	(s)	157	2,181	92	--	--	1,713	--	4,113	--
1996	57	16	1,927	(s)	195	2,122	96	--	--	1,766	--	4,190	--
1997	55	15	1,849	(s)	123	1,972	78	--	--	1,726	--	4,184	--
1998	58	16	1,672	1	98	1,771	70	--	--	1,768	--	3,994	--
1999	66	18	2,033	17	213	2,263	73	--	--	1,866	--	3,883	--
2000	58	16	1,731	13	188	1,933	79	--	--	1,855	--	4,371	--
2001	52	17	1,824	16	214	2,054	125	--	--	1,891	--	4,602	--
2002	57	16	1,491	(s)	211	1,702	127	--	--	1,932	--	4,834	--
2003	58	17	1,429	15	234	1,678	134	--	--	1,987	--	4,780	--
2004	55	18	1,687	20	147	1,854	137	--	--	2,062	--	4,902	--
Trillion Btu													
1960	0.7	0.2	5.0	0.0	0.1	5.2	1.8	0.0	0.0	0.5	8.4	1.8	10.2
1965	0.4	1.5	6.5	0.1	0.3	6.8	1.6	0.0	0.0	1.0	11.2	3.9	15.1
1970	0.2	6.2	7.9	0.1	0.3	8.3	1.3	0.0	0.0	1.8	17.9	7.1	25.0
1975	0.1	10.4	9.4	0.5	0.3	10.2	1.4	0.0	0.0	3.1	25.2	11.0	36.2
1980	0.0	7.9	6.8	0.0	0.2	7.0	0.9	0.0	0.0	3.7	19.7	15.0	34.7
1985	1.5	13.3	7.4	(s)	0.7	8.1	1.9	0.0	0.0	5.7	30.6	16.5	47.0
1990	1.6	13.4	9.1	(s)	1.1	10.2	1.5	^f (s)	^f (s)	5.7	^f 32.3	15.4	^f 47.7
1995	1.1	15.3	11.8	(s)	0.6	12.4	1.8	(s)	(s)	5.8	36.5	14.0	50.5
1996	0.9	16.0	11.2	(s)	0.7	11.9	1.9	(s)	(s)	6.0	36.8	14.3	51.1
1997	0.9	15.1	10.8	(s)	0.4	11.2	1.6	(s)	(s)	5.9	34.7	14.3	49.0
1998	0.9	15.6	9.7	(s)	0.4	10.1	1.4	(s)	(s)	6.0	34.1	13.6	47.7
1999	1.0	17.6	11.8	0.1	0.8	12.7	1.5	(s)	(s)	6.4	39.3	13.2	52.5
2000	0.9	12.2	10.1	0.1	0.7	10.8	1.6	(s)	(s)	6.3	31.9	14.9	46.8
2001	0.8	17.0	10.6	0.1	0.8	11.5	2.5	(s)	(s)	6.5	38.3	15.7	54.0
2002	0.9	16.4	8.7	(s)	0.8	9.4	2.5	(s)	(s)	6.6	35.9	16.5	52.4
2003	0.9	17.1	8.3	0.1	0.9	9.3	2.7	0.1	(s)	6.8	36.8	16.3	53.1
2004	0.9	18.5	9.8	0.1	0.5	10.5	2.7	0.1	(s)	7.0	39.6	16.7	56.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alaska

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowattsales	Million Kilowattlosses ^e							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	26	0	268	0	6	130	464	868	0	--	--	99	--	354	--
1965	15	2	344	0	14	253	751	1,361	0	--	--	267	--	1,043	--
1970	10	13	422	0	14	246	807	1,488	0	--	--	478	--	1,882	--
1975	12	14	502	0	12	415	558	1,487	0	--	--	657	--	2,362	--
1980	0	17	577	0	10	258	4	849	0	--	--	728	--	2,932	--
1985	341	20	901	3	34	268	0	1,205	0	--	--	1,898	--	5,480	--
1990	395	22	1,049	(s)	53	52	0	1,154	^g 0	--	--	2,133	--	5,793	--
1995	455	25	1,035	(s)	28	21	0	1,084	0	--	--	2,372	--	5,696	--
1996	417	27	1,181	(s)	34	294	0	1,509	0	--	--	2,429	--	5,763	--
1997	448	27	947	(s)	22	71	0	1,040	0	--	--	2,359	--	5,719	--
1998	472	27	1,068	(s)	17	116	0	1,201	0	--	--	2,508	--	5,666	--
1999	486	28	1,310	1	38	88	0	1,437	0	--	--	2,583	--	5,375	--
2000	466	26	1,155	(s)	33	64	0	1,252	0	--	--	2,418	--	5,698	--
2001	421	16	1,686	1	38	680	0	2,405	0	--	--	2,483	--	6,042	--
2002	414	16	1,239	(s)	37	124	0	1,400	0	--	--	2,445	--	6,118	--
2003	390	17	905	(s)	41	9	0	955	0	--	--	2,473	--	5,949	--
2004	442	18	1,158	1	26	95	0	1,279	0	--	--	2,601	--	6,183	--
Trillion Btu															
1960	0.5	0.0	1.6	0.0	(s)	0.7	2.9	5.2	0.0	(s)	0.0	0.3	6.1	1.2	7.3
1965	0.3	2.3	2.0	0.0	0.1	1.3	4.7	8.1	0.0	(s)	0.0	0.9	11.6	3.6	15.2
1970	0.2	12.6	2.5	0.0	0.1	1.3	5.1	8.9	0.0	(s)	0.0	1.6	23.3	6.4	29.7
1975	0.2	14.5	2.9	0.0	(s)	2.2	3.5	8.7	0.0	(s)	0.0	2.2	25.6	8.1	33.7
1980	0.0	16.6	3.4	0.0	(s)	1.4	(s)	4.8	0.0	(s)	0.0	2.5	23.8	10.0	33.8
1985	5.4	20.5	5.2	(s)	0.1	1.4	0.0	6.8	0.0	(s)	0.0	6.5	39.2	18.7	57.9
1990	6.2	20.5	6.1	(s)	0.2	0.3	0.0	6.6	^g 0.0	^g 0.2	^g (s)	7.3	^g 40.7	19.8	^g 60.5
1995	7.2	25.1	6.0	(s)	0.1	0.1	0.0	6.2	0.0	0.3	(s)	8.1	46.9	19.4	66.4
1996	6.6	27.0	6.9	(s)	0.1	1.5	0.0	8.5	0.0	0.3	(s)	8.3	50.7	19.7	70.4
1997	7.1	26.9	5.5	(s)	0.1	0.4	0.0	6.0	0.0	0.3	(s)	8.0	48.3	19.5	67.8
1998	7.4	27.0	6.2	(s)	0.1	0.6	0.0	6.9	0.0	0.2	(s)	8.6	50.2	19.3	69.5
1999	7.6	27.7	7.6	(s)	0.1	0.5	0.0	8.2	0.0	0.2	(s)	8.8	52.6	18.3	70.9
2000	7.3	20.2	6.7	(s)	0.1	0.3	0.0	7.2	0.0	0.3	(s)	8.3	43.1	19.4	62.6
2001	6.6	16.0	9.8	(s)	0.1	3.5	0.0	13.5	0.0	0.4	(s)	8.5	45.1	20.6	65.7
2002	6.5	15.9	7.2	(s)	0.1	0.6	0.0	8.0	0.0	0.5	(s)	8.3	39.2	20.9	60.1
2003	6.1	17.5	5.3	(s)	0.2	(s)	0.0	5.5	0.0	0.5	(s)	8.4	38.1	20.3	58.4
2004	6.9	18.6	6.7	(s)	0.1	0.5	0.0	7.3	0.0	0.5	(s)	8.9	42.3	21.1	63.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alaska

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Net Energy	
1960	256	2	47	878	90	4	4	0	229	0	1,252	0	--	--	45	--	162	--
1965	339	2	132	1,238	0	(s)	1	83	60	284	1,798	0	--	--	59	--	229	--
1970	467	19	274	1,923	14	60	1	107	73	523	2,975	0	--	--	101	--	398	--
1975	594	40	319	2,117	32	130	24	106	31	771	3,530	0	--	--	485	--	1,743	--
1980	0	100	309	1,784	19	119	21	111	14	1,446	3,823	0	--	--	757	--	3,048	--
1985	0	140	485	1,713	4	91	19	406	2,577	5,925	11,220	0	--	--	417	--	1,203	--
1990	0	271	269	1,413	(s)	25	21	55	116	4,582	6,481	^g 0	--	--	459	--	1,247	--
1995	0	358	83	3,099	(s)	85	20	62	375	3,195	6,920	0	--	--	546	--	1,312	--
1996	2	371	26	3,733	(s)	9	20	64	387	4,138	8,376	0	--	--	584	--	1,386	--
1997	2	345	55	3,583	(s)	180	21	54	139	4,104	8,134	0	--	--	756	--	1,832	--
1998	1	358	65	3,595	(s)	204	22	79	0	4,056	8,021	0	--	--	818	--	1,848	--
1999	1	340	131	3,295	(s)	16	22	25	0	4,217	7,705	0	--	--	844	--	1,756	--
2000	1	342	310	2,266	(s)	(s)	22	25	0	3,805	6,428	0	--	--	1,037	--	2,443	--
2001	1	339	1,898	2,288	(s)	7	20	76	18	5,119	9,427	0	--	--	1,079	--	2,626	--
2002	1	351	362	2,337	(s)	47	19	86	0	4,828	7,680	0	--	--	1,088	--	2,721	--
2003	(s)	^R 342	59	2,130	(s)	35	18	113	0	5,500	7,856	0	--	--	1,104	--	2,655	--
2004	1	328	268	2,089	(s)	33	18	112	0	5,421	7,942	0	--	--	1,126	--	2,677	--
Trillion Btu																		
1960	5.0	1.9	0.3	5.1	0.5	(s)	(s)	0.0	1.4	0.0	7.4	0.0	1.8	0.0	0.2	16.2	0.6	16.8
1965	6.5	1.8	0.9	7.2	0.0	(s)	(s)	0.4	0.4	1.7	10.6	0.0	3.2	0.0	0.2	22.3	0.8	23.1
1970	8.5	19.6	1.8	11.2	0.1	0.2	(s)	0.6	0.5	3.1	17.5	0.0	3.7	0.0	0.3	49.6	1.4	51.0
1975	10.5	40.4	2.1	12.3	0.2	0.5	0.1	0.6	0.2	4.6	20.6	0.0	3.5	0.0	1.7	76.7	5.9	82.6
1980	0.0	100.3	2.1	10.4	0.1	0.4	0.1	0.6	0.1	8.7	22.5	0.0	1.8	0.0	2.6	127.1	10.4	137.5
1985	0.0	140.7	3.2	10.0	(s)	0.3	0.1	2.1	16.2	35.3	67.3	0.0	2.1	0.0	1.4	211.5	4.1	215.6
1990	0.0	256.1	1.8	8.2	(s)	0.1	0.1	0.3	0.7	27.2	38.5	^g 0.0	^g 6.5	^g (s)	1.6	^g 302.6	4.3	^g 306.9
1995	0.0	360.0	0.5	18.1	(s)	0.3	0.1	0.3	2.4	19.3	41.0	0.0	6.2	(s)	1.9	409.1	4.5	413.6
1996	(s)	367.4	0.2	21.7	(s)	(s)	0.1	0.3	2.4	24.9	49.7	0.0	5.9	(s)	2.0	425.0	4.7	429.7
1997	(s)	344.8	0.4	20.9	(s)	0.6	0.1	0.3	0.9	24.6	47.8	0.0	1.8	(s)	2.6	397.1	6.3	403.4
1998	(s)	357.4	0.4	20.9	(s)	0.7	0.1	0.4	0.0	24.5	47.2	0.0	0.2	(s)	2.8	407.6	6.3	413.9
1999	(s)	339.7	0.9	19.2	(s)	0.1	0.1	0.1	0.0	25.5	45.8	0.0	0.1	0.0	2.9	388.5	6.0	394.5
2000	(s)	260.1	2.1	13.2	(s)	(s)	0.1	0.1	0.0	23.1	38.6	0.0	0.1	0.0	3.5	302.4	8.3	310.7
2001	(s)	342.9	12.6	13.3	(s)	(s)	0.1	0.4	0.1	30.7	57.3	0.0	(s)	0.0	3.7	403.9	9.0	412.9
2002	(s)	356.2	2.4	13.6	(s)	0.2	0.1	0.4	0.0	29.0	45.8	0.0	0.2	0.0	3.7	405.9	9.3	415.2
2003	(s)	^R 346.7	0.4	12.4	(s)	0.1	0.1	0.6	0.0	33.0	46.6	0.0	0.1	0.0	3.8	^R 397.2	9.1	^R 406.3
2004	(s)	333.0	1.8	12.2	(s)	0.1	0.1	0.6	0.0	32.5	47.3	0.0	0.1	0.0	3.8	384.2	9.1	393.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Alaska

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	Total ^e
1960	4	(s)	1,032	528	1,972	0	3	1,527	15	5,077	0	0	--	0	--
1965	1	0	293	789	3,005	(s)	40	2,113	66	6,307	0	0	--	0	--
1970	1	17	462	1,000	6,735	1	59	2,267	135	10,659	0	0	--	0	--
1975	(s)	(s)	466	2,157	7,420	0	121	3,658	484	14,305	0	0	--	0	--
1980	0	(s)	498	2,605	9,618	4	94	3,306	0	16,125	0	0	--	0	--
1985	0	5	490	5,793	15,231	14	86	4,964	19	26,596	^f 0	0	--	0	--
1990	0	2	491	6,042	17,367	6	96	5,747	138	29,888	0	0	--	0	--
1995	0	2	389	6,053	16,921	2	92	7,065	114	30,636	184	0	--	0	--
1996	0	2	142	4,340	18,652	4	89	6,377	4	29,608	210	0	--	0	--
1997	0	5	407	5,002	21,099	2	94	6,187	2	32,794	170	0	--	0	--
1998	0	6	152	4,632	21,865	1	99	6,543	7	33,299	100	0	--	0	--
1999	0	7	529	4,898	23,612	(s)	100	6,312	230	35,680	113	0	--	0	--
2000	0	7	521	5,308	25,872	(s)	98	5,884	118	37,801	49	0	--	0	--
2001	0	5	245	5,384	24,262	2	90	5,627	54	35,663	134	0	--	0	--
2002	0	4	179	5,195	25,110	23	89	5,713	51	36,360	97	0	--	0	--
2003	0	4	156	4,751	27,355	3	82	5,797	13	38,158	64	0	--	0	--
2004	0	4	184	8,596	30,954	2	83	6,740	0	46,560	127	0	--	0	--

Trillion Btu															
1960	0.1	(s)	5.2	3.1	10.6	0.0	(s)	8.0	0.1	27.1	0.0	0.0	27.1	0.0	27.1
1965	(s)	0.0	1.5	4.6	16.5	(s)	0.2	11.1	0.4	34.4	0.0	0.0	34.4	0.0	34.4
1970	(s)	17.4	2.3	5.8	37.7	(s)	0.4	11.9	0.9	59.0	0.0	0.0	76.4	0.0	76.4
1975	(s)	0.1	2.4	12.6	41.7	0.0	0.7	19.2	3.0	79.6	0.0	0.0	79.7	0.0	79.7
1980	0.0	0.1	2.5	15.2	54.0	(s)	0.6	17.4	0.0	89.7	0.0	0.0	89.8	0.0	89.8
1985	0.0	5.2	2.5	33.7	85.8	0.1	0.5	26.1	0.1	148.7	^f 0.0	0.0	^f 153.9	0.0	^f 153.9
1990	0.0	1.6	2.5	35.2	97.9	(s)	0.6	30.2	0.9	167.3	0.0	0.0	168.9	0.0	168.9
1995	0.0	2.4	2.0	35.3	95.9	(s)	0.6	36.8	0.7	171.3	0.6	0.0	173.7	0.0	173.7
1996	0.0	2.0	0.7	25.3	105.8	(s)	0.5	33.3	(s)	165.6	0.7	0.0	167.6	0.0	167.6
1997	0.0	4.9	2.1	29.1	119.6	(s)	0.6	32.3	(s)	183.7	0.6	0.0	188.6	0.0	188.6
1998	0.0	5.6	0.8	27.0	124.1	(s)	0.6	34.1	(s)	186.6	0.4	0.0	192.1	0.0	192.1
1999	0.0	7.3	2.7	28.5	134.1	(s)	0.6	32.9	1.4	200.3	0.4	0.0	207.5	0.0	207.5
2000	0.0	5.6	2.6	30.9	146.7	(s)	0.6	30.7	0.7	212.2	0.2	0.0	217.9	0.0	217.9
2001	0.0	5.1	1.2	31.4	137.6	(s)	0.5	29.3	0.3	200.4	0.5	0.0	205.6	0.0	205.6
2002	0.0	4.4	0.9	30.3	143.2	0.1	0.5	29.8	0.3	205.0	0.3	0.0	209.5	0.0	209.5
2003	0.0	4.1	0.8	27.7	155.2	(s)	0.5	30.2	0.1	214.4	0.2	0.0	218.5	0.0	218.5
2004	0.0	3.9	0.9	50.1	175.5	(s)	0.5	35.1	0.0	262.2	0.4	0.0	266.0	0.0	266.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Alaska

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	52	0	3	95	0	99	0	290	--	0	0	0	0	--
1965	151	2	4	308	0	312	0	350	--	0	0	0	0	--
1970	249	8	5	394	0	399	0	363	--	0	0	0	(s)	--
1975	257	20	1	694	0	696	0	357	--	0	0	0	0	--
1980	273	29	353	538	0	891	0	539	--	0	0	0	0	--
1985	296	34	476	518	0	994	0	748	--	0	0	(s)	0	--
1990	290	34	171	486	0	658	0	975	--	ⁱ 0	ⁱ 0	ⁱ 0	1	--
1995	293	30	257	592	0	849	0	1,372	--	0	0	0	1	--
1996	229	31	515	655	0	1,171	0	1,266	--	0	0	0	1	--
1997	235	34	723	598	0	1,321	0	1,099	--	0	0	0	2	--
1998	481	29	821	537	0	1,357	0	1,113	--	0	0	0	1	--
1999	465	31	838	629	0	1,467	0	817	--	0	0	0	1	--
2000	500	36	670	415	0	1,085	0	1,002	--	0	0	0	1	--
2001	515	33	1,057	494	0	1,550	0	1,346	--	0	0	1	1	--
2002	562	32	1,007	553	0	1,560	0	1,439	--	0	0	0	1	--
2003	342	34	851	511	0	1,363	0	1,583	--	0	0	0	1	--
2004	393	38	702	529	0	1,231	0	1,498	--	0	0	0	1	--
Trillion Btu														
1960	0.9	0.0	(s)	0.6	0.0	0.6	0.0	3.1	0.0	0.0	0.0	0.0	0.0	4.6
1965	2.7	2.2	(s)	1.8	0.0	1.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0	10.3
1970	4.3	8.2	(s)	2.3	0.0	2.3	0.0	3.8	0.0	0.0	0.0	0.0	(s)	18.6
1975	4.5	19.7	(s)	4.0	0.0	4.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	32.0
1980	4.3	28.9	2.2	3.1	0.0	5.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	44.2
1985	4.7	34.4	3.0	3.0	0.0	6.0	0.0	7.8	0.0	0.0	0.0	(s)	0.0	52.9
1990	4.6	35.3	1.1	2.8	0.0	3.9	0.0	10.1	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	(s)	ⁱ 53.9
1995	4.6	29.9	1.6	3.4	0.0	5.1	0.0	14.1	0.0	0.0	0.0	0.0	(s)	53.7
1996	3.6	31.2	3.2	3.8	0.0	7.1	0.0	13.1	0.0	0.0	0.0	0.0	(s)	55.0
1997	3.7	33.6	4.5	3.5	0.0	8.0	0.0	11.2	0.0	0.0	0.0	0.0	(s)	56.6
1998	8.1	28.9	5.2	3.1	0.0	8.3	0.0	11.4	(s)	0.0	0.0	0.0	(s)	56.6
1999	7.8	30.6	5.3	3.7	0.0	8.9	0.0	8.4	0.0	0.0	0.0	0.0	(s)	55.6
2000	8.3	35.7	4.2	2.4	0.0	6.6	0.0	10.2	0.0	0.0	0.0	0.0	(s)	60.8
2001	8.5	31.9	6.6	2.9	0.0	9.5	0.0	13.9	0.0	0.0	0.0	(s)	(s)	63.9
2002	9.1	32.0	6.3	3.2	0.0	9.6	0.0	14.6	(s)	0.0	0.0	0.0	(s)	65.3
2003	5.6	34.6	5.4	3.0	0.0	8.3	0.0	16.2	0.0	0.0	0.0	0.0	(s)	64.7
2004	6.3	37.9	4.4	3.1	0.0	7.5	0.0	15.0	0.0	0.0	0.0	0.0	(s)	66.7

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	10	136	863	699	2,787	4,721	64	724	275	12,363	125	0	22,622	0	2,990	--	--	-4,385	--
1965	337	154	1,110	478	3,528	5,545	31	1,056	299	14,997	82	0	27,125	0	4,439	--	--	1,877	--
1970	406	193	3,679	427	4,899	6,644	165	1,304	344	21,542	105	0	39,108	0	6,154	--	--	7,447	--
1975	4,392	156	2,331	358	10,143	7,075	213	1,119	472	27,704	5,942	39	55,395	0	7,254	--	--	4,704	--
1980	11,559	166	2,061	281	10,769	7,967	73	1,589	611	30,589	1,339	71	55,350	0	9,836	--	--	-24,859	--
1985	16,364	131	2,563	184	10,109	7,154	16	1,722	556	36,148	176	0	58,629	1,130	13,987	--	--	-39,719	--
1990	16,419	127	2,367	194	11,371	8,501	20	1,508	626	39,326	28	129	64,069	20,598	7,418	--	--	-53,553	--
1995	16,682	124	3,138	139	15,125	7,588	4	1,938	597	47,159	81	107	75,875	26,985	8,288	--	--	-52,984	--
1996	16,793	124	2,460	155	17,387	7,922	7	1,625	580	49,417	107	1,659	81,317	28,840	9,214	--	--	-49,625	--
1997	18,206	135	2,704	151	17,911	7,974	8	1,204	612	48,884	14	1,798	81,261	29,314	12,049	--	--	-60,978	--
1998	19,013	159	3,972	191	18,668	8,669	11	1,345	641	52,661	20	1,806	87,983	30,301	10,970	--	--	-65,613	--
1999	19,710	165	3,814	157	20,169	9,627	9	1,809	648	54,854	40	1,808	92,935	30,416	9,759	--	--	-63,529	--
2000	21,128	205	3,429	204	19,923	10,433	5	1,660	638	56,431	69	1,787	94,579	30,381	8,354	--	--	-69,099	--
2001	20,830	241	2,563	191	21,591	9,914	5	1,650	585	58,506	252	423	95,680	28,724	7,624	--	--	R -68,668	--
2002	19,955	251	3,531	183	19,928	10,344	3	1,509	578	61,230	29	434	97,769	30,862	7,427	--	--	-72,802	--
2003	20,059	273	3,468	233	20,308	10,650	4	1,823	534	61,827	0	443	99,291	28,581	7,075	--	--	-67,308	--
2004	20,799	352	4,812	166	22,503	8,256	6	1,575	541	65,247	40	477	103,623	28,113	6,973	--	--	-82,561	--
Trillion Btu																			
1960	0.2	140.3	5.7	3.5	16.2	25.3	0.4	2.9	1.7	64.9	0.8	0.0	121.5	0.0	32.2	4.0	-0.1	-15.0	283.1
1965	7.0	166.1	7.4	2.4	20.6	30.1	0.2	4.2	1.8	78.8	0.5	0.0	145.9	0.0	46.4	3.7	-0.1	6.4	375.4
1970	8.6	204.4	24.4	2.2	28.5	36.4	0.9	4.9	2.1	113.2	0.7	0.0	213.3	0.0	64.6	4.3	-0.2	25.4	520.4
1975	92.4	164.3	15.5	1.8	59.1	39.0	1.2	4.2	2.9	145.5	37.4	0.2	306.7	0.0	75.5	5.4	(s)	16.1	660.4
1980	245.0	174.0	13.7	1.4	62.7	43.9	0.4	5.8	3.7	160.7	8.4	0.4	301.2	0.0	102.2	17.8	-0.1	-84.8	755.3
1985	342.0	137.3	17.0	0.9	58.9	39.4	0.1	6.2	3.4	189.9	1.1	0.0	316.9	12.0	146.1	25.6	0.0	-135.5	844.4
1990	343.4	130.8	15.7	1.0	66.2	47.3	0.1	5.5	3.8	206.6	0.2	0.8	347.1	218.0	77.2	13.7	3.9	-182.7	1,951.4
1995	342.9	127.9	20.8	0.7	88.1	43.0	(s)	7.0	3.6	245.9	0.5	0.6	410.3	283.5	85.5	14.4	5.4	-180.8	1,089.1
1996	342.8	125.3	16.3	0.8	101.3	44.9	(s)	5.9	3.5	257.8	0.7	8.9	440.0	302.9	95.3	12.8	4.2	-169.3	1,154.0
1997	369.9	137.6	17.9	0.8	104.3	45.2	(s)	4.4	3.7	254.8	0.1	9.7	441.0	307.6	123.1	14.5	4.6	-208.1	1,190.2
1998	386.8	161.1	26.4	1.0	108.7	49.2	0.1	4.9	3.9	274.5	0.1	9.8	478.4	317.9	111.9	10.8	4.2	-223.9	1,247.1
1999	403.3	167.8	25.3	0.8	117.5	54.6	(s)	6.5	3.9	285.8	0.3	9.7	504.5	317.8	99.8	11.5	4.1	-216.8	1,291.9
2000	432.8	208.1	22.8	1.0	116.1	59.2	(s)	6.0	3.9	294.0	0.4	9.6	512.9	316.8	85.2	12.2	4.0	-235.8	1,336.3
2001	424.0	244.4	17.0	1.0	125.8	56.2	(s)	6.0	3.5	304.8	1.6	2.3	518.2	300.1	78.8	8.4	3.8	R -234.3	R 1,343.5
2002	406.5	257.0	23.4	0.9	116.1	58.6	(s)	5.5	3.5	318.9	0.2	2.3	529.5	322.2	75.6	9.5	3.5	-248.4	1,355.3
2003	406.5	274.6	23.0	1.2	118.3	60.4	(s)	6.6	3.2	321.9	0.0	2.4	537.1	297.8	72.5	8.5	3.3	R -229.7	R 1,370.6
2004	425.4	354.9	31.9	0.8	131.1	46.8	(s)	5.7	3.3	340.3	0.3	2.6	562.8	293.1	69.9	8.7	3.6	-281.7	1,436.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	0	27	47	0	397	445	138	--	--	1,355	--	3,350	--
1965	0	25	59	9	727	794	129	--	--	2,230	--	5,326	--
1970	0	30	98	68	840	1,006	151	--	--	4,327	--	10,474	--
1975	0	38	216	77	542	836	170	--	--	7,138	--	17,165	--
1980	0	30	2	0	657	659	438	--	--	9,637	--	23,236	--
1985	(s)	29	12	3	956	971	741	--	--	12,249	--	28,218	--
1990	(s)	30	9	(s)	772	782	411	--	--	15,378	--	35,572	--
1995	1	27	6	2	971	979	411	--	--	18,036	--	40,970	--
1996	(s)	28	10	3	784	797	426	--	--	19,746	--	44,916	--
1997	(s)	31	7	2	720	729	485	--	--	20,683	--	46,871	--
1998	(s)	36	4	3	1,028	1,036	431	--	--	21,611	--	49,024	--
1999	(s)	33	4	2	1,423	1,429	453	--	--	22,517	--	51,519	--
2000	(s)	35	4	1	1,250	1,255	487	--	--	24,844	--	56,524	--
2001	(s)	36	7	1	1,181	1,188	285	--	--	26,200	--	^R 58,926	--
2002	(s)	35	9	1	1,200	1,210	289	--	--	26,413	--	59,171	--
2003	(s)	36	9	2	1,030	1,041	304	--	--	27,742	--	61,624	--
2004	(s)	38	5	1	864	870	312	--	--	28,921	--	64,372	--
Trillion Btu													
1960	0.0	28.4	0.3	0.0	1.6	1.9	2.8	0.0	0.0	4.6	37.6	11.4	49.1
1965	0.0	27.1	0.3	(s)	2.9	3.3	2.6	0.0	0.0	7.6	40.6	18.2	58.8
1970	0.0	31.4	0.6	0.4	3.2	4.1	3.0	0.0	0.0	14.8	53.3	35.7	89.1
1975	0.0	39.8	1.3	0.4	2.0	3.7	3.4	0.0	0.0	24.4	71.3	58.6	129.8
1980	0.0	30.9	(s)	0.0	2.4	2.4	8.8	0.0	0.0	32.9	74.9	79.3	154.2
1985	(s)	29.9	0.1	(s)	3.4	3.5	14.8	0.0	0.0	41.8	90.1	96.3	186.4
1990	(s)	31.3	0.1	(s)	2.8	2.9	8.2	^f (s)	^f 3.7	52.5	^f 98.6	121.4	^f 219.9
1995	(s)	27.9	(s)	(s)	3.5	3.6	8.2	(s)	4.0	61.5	105.2	139.8	245.0
1996	(s)	28.0	0.1	(s)	2.8	2.9	8.5	(s)	4.0	67.4	110.8	153.3	264.1
1997	(s)	31.8	(s)	(s)	2.6	2.7	9.7	(s)	4.0	70.6	118.7	159.9	278.6
1998	(s)	36.7	(s)	(s)	3.7	3.8	8.6	(s)	3.9	73.7	126.7	167.3	294.0
1999	(s)	33.5	(s)	(s)	5.1	5.2	9.1	(s)	3.8	76.8	128.3	175.8	304.1
2000	(s)	35.1	(s)	(s)	4.5	4.5	9.7	(s)	3.6	84.8	137.7	192.9	330.6
2001	(s)	36.5	(s)	(s)	4.3	4.3	5.7	(s)	3.4	89.4	139.3	^R 201.1	^R 340.3
2002	(s)	36.5	0.1	(s)	4.3	4.4	5.8	(s)	3.2	90.1	140.0	201.9	341.9
2003	(s)	35.9	0.1	(s)	3.7	3.8	6.1	(s)	3.1	94.7	143.6	210.3	353.8
2004	(s)	37.7	(s)	(s)	3.1	3.2	6.2	(s)	3.0	98.7	148.8	219.6	368.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	0	25	106	0	70	89	39	305	0	--	--	3,302	--	8,167	--
1965	0	19	131	2	128	137	17	416	0	--	--	3,044	--	7,269	--
1970	0	23	220	12	148	146	31	557	0	--	--	4,690	--	11,352	--
1975	0	33	485	14	96	177	83	855	0	--	--	7,162	--	17,225	--
1980	0	27	280	0	116	179	0	576	0	--	--	9,122	--	21,995	--
1985	1	25	463	2	169	140	(s)	774	0	--	--	12,295	--	28,323	--
1990	(s)	28	456	2	136	257	0	851	^g 0	--	--	16,058	--	37,146	--
1995	4	28	354	1	171	35	0	562	0	--	--	18,562	--	42,165	--
1996	(s)	29	592	2	138	35	5	772	0	--	--	19,555	--	44,480	--
1997	(s)	30	655	4	127	35	0	821	0	--	--	20,520	--	46,503	--
1998	(s)	32	1,122	1	181	36	0	1,340	0	--	--	21,683	--	49,189	--
1999	(s)	31	945	5	251	36	0	1,237	0	--	--	22,688	--	51,910	--
2000	(s)	32	867	3	221	37	0	1,127	0	--	--	24,311	--	55,311	--
2001	1	31	766	3	208	40	0	1,017	0	--	--	24,697	--	^R 55,546	--
2002	1	32	832	2	212	41	0	1,086	0	--	--	25,162	--	56,369	--
2003	1	32	476	1	182	40	0	700	0	--	--	25,425	--	56,477	--
2004	1	35	346	2	153	40	0	541	0	--	--	26,106	--	58,108	--
Trillion Btu															
1960	0.0	26.2	0.6	0.0	0.3	0.5	0.2	1.6	0.0	0.1	0.0	11.3	39.1	27.9	67.0
1965	0.0	20.7	0.8	(s)	0.5	0.7	0.1	2.1	0.0	(s)	0.0	10.4	33.2	24.8	58.0
1970	0.0	24.0	1.3	0.1	0.6	0.8	0.2	2.9	0.0	0.1	0.0	16.0	43.0	38.7	81.7
1975	0.0	34.3	2.8	0.1	0.4	0.9	0.5	4.7	0.0	0.1	0.0	24.4	63.5	58.8	122.2
1980	0.0	28.7	1.6	0.0	0.4	0.9	0.0	3.0	0.0	0.2	0.0	31.1	63.1	75.0	138.1
1985	(s)	26.5	2.7	(s)	0.6	0.7	(s)	4.1	0.0	0.4	0.0	41.9	72.9	96.6	169.5
1990	(s)	29.3	2.7	(s)	0.5	1.3	0.0	4.5	^g 0.0	^g 0.9	^g (s)	54.8	^g 89.5	126.7	^g 216.3
1995	0.1	29.3	2.1	(s)	0.6	0.2	0.0	2.9	0.0	1.1	(s)	63.3	96.7	143.9	240.6
1996	(s)	29.3	3.4	(s)	0.5	0.2	(s)	4.2	0.0	1.2	(s)	66.7	101.4	151.8	253.1
1997	(s)	30.8	3.8	(s)	0.5	0.2	0.0	4.5	0.0	1.6	(s)	70.0	106.9	158.7	265.6
1998	(s)	32.3	6.5	(s)	0.7	0.2	0.0	7.4	0.0	1.4	(s)	74.0	115.1	167.8	282.9
1999	(s)	31.8	5.5	(s)	0.9	0.2	0.0	6.6	0.0	1.6	(s)	77.4	117.4	177.1	294.6
2000	(s)	32.5	5.1	(s)	0.8	0.2	0.0	6.1	0.0	1.7	(s)	82.9	123.2	188.7	311.9
2001	(s)	31.3	4.5	(s)	0.8	0.2	0.0	5.4	0.0	1.1	(s)	84.3	122.1	^R 189.5	^R 311.7
2002	(s)	32.8	4.8	(s)	0.8	0.2	0.0	5.8	0.0	1.1	0.1	85.9	125.6	192.3	317.9
2003	(s)	32.4	2.8	(s)	0.7	0.2	0.0	3.7	0.0	1.1	0.1	86.7	123.9	192.7	316.6
2004	(s)	34.7	2.0	(s)	0.6	0.2	0.0	2.8	0.0	1.0	0.1	89.1	127.7	198.3	326.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	10	14	863	1,227	64	222	81	515	27	0	3,000	0	--	--	1,481	--	3,662
1965	4	55	1,110	1,545	21	161	93	437	20	0	3,387	0	--	--	3,331	--	7,953
1970	5	58	3,679	1,387	85	253	115	456	55	0	6,031	13	--	--	4,751	--	11,500
1975	133	51	2,331	3,113	122	430	205	440	102	39	6,781	14	--	--	6,868	--	16,516
1980	643	38	2,061	3,570	73	739	264	309	154	71	7,241	15	--	--	8,003	--	19,296
1985	1,915	17	2,563	1,799	11	505	241	404	31	0	5,554	15	--	--	8,457	--	19,482
1990	660	18	2,367	2,768	17	545	271	503	18	129	6,617	⁹ 0	--	--	10,034	--	23,210
1995	657	28	3,138	3,590	1	745	258	410	69	107	8,317	0	--	--	11,992	--	27,241
1996	675	27	2,460	4,066	2	667	251	437	80	1,659	9,621	0	--	--	12,783	--	29,076
1997	702	28	2,704	4,229	2	331	265	457	14	1,798	9,801	0	--	--	13,253	--	30,034
1998	698	28	3,972	3,620	7	128	277	473	20	1,806	10,302	0	--	--	12,549	--	28,467
1999	684	27	3,814	4,157	2	116	280	334	27	1,808	10,540	0	--	--	12,456	--	28,499
2000	720	21	3,429	4,222	1	167	276	339	23	1,787	10,243	0	--	--	11,975	--	27,245
2001	672	21	2,563	4,338	1	249	253	913	27	423	8,767	0	--	--	11,377	--	^R 25,587
2002	626	17	3,531	3,750	1	79	250	911	29	434	8,984	0	--	--	11,026	--	24,702
2003	681	15	3,468	2,957	1	478	231	988	0	443	8,566	0	--	--	10,914	--	24,243
2004	738	21	4,812	3,141	3	436	234	1,202	33	477	10,338	0	--	--	11,906	--	26,501
Trillion Btu																	
1960	0.2	14.2	5.7	7.1	0.4	0.9	0.5	2.7	0.2	0.0	17.5	0.0	1.0	0.0	5.1	37.9	50.4
1965	0.1	59.4	7.4	9.0	0.1	0.6	0.6	2.3	0.1	0.0	20.1	0.0	1.1	0.0	11.4	92.0	119.1
1970	0.1	61.2	24.4	8.1	0.5	1.0	0.7	2.4	0.3	0.0	37.4	0.1	1.3	0.0	16.2	116.3	155.5
1975	2.6	53.4	15.5	18.1	0.7	1.6	1.2	2.3	0.6	0.2	40.3	0.1	1.9	0.0	23.4	121.9	178.2
1980	13.1	39.5	13.7	20.8	0.4	2.7	1.6	1.6	1.0	0.4	42.2	0.2	8.9	0.0	27.3	131.2	197.0
1985	38.8	17.3	17.0	10.5	0.1	1.8	1.5	2.1	0.2	0.0	33.1	0.2	10.4	0.0	28.9	128.6	195.1
1990	13.3	19.0	15.7	16.1	0.1	2.0	1.6	2.6	0.1	0.8	39.1	⁹ 0.0	⁹ 4.6	⁹ 0.2	34.2	⁹ 110.5	⁹ 189.7
1995	13.1	28.8	20.8	20.9	(s)	2.7	1.6	2.1	0.4	0.6	49.1	0.0	5.0	0.2	40.9	137.2	230.2
1996	13.4	27.3	16.3	23.7	(s)	2.4	1.5	2.3	0.5	8.9	55.6	0.0	3.1	0.2	43.6	143.2	242.4
1997	13.7	28.6	17.9	24.6	(s)	1.2	1.6	2.4	0.1	9.7	57.6	0.0	3.2	0.2	45.2	148.5	251.0
1998	13.4	28.7	26.4	21.1	(s)	0.5	1.7	2.5	0.1	9.8	62.0	0.0	0.8	0.2	42.8	147.9	245.1
1999	13.2	27.5	25.3	24.2	(s)	0.4	1.7	1.7	0.2	9.7	63.3	0.0	0.8	0.2	42.5	147.5	244.7
2000	16.0	21.5	22.8	24.6	(s)	0.6	1.7	1.8	0.1	9.6	61.1	0.0	0.7	0.2	40.9	140.4	233.3
2001	14.7	21.4	17.0	25.3	(s)	0.9	1.5	4.8	0.2	2.3	51.9	0.0	1.3	0.2	38.8	128.4	^R 215.7
2002	14.0	17.8	23.4	21.8	(s)	0.3	1.5	4.7	0.2	2.3	54.3	0.0	1.0	0.2	37.6	125.0	^R 209.2
2003	15.2	15.3	23.0	17.2	(s)	1.7	1.4	5.1	0.0	2.4	50.9	0.0	1.0	0.2	37.2	119.9	202.6
2004	16.2	20.4	31.9	18.3	(s)	1.6	1.4	6.3	0.2	2.6	62.3	0.0	1.0	0.2	40.6	140.8	231.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	(s)	16	699	1,404	4,721	34	193	11,759	17	18,829	0	0	--	0	--
1965	(s)	18	478	1,790	5,545	40	206	14,423	0	22,482	0	0	--	0	--
1970	(s)	24	427	3,192	6,644	63	229	20,940	0	31,494	0	0	--	0	--
1975	(s)	17	358	4,756	6,995	51	267	27,087	0	39,514	0	0	--	0	--
1980	0	21	281	6,480	7,967	78	347	30,100	0	45,253	0	0	--	0	--
1985	0	19	184	7,624	7,154	92	316	35,604	0	50,974	^f 0	0	--	0	--
1990	0	25	194	7,936	8,501	55	355	38,566	0	55,608	0	0	--	0	--
1995	0	19	139	11,068	7,588	51	339	46,714	0	65,899	655	0	--	0	--
1996	0	18	155	12,618	7,922	35	329	48,944	0	70,003	553	0	--	0	--
1997	0	19	151	12,909	7,974	26	347	48,391	0	69,799	549	0	--	0	--
1998	0	20	191	13,805	8,669	7	364	52,152	0	75,188	423	0	--	0	--
1999	0	19	157	14,987	9,627	18	368	54,484	0	79,642	366	0	--	0	--
2000	0	21	204	14,474	10,433	23	362	56,056	0	81,551	419	0	--	0	--
2001	0	23	191	16,045	9,914	12	332	57,554	0	84,047	579	0	--	0	--
2002	0	21	183	15,237	10,344	18	328	60,279	0	86,389	330	0	--	0	--
2003	0	19	233	16,770	10,650	134	303	60,799	0	88,889	319	0	--	0	--
2004	0	17	166	18,934	8,256	122	307	64,005	0	91,790	307	0	--	0	--

Trillion Btu															
1960	(s)	16.5	3.5	8.2	25.3	0.1	1.2	61.8	0.1	100.2	0.0	0.0	116.7	0.0	116.7
1965	(s)	19.4	2.4	10.4	30.1	0.2	1.2	75.8	0.0	120.1	0.0	0.0	139.4	0.0	139.4
1970	(s)	25.4	2.2	18.6	36.4	0.2	1.4	110.0	0.0	168.8	0.0	0.0	194.1	0.0	194.1
1975	(s)	17.9	1.8	27.7	38.6	0.2	1.6	142.3	0.0	212.2	0.0	0.0	230.1	0.0	230.1
1980	0.0	22.3	1.4	37.7	43.9	0.3	2.1	158.1	0.0	243.6	0.0	0.0	265.9	0.0	265.9
1985	0.0	19.4	0.9	44.4	39.4	0.3	1.9	187.0	0.0	274.0	^f 0.0	0.0	^f 293.4	0.0	^f 293.4
1990	0.0	26.1	1.0	46.2	47.3	0.2	2.2	202.6	0.0	299.5	0.0	0.0	325.6	0.0	325.6
1995	0.0	19.3	0.7	64.5	43.0	0.2	2.1	243.6	0.0	354.0	2.3	0.0	373.4	0.0	373.4
1996	0.0	17.8	0.8	73.5	44.9	0.1	2.0	255.3	0.0	376.6	2.0	0.0	394.4	0.0	394.4
1997	0.0	19.4	0.8	75.2	45.2	0.1	2.1	252.3	0.0	375.6	1.9	0.0	395.0	0.0	395.0
1998	0.0	20.5	1.0	80.4	49.2	(s)	2.2	271.8	0.0	404.6	1.5	0.0	425.1	0.0	425.1
1999	0.0	19.6	0.8	87.3	54.6	0.1	2.2	283.9	0.0	428.9	1.3	0.0	448.5	0.0	448.5
2000	0.0	21.7	1.0	84.3	59.2	0.1	2.2	292.1	0.0	438.8	1.5	0.0	460.5	0.0	460.5
2001	0.0	23.2	1.0	93.5	56.2	(s)	2.0	299.9	0.0	452.5	2.1	0.0	475.8	0.0	475.8
2002	0.0	21.9	0.9	88.8	58.6	0.1	2.0	313.9	0.0	464.3	1.2	0.0	486.2	0.0	486.2
2003	0.0	19.4	1.2	97.7	60.4	0.5	1.8	316.6	0.0	478.2	1.1	0.0	497.6	0.0	497.6
2004	0.0	17.0	0.8	110.3	46.8	0.4	1.9	333.8	0.0	494.0	1.1	0.0	511.0	0.0	511.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Arizona

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	53	41	3	0	44	0	2,990	--	0	0	0	-15	--
1965	333	37	44	3	0	47	0	4,439	--	0	0	0	-29	--
1970	401	59	19	1	0	20	0	6,141	--	0	0	0	-51	--
1975	4,259	18	5,756	1,653	0	7,410	0	7,240	--	0	0	0	-14	--
1980	10,916	50	1,185	436	0	1,622	0	9,820	--	0	0	0	-41	--
1985	14,448	42	145	211	0	357	1,130	13,972	--	0	0	0	0	--
1990	15,758	24	10	200	0	210	20,598	7,418	--	i 0	i 0	i 0	-2	--
1995	16,021	22	12	107	0	119	26,985	8,288	--	0	0	0	336	--
1996	16,118	23	23	101	0	124	28,840	9,214	--	0	0	0	-3	--
1997	17,504	27	(s)	110	0	110	29,314	12,049	--	0	0	0	115	--
1998	18,316	42	0	117	0	117	30,301	10,970	--	0	0	0	4	--
1999	19,025	55	12	75	0	88	30,416	9,759	--	0	0	0	0	--
2000	20,408	96	46	357	0	402	30,381	8,354	--	0	0	0	47	--
2001	20,158	129	225	435	0	660	28,724	7,624	--	0	(s)	0	55	--
2002	19,328	145	0	100	0	100	30,862	7,427	--	0	(s)	0	14	--
2003	19,378	170	0	96	0	96	28,581	7,075	--	0	(s)	0	-15	--
2004	20,060	240	7	83	0	83	28,113	6,973	--	0	4	0	78	--
Trillion Btu														
1960	0.0	55.1	0.3	(s)	0.0	0.3	0.0	32.2	0.2	0.0	0.0	0.0	-0.1	87.7
1965	6.9	39.5	0.3	(s)	0.0	0.3	0.0	46.4	0.0	0.0	0.0	0.0	-0.1	93.1
1970	8.5	62.4	0.1	(s)	0.0	0.1	0.0	64.4	0.0	0.0	0.0	0.0	-0.2	135.3
1975	89.8	18.9	36.2	9.6	0.0	45.8	0.0	75.3	0.0	0.0	0.0	0.0	(s)	229.9
1980	231.9	52.5	7.5	2.5	0.0	10.0	0.0	102.0	0.0	0.0	0.0	0.0	-0.1	396.3
1985	303.2	44.2	0.9	1.2	0.0	2.1	12.0	146.0	0.0	0.0	0.0	0.0	0.0	507.5
1990	330.2	25.0	0.1	1.2	0.0	1.2	218.0	77.2	i 0.0	i 0.0	i 0.0	i 0.0	(s)	i 651.5
1995	329.7	22.7	0.1	0.6	0.0	0.7	283.5	85.5	0.0	0.0	0.0	0.0	1.1	723.2
1996	329.5	22.9	0.1	0.6	0.0	0.7	302.9	95.3	0.0	0.0	0.0	0.0	(s)	751.3
1997	356.2	27.1	(s)	0.6	0.0	0.6	307.6	123.1	0.0	0.0	0.0	0.0	0.4	814.9
1998	373.3	42.9	0.0	0.7	0.0	0.7	317.9	111.9	0.0	0.0	0.0	0.0	(s)	846.6
1999	390.1	55.4	0.1	0.4	0.0	0.5	317.8	99.8	0.0	0.0	0.0	0.0	0.0	863.6
2000	416.9	97.4	0.3	2.1	0.0	2.4	316.8	85.2	0.0	0.0	0.0	0.0	0.2	918.9
2001	409.3	132.0	1.4	2.5	0.0	3.9	300.1	78.8	0.3	0.0	(s)	0.0	0.2	924.7
2002	392.5	148.0	0.0	0.6	0.0	0.6	322.2	75.6	1.6	0.0	(s)	0.0	(s)	940.5
2003	391.3	171.6	0.0	0.6	0.0	0.6	297.8	72.5	0.3	0.0	(s)	0.0	(s)	934.0
2004	409.2	245.0	(s)	0.4	0.0	0.5	293.1	69.9	0.4	0.0	(s)	0.0	0.3	1,018.4

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Arkansas

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	14	215	1,003	177	2,021	2,237	565	4,823	543	14,675	539	1,892	28,475	0	992	--	--	2,128	--
1965	6	277	1,295	482	2,828	2,094	386	5,599	468	17,922	453	2,807	34,332	0	1,080	--	--	7,478	--
1970	0	382	2,104	293	5,462	2,204	821	10,198	531	22,457	935	2,830	47,835	0	2,160	--	--	6,424	--
1975	40	258	2,276	254	9,566	1,995	688	9,467	616	27,611	9,086	3,017	64,577	4,874	3,433	--	--	17,946	--
1980	2,076	274	2,770	275	10,686	2,035	571	4,847	700	26,490	4,981	3,975	57,331	7,833	1,695	--	--	27,620	--
1985	12,682	196	1,263	86	12,804	2,030	156	3,673	637	26,607	735	2,433	50,424	9,889	4,434	--	--	-31,233	--
1990	12,092	232	495	125	12,585	1,693	38	3,463	717	28,997	228	1,843	50,184	11,282	3,655	--	--	-25,930	--
1995	13,540	253	1,246	143	17,007	1,179	39	3,229	684	32,121	219	1,798	57,665	11,658	3,218	--	--	-9,440	--
1996	14,816	268	975	121	16,848	1,534	26	3,116	664	32,081	197	7,182	62,745	13,357	2,797	--	--	-15,543	--
1997	14,068	260	1,012	135	17,950	1,539	34	3,068	701	33,184	48	7,679	65,351	14,208	3,516	--	--	-11,793	--
1998	14,563	266	859	122	18,699	1,527	39	2,322	734	33,261	103	7,540	65,207	13,097	3,117	--	--	-6,277	--
1999	15,299	253	1,023	118	17,781	4,575	53	5,973	742	33,698	109	7,530	71,602	12,920	2,694	--	--	-5,252	--
2000	15,249	251	1,017	93	18,815	4,868	33	6,522	731	33,297	302	7,382	73,060	11,652	2,370	--	--	6,980	--
2001	15,547	228	536	183	20,897	1,036	52	6,152	669	33,246	1,543	5,701	70,015	14,781	2,548	--	--	R -5,030	--
2002	14,587	242	2,608	118	21,682	794	29	4,047	661	34,103	226	5,802	70,070	14,559	3,436	--	--	-2,069	--
2003	14,726	247	1,810	103	22,044	822	21	3,211	611	34,343	570	6,097	69,633	14,689	2,655	--	--	R -5,288	--
2004	15,733	220	884	129	23,356	722	28	3,470	619	34,627	1,188	6,708	71,732	15,450	3,643	--	--	-7,539	--
Trillion Btu																			
1960	0.4	222.2	6.7	0.9	11.8	12.0	3.2	19.3	3.3	77.1	3.4	11.3	148.9	0.0	10.7	37.4	0.0	7.3	426.9
1965	0.2	277.7	8.6	2.4	16.5	11.2	2.2	22.5	2.8	94.1	2.8	16.8	180.0	0.0	11.3	35.1	0.0	25.5	529.8
1970	0.0	383.5	14.0	1.5	31.8	11.9	4.7	38.5	3.2	118.0	5.9	16.9	246.3	0.0	22.7	34.3	0.0	21.9	708.7
1975	0.9	257.4	15.1	1.3	55.7	10.8	3.9	35.2	3.7	145.0	57.1	17.5	345.4	53.7	35.7	35.9	0.0	61.2	790.2
1980	36.6	274.0	18.4	1.4	62.2	11.0	3.2	17.8	4.2	139.1	31.3	22.5	311.3	85.4	17.6	52.4	0.0	94.2	871.7
1985	219.8	199.3	8.4	0.4	74.6	11.0	0.9	13.2	3.9	139.8	4.6	13.7	270.6	105.0	46.3	62.9	0.0	-106.6	797.4
1990	212.7	234.5	3.3	0.6	73.3	9.2	0.2	12.6	4.3	152.3	1.4	10.5	267.9	119.4	38.0	^j 70.6	^j 1.4	-88.5	^j 856.5
1995	237.3	272.0	8.3	0.7	99.1	6.7	0.2	11.7	4.1	167.5	1.4	10.4	310.1	122.5	33.2	82.9	1.4	-32.2	1,027.1
1996	260.1	275.0	6.5	0.6	98.1	8.7	0.1	11.3	4.0	167.3	1.2	39.3	337.2	140.3	28.9	87.8	1.4	-53.0	1,077.6
1997	246.8	264.0	6.7	0.7	104.6	8.7	0.2	11.1	4.3	173.0	0.3	42.2	351.7	149.1	35.9	86.9	1.3	-40.2	1,095.4
1998	254.7	272.9	5.7	0.6	108.9	8.7	0.2	8.4	4.5	173.4	0.6	41.4	352.3	137.4	31.8	82.0	1.2	-21.4	1,110.9
1999	267.0	257.7	6.8	0.6	103.6	25.9	0.3	21.6	4.5	175.6	0.7	41.1	380.7	135.0	27.6	82.2	1.2	-17.9	1,133.4
2000	267.6	256.1	6.7	0.5	109.6	27.6	0.2	23.5	4.4	173.5	1.9	40.2	388.1	121.5	24.2	83.5	1.0	23.8	1,165.9
2001	274.0	231.6	3.6	0.9	121.7	5.9	0.3	22.2	4.1	173.2	9.7	31.5	373.1	154.4	26.3	^R 66.9	0.9	^R -17.2	^R 1,110.0
2002	255.2	253.7	17.3	0.6	126.3	4.5	0.2	14.6	4.0	177.6	1.4	32.1	378.6	152.0	35.0	73.0	0.8	-7.1	1,141.2
2003	253.7	258.5	12.0	0.5	128.4	4.7	0.1	11.7	3.7	178.8	3.6	33.8	377.3	153.1	27.2	^R 80.5	0.7	-18.0	1,132.8
2004	270.2	228.9	5.9	0.7	136.0	4.1	0.2	12.6	3.8	180.6	7.5	37.1	388.3	161.1	36.5	76.0	0.6	-25.7	1,135.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arkansas

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	0	33	24	62	2,831	2,918	969	--	--	1,339	--	3,312	--
1965	0	37	43	63	3,420	3,527	667	--	--	2,333	--	5,572	--
1970	0	60	70	147	6,552	6,769	417	--	--	4,321	--	10,460	--
1975	0	49	161	128	5,162	5,451	430	--	--	7,751	--	18,640	--
1980	1	47	152	0	2,142	2,294	102	--	--	10,227	--	24,659	--
1985	(s)	40	1	31	2,083	2,114	192	--	--	8,936	--	20,585	--
1990	(s)	39	(s)	20	1,851	1,871	158	--	--	10,558	--	24,423	--
1995	0	41	2	14	1,497	1,513	229	--	--	12,417	--	28,207	--
1996	0	46	1	12	1,490	1,503	238	--	--	12,934	--	29,420	--
1997	(s)	42	1	19	1,577	1,596	117	--	--	12,990	--	29,437	--
1998	(s)	38	1	15	1,169	1,184	104	--	--	14,339	--	32,529	--
1999	(s)	36	1	36	3,027	3,064	110	--	--	14,045	--	32,136	--
2000	0	42	1	25	2,686	2,711	118	--	--	14,871	--	33,833	--
2001	0	37	1	24	2,823	2,848	111	--	--	15,104	--	^R 33,970	--
2002	(s)	39	9	20	2,112	2,140	113	--	--	15,527	--	34,786	--
2003	0	38	4	16	1,743	1,763	119	--	--	15,598	--	^R 34,649	--
2004	(s)	35	6	11	1,934	1,951	122	--	--	15,619	--	34,766	--
Trillion Btu													
1960	0.0	34.4	0.1	0.4	11.4	11.9	19.4	0.0	0.0	4.6	70.2	11.3	81.5
1965	0.0	36.5	0.3	0.4	13.7	14.3	13.3	0.0	0.0	8.0	72.2	19.0	91.2
1970	0.0	60.0	0.4	0.8	24.8	26.0	8.3	0.0	0.0	14.7	109.1	35.7	144.8
1975	0.0	48.3	0.9	0.7	19.2	20.8	8.6	0.0	0.0	26.4	104.2	63.6	167.8
1980	(s)	46.6	0.9	0.0	7.9	8.8	2.0	0.0	0.0	34.9	92.3	84.1	176.4
1985	(s)	40.9	(s)	0.2	7.5	7.7	3.8	0.0	0.0	30.5	82.9	70.2	153.1
1990	(s)	39.5	(s)	0.1	6.7	6.8	3.2	^f 0.1	^f 1.3	36.0	^f 86.9	83.3	^f 170.2
1995	0.0	44.6	(s)	0.1	5.4	5.5	4.6	0.1	1.3	42.4	98.4	96.2	194.7
1996	0.0	47.5	(s)	0.1	5.4	5.5	4.8	0.1	1.2	44.1	103.2	100.4	203.6
1997	(s)	43.0	(s)	0.1	5.7	5.8	2.3	0.1	1.2	44.3	96.8	100.4	197.2
1998	(s)	39.1	(s)	0.1	4.2	4.3	2.1	0.1	1.1	48.9	95.7	111.0	206.7
1999	(s)	36.9	(s)	0.2	10.9	11.2	2.2	0.2	1.0	47.9	99.3	109.6	209.0
2000	0.0	43.2	(s)	0.1	9.7	9.8	2.4	0.2	0.9	50.7	107.1	115.4	222.6
2001	0.0	37.7	(s)	0.1	10.2	10.3	2.2	0.2	0.7	51.5	102.7	^R 115.9	^R 218.6
2002	(s)	41.2	(s)	0.1	7.6	7.8	2.3	0.2	0.6	53.0	105.0	118.7	223.7
2003	0.0	39.9	(s)	0.1	6.3	6.4	2.4	0.3	0.4	53.2	102.7	118.2	220.9
2004	(s)	36.3	(s)	0.1	7.0	7.1	2.4	0.3	0.3	53.3	99.7	118.6	218.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arkansas

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	0	17	14	38	500	151	103	806	0	--	--	1,161	--	2,872	--
1965	0	28	24	39	604	127	88	883	0	--	--	1,834	--	4,379	--
1970	0	39	40	90	1,156	181	41	1,508	0	--	--	2,789	--	6,752	--
1975	0	33	92	79	911	143	1,077	2,302	0	--	--	4,382	--	10,538	--
1980	5	31	112	132	378	162	437	1,221	0	--	--	5,326	--	12,842	--
1985	1	27	829	84	368	119	0	1,400	0	--	--	5,848	--	13,471	--
1990	(s)	25	298	1	327	142	0	769	^g 0	--	--	6,681	--	15,455	--
1995	0	27	301	5	264	29	0	599	0	--	--	7,771	--	17,654	--
1996	0	31	291	5	263	29	(s)	588	0	--	--	8,063	--	18,340	--
1997	(s)	29	270	5	278	28	0	582	0	--	--	8,236	--	18,664	--
1998	(s)	28	358	7	206	29	0	600	0	--	--	8,910	--	20,212	--
1999	(s)	28	260	4	534	28	0	827	0	--	--	9,064	--	20,737	--
2000	0	33	376	4	474	29	0	883	0	--	--	9,472	--	21,551	--
2001	0	32	593	9	498	30	0	1,131	0	--	--	9,894	--	^R 22,253	--
2002	(s)	33	446	4	373	110	0	933	0	--	--	10,035	--	22,482	--
2003	0	32	722	3	308	99	0	1,132	0	--	--	10,568	--	23,475	--
2004	(s)	30	515	17	341	104	(s)	977	0	--	--	10,731	--	23,885	--

Trillion Btu															
1960	0.0	17.8	0.1	0.2	2.0	0.8	0.6	3.7	0.0	0.4	0.0	4.0	25.8	9.8	35.6
1965	0.0	28.0	0.1	0.2	2.4	0.7	0.6	4.0	0.0	0.3	0.0	6.3	38.5	14.9	53.4
1970	0.0	39.3	0.2	0.5	4.4	0.9	0.3	6.3	0.0	0.2	0.0	9.5	55.3	23.0	78.4
1975	0.0	33.1	0.5	0.4	3.4	0.8	6.8	11.9	0.0	0.2	0.0	15.0	60.1	36.0	96.1
1980	0.1	30.5	0.6	0.7	1.4	0.9	2.7	6.4	0.0	(s)	0.0	18.2	55.2	43.8	99.1
1985	(s)	27.2	4.8	0.5	1.3	0.6	0.0	7.3	0.0	0.1	0.0	20.0	54.5	46.0	100.5
1990	(s)	25.3	1.7	(s)	1.2	0.7	0.0	3.7	^g 0.0	^g 0.5	^g (s)	22.8	^g 52.3	52.7	^g 105.1
1995	0.0	29.7	1.8	(s)	1.0	0.2	0.0	2.9	0.0	0.8	(s)	26.5	60.0	60.2	120.2
1996	0.0	31.8	1.7	(s)	1.0	0.2	(s)	2.8	0.0	0.8	(s)	27.5	63.0	62.6	125.6
1997	(s)	29.9	1.6	(s)	1.0	0.1	0.0	2.8	0.0	0.6	(s)	28.1	61.3	63.7	124.9
1998	(s)	28.8	2.1	(s)	0.7	0.1	0.0	3.0	0.0	0.5	(s)	30.4	62.7	69.0	131.6
1999	(s)	28.4	1.5	(s)	1.9	0.1	0.0	3.6	0.0	0.6	0.0	30.9	63.5	70.8	134.3
2000	0.0	33.8	2.2	(s)	1.7	0.1	0.0	4.1	0.0	0.6	0.0	32.3	70.8	73.5	144.3
2001	0.0	32.5	3.5	0.1	1.8	0.2	0.0	5.5	0.0	0.6	0.0	33.8	72.3	^R 75.9	^R 148.2
2002	(s)	34.7	2.6	(s)	1.3	0.6	0.0	4.5	0.0	0.6	0.0	34.2	74.0	76.7	150.8
2003	0.0	33.4	4.2	(s)	1.1	0.5	0.0	5.9	0.0	0.6	0.0	36.1	75.9	80.1	156.0
2004	(s)	31.2	3.0	0.1	1.2	0.5	(s)	4.9	0.0	0.5	0.0	36.6	73.2	81.5	154.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arkansas

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	14	108	1,003	1,055	465	1,183	269	431	315	1,892	6,614	0	--	--	3,161	--	7,819	--
1965	6	134	1,295	1,057	283	1,141	163	485	291	2,807	7,522	0	--	--	4,883	--	11,661	--
1970	0	162	2,104	1,962	584	1,798	231	291	191	2,830	9,992	0	--	--	6,333	--	15,328	--
1975	40	132	2,276	2,841	480	2,715	308	169	3,634	3,017	15,440	0	--	--	5,994	--	14,416	--
1980	296	126	2,770	3,544	439	2,122	268	51	1,438	3,975	14,608	0	--	--	10,946	--	26,392	--
1985	379	109	1,263	4,273	41	1,076	244	630	726	2,433	10,687	0	--	--	9,049	--	20,846	--
1990	256	127	495	2,424	17	1,202	274	416	214	1,843	6,886	9	--	--	10,126	--	23,424	--
1995	325	140	1,246	4,041	20	1,416	262	449	204	1,798	9,436	0	--	--	14,483	--	32,900	--
1996	348	144	975	3,393	9	1,317	254	454	116	7,182	13,700	0	--	--	15,139	--	34,436	--
1997	296	152	1,012	3,997	10	1,171	268	472	21	7,679	14,630	0	--	--	15,632	--	35,426	--
1998	287	149	859	3,816	17	915	281	648	3	7,540	14,079	0	--	--	16,066	--	36,446	--
1999	324	140	1,023	3,528	13	1,955	284	549	17	7,530	14,899	0	--	--	16,680	--	38,163	--
2000	382	132	1,017	4,026	4	3,269	280	550	9	7,382	16,536	0	--	--	17,268	--	39,288	--
2001	437	124	536	4,589	19	2,741	256	936	203	5,701	14,980	0	--	--	16,734	--	^R 37,637	--
2002	422	120	2,608	4,347	5	1,507	253	999	46	5,802	15,567	0	--	--	16,887	--	37,831	--
2003	417	112	1,810	5,173	2	1,113	234	1,071	188	6,097	15,688	0	--	--	16,942	--	37,634	--
2004	415	107	884	5,583	1	1,143	237	1,257	446	6,708	16,259	0	--	--	17,322	--	38,556	--
Trillion Btu																		
1960	0.4	112.1	6.7	6.1	2.6	4.7	1.6	2.3	2.0	11.3	37.4	0.0	17.7	0.0	10.8	178.3	26.7	205.0
1965	0.2	134.2	8.6	6.2	1.6	4.6	1.0	2.5	1.8	16.8	43.1	0.0	21.6	0.0	16.7	215.7	39.8	255.5
1970	0.0	162.8	14.0	11.4	3.3	6.8	1.4	1.5	1.2	16.9	56.6	0.0	25.8	0.0	21.6	266.7	52.3	319.0
1975	0.9	131.7	15.1	16.5	2.7	10.1	1.9	0.9	22.8	17.5	87.6	0.0	27.1	0.0	20.5	267.7	49.2	316.9
1980	6.3	125.1	18.4	20.6	2.5	7.8	1.6	0.3	9.0	22.5	82.8	0.0	50.3	0.0	37.3	301.9	90.1	391.9
1985	8.1	110.9	8.4	24.9	0.2	3.9	1.5	3.3	4.6	13.7	60.5	0.0	58.9	0.0	30.9	269.3	71.1	340.4
1990	5.8	128.3	3.3	14.1	0.1	4.4	1.7	2.2	1.3	10.5	37.6	^g 0.0	^g 66.9	^g 0.0	34.6	^g 273.2	79.9	^g 353.1
1995	7.8	151.8	8.3	23.5	0.1	5.1	1.6	2.3	1.3	10.4	52.6	0.0	77.5	0.0	49.4	339.2	112.3	451.4
1996	8.4	148.0	6.5	19.8	0.1	4.8	1.5	2.4	0.7	39.3	74.9	0.0	82.2	0.0	51.7	365.1	117.5	482.6
1997	7.0	153.9	6.7	23.3	0.1	4.2	1.6	2.5	0.1	42.2	80.7	0.0	84.0	0.0	53.3	378.9	120.9	499.8
1998	7.0	153.1	5.7	22.2	0.1	3.3	1.7	3.4	(s)	41.4	77.8	0.0	79.4	0.0	54.8	372.1	124.4	496.5
1999	7.9	142.1	6.8	20.6	0.1	7.1	1.7	2.9	0.1	41.1	80.2	0.0	79.4	(s)	56.9	366.6	130.2	496.8
2000	9.6	134.8	6.7	23.4	(s)	11.8	1.7	2.9	0.1	40.2	86.8	0.0	80.6	(s)	58.9	370.8	134.1	504.8
2001	10.9	125.5	3.6	26.7	0.1	9.9	1.6	4.9	1.3	31.5	79.5	0.0	^R 64.1	(s)	57.1	337.0	^R 128.4	^R 465.5
2002	10.5	126.3	17.3	25.3	(s)	5.4	1.5	5.2	0.3	32.1	87.2	0.0	^R 70.2	(s)	57.6	351.7	129.1	480.8
2003	10.1	118.1	12.0	30.1	(s)	4.0	1.4	5.6	1.2	33.8	88.1	0.0	70.4	(s)	57.8	^R 344.6	128.4	^R 473.0
2004	10.1	112.1	5.9	32.5	(s)	4.1	1.4	6.6	2.8	37.1	90.5	0.0	70.6	(s)	59.1	342.4	131.6	473.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Arkansas

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	Total ^e
1960	(s)	9	177	926	2,237	309	274	14,093	3	18,019	0	0	--	0	--
1965	(s)	11	482	1,703	2,094	434	305	17,310	36	22,364	0	0	--	0	--
1970	0	13	293	3,383	2,204	692	300	21,985	5	28,862	0	0	--	0	--
1975	(s)	12	254	6,410	1,995	679	308	27,299	11	36,957	0	0	--	0	--
1980	0	11	275	6,699	2,035	205	432	26,276	0	35,922	0	0	--	0	--
1985	0	8	86	7,690	2,030	147	393	25,857	0	36,203	^f 19	0	--	0	--
1990	0	9	125	9,722	1,693	83	442	28,438	0	40,503	146	0	--	0	--
1995	0	11	143	12,569	1,179	51	422	31,644	0	46,008	9	0	--	0	--
1996	0	13	121	13,066	1,534	45	410	31,599	0	46,775	1	0	--	0	--
1997	0	12	135	13,582	1,539	42	433	32,684	0	48,414	0	0	--	0	--
1998	0	10	122	14,345	1,527	33	453	32,585	0	49,065	0	0	--	0	--
1999	0	9	118	13,824	4,575	457	458	33,120	0	52,552	0	0	--	0	--
2000	0	9	93	14,346	4,868	93	451	32,719	0	52,570	0	0	--	0	--
2001	0	9	183	15,633	1,036	89	413	32,280	0	49,634	0	0	--	0	--
2002	0	8	118	16,811	794	54	408	32,995	0	51,180	0	0	--	0	--
2003	0	9	103	16,075	822	47	377	33,173	0	50,597	0	0	--	0	--
2004	0	8	129	17,189	722	51	382	33,266	0	51,740	0	(s)	--	(s)	--
Trillion Btu															
1960	(s)	9.5	0.9	5.4	12.0	1.2	1.7	74.0	(s)	95.2	0.0	0.0	104.7	0.0	104.7
1965	(s)	11.4	2.4	9.9	11.2	1.7	1.8	90.9	0.2	118.3	0.0	0.0	129.7	0.0	129.7
1970	0.0	13.5	1.5	19.7	11.9	2.6	1.8	115.5	(s)	153.0	0.0	0.0	166.5	0.0	166.5
1975	(s)	12.2	1.3	37.3	10.8	2.5	1.9	143.4	0.1	197.3	0.0	0.0	209.4	0.0	209.4
1980	0.0	11.4	1.4	39.0	11.0	0.8	2.6	138.0	0.0	192.9	0.0	0.0	204.2	0.0	204.2
1985	0.0	8.3	0.4	44.8	11.0	0.5	2.4	135.8	0.0	195.0	^f 0.1	0.0	^f 203.4	0.0	^f 203.4
1990	0.0	8.7	0.6	56.6	9.2	0.3	2.7	149.4	0.0	218.9	0.5	0.0	228.1	0.0	228.1
1995	0.0	12.5	0.7	73.2	6.7	0.2	2.6	165.0	0.0	248.4	(s)	0.0	260.8	0.0	260.8
1996	0.0	12.9	0.6	76.1	8.7	0.2	2.5	164.8	0.0	252.9	(s)	0.0	265.8	0.0	265.8
1997	0.0	11.8	0.7	79.1	8.7	0.2	2.6	170.4	0.0	261.7	0.0	0.0	273.5	0.0	273.5
1998	0.0	10.5	0.6	83.6	8.7	0.1	2.7	169.8	0.0	265.5	0.0	0.0	276.1	0.0	276.1
1999	0.0	9.2	0.6	80.5	25.9	1.7	2.8	172.6	0.0	284.1	0.0	0.0	293.3	0.0	293.3
2000	0.0	9.0	0.5	83.6	27.6	0.3	2.7	170.5	0.0	285.2	0.0	0.0	294.2	0.0	294.2
2001	0.0	8.9	0.9	91.1	5.9	0.3	2.5	168.2	0.0	268.9	0.0	0.0	277.8	0.0	277.8
2002	0.0	8.4	0.6	97.9	4.5	0.2	2.5	171.8	0.0	277.5	0.0	0.0	285.9	0.0	285.9
2003	0.0	9.0	0.5	93.6	4.7	0.2	2.3	172.7	0.0	274.0	0.0	0.0	283.0	0.0	283.0
2004	0.0	8.0	0.7	100.1	4.1	0.2	2.3	173.5	0.0	280.9	0.0	(s)	288.9	(s)	288.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Arkansas

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	47	118	1	0	119	0	992	--	0	0	0	0	--
1965	0	68	38	(s)	0	38	0	1,080	--	0	0	0	0	--
1970	0	107	698	8	0	705	0	2,160	--	0	0	0	0	--
1975	0	32	4,365	62	0	4,427	4,874	3,433	--	0	0	0	0	--
1980	1,774	59	3,106	180	0	3,285	7,833	1,695	--	0	0	0	0	--
1985	12,302	11	8	12	0	21	9,889	4,434	--	0	0	0	0	--
1990	11,836	32	15	140	0	155	11,282	3,655	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	13,216	33	15	94	0	109	11,658	3,218	--	0	0	0	0	--
1996	14,467	34	81	97	0	179	13,357	2,797	--	0	0	0	0	--
1997	13,772	25	27	100	0	127	14,208	3,516	--	0	0	0	0	--
1998	14,276	41	100	179	0	279	13,097	3,117	--	0	0	0	0	--
1999	14,974	40	92	167	0	260	12,920	2,694	--	0	0	0	0	--
2000	14,866	35	293	67	0	360	11,652	2,370	--	0	0	0	0	--
2001	15,110	26	1,340	82	0	1,421	14,781	2,548	--	0	0	0	0	--
2002	14,165	42	180	69	0	249	14,559	3,436	--	0	0	0	0	--
2003	14,310	56	382	71	0	453	14,689	2,655	--	0	0	0	0	--
2004	15,318	40	742	62	0	805	15,450	3,643	--	0	0	0	0	--
Trillion Btu														
1960	0.0	48.4	0.7	(s)	0.0	0.7	0.0	10.7	0.0	0.0	0.0	0.0	0.0	59.8
1965	0.0	67.6	0.2	(s)	0.0	0.2	0.0	11.3	0.0	0.0	0.0	0.0	0.0	79.1
1970	0.0	107.9	4.4	(s)	0.0	4.4	0.0	22.7	0.0	0.0	0.0	0.0	0.0	135.0
1975	0.0	32.2	27.4	0.4	0.0	27.8	53.7	35.7	0.0	0.0	0.0	0.0	0.0	149.4
1980	30.2	60.4	19.5	1.0	0.0	20.6	85.4	17.6	0.0	0.0	0.0	0.0	0.0	214.2
1985	211.7	12.0	0.1	0.1	0.0	0.1	105.0	46.3	0.0	0.0	0.0	0.0	0.0	375.2
1990	206.9	32.7	0.1	0.8	0.0	0.9	119.4	38.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 397.8
1995	229.5	33.4	0.1	0.5	0.0	0.6	122.5	33.2	0.0	0.0	0.0	0.0	0.0	419.2
1996	251.7	34.8	0.5	0.6	0.0	1.1	140.3	28.9	0.0	0.0	0.0	0.0	0.0	456.8
1997	239.8	25.4	0.2	0.6	0.0	0.8	149.1	35.9	0.0	0.0	0.0	0.0	0.0	451.0
1998	247.7	41.4	0.6	1.0	0.0	1.7	137.4	31.8	0.0	0.0	0.0	0.0	0.0	459.9
1999	259.1	41.1	0.6	1.0	0.0	1.6	135.0	27.6	0.0	0.0	0.0	0.0	0.0	464.3
2000	258.0	35.3	1.8	0.4	0.0	2.2	121.5	24.2	0.0	0.0	0.0	0.0	0.0	441.2
2001	263.1	27.1	8.4	0.5	0.0	8.9	154.4	26.3	0.0	0.0	0.0	0.0	0.0	479.8
2002	244.8	43.1	1.1	0.4	0.0	1.5	152.0	35.0	0.0	0.0	0.0	0.0	0.0	476.4
2003	243.5	58.2	2.4	0.4	0.0	2.8	153.1	27.2	7.1	0.0	0.0	0.0	0.0	491.9
2004	260.1	41.3	4.7	0.4	0.0	5.0	161.1	36.5	2.4	0.0	0.0	0.0	0.0	506.4

^a Includes supplemental gaseous fuels.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g Solar thermal and photovoltaic energy.

^h Electricity traded with Canada and Mexico.

ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, California

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	1,342	1,258	10,665	5,383	26,683	25,818	1,017	8,888	3,781	137,025	80,575	25,691	325,526	(s)	17,445	--	--	1,788	--
1965	2,379	1,690	11,892	3,342	35,105	40,150	817	11,029	4,482	169,900	69,745	28,664	375,126	270	30,523	--	--	-1,386	--
1970	2,327	2,126	12,084	2,184	39,221	59,614	1,004	15,532	3,967	214,064	70,324	35,824	453,818	3,132	38,082	--	--	38,641	--
1975	2,151	1,833	13,146	1,640	42,335	62,607	2,027	19,264	3,632	241,508	111,086	39,478	536,724	6,071	40,103	--	--	112,514	--
1980	2,669	1,808	18,431	285	62,277	63,201	2,117	19,197	4,907	253,593	148,701	49,455	622,165	4,920	40,780	--	--	119,640	--
1985	1,942	1,846	13,848	1,354	71,538	67,028	916	20,497	4,465	267,368	66,724	55,165	568,904	19,729	31,717	--	--	174,746	--
1990	3,809	2,036	14,862	1,106	77,233	94,907	145	19,992	5,024	305,983	64,095	56,989	640,335	32,693	23,793	--	--	189,777	--
1995	3,675	2,077	12,212	807	73,050	95,305	164	14,798	4,793	313,464	46,248	48,574	609,415	30,246	48,033	--	--	161,476	--
1996	3,444	1,955	12,399	769	73,677	103,773	294	10,914	4,652	318,257	40,283	53,105	618,122	34,097	44,751	--	--	196,691	--
1997	3,628	2,146	11,512	836	79,624	103,144	358	8,854	4,914	322,871	21,420	51,297	604,830	30,512	41,055	--	--	230,327	--
1998	2,903	2,310	15,572	574	78,526	105,385	474	10,936	5,145	329,943	17,194	46,008	609,758	34,594	49,548	--	--	204,259	--
1999	3,005	2,340	20,366	825	82,748	98,673	288	12,171	5,198	337,791	23,794	46,668	628,524	33,372	40,737	--	--	206,772	--
2000	2,954	2,509	20,359	723	93,456	103,001	371	12,558	5,120	342,890	33,734	41,898	654,112	35,176	38,334	--	--	184,598	--
2001	2,834	2,465	18,920	536	97,376	97,216	455	11,060	4,691	351,981	25,470	54,025	661,731	33,220	25,542	--	--	^R 169,130	--
2002	2,943	2,273	17,856	599	89,580	102,756	258	14,696	4,636	369,567	30,768	55,074	685,789	34,352	31,141	--	--	212,262	--
2003	2,866	^R 2,269	13,644	601	121,454	99,721	284	14,689	4,286	367,675	23,421	55,462	701,237	35,594	36,371	--	--	^R 209,339	--
2004	2,847	2,423	13,808	499	94,023	105,408	391	14,831	4,342	376,065	27,786	55,921	693,074	30,268	34,141	--	--	254,160	--
Trillion Btu																			
1960	35.9	1,301.8	70.8	27.2	155.4	140.7	5.8	35.7	22.9	719.8	506.6	153.9	1,838.7	(s)	187.7	82.1	-0.6	6.1	3,451.7
1965	63.7	1,813.2	78.9	16.9	204.5	222.2	4.6	44.2	27.2	892.5	438.5	168.7	2,098.2	3.2	319.1	97.5	4.2	-4.7	4,394.3
1970	61.8	2,241.3	80.2	11.0	228.5	332.9	5.7	58.7	24.1	1,124.5	442.1	210.6	2,518.2	34.4	399.6	116.8	11.3	131.8	5,515.3
1975	56.4	1,937.3	87.2	8.3	246.6	350.7	11.5	71.6	22.0	1,268.6	698.4	232.3	2,997.3	66.9	417.3	127.5	70.2	383.9	6,056.7
1980	66.2	1,890.9	122.3	1.4	362.8	354.2	12.0	70.5	29.8	1,332.1	934.9	289.5	3,509.6	53.7	423.6	115.6	110.1	408.2	6,577.8
1985	45.3	1,925.5	91.9	6.8	416.7	375.8	5.2	73.8	27.1	1,404.5	419.5	327.2	3,148.5	209.6	331.3	165.3	209.5	596.2	6,632.8
1990	84.2	2,101.6	98.6	5.6	449.9	534.7	0.8	72.5	30.5	1,607.3	403.0	335.5	3,538.3	346.0	247.5	^j 218.4	^j 374.1	647.5	^j 7,561.6
1995	84.3	2,110.0	81.0	4.1	425.5	540.4	0.9	53.6	29.1	1,634.7	290.8	288.1	3,348.2	317.8	495.3	172.9	304.8	551.0	7,384.2
1996	80.3	2,017.7	82.3	3.9	429.2	588.4	1.7	39.4	28.2	1,660.0	253.3	315.8	3,402.1	358.1	462.7	167.6	322.6	671.1	7,482.3
1997	82.7	2,185.0	76.4	4.2	463.8	584.8	2.0	32.0	29.8	1,683.1	134.7	305.2	3,316.1	320.2	419.3	151.2	330.7	785.9	7,591.1
1998	66.2	2,418.7	103.3	2.9	457.4	597.5	2.7	39.5	31.2	1,719.7	108.1	274.1	3,336.5	362.9	505.2	141.1	323.2	696.9	7,850.7
1999	69.5	2,379.6	135.1	4.2	482.0	559.5	1.6	44.0	31.5	1,760.2	149.6	277.4	3,445.2	348.7	416.6	151.5	334.0	705.5	7,850.6
2000	70.0	2,456.4	135.1	3.7	544.4	584.0	2.1	45.3	31.1	1,786.5	212.1	249.8	3,593.9	366.8	391.0	159.2	331.6	629.9	7,998.9
2001	67.8	2,513.9	125.6	2.7	567.2	551.2	2.6	40.0	28.5	1,833.8	160.1	319.1	3,630.7	347.1	263.9	^R 160.5	328.2	^R 577.1	^R 7,889.2
2002	70.0	2,268.6	118.5	3.0	521.8	582.6	1.5	53.1	28.1	1,924.7	193.4	325.2	3,752.0	358.6	316.8	^R 177.0	345.0	724.2	^R 8,012.2
2003	69.5	^R 2,319.3	90.5	3.0	707.5	565.4	1.6	53.3	26.0	1,914.5	147.2	327.4	3,836.6	370.9	372.5	^R 160.4	341.5	714.3	^R 8,185.0
2004	68.9	2,474.2	91.6	2.5	547.7	597.7	2.2	53.7	26.3	1,961.2	174.7	330.3	3,787.8	315.6	342.2	160.7	348.0	867.2	8,364.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatt-hours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, California

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	4	365	485	15	3,778	4,277	1,263	--	--	14,975	--	37,035	--
1965	6	489	427	31	5,095	5,553	1,083	--	--	23,800	--	56,832	--
1970	61	553	500	166	5,167	5,833	1,209	--	--	35,777	--	86,595	--
1975	0	631	493	211	2,708	3,412	1,374	--	--	44,257	--	106,431	--
1980	1	529	94	18	4,919	5,032	2,649	--	--	52,011	--	125,406	--
1985	12	527	144	73	5,350	5,567	4,577	--	--	57,501	--	132,462	--
1990	5	515	202	88	5,750	6,040	3,659	--	--	66,575	--	154,003	--
1995	17	477	175	81	4,884	5,140	2,832	--	--	68,783	--	156,249	--
1996	21	473	148	103	4,079	4,331	2,941	--	--	71,396	--	162,398	--
1997	12	479	159	135	3,686	3,979	1,883	--	--	73,086	--	165,630	--
1998	13	550	169	237	6,092	6,498	1,674	--	--	75,205	--	170,604	--
1999	3	568	171	187	5,711	6,069	1,762	--	--	75,303	--	172,291	--
2000	3	517	241	281	5,328	5,850	1,894	--	--	79,241	--	180,285	--
2001	(s)	513	293	350	3,657	4,301	1,777	--	--	76,209	--	^R 171,399	--
2002	(s)	^R 511	147	216	4,256	4,619	1,804	--	--	77,425	--	173,453	--
2003	(s)	^R 498	117	196	6,386	6,699	1,899	--	--	80,699	--	^R 179,262	--
2004	1	528	142	276	8,120	8,539	1,947	--	--	84,966	--	189,121	--
Trillion Btu													
1960	0.1	377.6	2.8	0.1	15.2	18.1	25.3	0.0	0.0	51.1	472.1	126.4	598.4
1965	0.1	524.9	2.5	0.2	20.4	23.1	21.7	0.0	0.0	81.2	651.0	193.9	844.9
1970	1.3	582.4	2.9	0.9	19.5	23.4	24.2	0.0	0.0	122.1	753.4	295.5	1,048.8
1975	0.0	666.7	2.9	1.2	10.1	14.1	27.5	0.0	0.0	151.0	859.3	363.1	1,222.5
1980	(s)	552.4	0.6	0.1	18.1	18.7	53.0	0.0	0.0	177.5	801.6	427.9	1,229.5
1985	0.3	547.8	0.8	0.4	19.3	20.5	91.5	0.0	0.0	196.2	856.3	452.0	1,308.3
1990	0.1	531.0	1.2	0.5	20.8	22.5	73.2	^f 0.2	^f 18.4	227.2	^f 872.5	525.5	^f 1,397.9
1995	0.4	482.7	1.0	0.5	17.7	19.2	56.6	0.2	20.5	234.7	814.3	533.1	1,347.4
1996	0.5	489.5	0.9	0.6	14.7	16.2	58.8	0.2	20.4	243.6	829.3	554.1	1,383.4
1997	0.3	487.1	0.9	0.8	13.3	15.0	37.7	0.2	20.1	249.4	809.7	565.1	1,374.8
1998	0.3	580.9	1.0	1.3	22.0	24.3	33.5	0.2	19.7	256.6	915.6	582.1	1,497.7
1999	0.1	576.9	1.0	1.1	20.7	22.7	35.2	0.1	19.2	256.9	911.2	587.9	1,499.0
2000	0.1	494.2	1.4	1.6	19.2	22.2	37.9	0.2	18.4	270.4	843.2	615.1	1,458.3
2001	(s)	521.3	1.7	2.0	13.2	16.9	35.6	0.2	17.8	260.0	851.8	^R 584.8	^R 1,436.6
2002	(s)	504.3	0.9	1.2	15.4	17.5	36.1	0.2	17.3	264.2	839.5	591.8	1,431.3
2003	(s)	^R 508.6	0.7	1.1	23.2	25.0	38.0	0.2	17.1	275.3	^R 864.2	611.6	^R 1,475.8
2004	(s)	532.7	0.8	1.6	29.4	31.8	38.9	0.2	17.2	289.9	910.8	645.3	1,556.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, California

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	3	109	637	46	667	1,406	7,284	10,040	0	--	--	22,039	--	54,506	--
1965	5	164	560	95	899	1,309	6,200	9,064	0	--	--	29,917	--	71,439	--
1970	48	210	657	510	912	1,482	8,631	12,192	0	--	--	40,634	--	98,352	--
1975	0	240	647	650	478	1,622	4,377	7,774	0	--	--	57,846	--	139,110	--
1980	3	258	3,225	222	868	1,795	6,811	12,921	0	--	--	63,465	--	153,025	--
1985	41	205	3,416	353	944	1,759	35	6,507	0	--	--	73,592	--	169,530	--
1990	20	285	4,094	19	1,015	1,928	882	7,937	^g 7	--	--	88,311	--	204,285	--
1995	116	279	3,164	27	862	236	4	4,292	4	--	--	86,032	--	195,431	--
1996	156	235	2,559	69	720	231	12	3,591	11	--	--	88,605	--	201,541	--
1997	97	254	2,487	41	650	233	2	3,414	5	--	--	92,299	--	209,171	--
1998	103	282	2,657	63	1,075	250	59	4,104	12	--	--	99,067	--	224,734	--
1999	24	245	2,745	29	1,008	236	0	4,018	11	--	--	95,771	--	219,121	--
2000	21	246	3,104	52	940	237	1	4,335	8	--	--	99,900	--	227,288	--
2001	(s)	246	2,838	63	645	246	27	3,820	0	--	--	107,580	--	^R 241,955	--
2002	(s)	238	2,190	27	751	253	0	3,222	0	--	--	109,462	--	245,224	--
2003	(s)	^R 233	1,743	47	1,127	262	0	3,179	1	--	--	108,049	--	^R 240,015	--
2004	7	232	1,663	72	1,433	271	0	3,439	(s)	--	--	117,573	--	261,697	--

Trillion Btu															
1960	0.1	112.7	3.7	0.3	2.7	7.4	45.8	59.8	0.0	0.5	0.0	75.2	248.2	186.0	434.2
1965	0.1	175.5	3.3	0.5	3.6	6.9	39.0	53.3	0.0	0.4	0.0	102.1	331.3	243.7	575.1
1970	1.1	221.3	3.8	2.9	3.4	7.8	54.3	72.2	0.0	0.5	0.0	138.6	433.6	335.6	769.2
1975	0.0	253.7	3.8	3.7	1.8	8.5	27.5	45.3	0.0	0.5	0.0	197.4	496.8	474.6	971.5
1980	0.1	269.4	18.8	1.3	3.2	9.4	42.8	75.5	0.0	1.3	0.0	216.5	562.8	522.1	1,084.9
1985	1.0	212.9	19.9	2.0	3.4	9.2	0.2	34.8	0.0	2.2	0.0	251.1	501.9	578.4	1,080.4
1990	0.5	294.2	23.8	0.1	3.7	10.1	5.5	43.3	^g 0.1	^g 8.4	^g 0.3	301.3	^g 648.1	697.0	^g 1,345.1
1995	2.7	281.8	18.4	0.2	3.1	1.2	(s)	23.0	(s)	11.4	0.4	293.5	612.8	666.8	1,279.6
1996	3.6	243.1	14.9	0.4	2.6	1.2	0.1	19.2	0.1	11.2	0.5	302.3	580.1	687.7	1,267.7
1997	2.2	258.3	14.5	0.2	2.4	1.2	(s)	18.3	0.1	9.8	0.5	314.9	604.1	713.7	1,317.8
1998	2.4	298.1	15.5	0.4	3.9	1.3	0.4	21.4	0.1	8.6	0.7	338.0	669.3	766.8	1,436.1
1999	0.6	248.3	16.0	0.2	3.6	1.2	0.0	21.0	0.1	9.0	0.5	326.8	606.3	747.6	1,354.0
2000	0.5	235.7	18.1	0.3	3.4	1.2	(s)	23.0	0.1	10.8	0.6	340.9	611.4	775.5	1,387.0
2001	(s)	249.9	16.5	0.4	2.3	1.3	0.2	20.7	0.0	9.1	0.6	367.1	647.4	^R 825.6	^R 1,472.9
2002	(s)	235.2	12.8	0.2	2.7	1.3	0.0	16.9	0.0	9.9	0.7	373.5	636.1	836.7	1,472.8
2003	(s)	^R 237.9	10.2	0.3	4.1	1.4	0.0	15.9	(s)	10.9	0.8	368.7	^R 634.2	818.9	^R 1,453.1
2004	0.2	233.5	9.7	0.4	5.2	1.4	0.0	16.7	(s)	11.0	0.9	401.2	663.4	892.9	1,556.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, California

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	1,313	451	10,665	10,127	956	4,231	1,454	2,851	10,750	25,691	66,725	(s)	--	--	20,190	--	49,933	--
1965	2,361	529	11,892	13,002	692	4,826	1,709	2,245	11,846	28,664	74,876	(s)	--	--	28,904	--	69,021	--
1970	2,215	711	12,084	8,510	328	9,147	1,510	1,942	12,121	35,824	81,466	(s)	--	--	42,169	--	102,067	--
1975	2,151	666	13,146	10,519	1,166	15,688	1,246	1,338	8,308	39,478	90,890	0	--	--	46,053	--	110,751	--
1980	2,665	486	18,431	15,576	1,877	12,887	2,103	1,698	12,554	49,455	114,581	0	--	--	51,888	--	125,110	--
1985	1,889	433	13,848	17,779	491	12,977	1,914	3,065	18,732	55,165	123,971	0	--	--	52,972	--	122,030	--
1990	2,874	588	14,862	17,076	38	12,304	2,153	3,163	1,838	56,170	107,604	^g 0	--	--	55,892	--	129,290	--
1995	2,485	698	12,212	11,664	56	8,489	2,054	2,849	1,467	45,962	84,752	0	--	--	57,367	--	130,316	--
1996	2,414	702	12,399	11,865	122	5,634	1,994	2,741	304	50,206	85,265	0	--	--	57,683	--	131,206	--
1997	2,697	794	11,512	14,035	182	4,169	2,106	2,910	102	48,562	83,577	0	--	--	62,017	--	140,543	--
1998	1,885	819	15,572	12,849	174	3,100	2,205	3,263	31	42,598	79,791	0	--	--	61,641	--	139,832	--
1999	2,034	792	20,366	14,766	73	5,068	2,228	1,922	570	43,635	88,627	0	--	--	63,217	--	144,638	--
2000	1,992	841	20,359	18,686	38	5,948	2,194	1,971	108	38,579	87,884	0	--	--	64,311	--	146,317	--
2001	1,937	719	18,920	21,700	42	6,367	2,011	4,533	333	50,826	104,733	0	--	--	50,943	--	^R 114,575	--
2002	1,973	785	17,856	14,644	15	9,188	1,987	4,821	194	51,722	100,426	0	--	--	48,349	--	108,315	--
2003	1,976	^R 821	13,644	10,432	41	6,703	1,837	5,009	53	51,831	89,550	0	--	--	49,153	--	109,187	--
2004	1,914	876	13,808	14,218	43	4,799	1,861	5,720	14	52,447	92,910	0	--	--	49,484	--	110,143	--
Trillion Btu																		
1960	35.2	466.3	70.8	59.0	5.4	17.0	8.8	15.0	67.6	153.9	397.5	(s)	56.3	0.0	68.9	1,024.2	170.4	1,194.6
1965	63.2	567.4	78.9	75.7	3.9	19.4	10.4	11.8	74.5	168.7	443.3	(s)	74.8	0.0	98.6	1,247.3	235.5	1,482.8
1970	59.3	749.1	80.2	49.6	1.9	34.6	9.2	10.2	76.2	210.6	472.3	(s)	91.7	0.0	143.9	1,516.4	348.3	1,864.6
1975	56.4	703.6	87.2	61.3	6.6	58.3	7.6	7.0	52.2	232.3	512.5	0.0	99.3	0.0	157.1	1,529.0	377.9	1,906.9
1980	66.1	507.4	122.3	90.7	10.6	47.3	12.8	8.9	78.9	289.5	661.2	0.0	61.1	0.0	177.0	1,472.7	426.9	1,899.6
1985	44.0	449.5	91.9	103.6	2.8	46.8	11.6	16.1	117.8	327.2	717.6	0.0	71.6	0.0	180.7	1,463.5	416.4	1,879.9
1990	64.7	606.7	98.6	99.5	0.2	44.6	13.1	16.6	11.6	330.6	614.7	^g 0.0	^g 65.3	^g 0.6	190.7	^g 1,542.8	441.1	^g 1,984.0
1995	57.9	705.4	81.0	67.9	0.3	30.8	12.5	14.9	9.2	272.4	489.0	0.0	42.3	1.4	195.7	1,491.7	444.6	1,936.3
1996	56.2	726.4	82.3	69.1	0.7	20.4	12.1	14.3	1.9	298.4	499.1	0.0	35.6	1.4	196.8	1,515.4	447.7	1,963.1
1997	62.2	807.3	76.4	81.8	1.0	15.1	12.8	15.2	0.6	288.7	491.6	0.0	42.1	1.6	211.6	1,616.3	479.5	2,095.8
1998	43.3	864.8	103.3	74.8	1.0	11.2	13.4	17.0	0.2	253.6	474.5	0.0	34.7	1.6	210.3	1,629.2	477.1	2,106.3
1999	46.8	803.6	135.1	86.0	0.4	18.3	13.5	10.0	3.6	259.1	526.1	0.0	37.6	1.2	215.7	1,631.1	493.5	2,124.6
2000	47.4	803.8	135.1	108.8	0.2	21.5	13.3	10.3	0.7	229.8	519.7	0.0	41.1	1.3	219.4	1,632.8	499.2	2,132.0
2001	46.7	731.2	125.6	126.4	0.2	23.0	12.2	23.6	2.1	299.8	612.9	0.0	^R 51.7	1.4	173.8	^R 1,617.7	^R 390.9	^R 2,008.6
2002	47.1	774.6	118.5	85.3	0.1	33.2	12.1	25.1	1.2	305.0	580.5	0.0	^R 35.8	1.4	165.0	^R 1,604.3	369.6	^R 1,973.9
2003	47.7	^R 838.7	90.5	60.8	0.2	24.3	11.1	26.1	0.3	305.6	519.0	0.0	^R 34.9	1.0	167.7	^R 1,609.0	372.5	^R 1,981.6
2004	46.2	883.0	91.6	82.8	0.2	17.4	11.3	29.8	0.1	309.3	542.6	0.0	35.1	1.1	168.8	1,676.9	375.8	2,052.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, California

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	23	11	5,383	15,313	25,818	214	2,327	132,768	38,610	220,432	0	66	--	163	--
1965	8	16	3,342	21,032	40,150	208	2,772	166,346	35,109	268,960	0	66	--	158	--
1970	4	17	2,184	29,448	59,614	305	2,457	210,641	27,982	332,632	0	65	--	157	--
1975	(s)	20	1,640	30,528	62,509	390	2,386	238,548	20,056	356,057	0	265	--	637	--
1980	0	15	285	41,801	62,224	522	2,804	250,100	66,673	424,409	0	203	--	488	--
1985	0	14	1,354	49,892	67,028	1,225	2,552	262,544	43,340	427,934	^f 429	266	--	613	--
1990	0	20	1,106	55,598	94,907	923	2,871	300,893	54,206	510,503	1,133	315	--	730	--
1995	0	20	807	57,940	95,305	564	2,739	310,379	44,043	511,777	2,523	423	--	961	--
1996	0	19	769	58,960	103,773	481	2,658	315,285	38,983	520,908	2,128	429	--	976	--
1997	0	24	836	62,659	103,144	349	2,808	319,727	21,272	510,796	2,134	478	--	1,083	--
1998	0	10	574	62,554	105,385	670	2,940	326,430	17,094	515,648	1,610	521	--	1,181	--
1999	0	11	825	64,787	98,673	384	2,971	335,633	23,223	526,496	1,395	540	--	1,235	--
2000	0	12	723	70,525	103,001	341	2,926	340,681	33,540	551,739	1,589	606	--	1,379	--
2001	0	14	536	71,172	97,216	390	2,681	347,202	24,617	543,814	2,205	660	--	^R 1,484	--
2002	0	12	599	72,375	102,756	501	2,649	364,493	30,534	573,906	2,587	591	--	1,324	--
2003	0	12	601	108,907	99,721	472	2,449	362,405	23,358	597,914	14,411	809	--	1,797	--
2004	0	17	499	77,767	105,408	478	2,481	370,074	27,772	584,479	20,813	741	--	1,649	--
Trillion Btu															
1960	0.6	11.0	27.2	89.2	140.7	0.9	14.1	697.4	242.7	1,212.2	0.0	0.2	1,223.9	0.6	1,224.5
1965	0.2	16.8	16.9	122.5	222.2	0.8	16.8	873.8	220.7	1,473.8	0.0	0.2	1,491.0	0.5	1,491.5
1970	0.1	17.9	11.0	171.5	332.9	1.2	14.9	1,106.5	175.9	1,814.0	0.0	0.2	1,832.2	0.5	1,832.7
1975	(s)	21.4	8.3	177.8	350.2	1.5	14.5	1,253.1	126.1	1,931.4	0.0	0.9	1,953.7	2.2	1,955.9
1980	0.0	15.9	1.4	243.5	348.7	1.9	17.0	1,313.8	419.2	2,345.5	0.0	0.7	2,362.1	1.7	2,363.8
1985	0.0	15.0	6.8	290.6	375.8	4.4	15.5	1,379.1	272.5	2,344.8	^f 1.5	0.9	^f 2,362.2	2.1	^f 2,364.3
1990	0.0	20.8	5.6	323.9	534.7	3.3	17.4	1,580.6	340.8	2,806.2	4.0	1.1	2,832.1	2.5	2,834.6
1995	0.0	20.0	4.1	337.5	540.4	2.0	16.6	1,618.6	276.9	2,796.1	8.9	1.4	2,817.6	3.3	2,820.8
1996	0.0	20.1	3.9	343.4	588.4	1.7	16.1	1,644.5	245.1	2,843.2	7.5	1.5	2,864.7	3.3	2,868.0
1997	0.0	24.4	4.2	365.0	584.8	1.3	17.0	1,666.7	133.7	2,772.8	7.6	1.6	2,798.9	3.7	2,802.6
1998	0.0	10.9	2.9	364.4	597.5	2.4	17.8	1,701.4	107.5	2,793.9	5.7	1.8	2,806.5	4.0	2,810.6
1999	0.0	11.6	4.2	377.4	559.5	1.4	18.0	1,749.0	146.0	2,855.4	4.9	1.8	2,868.9	4.2	2,873.1
2000	0.0	11.5	3.7	410.8	584.0	1.2	17.7	1,774.9	210.9	3,003.3	5.6	2.1	3,016.9	4.7	3,021.6
2001	0.0	13.9	2.7	414.6	551.2	1.4	16.3	1,808.9	154.8	2,949.9	7.8	2.3	2,966.0	5.1	2,971.0
2002	0.0	12.2	3.0	421.6	582.6	1.8	16.1	1,898.3	192.0	3,115.4	9.2	2.0	3,129.6	4.5	3,134.1
2003	0.0	^R 12.3	3.0	634.4	565.4	1.7	14.9	1,887.0	146.9	3,253.3	51.0	2.8	3,268.4	6.1	^R 3,274.5
2004	0.0	16.9	2.5	453.0	597.7	1.7	15.0	1,929.9	174.6	3,174.5	73.7	2.5	3,194.0	5.6	3,199.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, California

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	323	23,931	120	0	24,051	(s)	17,445	--	33	0	0	-400	--
1965	0	493	16,590	83	0	16,673	270	30,523	--	189	0	0	-3	--
1970	0	636	21,589	107	0	21,696	3,132	38,082	--	525	0	0	-11	--
1975	0	275	78,345	247	0	78,592	6,071	40,103	--	3,246	0	0	0	--
1980	0	519	62,663	2,559	0	65,222	4,920	40,780	--	5,073	0	0	89	--
1985	0	666	4,617	308	0	4,925	19,729	31,717	--	9,197	11	3	4,055	--
1990	910	629	7,169	264	819	8,252	32,693	23,785	--	ⁱ 14,521	ⁱ 367	ⁱ 2,759	4,618	--
1995	1,057	603	734	107	2,612	3,454	30,246	48,029	--	11,450	497	3,087	1,739	--
1996	853	525	983	145	2,898	4,027	34,097	44,740	--	12,340	521	3,079	1,228	--
1997	822	596	44	283	2,736	3,063	30,512	41,049	--	12,716	511	3,137	1,320	--
1998	903	649	10	297	3,411	3,717	34,594	49,537	--	12,840	502	2,758	-617	--
1999	943	723	2	279	3,034	3,314	33,372	40,726	--	13,046	495	3,230	188	--
2000	939	893	86	899	3,319	4,304	35,176	38,326	--	12,308	493	3,518	3,381	--
2001	897	973	492	1,372	3,199	5,063	33,220	25,542	--	12,181	542	3,500	3,055	--
2002	970	727	40	224	3,352	3,616	34,352	31,141	--	13,074	554	3,803	1,870	--
2003	890	705	11	255	3,631	3,896	35,594	36,370	--	12,982	534	3,895	1,245	--
2004	924	771	0	233	3,474	3,707	30,268	34,141	--	13,105	571	4,306	1,243	--
Trillion Btu														
1960	0.0	334.3	150.5	0.7	0.0	151.2	(s)	187.7	(s)	0.8	0.0	0.0	-1.4	672.6
1965	0.0	528.7	104.3	0.5	0.0	104.8	3.2	319.1	0.7	4.2	0.0	0.0	(s)	960.6
1970	0.0	670.6	135.7	0.6	0.0	136.4	34.4	399.6	0.5	11.3	0.0	0.0	(s)	1,252.8
1975	0.0	291.9	492.6	1.4	0.0	494.0	66.9	417.3	0.2	70.2	0.0	0.0	0.0	1,340.4
1980	0.0	545.8	394.0	14.8	0.0	408.7	53.7	423.6	0.2	109.8	0.0	0.0	0.3	1,542.1
1985	0.0	700.3	29.0	1.8	0.0	30.8	209.6	331.3	(s)	195.6	0.1	(s)	13.8	1,481.6
1990	18.8	648.9	45.1	1.5	4.9	51.5	346.0	247.4	ⁱ 71.5	ⁱ 306.3	ⁱ 3.8	ⁱ 28.7	15.8	ⁱ 1,738.8
1995	23.3	620.0	4.6	0.6	15.7	21.0	317.8	495.3	62.6	239.5	5.1	31.8	5.9	1,822.3
1996	20.0	538.6	6.2	0.8	17.5	24.5	358.1	462.6	62.0	258.6	5.4	31.8	4.2	1,765.9
1997	18.0	607.9	0.3	1.7	16.5	18.4	320.2	419.2	61.7	266.5	5.2	32.0	4.5	1,753.7
1998	20.1	664.0	0.1	1.7	20.5	22.3	362.9	505.1	64.3	269.9	5.1	28.1	-2.1	1,939.8
1999	22.1	739.2	(s)	1.6	18.3	19.9	348.7	416.5	69.6	274.2	5.1	33.0	0.6	1,929.0
2000	22.1	911.2	0.5	5.2	20.0	25.8	366.8	391.0	69.4	258.7	5.0	35.9	11.5	2,097.5
2001	21.1	997.6	3.1	8.0	19.3	30.4	347.1	263.9	64.2	256.0	5.6	36.2	10.4	2,032.4
2002	22.9	742.3	0.2	1.3	20.2	21.7	358.6	316.8	95.2	274.8	5.6	38.7	6.4	1,883.0
2003	21.7	721.8	0.1	1.5	21.9	23.4	370.9	372.5	76.6	272.8	5.5	39.9	4.2	1,909.5
2004	22.5	808.0	0.0	1.4	20.9	22.3	315.6	342.2	75.7	275.4	5.7	43.2	4.2	1,914.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Colorado

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	2,940	188	1,617	1,125	4,194	480	277	3,153	378	16,461	1,883	675	30,242	0	970	--	--	-5,049	--
1965	4,204	224	1,423	1,111	3,925	3,426	1,108	3,339	416	19,321	2,056	937	37,061	0	938	--	--	-2,569	--
1970	5,101	282	3,220	337	5,212	7,476	822	4,710	423	26,103	1,507	1,182	50,991	0	1,236	--	--	-2,262	--
1975	7,603	308	2,231	267	8,846	7,151	278	5,053	458	31,916	3,388	1,121	60,709	0	1,507	--	--	-1,993	--
1980	11,981	256	2,284	265	11,228	4,725	413	3,870	641	34,282	1,814	1,826	61,348	667	1,717	--	--	-5,447	--
1985	15,241	219	3,103	142	9,149	7,861	92	2,324	583	35,742	194	1,214	60,404	-32	2,357	--	--	-2,321	--
1990	17,102	247	3,257	167	10,116	6,109	50	3,045	656	35,562	13	1,351	60,326	0	1,420	--	--	-369	--
1995	17,330	290	3,720	124	12,183	7,428	29	3,936	626	41,357	8	1,482	70,893	0	2,131	--	--	5,835	--
1996	17,586	315	3,904	124	12,483	7,765	33	3,897	608	43,028	20	1,958	73,818	0	1,820	--	--	6,877	--
1997	18,297	315	2,574	143	11,863	7,174	29	1,954	642	43,744	3	1,955	70,080	0	2,032	--	--	8,683	--
1998	18,429	330	4,749	144	14,517	6,792	44	1,413	672	44,841	3	1,799	74,975	0	1,462	--	--	10,267	--
1999	18,573	333	2,137	195	15,025	7,800	32	2,973	679	47,069	3	1,865	77,778	0	1,562	--	--	12,546	--
2000	19,652	368	3,870	156	15,566	7,582	41	6,484	669	47,424	7	1,676	83,476	0	1,454	--	--	6,106	--
2001	20,367	464	2,566	270	17,436	7,718	34	6,509	613	49,636	5	2,098	86,885	0	1,495	--	--	^R -1,192	--
2002	19,877	459	1,219	158	17,412	7,131	29	5,597	606	49,151	0	1,984	83,287	0	1,209	--	--	9,736	--
2003	20,153	436	4,925	138	17,664	5,652	49	6,965	560	48,708	0	2,081	86,741	0	1,262	--	--	9,901	--
2004	19,766	440	3,865	123	16,614	12,354	62	7,169	567	50,822	1	2,122	93,698	0	1,195	--	--	9,782	--
Trillion Btu																			
1960	68.2	195.0	10.7	5.7	24.4	2.6	1.6	12.6	2.3	86.5	11.8	4.0	162.3	0.0	10.4	6.5	0.0	-17.2	425.1
1965	98.1	204.5	9.4	5.6	22.9	19.3	6.3	13.4	2.5	101.5	12.9	5.5	199.3	0.0	9.8	6.6	0.0	-8.8	509.5
1970	115.7	275.0	21.4	1.7	30.4	42.3	4.7	17.8	2.6	137.1	9.5	6.9	274.2	0.0	13.0	8.4	0.0	-7.7	678.5
1975	159.3	281.0	14.8	1.3	51.5	40.4	1.6	18.8	2.8	167.7	21.3	6.6	326.8	0.0	15.7	9.0	0.0	-6.8	785.0
1980	247.6	254.6	15.2	1.3	65.4	26.7	2.3	14.2	3.9	180.1	11.4	10.5	331.0	7.3	17.8	10.7	0.0	-18.6	850.5
1985	299.1	218.7	20.6	0.7	53.3	44.5	0.5	8.4	3.5	187.8	1.2	7.2	327.7	-0.3	24.6	16.9	0.0	-7.9	880.4
1990	337.4	247.8	21.6	0.8	58.9	34.6	0.3	11.0	4.0	186.8	0.1	8.1	326.2	0.0	14.8	^j 10.9	^j 0.6	-1.3	^j 937.1
1995	344.2	295.7	24.7	0.6	71.0	42.0	0.2	14.3	3.8	215.7	0.1	8.9	381.1	0.0	22.0	10.7	0.6	19.9	1,074.3
1996	350.7	322.8	25.9	0.6	72.7	44.0	0.2	14.1	3.7	224.4	0.1	11.5	397.3	0.0	18.8	10.9	0.6	23.5	1,124.7
1997	362.4	318.3	17.1	0.7	69.1	40.7	0.2	7.1	3.9	228.0	(s)	11.5	378.3	0.0	20.8	11.8	0.8	29.6	1,122.0
1998	364.9	334.3	31.5	0.7	84.6	38.5	0.2	5.1	4.1	233.7	(s)	10.6	409.1	0.0	14.9	10.6	0.7	35.0	1,169.4
1999	364.2	335.5	14.2	1.0	87.5	44.2	0.2	10.8	4.1	245.3	(s)	10.9	418.2	0.0	16.0	11.3	0.8	42.8	1,188.8
2000	387.9	370.9	25.7	0.8	90.7	43.0	0.2	23.4	4.1	247.1	(s)	9.9	444.8	0.0	14.8	11.5	0.8	20.8	1,251.6
2001	400.0	469.8	17.0	1.4	101.6	43.8	0.2	23.5	3.7	258.6	(s)	12.4	462.2	0.0	15.4	6.8	1.4	^R -4.1	^R 1,351.6
2002	390.5	461.7	8.1	0.8	101.4	40.4	0.2	20.2	3.7	256.0	0.0	11.7	442.5	0.0	12.3	6.4	2.2	33.2	1,348.8
2003	394.2	438.4	32.7	0.7	102.9	32.0	0.3	25.3	3.4	253.6	0.0	12.3	463.1	0.0	12.9	6.7	2.3	33.8	1,351.5
2004	390.2	437.5	25.6	0.6	96.8	70.0	0.4	25.9	3.4	265.0	(s)	12.5	500.4	0.0	12.0	7.4	3.2	33.4	1,383.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Colorado

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	152	52	148	50	2,097	2,294	212	--	--	1,776	--	4,393	--
1965	182	65	90	285	2,224	2,599	179	--	--	2,521	--	6,019	--
1970	129	83	168	112	3,080	3,361	195	--	--	3,859	--	9,340	--
1975	6	100	283	36	2,862	3,181	233	--	--	5,142	--	12,365	--
1980	21	90	78	23	1,670	1,772	462	--	--	6,693	--	16,138	--
1985	34	90	95	49	1,390	1,534	753	--	--	8,861	--	20,414	--
1990	12	92	27	22	1,697	1,747	366	--	--	9,787	--	22,640	--
1995	3	104	35	20	2,188	2,243	360	--	--	11,307	--	25,685	--
1996	2	111	45	21	2,100	2,165	373	--	--	11,871	--	27,001	--
1997	7	116	52	19	330	400	418	--	--	12,261	--	27,786	--
1998	2	111	19	24	171	214	372	--	--	12,652	--	28,700	--
1999	12	112	10	16	2,011	2,037	391	--	--	13,131	--	30,042	--
2000	9	116	62	29	2,821	2,912	421	--	--	14,029	--	31,918	--
2001	32	124	56	18	2,639	2,713	236	--	--	14,470	--	^R 32,545	--
2002	27	129	25	9	2,683	2,716	239	--	--	15,425	--	34,556	--
2003	36	124	11	35	3,875	3,921	252	--	--	15,725	--	34,931	--
2004	24	120	16	45	3,380	3,441	258	--	--	15,532	--	34,572	--

Trillion Btu

1960	3.5	54.1	0.9	0.3	8.4	9.6	4.2	0.0	0.0	6.1	77.4	15.0	92.4
1965	4.2	59.6	0.5	1.6	8.9	11.1	3.6	0.0	0.0	8.6	87.0	20.5	107.6
1970	2.8	80.4	1.0	0.6	11.6	13.3	3.9	0.0	0.0	13.2	113.6	31.9	145.5
1975	0.1	89.5	1.6	0.2	10.6	12.5	4.7	0.0	0.0	17.5	124.3	42.2	166.5
1980	0.5	89.2	0.5	0.1	6.1	6.7	9.2	0.0	0.0	22.8	128.5	55.1	183.5
1985	0.7	90.1	0.6	0.3	5.0	5.8	15.1	0.0	0.0	30.2	142.0	69.7	211.6
1990	0.2	92.2	0.2	0.1	6.2	6.4	7.3	^f 0.1	^f 0.2	33.4	^f 139.8	77.2	^f 217.1
1995	0.1	105.8	0.2	0.1	7.9	8.2	7.2	0.1	0.2	38.6	160.1	87.6	247.8
1996	(s)	112.6	0.3	0.1	7.6	8.0	7.5	0.1	0.2	40.5	168.9	92.1	261.0
1997	0.1	116.6	0.3	0.1	1.2	1.6	8.4	0.1	0.2	41.8	168.9	94.8	263.7
1998	(s)	111.5	0.1	0.1	0.6	0.9	7.4	0.1	0.2	43.2	163.4	97.9	261.3
1999	0.3	111.8	0.1	0.1	7.3	7.4	7.8	0.1	0.2	44.8	172.5	102.5	275.0
2000	0.2	116.1	0.4	0.2	10.2	10.7	8.4	0.1	0.2	47.9	183.6	108.9	292.5
2001	0.7	124.4	0.3	0.1	9.5	10.0	4.7	0.1	0.2	49.4	189.5	^R 111.0	^R 300.6
2002	0.6	129.2	0.1	0.1	9.7	9.9	4.8	0.1	0.2	52.6	197.4	117.9	315.3
2003	0.8	124.1	0.1	0.2	14.1	14.3	5.0	0.1	0.2	53.7	198.2	119.2	317.4
2004	0.5	118.4	0.1	0.3	12.2	12.6	5.2	0.2	0.2	53.0	190.0	118.0	308.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Colorado

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total			Million Kilowatthours		Million Kilowatthours		Million Kilowatthours
1960	105	28	123	66	370	135	56	750	0	--	--	1,772	--	4,383	--	
1965	137	39	75	376	393	186	49	1,078	0	--	--	2,842	--	6,786	--	
1970	101	59	140	148	544	124	38	993	0	--	--	4,594	--	11,120	--	
1975	15	76	235	48	505	109	75	972	0	--	--	6,276	--	15,094	--	
1980	79	67	339	6	295	312	3	955	0	--	--	7,277	--	17,546	--	
1985	122	69	610	15	245	176	1	1,047	0	--	--	12,344	--	28,436	--	
1990	46	66	442	10	299	265	0	1,016	9 0	--	--	14,420	--	33,358	--	
1995	17	67	703	5	386	58	0	1,152	0	--	--	14,300	--	32,484	--	
1996	12	69	732	6	371	265	0	1,374	0	--	--	15,251	--	34,690	--	
1997	57	69	892	5	58	37	0	992	0	--	--	15,506	--	35,140	--	
1998	16	63	867	9	30	38	3	948	0	--	--	16,920	--	38,382	--	
1999	90	59	812	9	355	166	1	1,344	0	--	--	17,915	--	40,988	--	
2000	71	61	605	8	498	128	0	1,239	0	--	--	19,028	--	43,292	--	
2001	259	65	632	10	466	40	0	1,149	0	--	--	18,836	--	R 42,363	--	
2002	201	67	497	10	473	41	0	1,021	0	--	--	19,802	--	44,362	--	
2003	240	63	303	10	684	41	0	1,039	0	--	--	19,657	--	43,665	--	
2004	198	62	323	12	596	41	0	972	0	--	--	19,498	--	43,399	--	
Trillion Btu																
1960	2.4	29.5	0.7	0.4	1.5	0.7	0.4	3.6	0.0	0.1	0.0	6.0	41.7	15.0	56.6	
1965	3.1	35.8	0.4	2.1	1.6	1.0	0.3	5.4	0.0	0.1	0.0	9.7	54.1	23.2	77.3	
1970	2.2	57.5	0.8	0.8	2.1	0.7	0.2	4.6	0.0	0.1	0.0	15.7	80.1	37.9	118.1	
1975	0.3	68.3	1.4	0.3	1.9	0.6	0.5	4.6	0.0	0.1	0.0	21.4	94.7	51.5	146.2	
1980	1.7	66.6	2.0	(s)	1.1	1.6	(s)	4.7	0.0	0.2	0.0	24.8	98.1	59.9	158.0	
1985	2.6	68.9	3.6	0.1	0.9	0.9	(s)	5.5	0.0	0.4	0.0	42.1	119.4	97.0	216.5	
1990	1.0	66.5	2.6	0.1	1.1	1.4	0.0	5.1	9 0.0	9 1.1	9 0.2	49.2	9 123.1	113.8	9 236.9	
1995	0.4	67.6	4.1	(s)	1.4	0.3	0.0	5.8	0.0	1.4	0.2	48.8	124.2	110.8	235.0	
1996	0.3	70.0	4.3	(s)	1.3	1.4	0.0	7.0	0.0	1.4	0.2	52.0	130.9	118.4	249.2	
1997	1.1	69.7	5.2	(s)	0.2	0.2	0.0	5.6	0.0	1.7	0.2	52.9	131.2	119.9	251.1	
1998	0.4	63.5	5.1	(s)	0.1	0.2	(s)	5.4	0.0	1.6	0.2	57.7	128.8	131.0	259.7	
1999	2.0	59.4	4.7	0.1	1.3	0.9	(s)	6.9	0.0	1.9	0.2	61.1	131.6	139.9	271.4	
2000	1.5	60.8	3.5	(s)	1.8	0.7	0.0	6.0	0.0	1.5	0.2	64.9	135.0	147.7	282.7	
2001	5.8	65.5	3.7	0.1	1.7	0.2	0.0	5.6	0.0	1.3	0.2	64.3	142.7	R 144.5	R 287.3	
2002	4.5	67.1	2.9	0.1	1.7	0.2	0.0	4.9	0.0	0.8	0.2	67.6	145.1	151.4	296.5	
2003	5.4	62.5	1.8	0.1	2.5	0.2	0.0	4.5	0.0	0.9	0.3	67.1	140.7	149.0	289.7	
2004	4.4	60.8	1.9	0.1	2.2	0.2	0.0	4.3	0.0	0.9	0.3	66.5	137.2	148.1	285.3	

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
^b Includes supplemental gaseous fuels.
^c Liquefied petroleum gases.
^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.
^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.
⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R = Revised data.
-- = Not applicable.
(s) = Btu value less than 0.05 or physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Colorado

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	1,438	69	1,617	1,768	161	593	98	1,303	1,583	675	7,798	1	--	--	1,289	--	3,188
1965	1,698	82	1,423	1,994	447	641	130	1,039	1,254	937	7,865	1	--	--	1,576	--	3,763
1970	1,657	88	3,220	2,228	561	953	137	1,036	1,128	1,182	10,444	1	--	--	2,334	--	5,649
1975	1,871	73	2,231	3,419	193	1,498	156	860	2,327	1,121	11,805	1	--	--	4,407	--	10,597
1980	1,757	60	2,284	3,983	384	1,860	238	695	1,640	1,826	12,910	1	--	--	6,900	--	16,637
1985	791	48	3,103	2,054	28	621	217	580	40	1,214	7,857	1	--	--	5,468	--	12,597
1990	729	66	3,257	2,712	18	975	244	408	13	1,351	8,978	9	--	--	6,587	--	15,237
1995	729	85	3,720	2,749	5	1,294	233	541	(s)	1,482	10,023	0	--	--	9,706	--	22,049
1996	367	98	3,904	3,058	6	1,357	226	631	4	1,958	11,144	0	--	--	9,947	--	22,626
1997	728	90	2,574	3,059	5	1,536	239	681	3	1,955	10,051	0	--	--	10,297	--	23,336
1998	392	114	4,749	3,366	11	1,186	250	625	(s)	1,799	11,987	0	--	--	9,998	--	22,681
1999	429	112	2,137	3,186	6	538	253	564	1	1,865	8,549	0	--	--	9,521	--	21,784
2000	427	118	3,870	3,274	5	3,108	249	546	0	1,676	12,728	0	--	--	9,955	--	22,649
2001	311	178	2,566	3,370	6	3,345	228	1,171	4	2,098	12,788	0	--	--	10,918	--	R 24,556
2002	202	174	1,219	3,333	11	2,389	225	1,229	0	1,984	10,390	0	--	--	10,672	--	R 23,909
2003	281	161	4,925	2,982	3	2,355	208	1,268	0	2,081	13,822	0	--	--	11,076	--	24,603
2004	293	163	3,865	3,270	5	3,116	211	1,401	0	2,122	13,990	0	--	--	11,675	--	25,987
Trillion Btu																	
1960	36.6	71.8	10.7	10.3	0.9	2.4	0.6	6.8	10.0	4.0	45.8	(s)	2.2	0.0	4.4	160.7	171.6
1965	44.2	74.9	9.4	11.6	2.5	2.6	0.8	5.5	7.9	5.5	45.8	(s)	2.9	0.0	5.4	173.2	186.1
1970	41.4	85.3	21.4	13.0	3.2	3.6	0.8	5.4	7.1	6.9	61.4	(s)	4.4	0.0	8.0	200.5	219.8
1975	45.8	65.6	14.8	19.9	1.1	5.6	0.9	4.5	14.6	6.6	68.1	(s)	4.3	0.0	15.0	198.8	235.0
1980	43.1	59.9	15.2	23.2	2.2	6.8	1.4	3.6	10.3	10.5	73.3	(s)	1.3	0.0	23.5	201.1	257.9
1985	17.1	47.7	20.6	12.0	0.2	2.2	1.3	3.0	0.2	7.2	46.8	(s)	1.5	0.0	18.7	131.7	174.7
1990	15.4	66.5	21.6	15.8	0.1	3.5	1.5	2.1	0.1	8.1	52.8	9 0.0	9 2.4	9 0.2	22.5	9 159.7	9 211.7
1995	15.8	86.6	24.7	16.0	(s)	4.7	1.4	2.8	(s)	8.9	58.5	0.0	2.1	0.2	33.1	196.3	271.5
1996	7.9	99.9	25.9	17.8	(s)	4.9	1.4	3.3	(s)	11.5	64.9	0.0	2.0	0.2	33.9	208.8	286.0
1997	15.7	91.2	17.1	17.8	(s)	5.6	1.4	3.5	(s)	11.5	57.0	0.0	1.7	0.2	35.1	200.8	280.5
1998	8.3	114.8	31.5	19.6	0.1	4.3	1.5	3.3	(s)	10.6	70.8	0.0	1.6	0.2	34.1	229.8	307.2
1999	9.1	112.3	14.2	18.6	(s)	1.9	1.5	2.9	(s)	10.9	50.1	0.0	1.6	0.2	32.5	205.9	280.3
2000	9.3	117.4	25.7	19.1	(s)	11.2	1.5	2.8	0.0	9.9	70.2	0.0	1.3	0.3	34.0	232.5	309.8
2001	6.8	179.8	17.0	19.6	(s)	12.1	1.4	6.1	(s)	12.4	68.7	0.0	0.4	0.3	37.3	293.1	R 376.9
2002	4.7	174.4	8.1	19.4	0.1	8.6	1.4	6.4	0.0	11.7	55.7	0.0	0.3	0.3	36.4	271.7	R 353.3
2003	6.5	161.0	32.7	17.4	(s)	8.5	1.3	6.6	0.0	12.3	78.7	0.0	0.3	0.2	37.8	284.5	368.4
2004	6.7	160.6	25.6	19.0	(s)	11.3	1.3	7.3	0.0	12.5	77.1	0.0	0.3	0.2	39.8	284.7	373.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Colorado

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	25	1	1,125	2,146	480	93	280	15,023	137	19,284	0	0	--	0	--
1965	6	2	1,111	1,763	3,426	81	286	18,097	713	25,476	0	0	--	0	--
1970	3	2	337	2,655	7,476	133	286	24,943	99	35,929	0	0	--	0	--
1975	(s)	5	267	4,290	7,151	188	302	30,948	104	43,250	0	0	--	0	--
1980	0	8	265	6,554	4,725	45	402	33,275	0	45,267	0	0	--	0	--
1985	0	7	142	6,277	7,861	68	366	34,986	146	49,845	^f 446	0	--	0	--
1990	0	9	167	6,884	6,109	75	412	34,889	0	48,535	230	0	--	0	--
1995	0	11	124	8,669	7,428	69	393	40,757	0	57,440	897	4	--	9	--
1996	0	11	124	8,613	7,765	70	382	42,132	(s)	59,085	1,547	4	--	10	--
1997	0	13	143	7,822	7,174	31	403	43,026	0	58,599	1,521	5	--	11	--
1998	0	10	144	10,179	6,792	25	422	44,178	0	61,740	1,504	5	--	11	--
1999	0	9	195	10,947	7,800	70	426	46,339	0	65,776	1,276	5	--	11	--
2000	0	10	156	11,435	7,582	56	420	46,750	0	66,400	1,443	9	--	20	--
2001	0	11	270	13,040	7,718	59	385	48,425	0	69,897	1,969	11	--	26	--
2002	0	12	158	13,506	7,131	52	380	47,881	0	69,108	1,751	37	--	84	--
2003	0	10	138	14,297	5,652	51	352	47,399	0	67,889	2,031	37	--	83	--
2004	0	11	123	12,974	12,354	77	356	49,381	0	75,264	1,944	19	--	41	--

Trillion Btu															
1960	0.6	1.3	5.7	12.5	2.6	0.4	1.7	78.9	0.9	102.6	0.0	0.0	104.5	0.0	104.5
1965	0.1	1.7	5.6	10.3	19.3	0.3	1.7	95.1	4.5	136.8	0.0	0.0	138.6	0.0	138.6
1970	0.1	1.8	1.7	15.5	42.3	0.5	1.7	131.0	0.6	193.3	0.0	0.0	195.2	0.0	195.2
1975	(s)	4.8	1.3	25.0	40.4	0.7	1.8	162.6	0.7	232.5	0.0	0.0	237.3	0.0	237.3
1980	0.0	7.5	1.3	38.2	26.7	0.2	2.4	174.8	0.0	243.6	0.0	0.0	251.1	0.0	251.1
1985	0.0	7.1	0.7	36.6	44.5	0.2	2.2	183.8	0.9	268.9	^f 1.6	0.0	^f 277.6	0.0	^f 277.6
1990	0.0	9.2	0.8	40.1	34.6	0.3	2.5	183.3	0.0	261.5	0.8	0.0	271.5	0.0	271.5
1995	0.0	11.6	0.6	50.5	42.0	0.2	2.4	212.6	0.0	308.3	3.2	(s)	320.0	(s)	320.0
1996	0.0	11.3	0.6	50.2	44.0	0.3	2.3	219.8	(s)	317.1	5.5	(s)	328.4	(s)	328.5
1997	0.0	12.8	0.7	45.6	40.7	0.1	2.4	224.3	0.0	313.8	5.4	(s)	326.7	(s)	326.7
1998	0.0	9.7	0.7	59.3	38.5	0.1	2.6	230.3	0.0	331.4	5.3	(s)	341.1	(s)	341.2
1999	0.0	8.9	1.0	63.8	44.2	0.3	2.6	241.5	0.0	353.3	4.5	(s)	362.2	(s)	362.2
2000	0.0	9.8	0.8	66.6	43.0	0.2	2.5	243.6	0.0	356.7	5.1	(s)	366.5	0.1	366.6
2001	0.0	10.9	1.4	76.0	43.8	0.2	2.3	252.3	0.0	375.9	7.0	(s)	386.8	0.1	386.9
2002	0.0	11.5	0.8	78.7	40.4	0.2	2.3	249.4	0.0	371.8	6.2	0.1	383.4	0.3	383.7
2003	0.0	10.4	0.7	83.3	32.0	0.2	2.1	246.8	0.0	365.1	7.2	0.1	375.6	0.3	375.9
2004	0.0	10.8	0.6	75.6	70.0	0.3	2.2	257.5	0.0	406.2	6.9	0.1	417.1	0.1	417.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Colorado

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	1,221	37	106	10	0	116	0	969	--	0	0	0	0	--
1965	2,181	36	40	4	0	43	0	937	--	0	0	0	0	--
1970	3,212	51	242	22	0	264	0	1,234	--	0	0	0	0	--
1975	5,710	53	882	619	0	1,501	0	1,506	--	0	0	0	0	--
1980	10,124	32	171	273	0	444	667	1,716	--	0	0	0	0	--
1985	14,295	5	8	113	0	121	-32	2,357	--	0	0	0	0	--
1990	16,315	13	(s)	50	0	50	0	1,420	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	16,581	23	8	28	0	36	0	2,131	--	0	0	0	0	--
1996	17,205	26	16	35	0	51	0	1,820	--	0	0	0	0	--
1997	17,505	27	(s)	38	0	38	0	2,032	--	0	0	0	43	--
1998	18,020	33	(s)	85	0	85	0	1,462	--	0	0	0	1	--
1999	18,042	41	1	71	0	72	0	1,562	--	0	0	0	2	--
2000	19,145	63	7	190	0	197	0	1,454	--	0	0	0	11	--
2001	19,765	86	1	338	0	339	0	1,495	--	0	0	49	36	--
2002	19,446	78	0	52	0	52	0	1,209	--	0	0	139	7	--
2003	19,596	78	0	70	0	70	0	1,262	--	0	0	147	10	--
2004	19,251	83	1	30	0	31	0	1,195	--	0	0	220	37	--
Trillion Btu														
1960	25.1	38.3	0.7	0.1	0.0	0.7	0.0	10.4	0.0	0.0	0.0	0.0	0.0	74.6
1965	46.5	32.4	0.3	(s)	0.0	0.3	0.0	9.8	0.0	0.0	0.0	0.0	0.0	89.0
1970	69.1	49.9	1.5	0.1	0.0	1.6	0.0	13.0	0.0	0.0	0.0	0.0	0.0	133.6
1975	113.1	52.7	5.5	3.6	0.0	9.2	0.0	15.7	0.0	0.0	0.0	0.0	0.0	190.6
1980	202.4	31.3	1.1	1.6	0.0	2.7	7.3	17.8	0.0	0.0	0.0	0.0	0.0	261.5
1985	278.7	4.9	(s)	0.7	0.0	0.7	-0.3	24.6	(s)	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 308.6
1990	320.8	13.4	(s)	0.3	0.0	0.3	0.0	14.8	ⁱ 0.1	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 349.4
1995	328.0	24.1	(s)	0.2	0.0	0.2	0.0	22.0	0.1	0.0	0.0	0.0	0.0	374.3
1996	342.5	29.1	0.1	0.2	0.0	0.3	0.0	18.8	0.1	0.0	0.0	0.0	0.0	390.7
1997	345.5	27.9	(s)	0.2	0.0	0.2	0.0	20.8	0.1	0.0	0.0	0.0	0.1	394.6
1998	356.2	34.7	(s)	0.5	0.0	0.5	0.0	14.9	0.0	0.0	0.0	0.0	(s)	406.3
1999	352.8	43.1	(s)	0.4	0.0	0.4	0.0	16.0	0.0	0.0	0.0	0.0	(s)	412.3
2000	376.9	66.8	(s)	1.1	0.0	1.2	0.0	14.8	0.2	0.0	0.0	0.0	(s)	459.9
2001	386.7	89.2	(s)	2.0	0.0	2.0	0.0	15.4	0.5	0.0	0.0	0.5	0.1	494.5
2002	380.6	79.5	0.0	0.3	0.0	0.3	0.0	12.3	0.5	0.0	0.0	1.4	(s)	474.6
2003	381.4	80.5	0.0	0.4	0.0	0.4	0.0	12.9	0.4	0.0	0.0	1.5	(s)	477.3
2004	378.5	86.9	(s)	0.2	0.0	0.2	0.0	12.0	1.0	0.0	0.0	2.2	0.1	480.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Connecticut

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	3,851	28	1,088	104	23,369	1,129	1,914	1,092	350	19,349	14,622	222	63,238	0	424	--	--	-814	--
1965	4,957	41	1,326	172	21,186	1,411	1,308	1,383	563	22,933	17,159	660	68,100	0	187	--	--	-942	--
1970	2,060	61	1,019	124	24,117	2,897	778	1,854	569	28,638	35,595	6,190	101,782	3,604	329	--	--	-9,954	--
1975	55	64	1,262	90	21,613	2,124	588	2,209	396	31,822	32,512	617	93,233	8,135	493	--	--	-6,092	--
1980	16	73	630	89	22,304	1,973	491	1,501	455	30,205	29,334	2,012	88,994	11,835	256	--	--	-6,044	--
1985	815	78	2,095	71	20,680	1,085	712	1,283	414	30,999	21,040	1,857	80,236	12,721	264	--	--	-776	--
1990	1,493	105	1,585	94	23,264	2,344	315	1,592	466	31,140	16,554	1,305	78,659	19,776	571	--	--	-18,856	--
1995	1,594	141	1,911	41	21,322	2,489	244	1,410	445	30,591	6,803	1,553	66,808	18,749	364	--	--	-7,658	--
1996	1,606	135	1,572	37	22,170	2,718	221	1,517	432	32,663	10,407	4,064	75,802	6,225	626	--	--	29,699	--
1997	1,745	145	1,217	23	22,176	2,371	286	1,732	456	32,934	14,673	4,411	80,280	-125	447	--	--	37,114	--
1998	1,272	132	552	52	19,886	2,212	355	2,243	477	33,589	14,982	4,434	78,783	3,243	448	--	--	32,189	--
1999	619	152	666	32	22,407	2,456	355	1,673	482	36,283	14,429	4,444	83,228	12,675	422	--	--	9,143	--
2000	1,477	160	671	30	23,578	2,599	509	2,130	475	34,933	11,835	4,392	81,151	16,365	526	--	--	-5,875	--
2001	1,627	146	703	78	24,817	2,356	461	2,422	435	35,437	9,033	905	76,646	15,428	286	--	--	^R 5,606	--
2002	1,512	178	677	52	22,382	2,201	235	2,065	430	37,436	4,437	924	70,840	14,918	335	--	--	9,087	--
2003	2,055	154	1,661	45	25,891	2,108	618	2,954	398	40,498	4,692	951	79,816	16,078	564	--	--	12,290	--
2004	2,136	163	1,751	60	28,850	2,382	768	3,057	403	43,740	4,093	1,037	86,141	16,539	463	--	--	7,791	--
Trillion Btu																			
1960	101.7	29.4	7.2	0.5	136.1	6.4	10.9	4.4	2.1	101.6	91.9	1.3	362.4	0.0	4.6	12.8	0.0	-2.8	508.2
1965	128.6	41.7	8.8	0.9	123.4	8.0	7.4	5.5	3.4	120.5	107.9	3.7	389.4	0.0	2.0	13.5	0.0	-3.2	572.0
1970	48.6	61.5	6.8	0.6	140.5	16.4	4.4	7.0	3.5	150.4	223.8	34.0	587.4	39.6	3.5	15.8	0.0	-34.0	722.4
1975	1.3	64.3	8.4	0.5	125.9	12.0	3.3	8.2	2.4	167.2	204.4	3.4	535.7	89.6	5.1	17.1	0.0	-20.8	692.3
1980	0.4	74.2	4.2	0.4	129.9	11.2	2.8	5.5	2.8	158.7	184.4	11.0	510.9	129.1	2.7	41.1	0.0	-20.6	737.6
1985	21.3	80.6	13.9	0.4	120.5	6.1	4.0	4.6	2.5	162.8	132.3	10.0	457.2	135.1	2.8	37.5	0.1	-2.6	732.1
1990	38.5	109.0	10.5	0.5	135.5	13.3	1.8	5.8	2.8	163.6	104.1	7.1	444.9	209.3	5.9	^j 28.7	^j 0.2	-64.3	^j 772.1
1995	40.8	144.9	12.7	0.2	124.2	14.1	1.4	5.1	2.7	159.5	42.8	8.4	371.1	197.0	3.8	42.2	4.5	-26.1	778.2
1996	41.1	139.2	10.4	0.2	129.1	15.4	1.3	5.5	2.6	170.4	65.4	21.8	422.1	65.4	6.5	49.4	4.7	101.3	829.7
1997	45.0	148.6	8.1	0.1	129.2	13.4	1.6	6.3	2.8	171.7	92.3	23.8	449.2	-1.3	4.6	45.9	6.0	126.6	824.6
1998	32.6	134.9	3.7	0.3	115.8	12.5	2.0	8.1	2.9	175.1	94.2	23.9	438.5	34.0	4.6	44.4	6.2	109.8	805.1
1999	15.2	155.9	4.4	0.2	130.5	13.9	2.0	6.1	2.9	189.1	90.7	23.9	463.7	132.5	4.3	44.9	6.9	31.2	854.5
2000	36.2	163.7	4.5	0.2	137.3	14.7	2.9	7.7	2.9	182.0	74.4	23.5	450.1	170.7	5.4	45.1	5.7	-20.0	856.8
2001	40.0	149.4	4.7	0.4	144.6	13.4	2.6	8.8	2.6	184.6	56.8	4.9	423.3	161.2	3.0	39.9	2.9	^R 19.1	^R 838.7
2002	34.2	182.9	4.5	0.3	130.4	12.5	1.3	7.5	2.6	195.0	27.9	5.0	386.9	155.7	3.4	37.7	1.5	31.0	833.4
2003	41.9	155.0	11.0	0.2	150.8	12.0	3.5	10.7	2.4	210.9	29.5	5.1	436.2	167.5	5.8	38.7	1.6	41.9	888.7
2004	44.0	163.1	11.6	0.3	168.1	13.5	4.4	11.1	2.4	228.1	25.7	5.6	470.8	172.5	4.6	38.3	3.9	26.6	923.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Connecticut

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	114	16	15,480	1,507	624	17,611	255	--	--	2,724	--	6,737	--
1965	46	22	13,649	1,101	692	15,442	239	--	--	3,812	--	9,102	--
1970	24	31	14,239	526	802	15,568	308	--	--	6,396	--	15,482	--
1975	7	32	12,950	291	768	14,009	332	--	--	7,449	--	17,915	--
1980	3	32	13,468	233	595	14,296	1,104	--	--	8,218	--	19,815	--
1985	8	33	10,896	605	639	12,140	776	--	--	8,638	--	19,899	--
1990	2	37	13,576	196	857	14,628	483	--	--	10,376	--	24,002	--
1995	3	41	12,528	122	875	13,525	523	--	--	10,760	--	24,442	--
1996	1	44	13,202	124	1,061	14,388	543	--	--	10,943	--	24,891	--
1997	1	41	12,949	143	1,208	14,301	390	--	--	10,859	--	24,609	--
1998	1	35	11,060	126	1,530	12,716	346	--	--	10,935	--	24,806	--
1999	1	38	12,905	177	1,182	14,264	365	--	--	11,619	--	26,584	--
2000	(s)	42	14,123	199	1,335	15,656	392	--	--	11,645	--	26,495	--
2001	(s)	41	13,603	161	1,387	15,151	304	--	--	11,975	--	^R 26,932	--
2002	(s)	40	13,095	92	1,496	14,683	308	--	--	12,473	--	27,942	--
2003	1	46	15,298	270	1,833	17,401	325	--	--	13,178	--	29,274	--
2004	(s)	44	17,021	349	1,724	19,093	333	--	--	13,211	--	29,406	--
Trillion Btu													
1960	2.8	16.6	90.2	8.5	2.5	101.2	5.1	0.0	0.0	9.3	135.0	23.0	158.0
1965	1.1	22.7	79.5	6.2	2.8	88.5	4.8	0.0	0.0	13.0	130.2	31.1	161.2
1970	0.6	31.7	82.9	3.0	3.0	89.0	6.2	0.0	0.0	21.8	149.2	52.8	202.0
1975	0.1	32.3	75.4	1.7	2.9	79.9	6.6	0.0	0.0	25.4	144.4	61.1	205.6
1980	0.1	32.7	78.5	1.3	2.2	82.0	22.1	0.0	0.0	28.0	164.9	67.6	232.5
1985	0.2	33.8	63.5	3.4	2.3	69.2	15.5	0.0	0.0	29.5	148.2	67.9	216.0
1990	0.1	38.7	79.1	1.1	3.1	83.3	9.7	^f 0.0	^f 0.1	35.4	^f 167.2	81.9	^f 249.1
1995	0.1	42.0	73.0	0.7	3.2	76.8	10.5	0.0	0.2	36.7	166.3	83.4	249.7
1996	(s)	45.0	76.9	0.7	3.8	81.4	10.9	0.0	0.2	37.3	174.9	84.9	259.8
1997	(s)	41.7	75.4	0.8	4.4	80.6	7.8	0.0	0.2	37.1	167.4	84.0	251.3
1998	(s)	36.2	64.4	0.7	5.5	70.7	6.9	0.0	0.2	37.3	151.4	84.6	236.1
1999	(s)	39.3	75.2	1.0	4.3	80.4	7.3	(s)	0.3	39.6	167.0	90.7	257.7
2000	(s)	42.7	82.3	1.1	4.8	88.2	7.8	(s)	0.3	39.7	178.8	90.4	269.2
2001	(s)	42.0	79.2	0.9	5.0	85.2	6.1	(s)	0.3	40.9	174.4	^R 91.9	^R 266.3
2002	(s)	41.7	76.3	0.5	5.4	82.2	6.2	(s)	0.4	42.6	173.0	95.3	268.4
2003	(s)	45.9	89.1	1.5	6.7	97.3	6.5	(s)	0.5	45.0	195.1	99.9	295.0
2004	(s)	44.0	99.1	2.0	6.2	107.4	6.7	(s)	0.5	45.1	203.6	100.3	304.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Connecticut

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	79	3	5,029	52	110	63	871	6,125	0	--	--	1,825	--	4,514	--
1965	35	6	4,434	38	122	76	958	5,629	0	--	--	2,873	--	6,861	--
1970	19	15	4,626	18	142	97	995	5,877	0	--	--	4,649	--	11,251	--
1975	16	16	4,207	10	136	239	656	5,248	0	--	--	6,000	--	14,428	--
1980	13	20	2,905	7	105	275	1,171	4,463	0	--	--	7,039	--	16,972	--
1985	29	25	3,961	64	113	142	1,679	5,960	0	--	--	8,731	--	20,114	--
1990	10	29	3,481	51	151	204	1,034	4,921	^g 0	--	--	10,711	--	24,778	--
1995	22	38	3,017	27	154	250	447	3,896	0	--	--	11,297	--	25,662	--
1996	5	40	2,958	72	187	823	455	4,495	0	--	--	11,546	--	26,262	--
1997	7	43	2,935	104	213	983	321	4,556	0	--	--	11,654	--	26,411	--
1998	6	42	2,630	176	270	725	160	3,961	0	--	--	12,184	--	27,639	--
1999	4	48	2,649	82	209	778	210	3,928	0	--	--	12,349	--	28,253	--
2000	4	48	2,983	119	236	825	218	4,380	0	--	--	12,496	--	28,431	--
2001	4	44	3,403	231	245	290	165	4,334	0	--	--	12,994	--	^R 29,224	--
2002	4	41	2,885	132	264	821	321	4,423	0	--	--	13,162	--	29,487	--
2003	3	39	3,495	125	323	1,850	705	6,498	0	--	--	13,094	--	29,086	--
2004	4	36	3,547	172	304	328	329	4,680	0	--	--	13,455	--	29,948	--
Trillion Btu															
1960	2.0	3.3	29.3	0.3	0.4	0.3	5.5	35.8	0.0	0.1	0.0	6.2	47.4	15.4	62.8
1965	0.8	5.9	25.8	0.2	0.5	0.4	6.0	33.0	0.0	0.1	0.0	9.8	49.6	23.4	73.0
1970	0.4	14.7	26.9	0.1	0.5	0.5	6.3	34.3	0.0	0.1	0.0	15.9	65.5	38.4	103.9
1975	0.3	16.0	24.5	0.1	0.5	1.3	4.1	30.4	0.0	0.1	0.0	20.5	67.4	49.2	116.6
1980	0.3	20.6	16.9	(s)	0.4	1.4	7.4	26.2	0.0	0.5	0.0	24.0	71.6	57.9	129.5
1985	0.7	25.3	23.1	0.4	0.4	0.7	10.6	35.1	0.0	0.4	0.0	29.8	91.3	68.6	159.9
1990	0.2	30.4	20.3	0.3	0.5	1.1	6.5	28.7	^g 0.0	^g 1.1	^g 0.0	36.5	^g 96.9	84.5	^g 181.5
1995	0.5	39.0	17.6	0.2	0.6	1.3	2.8	22.4	0.0	1.4	0.0	38.5	101.9	87.6	189.5
1996	0.1	40.9	17.2	0.4	0.7	4.3	2.9	25.5	0.0	9.1	0.0	39.4	115.1	89.6	204.7
1997	0.2	43.8	17.1	0.6	0.8	5.1	2.0	25.6	0.0	8.9	0.0	39.8	118.2	90.1	208.3
1998	0.2	43.4	15.3	1.0	1.0	3.8	1.0	22.1	0.0	9.0	0.0	41.6	116.3	94.3	210.6
1999	0.1	48.7	15.4	0.5	0.8	4.1	1.3	22.0	0.0	9.2	0.0	42.1	122.1	96.4	218.5
2000	0.1	49.9	17.4	0.7	0.8	4.3	1.4	24.6	0.0	1.3	0.0	42.6	118.4	97.0	215.4
2001	0.1	45.4	19.8	1.3	0.9	1.5	1.0	24.6	0.0	1.1	0.0	44.3	115.5	^R 99.7	^R 215.2
2002	0.1	42.0	16.8	0.7	1.0	4.3	2.0	24.8	0.0	1.1	0.0	44.9	112.9	100.6	213.5
2003	0.1	39.0	20.4	0.7	1.2	9.6	4.4	36.3	0.0	1.1	0.0	44.7	121.2	99.2	220.4
2004	0.1	35.4	20.7	1.0	1.1	1.7	2.1	26.5	0.0	1.1	0.0	45.9	109.0	102.2	211.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Connecticut

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh						
1960	866	7	1,088	1,665	354	355	93	243	11,950	222	15,968	26	--	--	2,837	--	7,016	--
1965	776	12	1,326	1,561	169	564	308	248	13,180	660	18,016	9	--	--	3,862	--	9,221	--
1970	142	15	1,019	1,968	234	890	331	269	13,710	6,190	24,611	3	--	--	5,094	--	12,329	--
1975	29	16	1,262	1,944	287	1,280	200	36	9,124	617	14,750	7	--	--	5,050	--	12,144	--
1980	0	20	630	3,235	251	785	208	66	6,683	2,012	13,870	6	--	--	5,944	--	14,332	--
1985	4	19	2,095	1,197	44	499	189	225	2,202	1,857	8,308	6	--	--	6,113	--	14,082	--
1990	1	25	1,585	1,209	68	548	213	263	1,415	1,305	6,605	⁹ 8	--	--	6,100	--	14,111	--
1995	0	32	1,911	852	95	355	203	195	755	1,553	5,918	6	--	--	5,913	--	13,433	--
1996	0	32	1,572	811	25	247	197	223	964	4,064	8,102	8	--	--	5,928	--	13,484	--
1997	0	35	1,217	847	39	295	208	232	387	4,411	7,636	8	--	--	5,919	--	13,414	--
1998	0	32	552	780	53	391	218	138	308	4,434	6,873	0	--	--	5,838	--	13,242	--
1999	0	32	666	783	97	249	220	210	405	4,444	7,075	0	--	--	5,836	--	13,351	--
2000	0	32	671	859	192	526	217	233	380	4,392	7,470	0	--	--	5,811	--	13,220	--
2001	0	26	703	1,026	70	697	199	536	598	905	4,733	0	--	--	5,572	--	^R 12,532	--
2002	0	29	677	848	11	271	196	499	347	924	3,773	0	--	--	5,370	--	12,031	--
2003	0	24	1,661	1,703	223	772	182	560	764	951	6,815	0	--	--	5,366	--	11,920	--
2004	0	21	1,751	1,091	247	997	184	634	1,103	1,037	7,044	0	--	--	5,358	--	11,927	--
Trillion Btu																		
1960	22.8	7.5	7.2	9.7	2.0	1.4	0.6	1.3	75.1	1.3	98.6	0.3	7.6	0.0	9.7	146.5	23.9	170.5
1965	20.4	12.7	8.8	9.1	1.0	2.3	1.9	1.3	82.9	3.7	110.8	0.1	8.7	0.0	13.2	165.9	31.5	197.3
1970	3.4	14.9	6.8	11.5	1.3	3.4	2.0	1.4	86.2	34.0	146.6	(s)	9.6	0.0	17.4	191.9	42.1	233.9
1975	0.7	15.6	8.4	11.3	1.6	4.8	1.2	0.2	57.4	3.4	88.3	0.1	10.3	0.0	17.2	132.2	41.4	173.6
1980	0.0	20.8	4.2	18.8	1.4	2.9	1.3	0.3	42.0	11.0	82.0	0.1	18.5	0.0	20.3	141.5	48.9	190.4
1985	0.1	19.5	13.9	7.0	0.2	1.8	1.1	1.2	13.8	10.0	49.1	0.1	21.6	0.0	20.9	111.3	48.0	159.3
1990	(s)	26.3	10.5	7.0	0.4	2.0	1.3	1.4	8.9	7.1	38.6	⁹ 0.1	⁹ 2.1	⁹ 0.0	20.8	⁹ 87.9	48.1	⁹ 136.1
1995	0.0	33.1	12.7	5.0	0.5	1.3	1.2	1.0	4.7	8.4	34.8	0.1	2.9	0.0	20.2	91.1	45.8	136.9
1996	0.0	33.4	10.4	4.7	0.1	0.9	1.2	1.2	6.1	21.8	46.4	0.1	5.8	0.0	20.2	105.8	46.0	151.8
1997	0.0	35.5	8.1	4.9	0.2	1.1	1.3	1.2	2.4	23.8	43.0	0.1	6.1	0.0	20.2	104.9	45.8	150.7
1998	0.0	33.3	3.7	4.5	0.3	1.4	1.3	0.7	1.9	23.9	37.8	0.0	5.1	0.0	19.9	96.2	45.2	141.4
1999	0.0	32.8	4.4	4.6	0.6	0.9	1.3	1.1	2.5	23.9	39.3	0.0	5.3	0.0	19.9	97.2	45.6	142.8
2000	0.0	33.1	4.5	5.0	1.1	1.9	1.3	1.2	2.4	23.5	40.9	0.0	5.0	0.0	19.8	98.8	45.1	143.9
2001	0.0	26.2	4.7	6.0	0.4	2.5	1.2	2.8	3.8	4.9	26.2	0.0	5.1	0.0	19.0	76.5	^R 42.8	^R 119.3
2002	0.0	30.1	4.5	4.9	0.1	1.0	1.2	2.6	2.2	5.0	21.4	0.0	3.6	0.0	18.3	73.4	41.0	114.5
2003	0.0	23.7	11.0	9.9	1.3	2.8	1.1	2.9	4.8	5.1	39.0	0.0	^R 3.7	0.0	18.3	84.6	40.7	125.3
2004	0.0	20.4	11.6	6.4	1.4	3.6	1.1	3.3	6.9	5.6	40.0	0.0	3.9	0.0	18.3	82.6	40.7	123.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Connecticut

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	15	(s)	104	1,117	1,129	2	258	19,044	204	21,857	0	0	--	0	--
1965	3	(s)	172	1,415	1,411	5	255	22,609	471	26,338	0	0	--	0	--
1970	(s)	(s)	124	2,266	2,897	21	238	28,273	359	34,177	0	0	--	0	--
1975	(s)	(s)	90	2,391	2,013	26	196	31,547	581	36,844	0	0	--	0	--
1980	0	(s)	89	2,580	1,921	15	247	29,864	53	34,768	0	0	--	0	--
1985	0	(s)	71	4,542	1,085	32	225	30,631	152	36,738	^f 31	0	--	0	--
1990	0	(s)	94	4,800	2,344	36	253	30,673	84	38,285	0	0	--	0	--
1995	0	1	41	4,756	2,489	26	242	30,146	11	37,711	24	0	--	0	--
1996	0	1	37	5,086	2,718	21	235	31,617	36	39,750	80	0	--	0	--
1997	0	3	23	5,320	2,371	16	248	31,719	25	39,721	85	0	--	0	--
1998	0	1	52	5,302	2,212	52	259	32,726	14	40,618	82	0	--	0	--
1999	0	3	32	5,598	2,456	34	262	35,294	12	43,689	87	0	--	0	--
2000	0	3	30	5,470	2,599	33	258	33,875	22	42,287	97	0	--	0	--
2001	0	3	78	6,683	2,356	93	237	34,611	10	44,067	29	0	--	0	--
2002	0	3	52	5,478	2,201	35	234	36,116	1	44,117	84	0	--	0	--
2003	0	4	45	5,213	2,108	26	216	38,088	2	45,698	501	192	--	427	--
2004	0	4	60	7,079	2,382	32	219	42,778	22	52,573	3,681	190	--	423	--
Trillion Btu															
1960	0.4	0.2	0.5	6.5	6.4	(s)	1.6	100.0	1.3	116.3	0.0	0.0	116.9	0.0	116.9
1965	0.1	0.1	0.9	8.2	8.0	(s)	1.5	118.8	3.0	140.4	0.0	0.0	140.5	0.0	140.5
1970	(s)	0.1	0.6	13.2	16.4	0.1	1.4	148.5	2.3	182.5	0.0	0.0	182.6	0.0	182.6
1975	(s)	(s)	0.5	13.9	11.4	0.1	1.2	165.7	3.7	196.4	0.0	0.0	196.5	0.0	196.5
1980	0.0	0.1	0.4	15.0	10.9	0.1	1.5	156.9	0.3	185.1	0.0	0.0	185.2	0.0	185.2
1985	0.0	0.4	0.4	26.5	6.1	0.1	1.4	160.9	1.0	196.3	^f 0.1	0.0	^f 196.8	0.0	^f 196.8
1990	0.0	0.5	0.5	28.0	13.3	0.1	1.5	161.1	0.5	205.0	0.0	0.0	205.5	0.0	205.5
1995	0.0	1.2	0.2	27.7	14.1	0.1	1.5	157.2	0.1	200.9	0.1	0.0	202.1	0.0	202.1
1996	0.0	1.5	0.2	29.6	15.4	0.1	1.4	164.9	0.2	211.9	0.3	0.0	213.4	0.0	213.4
1997	0.0	^R 2.6	0.1	31.0	13.4	0.1	1.5	165.4	0.2	211.6	0.3	0.0	214.3	0.0	214.3
1998	0.0	1.0	0.3	30.9	12.5	0.2	1.6	170.6	0.1	216.1	0.3	0.0	217.1	0.0	217.1
1999	0.0	3.1	0.2	32.6	13.9	0.1	1.6	183.9	0.1	232.4	0.3	0.0	235.5	0.0	235.5
2000	0.0	3.2	0.2	31.9	14.7	0.1	1.6	176.5	0.1	225.1	0.3	0.0	228.3	0.0	228.3
2001	0.0	3.2	0.4	38.9	13.4	0.3	1.4	180.3	0.1	234.8	0.1	0.0	238.0	0.0	238.0
2002	0.0	2.8	0.3	31.9	12.5	0.1	1.4	188.1	(s)	234.3	0.3	0.0	237.1	0.0	237.1
2003	0.0	3.6	0.2	30.4	12.0	0.1	1.3	198.3	(s)	242.3	1.8	0.7	246.5	1.5	248.0
2004	0.0	3.6	0.3	41.2	13.5	0.1	1.3	223.1	0.1	279.7	13.0	0.6	283.9	1.4	285.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Connecticut

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	2,776	2	1,597	79	0	1,676	0	398	--	0	0	0	0	--
1965	4,097	(s)	2,550	126	0	2,676	0	179	--	0	0	0	0	--
1970	1,875	(s)	20,531	1,018	0	21,550	3,604	327	--	0	0	0	0	--
1975	4	(s)	22,150	232	0	22,382	8,135	487	--	0	0	0	0	--
1980	0	0	21,428	168	0	21,596	11,835	250	--	0	0	0	0	--
1985	774	2	17,006	83	0	17,089	12,721	258	--	0	0	0	42	--
1990	1,480	13	14,021	199	0	14,219	19,776	563	--	ⁱ 0	ⁱ 0	ⁱ 0	37	--
1995	1,569	29	5,589	169	0	5,758	18,749	358	--	0	0	0	1,276	--
1996	1,600	18	8,953	113	0	9,066	6,225	618	--	0	0	0	1,325	--
1997	1,738	24	13,941	125	0	14,066	-125	438	--	0	0	0	1,699	--
1998	1,265	20	14,500	113	0	14,613	3,243	448	--	0	0	0	1,759	--
1999	614	31	13,802	471	0	14,273	12,675	422	--	0	0	0	1,934	--
2000	1,473	34	11,215	142	0	11,357	16,365	526	--	0	0	0	1,585	--
2001	1,623	32	8,259	102	0	8,362	15,428	286	--	0	0	0	766	--
2002	1,508	65	3,768	77	0	3,844	14,918	335	--	0	0	0	326	--
2003	2,051	43	3,221	183	0	3,403	16,078	564	--	0	0	0	346	--
2004	2,132	59	2,638	113	0	2,751	16,539	463	--	0	0	0	995	--
Trillion Btu														
1960	73.7	1.8	10.0	0.5	0.0	10.5	0.0	4.3	0.0	0.0	0.0	0.0	0.0	90.3
1965	106.2	0.3	16.0	0.7	0.0	16.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	125.1
1970	44.2	0.1	129.1	5.9	0.0	135.0	39.6	3.4	0.0	0.0	0.0	0.0	0.0	222.3
1975	0.1	0.3	139.3	1.3	0.0	140.6	89.6	5.1	0.0	0.0	0.0	0.0	0.0	235.7
1980	0.0	0.0	134.7	1.0	0.0	135.7	129.1	2.6	0.0	0.0	0.0	0.0	0.0	267.4
1985	20.4	1.6	106.9	0.5	0.0	107.4	135.1	2.7	0.0	0.0	0.0	0.0	0.1	267.3
1990	38.2	13.1	88.1	1.2	0.0	89.3	209.3	5.9	ⁱ 15.9	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.1	ⁱ 371.7
1995	40.2	29.5	35.1	1.0	0.0	36.1	197.0	3.7	27.5	0.0	0.0	0.0	4.4	338.4
1996	41.0	18.3	56.3	0.7	0.0	56.9	65.4	6.4	23.6	0.0	0.0	0.0	4.5	216.2
1997	44.8	24.9	87.6	0.7	0.0	88.4	-1.3	4.5	23.1	0.0	0.0	0.0	5.8	190.2
1998	32.4	20.9	91.2	0.7	0.0	91.8	34.0	4.6	23.3	0.0	0.0	0.0	6.0	213.1
1999	15.1	32.0	86.8	2.7	0.0	89.5	132.5	4.3	23.2	0.0	0.0	0.0	6.6	303.1
2000	36.1	34.8	70.5	0.8	0.0	71.3	170.7	5.4	31.0	0.0	0.0	0.0	5.4	354.8
2001	39.9	32.6	51.9	0.6	0.0	52.5	161.2	3.0	27.7	0.0	0.0	0.0	2.6	319.4
2002	34.1	66.4	23.7	0.4	0.0	24.1	155.7	3.4	26.9	0.0	0.0	0.0	1.1	311.8
2003	41.8	42.9	20.2	1.1	0.0	21.3	167.5	5.8	27.4	0.0	0.0	0.0	1.2	307.9
2004	43.9	59.7	16.6	0.7	0.0	17.2	172.5	4.6	26.6	0.0	0.0	0.0	3.4	328.0

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Delaware

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	791	9	239	19	2,712	2,144	966	1,007	111	4,314	6,246	3,841	21,599	0	0	--	--	-692	--
1965	1,103	18	571	150	3,275	2,086	825	1,507	112	5,076	5,538	4,382	23,522	0	0	--	--	-816	--
1970	1,541	26	518	20	4,308	2,062	437	2,255	108	6,247	6,588	4,748	27,293	0	0	--	--	-1,597	--
1975	937	19	653	15	4,309	1,654	277	2,654	82	7,069	10,218	4,087	31,018	0	0	--	--	-1,537	--
1980	1,130	30	350	10	3,716	1,573	301	3,199	139	6,614	12,717	5,453	34,072	0	0	--	--	-1,060	--
1985	2,766	38	827	16	3,696	1,569	705	994	126	7,556	3,602	3,440	22,532	0	0	--	--	-6,345	--
1990	2,293	39	537	78	3,518	1,306	159	1,043	142	8,012	3,804	6,843	25,441	0	0	--	--	2,016	--
1995	2,011	61	176	53	3,386	73	127	1,361	136	8,471	4,066	5,975	23,824	0	0	--	--	6,506	--
1996	1,956	54	298	52	3,755	62	235	1,707	132	8,453	5,425	6,765	26,883	0	0	--	--	7,251	--
1997	1,866	47	143	64	3,339	70	143	1,217	139	8,587	4,389	6,936	25,028	0	0	--	--	12,647	--
1998	1,773	41	168	55	3,164	70	178	1,427	146	9,079	4,465	6,498	25,248	0	0	--	--	14,854	--
1999	1,393	56	179	15	3,322	105	179	1,118	147	9,259	4,858	6,631	25,814	0	0	--	--	15,785	--
2000	1,934	48	514	20	4,309	104	274	1,006	145	8,999	4,170	5,350	24,891	0	0	--	--	19,001	--
2001	1,653	50	751	62	3,508	129	245	1,352	133	9,299	5,021	6,213	26,713	0	0	--	--	^R 18,100	--
2002	1,640	52	1,037	90	3,607	124	71	1,290	131	9,945	3,599	6,202	26,096	0	0	--	--	20,351	--
2003	1,887	46	719	79	3,847	142	98	1,393	121	9,894	3,573	6,765	26,632	0	0	--	--	20,027	--
2004	2,174	48	650	75	3,412	166	143	1,355	123	10,065	2,904	6,592	25,485	0	0	--	--	17,304	--
Trillion Btu																			
1960	20.5	9.4	1.6	0.1	15.8	11.5	5.5	4.0	0.7	22.7	39.3	23.1	124.2	0.0	0.0	5.0	0.0	-2.4	156.6
1965	29.0	18.7	3.8	0.8	19.1	11.2	4.7	6.0	0.7	26.7	34.8	26.3	134.0	0.0	0.0	5.6	0.0	-2.8	184.6
1970	37.2	26.9	3.4	0.1	25.1	11.1	2.5	8.5	0.7	32.8	41.4	28.6	154.2	0.0	0.0	7.0	0.0	-5.4	219.9
1975	22.9	19.0	4.3	0.1	25.1	8.9	1.6	9.9	0.5	37.1	64.2	24.4	176.1	0.0	0.0	7.9	0.0	-5.2	220.6
1980	28.1	30.8	2.3	0.1	21.6	8.4	1.7	11.8	0.8	34.7	80.0	31.7	193.2	0.0	0.0	2.5	0.0	-3.6	250.9
1985	71.4	39.5	5.5	0.1	21.5	8.4	4.0	3.6	0.8	39.7	22.6	20.6	126.8	0.0	0.0	3.0	0.0	-21.6	219.1
1990	59.5	40.1	3.6	0.4	20.5	7.0	0.9	3.8	0.9	42.1	23.9	40.7	143.7	0.0	0.0	^j 1.6	^j 0.1	6.9	^j 251.9
1995	52.4	62.7	1.2	0.3	19.7	0.4	0.7	4.9	0.8	44.2	25.6	35.1	132.9	0.0	0.0	2.4	0.1	22.2	272.8
1996	50.8	55.9	2.0	0.3	21.9	0.4	1.3	6.2	0.8	44.1	34.1	39.5	150.5	0.0	0.0	2.5	0.1	24.7	284.6
1997	48.6	48.1	0.9	0.3	19.5	0.4	0.8	4.4	0.8	44.8	27.6	40.5	140.1	0.0	0.0	2.1	0.1	43.2	282.2
1998	45.8	42.3	1.1	0.3	18.4	0.4	1.0	5.2	0.9	47.3	28.1	37.9	140.6	0.0	0.0	1.8	0.1	50.7	281.3
1999	35.9	58.1	1.2	0.1	19.3	0.6	1.0	4.0	0.9	48.3	30.5	38.6	144.6	0.0	0.0	1.9	0.1	53.9	294.5
2000	50.1	50.2	3.4	0.1	25.1	0.6	1.6	3.6	0.9	46.9	26.2	31.0	139.4	0.0	0.0	2.2	0.1	64.8	306.8
2001	38.3	51.8	5.0	0.3	20.4	0.7	1.4	4.9	0.8	48.4	31.6	36.0	149.6	0.0	0.0	1.2	0.1	^R 61.8	^R 302.8
2002	40.5	54.3	6.9	0.5	21.0	0.7	0.4	4.7	0.8	51.8	22.6	35.9	145.3	0.0	0.0	1.2	0.1	69.4	310.8
2003	47.0	48.2	4.8	0.4	22.4	0.8	0.6	5.1	0.7	51.5	22.5	39.3	148.0	0.0	0.0	1.3	0.1	68.3	312.9
2004	53.6	49.9	4.3	0.4	19.9	0.9	0.8	4.9	0.7	52.5	18.3	38.0	140.8	0.0	0.0	1.3	0.2	59.0	304.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Delaware

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	12	4	1,485	807	176	2,468	76	--	--	496	--	1,227	--
1965	7	6	1,651	604	288	2,543	58	--	--	729	--	1,741	--
1970	4	8	2,037	365	416	2,818	54	--	--	1,169	--	2,829	--
1975	1	7	1,866	215	394	2,474	63	--	--	1,640	--	3,944	--
1980	1	7	1,316	275	375	1,966	121	--	--	1,866	--	4,499	--
1985	1	6	1,486	649	593	2,727	147	--	--	1,924	--	4,433	--
1990	4	7	1,149	144	573	1,866	60	--	--	2,651	--	6,133	--
1995	(s)	9	1,113	120	859	2,092	91	--	--	3,168	--	7,197	--
1996	1	10	1,091	180	913	2,185	94	--	--	3,271	--	7,441	--
1997	1	9	905	121	982	2,009	71	--	--	3,257	--	7,382	--
1998	1	8	805	164	1,041	2,010	63	--	--	3,339	--	7,574	--
1999	(s)	9	912	125	931	1,968	67	--	--	3,532	--	8,081	--
2000	(s)	9	1,138	131	734	2,004	72	--	--	3,575	--	8,133	--
2001	(s)	9	1,004	113	935	2,052	47	--	--	3,734	--	^R 8,398	--
2002	0	10	990	65	996	2,052	47	--	--	4,020	--	9,007	--
2003	0	11	1,057	87	973	2,117	50	--	--	4,190	--	9,308	--
2004	0	10	965	127	986	2,078	51	--	--	4,305	--	9,581	--
Trillion Btu													
1960	0.3	3.9	8.6	4.6	0.7	13.9	1.5	0.0	0.0	1.7	21.4	4.2	25.6
1965	0.2	5.9	9.6	3.4	1.2	14.2	1.2	0.0	0.0	2.5	24.0	5.9	29.9
1970	0.1	8.0	11.9	2.1	1.6	15.5	1.1	0.0	0.0	4.0	28.7	9.7	38.3
1975	(s)	7.1	10.9	1.2	1.5	13.5	1.3	0.0	0.0	5.6	27.5	13.5	41.0
1980	(s)	7.1	7.7	1.6	1.4	10.6	2.4	0.0	0.0	6.4	26.5	15.4	41.9
1985	(s)	6.3	8.7	3.7	2.1	14.5	2.9	0.0	0.0	6.6	30.4	15.1	45.5
1990	0.1	7.3	6.7	0.8	2.1	9.6	1.2	^f 0.1	^f (s)	9.0	^f 27.4	20.9	^f 48.3
1995	(s)	8.8	6.5	0.7	3.1	10.3	1.8	0.1	(s)	10.8	31.8	24.6	56.4
1996	(s)	10.1	6.4	1.0	3.3	10.7	1.9	0.1	(s)	11.2	34.0	25.4	59.4
1997	(s)	9.3	5.3	0.7	3.6	9.5	1.4	0.1	(s)	11.1	31.5	25.2	56.6
1998	(s)	8.2	4.7	0.9	3.8	9.4	1.3	0.1	(s)	11.4	30.4	25.8	56.2
1999	(s)	9.5	5.3	0.7	3.4	9.4	1.3	0.1	(s)	12.1	32.3	27.6	59.9
2000	(s)	9.9	6.6	0.7	2.6	10.0	1.4	0.1	(s)	12.2	33.6	27.8	61.4
2001	(s)	9.5	5.8	0.6	3.4	9.9	0.9	0.1	(s)	12.7	33.1	^R 28.7	^R 61.8
2002	0.0	10.0	5.8	0.4	3.6	9.7	0.9	0.1	(s)	13.7	34.5	30.7	65.3
2003	0.0	11.2	6.2	0.5	3.5	10.2	1.0	0.1	(s)	14.3	36.9	31.8	68.6
2004	0.0	10.8	5.6	0.7	3.6	9.9	1.0	0.1	(s)	14.7	36.6	32.7	69.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Delaware

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	8	1	572	114	31	13	1,812	2,542	0	--	--	361	--	892	--
1965	6	1	636	85	51	11	2,081	2,864	0	--	--	536	--	1,279	--
1970	3	3	785	51	73	24	1,736	2,670	0	--	--	889	--	2,151	--
1975	3	3	719	30	70	32	1,204	2,054	0	--	--	1,333	--	3,205	--
1980	3	3	634	9	66	45	4,265	5,020	0	--	--	1,514	--	3,650	--
1985	5	3	373	51	105	38	70	638	0	--	--	1,698	--	3,911	--
1990	18	4	401	10	101	35	178	725	^g 0	--	--	2,361	--	5,461	--
1995	1	6	282	2	152	8	131	575	0	--	--	2,900	--	6,588	--
1996	4	7	383	6	161	8	221	779	0	--	--	2,970	--	6,756	--
1997	5	7	338	16	173	8	194	729	0	--	--	3,124	--	7,080	--
1998	6	6	290	12	184	11	124	620	0	--	--	3,280	--	7,440	--
1999	1	6	324	52	164	20	99	659	0	--	--	3,407	--	7,795	--
2000	1	5	274	136	130	12	226	777	0	--	--	4,099	--	9,325	--
2001	1	6	303	127	165	30	215	841	0	--	--	3,667	--	^R 8,248	--
2002	0	7	339	4	176	11	214	744	0	--	--	3,847	--	8,619	--
2003	0	8	293	7	172	11	272	756	0	--	--	3,886	--	8,633	--
2004	0	8	300	10	174	6	191	681	0	--	--	4,033	--	8,978	--
Trillion Btu															
1960	0.2	0.6	3.3	0.6	0.1	0.1	11.4	15.6	0.0	(s)	0.0	1.2	17.6	3.0	20.7
1965	0.1	1.4	3.7	0.5	0.2	0.1	13.1	17.5	0.0	(s)	0.0	1.8	20.9	4.4	25.2
1970	0.1	2.9	4.6	0.3	0.3	0.1	10.9	16.2	0.0	(s)	0.0	3.0	22.2	7.3	29.5
1975	0.1	3.0	4.2	0.2	0.3	0.2	7.6	12.4	0.0	(s)	0.0	4.5	20.0	10.9	30.9
1980	0.1	3.4	3.7	0.1	0.2	0.2	26.8	31.0	0.0	0.1	0.0	5.2	39.7	12.5	52.1
1985	0.1	3.5	2.2	0.3	0.4	0.2	0.4	3.5	0.0	0.1	0.0	5.8	12.9	13.3	26.3
1990	0.4	4.1	2.3	0.1	0.4	0.2	1.1	4.1	^g 0.0	^g 0.1	^g 0.0	8.1	^g 16.8	18.6	^g 35.4
1995	(s)	5.9	1.6	(s)	0.5	(s)	0.8	3.1	0.0	0.2	0.0	9.9	19.2	22.5	41.7
1996	0.1	6.9	2.2	(s)	0.6	(s)	1.4	4.3	0.0	0.3	0.0	10.1	21.7	23.1	44.8
1997	0.1	6.8	2.0	0.1	0.6	(s)	1.2	3.9	0.0	0.2	0.0	10.7	21.8	24.2	46.0
1998	0.2	5.9	1.7	0.1	0.7	0.1	0.8	3.3	0.0	0.2	0.0	11.2	20.8	25.4	46.1
1999	(s)	6.5	1.9	0.3	0.6	0.1	0.6	3.5	0.0	0.2	0.0	11.6	21.9	26.6	48.5
2000	(s)	5.3	1.6	0.8	0.5	0.1	1.4	4.3	0.0	0.2	0.0	14.0	23.9	31.8	55.7
2001	(s)	5.9	1.8	0.7	0.6	0.2	1.4	4.6	0.0	0.2	0.0	12.5	23.2	28.1	^R 51.3
2002	0.0	7.9	2.0	(s)	0.6	0.1	1.3	4.0	0.0	0.2	0.0	13.1	25.2	29.4	54.6
2003	0.0	8.8	1.7	(s)	0.6	0.1	1.7	4.1	0.0	0.2	0.0	13.3	26.4	29.5	55.8
2004	0.0	8.8	1.8	0.1	0.6	(s)	1.2	3.7	0.0	0.2	0.0	13.8	26.4	30.6	57.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Delaware

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	32	1	239	482	45	798	37	205	2,931	3,841	8,577	0	--	--	863	--	2,134	--
1965	35	6	571	715	136	1,165	40	144	2,785	4,382	9,939	0	--	--	1,373	--	3,278	--
1970	35	12	518	794	20	1,753	41	92	2,643	3,508	9,370	0	--	--	2,527	--	6,117	--
1975	27	7	653	1,079	32	2,154	31	63	1,878	3,851	9,741	0	--	--	2,176	--	5,234	--
1980	184	13	350	616	17	2,744	75	35	1,808	4,982	10,628	0	--	--	2,439	--	5,881	--
1985	217	22	827	473	4	293	69	54	649	3,089	5,457	0	--	--	2,693	--	6,204	--
1990	215	17	537	516	4	363	77	48	736	5,434	7,715	9 ⁰	--	--	3,272	--	7,568	--
1995	194	19	176	339	5	346	74	64	1,570	5,975	8,548	0	--	--	3,511	--	7,976	--
1996	164	14	298	503	49	628	71	70	1,460	6,765	9,845	0	--	--	3,399	--	7,732	--
1997	174	15	143	452	6	55	75	70	1,215	6,936	8,953	0	--	--	3,741	--	8,478	--
1998	174	16	168	431	2	199	79	86	978	6,498	8,440	0	--	--	3,779	--	8,573	--
1999	148	21	179	475	3	20	80	77	1,169	6,631	8,635	0	--	--	3,613	--	8,267	--
2000	179	25	514	485	7	140	79	58	1,437	5,350	8,069	0	--	--	3,601	--	8,193	--
2001	172	20	751	596	5	251	72	99	1,342	6,213	9,330	0	--	--	3,978	--	R 8,946	--
2002	99	18	1,037	613	1	115	71	113	1,159	6,202	9,311	0	--	--	4,151	--	9,299	--
2003	100	15	719	498	3	247	66	117	647	6,765	9,062	0	--	--	4,523	--	10,047	--
2004	119	16	650	468	6	192	67	132	775	6,592	8,882	0	--	--	3,423	--	7,619	--
Trillion Btu																		
1960	0.8	1.5	1.6	2.8	0.3	3.2	0.2	1.1	18.4	23.1	50.7	0.0	3.4	0.0	2.9	59.4	7.3	66.7
1965	0.9	6.6	3.8	4.2	0.8	4.7	0.2	0.8	17.5	26.3	58.2	0.0	4.4	0.0	4.7	74.8	11.2	86.0
1970	0.8	12.3	3.4	4.6	0.1	6.6	0.3	0.5	16.6	21.1	53.2	0.0	5.9	0.0	8.6	80.9	20.9	101.8
1975	0.6	7.1	4.3	6.3	0.2	8.0	0.2	0.3	11.8	22.9	54.1	0.0	6.6	0.0	7.4	75.8	17.9	93.7
1980	4.5	13.1	2.3	3.6	0.1	10.1	0.5	0.2	11.4	28.9	57.0	0.0	0.0	0.0	8.3	82.9	20.1	102.9
1985	5.4	22.1	5.5	2.8	(s)	1.1	0.4	0.3	4.1	18.4	32.6	0.0	0.0	0.0	9.2	69.2	21.2	90.3
1990	5.3	17.2	3.6	3.0	(s)	1.3	0.5	0.3	4.6	32.2	45.5	9 ⁰ 0.0	9 ⁰ 0.2	9 ⁰ 0.0	11.2	9 ⁰ 79.4	25.8	9 ⁰ 105.2
1995	4.9	20.1	1.2	2.0	(s)	1.3	0.4	0.3	9.9	35.1	50.2	0.0	0.3	0.0	12.0	87.5	27.2	114.7
1996	4.1	14.7	2.0	2.9	0.3	2.3	0.4	0.4	9.2	39.5	57.0	0.0	0.4	0.0	11.6	87.8	26.4	114.1
1997	4.4	15.3	0.9	2.6	(s)	0.2	0.5	0.4	7.6	40.5	52.8	0.0	0.4	0.0	12.8	85.7	28.9	114.7
1998	4.4	17.3	1.1	2.5	(s)	0.7	0.5	0.4	6.1	37.9	49.4	0.0	0.4	0.0	12.9	84.3	29.3	113.5
1999	3.7	22.5	1.2	2.8	(s)	0.1	0.5	0.4	7.4	38.6	50.9	0.0	0.4	0.0	12.3	89.8	28.2	118.0
2000	4.7	26.4	3.4	2.8	(s)	0.5	0.5	0.3	9.0	31.0	47.6	0.0	0.4	0.0	12.3	91.3	28.0	119.2
2001	4.5	20.7	5.0	3.5	(s)	0.9	0.4	0.5	8.4	36.0	54.8	0.0	0.1	0.0	13.6	93.7	30.5	R 124.2
2002	2.6	18.5	6.9	3.6	(s)	0.4	0.4	0.6	7.3	35.9	55.1	0.0	0.1	0.0	14.2	90.5	31.7	122.2
2003	2.6	15.8	4.8	2.9	(s)	0.9	0.4	0.6	4.1	39.3	52.9	0.0	0.1	0.0	15.4	86.8	34.3	121.1
2004	3.1	16.7	4.3	2.7	(s)	0.7	0.4	0.7	4.9	38.0	51.8	0.0	0.1	0.0	11.7	83.4	26.0	109.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Delaware

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	1	0	19	166	2,144	2	74	4,096	1,464	7,965	0	0	--	0	--
1965	(s)	0	150	256	2,086	3	71	4,921	589	8,076	0	0	--	0	--
1970	(s)	0	20	385	2,062	13	67	6,131	671	9,350	0	0	--	0	--
1975	(s)	0	15	510	1,654	36	52	6,973	961	10,201	0	0	--	0	--
1980	0	0	10	963	1,573	14	64	6,533	812	9,970	0	0	--	0	--
1985	0	(s)	16	1,264	1,569	5	58	7,464	232	10,608	^f 0	0	--	0	--
1990	0	(s)	78	1,342	1,306	6	65	7,929	900	11,625	0	0	--	0	--
1995	0	(s)	53	1,493	73	5	62	8,398	1,030	11,114	0	0	--	0	--
1996	0	(s)	52	1,555	62	4	60	8,375	1,997	12,105	0	0	--	0	--
1997	0	(s)	64	1,522	70	7	64	8,510	1,666	11,902	0	0	--	0	--
1998	0	(s)	55	1,519	70	3	67	8,982	1,372	12,068	0	0	--	0	--
1999	0	(s)	15	1,398	105	2	67	9,163	1,743	12,493	0	0	--	0	--
2000	0	(s)	20	2,151	104	2	66	8,928	1,635	12,908	0	0	--	0	--
2001	0	(s)	62	1,384	129	(s)	61	9,170	1,304	12,110	0	0	--	0	--
2002	0	(s)	90	1,483	124	3	60	9,821	1,167	12,749	0	0	--	0	--
2003	0	(s)	79	1,468	142	2	56	9,766	995	12,508	0	0	--	0	--
2004	0	(s)	75	1,595	166	3	56	9,927	988	12,811	0	0	--	0	--

Trillion Btu															
1960	(s)	0.0	0.1	1.0	11.5	(s)	0.5	21.5	9.2	43.7	0.0	0.0	43.7	0.0	43.7
1965	(s)	0.0	0.8	1.5	11.2	(s)	0.4	25.8	3.7	43.4	0.0	0.0	43.4	0.0	43.4
1970	(s)	0.0	0.1	2.2	11.1	0.1	0.4	32.2	4.2	50.3	0.0	0.0	50.3	0.0	50.3
1975	(s)	0.0	0.1	3.0	8.9	0.1	0.3	36.6	6.0	55.0	0.0	0.0	55.0	0.0	55.0
1980	0.0	0.0	0.1	5.6	8.4	0.1	0.4	34.3	5.1	54.0	0.0	0.0	54.0	0.0	54.0
1985	0.0	(s)	0.1	7.4	8.4	(s)	0.4	39.2	1.5	56.9	^f 0.0	0.0	^f 56.9	0.0	^f 56.9
1990	0.0	(s)	0.4	7.8	7.0	(s)	0.4	41.6	5.7	63.0	0.0	0.0	63.0	0.0	63.0
1995	0.0	(s)	0.3	8.7	0.4	(s)	0.4	43.8	6.5	60.0	0.0	0.0	60.1	0.0	60.1
1996	0.0	(s)	0.3	9.1	0.4	(s)	0.4	43.7	12.6	66.3	0.0	0.0	66.3	0.0	66.3
1997	0.0	(s)	0.3	8.9	0.4	(s)	0.4	44.4	10.5	64.8	0.0	0.0	64.9	0.0	64.9
1998	0.0	(s)	0.3	8.8	0.4	(s)	0.4	46.8	8.6	65.4	0.0	0.0	65.4	0.0	65.4
1999	0.0	0.1	0.1	8.1	0.6	(s)	0.4	47.7	11.0	67.9	0.0	0.0	68.0	0.0	68.0
2000	0.0	0.1	0.1	12.5	0.6	(s)	0.4	46.5	10.3	70.4	0.0	0.0	70.5	0.0	70.5
2001	0.0	0.1	0.3	8.1	0.7	(s)	0.4	47.8	8.2	65.4	0.0	0.0	65.5	0.0	65.5
2002	0.0	0.1	0.5	8.6	0.7	(s)	0.4	51.1	7.3	68.7	0.0	0.0	68.8	0.0	68.8
2003	0.0	0.1	0.4	8.6	0.8	(s)	0.3	50.9	6.3	67.2	0.0	0.0	67.3	0.0	67.3
2004	0.0	0.1	0.4	9.3	0.9	(s)	0.3	51.8	6.2	68.9	0.0	0.0	69.1	0.0	69.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Delaware

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	737	3	40	8	0	48	0	0	--	0	0	0	0	--
1965	1,055	5	84	17	0	100	0	0	--	0	0	0	0	--
1970	1,497	4	1,537	307	1,240	3,084	0	0	--	0	0	0	0	--
1975	905	2	6,176	135	237	6,547	0	0	--	0	0	0	0	--
1980	942	7	5,831	187	470	6,488	0	0	--	0	0	0	0	--
1985	2,543	7	2,650	101	351	3,102	0	0	--	0	0	0	0	--
1990	2,056	11	1,991	110	1,410	3,510	0	0	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	1,816	27	1,335	160	0	1,495	0	0	--	0	0	0	0	--
1996	1,787	23	1,747	222	0	1,969	0	0	--	0	0	0	0	--
1997	1,685	16	1,313	122	0	1,435	0	0	--	0	0	0	0	--
1998	1,592	11	1,991	120	0	2,111	0	0	--	0	0	0	0	--
1999	1,244	20	1,846	213	0	2,059	0	0	--	0	0	0	0	--
2000	1,755	8	872	261	0	1,133	0	0	--	0	0	0	0	--
2001	1,480	15	2,160	221	0	2,381	0	0	--	0	0	0	0	--
2002	1,541	17	1,058	182	0	1,240	0	0	--	0	0	0	0	--
2003	1,787	12	1,659	531	0	2,190	0	0	--	0	0	0	0	--
2004	2,055	13	950	83	0	1,033	0	0	--	0	0	0	0	--
Trillion Btu														
1960	19.1	3.3	0.2	(s)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7
1965	27.8	4.8	0.5	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3
1970	36.2	3.8	9.7	1.8	7.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0
1975	22.2	1.8	38.8	0.8	1.4	41.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.1
1980	23.5	7.3	36.7	1.1	2.8	40.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.3
1985	65.9	7.5	16.7	0.6	2.1	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.8
1990	53.6	11.5	12.5	0.6	8.5	21.6	0.0	0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 86.8
1995	47.5	27.9	8.4	0.9	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.7
1996	46.5	24.2	11.0	1.3	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0
1997	44.0	16.6	8.3	0.7	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.7
1998	41.3	10.8	12.5	0.7	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.3
1999	32.2	19.5	11.6	1.2	0.0	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.5
2000	45.5	8.5	5.5	1.5	0.0	7.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	61.2
2001	33.8	15.7	13.6	1.3	0.0	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.4
2002	38.0	17.8	6.7	1.1	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.4
2003	44.4	12.2	10.4	3.1	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.2
2004	50.5	13.5	6.0	0.5	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.4

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, District of Columbia

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	1,051	13	11	0	2,894	0	161	2	120	4,957	2,428	0	10,573	0	3	--	--	5,595	--
1965	526	17	20	0	3,435	(s)	104	2	71	5,469	6,749	0	15,850	0	3	--	--	10,437	--
1970	1,128	26	17	0	4,934	(s)	46	4	56	5,688	11,144	0	21,889	0	1	--	--	6,320	--
1975	418	26	20	0	3,157	0	110	4	60	5,748	4,174	0	13,273	0	1	--	--	14,900	--
1980	134	28	16	0	2,284	329	268	4	61	3,881	1,612	0	8,455	0	0	--	--	21,011	--
1985	140	29	27	0	2,394	7	68	4	55	3,802	740	0	7,098	0	0	--	--	26,562	--
1990	69	29	30	0	1,652	5	11	4	62	4,043	1,020	0	6,829	0	0	--	--	31,036	--
1995	6	33	26	4	1,839	2	135	5	60	4,142	532	0	6,744	0	0	--	--	32,880	--
1996	23	34	22	(s)	2,004	0	107	6	58	3,862	337	0	6,396	0	0	--	--	32,665	--
1997	40	34	34	3	1,474	252	209	7	61	4,066	160	0	6,267	0	0	--	--	32,658	--
1998	6	30	28	3	1,284	559	299	3	64	4,031	454	0	6,724	0	0	--	--	32,577	--
1999	6	32	26	3	1,380	0	232	3	65	3,979	442	0	6,130	0	0	--	--	33,259	--
2000	7	33	28	2	1,710	0	246	7	64	4,070	210	0	6,337	0	0	--	--	34,093	--
2001	30	30	26	2	1,660	0	207	5	58	3,890	285	0	6,134	0	0	--	--	^R 34,739	--
2002	4	33	28	2	2,131	0	(s)	3	58	3,927	0	0	6,149	0	0	--	--	35,001	--
2003	7	33	21	2	1,859	0	1	5	53	3,497	0	0	5,437	0	0	--	--	34,937	--
2004	30	32	19	(s)	1,960	0	1	4	54	3,590	0	0	5,629	0	0	--	--	36,601	--
Trillion Btu																			
1960	27.8	13.0	0.1	0.0	16.9	0.0	0.9	(s)	0.7	26.0	15.3	0.0	59.9	0.0	(s)	0.1	0.0	19.1	119.9
1965	13.8	17.3	0.1	0.0	20.0	(s)	0.6	(s)	0.4	28.7	42.4	0.0	92.3	0.0	(s)	0.1	0.0	35.6	159.2
1970	28.4	26.4	0.1	0.0	28.7	(s)	0.3	(s)	0.3	29.9	70.1	0.0	129.4	0.0	(s)	0.1	0.0	21.6	205.9
1975	10.1	26.2	0.1	0.0	18.4	0.0	0.6	(s)	0.4	30.2	26.2	0.0	76.0	0.0	(s)	0.1	0.0	50.8	163.3
1980	3.3	28.0	0.1	0.0	13.3	1.9	1.5	(s)	0.4	20.4	10.1	0.0	47.7	0.0	0.0	2.8	0.0	71.7	153.5
1985	3.5	29.3	0.2	0.0	13.9	(s)	0.4	(s)	0.3	20.0	4.7	0.0	39.5	0.0	0.0	3.3	0.0	90.6	166.3
1990	1.7	29.1	0.2	0.0	9.6	(s)	0.1	(s)	0.4	21.2	6.4	0.0	38.0	0.0	0.0	ⁱ 1.3	ⁱ (s)	105.9	ⁱ 176.0
1995	0.1	33.2	0.2	(s)	10.7	(s)	0.8	(s)	0.4	21.6	3.3	0.0	37.0	0.0	0.0	1.9	(s)	112.2	184.4
1996	0.6	34.2	0.1	(s)	11.7	0.0	0.6	(s)	0.4	20.1	2.1	0.0	35.1	0.0	0.0	1.9	(s)	111.5	183.2
1997	1.0	34.8	0.2	(s)	8.6	1.4	1.2	(s)	0.4	21.2	1.0	0.0	34.0	0.0	0.0	1.4	(s)	111.4	182.7
1998	0.2	31.2	0.2	(s)	7.5	3.2	1.7	(s)	0.4	21.0	2.9	0.0	36.8	0.0	0.0	1.2	(s)	111.2	180.6
1999	0.2	33.0	0.2	(s)	8.0	0.0	1.3	(s)	0.4	20.7	2.8	0.0	33.5	0.0	0.0	1.3	(s)	113.5	181.3
2000	0.2	34.4	0.2	(s)	10.0	0.0	1.4	(s)	0.4	21.2	1.3	0.0	34.5	0.0	0.0	1.4	(s)	116.3	186.7
2001	0.7	30.6	0.2	(s)	9.7	0.0	1.2	(s)	0.4	20.3	1.8	0.0	33.5	0.0	0.0	0.9	(s)	^R 118.5	^R 184.2
2002	0.1	33.7	0.2	(s)	12.4	0.0	(s)	(s)	0.3	20.5	0.0	0.0	33.4	0.0	0.0	0.9	(s)	119.4	187.5
2003	0.2	33.7	0.1	(s)	10.8	0.0	(s)	(s)	0.3	18.2	0.0	0.0	29.5	0.0	0.0	0.9	(s)	119.2	183.5
2004	0.7	33.1	0.1	(s)	11.4	0.0	(s)	(s)	0.3	18.7	0.0	0.0	30.6	0.0	0.0	0.9	(s)	124.9	190.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, District of Columbia

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Net Energy	
1960	79	9	1,314	67	1	1,382	6	--	--	429	--	1,062	--
1965	59	11	1,241	43	1	1,285	4	--	--	578	--	1,381	--
1970	22	14	1,622	21	1	1,644	5	--	--	830	--	2,009	--
1975	5	13	1,161	7	1	1,169	6	--	--	909	--	2,186	--
1980	23	14	749	5	1	755	139	--	--	1,085	--	2,616	--
1985	31	17	553	10	1	564	162	--	--	1,233	--	2,840	--
1990	14	15	178	3	1	182	58	--	--	1,480	--	3,424	--
1995	1	16	284	6	2	292	81	--	--	1,608	--	3,654	--
1996	3	17	302	6	2	310	84	--	--	1,614	--	3,672	--
1997	4	16	258	6	2	266	59	--	--	1,554	--	3,521	--
1998	1	13	235	6	2	243	52	--	--	1,596	--	3,620	--
1999	1	14	209	5	2	216	55	--	--	1,643	--	3,758	--
2000	1	15	218	3	1	222	59	--	--	1,624	--	3,695	--
2001	3	13	199	(s)	2	201	37	--	--	1,699	--	^R 3,821	--
2002	(s)	14	352	(s)	2	354	37	--	--	1,790	--	4,010	--
2003	1	15	352	(s)	2	354	39	--	--	1,754	--	3,897	--
2004	3	14	387	(s)	2	389	40	--	--	1,834	--	4,083	--
Trillion Btu													
1960	2.0	9.0	7.7	0.4	(s)	8.0	0.1	0.0	0.0	1.5	20.6	3.6	24.3
1965	1.5	11.1	7.2	0.2	(s)	7.5	0.1	0.0	0.0	2.0	22.1	4.7	26.8
1970	0.5	14.1	9.4	0.1	(s)	9.6	0.1	0.0	0.0	2.8	27.2	6.9	34.0
1975	0.1	13.3	6.8	(s)	(s)	6.8	0.1	0.0	0.0	3.1	23.5	7.5	30.9
1980	0.6	13.8	4.4	(s)	(s)	4.4	2.8	0.0	0.0	3.7	25.2	8.9	34.1
1985	0.8	16.9	3.2	0.1	(s)	3.3	3.2	0.0	0.0	4.2	28.4	9.7	38.1
1990	0.3	15.3	1.0	(s)	(s)	1.1	1.2	^f 0.0	^f (s)	5.1	^f 22.9	11.7	^f 34.6
1995	(s)	15.8	1.7	(s)	(s)	1.7	1.6	0.0	(s)	5.5	24.6	12.5	37.1
1996	0.1	17.4	1.8	(s)	(s)	1.8	1.7	0.0	(s)	5.5	26.5	12.5	39.0
1997	0.1	16.1	1.5	(s)	(s)	1.5	1.2	0.0	(s)	5.3	24.3	12.0	36.3
1998	(s)	13.6	1.4	(s)	(s)	1.4	1.0	0.0	(s)	5.4	21.5	12.4	33.9
1999	(s)	14.4	1.2	(s)	(s)	1.3	1.1	0.0	(s)	5.6	22.4	12.8	35.2
2000	(s)	15.9	1.3	(s)	(s)	1.3	1.2	0.0	(s)	5.5	23.9	12.6	36.5
2001	0.1	13.3	1.2	(s)	(s)	1.2	0.7	0.0	(s)	5.8	21.1	13.0	34.1
2002	(s)	14.6	2.0	(s)	(s)	2.1	0.7	0.0	(s)	6.1	23.5	13.7	37.2
2003	(s)	15.6	2.0	(s)	(s)	2.1	0.8	0.0	(s)	6.0	24.4	13.3	37.7
2004	0.1	14.7	2.3	(s)	(s)	2.3	0.8	0.0	(s)	6.3	24.1	13.9	38.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, District of Columbia

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	55	4	1,060	34	(s)	85	1,443	2,621	0	--	--	955	--	2,362	--
1965	45	6	1,001	22	(s)	78	4,044	5,144	0	--	--	1,359	--	3,245	--
1970	18	12	1,308	10	(s)	65	5,081	6,464	0	--	--	1,935	--	4,683	--
1975	11	12	936	4	(s)	78	1,051	2,068	0	--	--	2,355	--	5,663	--
1980	86	14	647	1	(s)	40	37	725	0	--	--	2,457	--	5,924	--
1985	109	12	836	55	(s)	27	286	1,205	0	--	--	4,317	--	9,945	--
1990	56	13	596	8	(s)	71	218	893	^g 0	--	--	5,250	--	12,145	--
1995	5	17	830	129	(s)	101	130	1,190	0	--	--	8,275	--	18,797	--
1996	20	16	961	101	(s)	20	96	1,178	0	--	--	8,108	--	18,442	--
1997	36	18	506	202	(s)	49	34	792	0	--	--	8,132	--	18,429	--
1998	5	17	318	293	(s)	170	4	786	0	--	--	8,261	--	18,741	--
1999	5	18	335	227	(s)	22	2	587	0	--	--	8,354	--	19,113	--
2000	6	18	561	243	(s)	54	1	859	0	--	--	8,540	--	19,430	--
2001	27	17	541	207	(s)	253	1	1,003	0	--	--	8,716	--	^R 19,602	--
2002	4	18	296	(s)	(s)	511	0	807	0	--	--	8,878	--	19,888	--
2003	6	17	371	1	(s)	243	0	616	0	--	--	8,639	--	19,191	--
2004	27	17	457	1	(s)	178	0	637	0	--	--	8,994	--	20,020	--
Trillion Btu															
1960	1.4	3.7	6.2	0.2	(s)	0.4	9.1	15.9	0.0	(s)	0.0	3.3	24.2	8.1	32.3
1965	1.1	6.0	5.8	0.1	(s)	0.4	25.4	31.8	0.0	(s)	0.0	4.6	43.5	11.1	54.6
1970	0.4	11.8	7.6	0.1	(s)	0.3	31.9	40.0	0.0	(s)	0.0	6.6	58.8	16.0	74.8
1975	0.2	12.4	5.5	(s)	(s)	0.4	6.6	12.5	0.0	(s)	0.0	8.0	33.2	19.3	52.5
1980	2.1	13.8	3.8	(s)	(s)	0.2	0.2	4.2	0.0	0.1	0.0	8.4	28.6	20.2	48.8
1985	2.7	12.1	4.9	0.3	(s)	0.1	1.8	7.1	0.0	0.1	0.0	14.7	36.8	33.9	70.7
1990	1.4	13.6	3.5	(s)	(s)	0.4	1.4	5.3	^g 0.0	^g 0.1	^g 0.0	17.9	^g 38.3	41.4	^g 79.7
1995	0.1	17.1	4.8	0.7	(s)	0.5	0.8	6.9	0.0	0.2	0.0	28.2	52.6	64.1	116.8
1996	0.5	16.5	5.6	0.6	(s)	0.1	0.6	6.9	0.0	0.2	0.0	27.7	51.8	62.9	114.7
1997	0.9	18.4	2.9	1.1	(s)	0.3	0.2	4.6	0.0	0.2	0.0	27.7	51.8	62.9	114.7
1998	0.1	17.3	1.9	1.7	(s)	0.9	(s)	4.4	0.0	0.2	0.0	28.2	50.2	63.9	114.2
1999	0.1	18.2	2.0	1.3	(s)	0.1	(s)	3.4	0.0	0.2	0.0	28.5	50.4	65.2	115.6
2000	0.2	18.2	3.3	1.4	(s)	0.3	(s)	4.9	0.0	0.2	0.0	29.1	52.6	66.3	118.9
2001	0.7	17.0	3.2	1.2	(s)	1.3	(s)	5.7	0.0	0.1	0.0	29.7	53.2	^R 66.9	^R 120.0
2002	0.1	18.8	1.7	(s)	(s)	2.7	0.0	4.4	0.0	0.1	0.0	30.3	53.7	67.9	121.5
2003	0.2	17.6	2.2	(s)	(s)	1.3	0.0	3.4	0.0	0.1	0.0	29.5	50.8	65.5	116.2
2004	0.7	17.9	2.7	(s)	(s)	0.9	0.0	3.6	0.0	0.1	0.0	30.7	52.9	68.3	121.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, District of Columbia

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	463	(s)	11	211	61	1	8	0	949	0	1,241	0	--	--	1,237	--	3,059
1965	129	(s)	20	316	39	1	11	0	2,689	0	3,076	0	--	--	1,836	--	4,384
1970	414	(s)	17	377	15	2	3	0	3,296	0	3,710	0	--	--	2,627	--	6,360
1975	292	(s)	20	150	99	2	14	0	686	0	970	0	--	--	2,532	--	6,089
1980	25	(s)	16	192	262	3	7	0	54	0	534	0	--	--	3,356	--	8,092
1985	0	0	27	40	3	2	7	59	1	0	139	0	--	--	2,534	--	5,838
1990	0	0	30	2	0	2	7	90	1	0	133	90	--	--	2,976	--	6,885
1995	0	0	26	16	0	3	7	44	(s)	0	95	0	--	--	262	--	595
1996	0	0	22	18	(s)	3	7	39	(s)	0	89	0	--	--	252	--	572
1997	0	0	34	21	(s)	4	7	56	0	0	121	0	--	--	262	--	595
1998	0	0	28	17	0	1	8	27	0	0	81	0	--	--	262	--	594
1999	0	0	26	140	(s)	1	8	18	0	0	194	0	--	--	249	--	570
2000	0	0	28	34	(s)	5	7	23	(s)	0	98	0	--	--	273	--	620
2001	0	0	26	36	0	3	7	126	0	0	197	0	--	--	281	--	632
2002	0	0	28	69	0	1	7	96	0	0	201	0	--	--	282	--	633
2003	0	0	21	94	0	2	6	161	0	0	284	0	--	--	267	--	594
2004	0	0	19	47	0	2	6	133	0	0	207	0	--	--	282	--	628
Trillion Btu																	
1960	12.0	0.2	0.1	1.2	0.3	(s)	(s)	0.0	6.0	0.0	7.7	0.0	0.0	0.0	4.2	24.0	34.5
1965	3.3	0.3	0.1	1.8	0.2	(s)	0.1	0.0	16.9	0.0	19.2	0.0	0.0	0.0	6.3	29.0	44.0
1970	10.0	0.4	0.1	2.2	0.1	(s)	(s)	0.0	20.7	0.0	23.1	0.0	0.0	0.0	9.0	42.6	64.3
1975	7.0	0.4	0.1	0.9	0.6	(s)	0.1	0.0	4.3	0.0	6.0	0.0	0.0	0.0	8.6	22.0	42.8
1980	0.6	0.4	0.1	1.1	1.5	(s)	(s)	0.0	0.3	0.0	3.1	0.0	0.0	0.0	11.5	15.5	43.2
1985	0.0	0.0	0.2	0.2	(s)	(s)	(s)	0.3	(s)	0.0	0.8	0.0	0.0	0.0	8.6	9.4	29.4
1990	0.0	0.0	0.2	(s)	0.0	(s)	(s)	0.5	(s)	0.0	0.7	90.0	90.0	90.0	10.2	10.9	34.4
1995	0.0	0.0	0.2	0.1	0.0	(s)	(s)	0.2	(s)	0.0	0.5	0.0	0.0	0.0	0.9	1.4	3.5
1996	0.0	0.0	0.1	0.1	(s)	(s)	(s)	0.2	(s)	0.0	0.5	0.0	0.0	0.0	0.9	1.4	3.3
1997	0.0	0.0	0.2	0.1	(s)	(s)	(s)	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.9	1.6	3.6
1998	0.0	0.0	0.2	0.1	0.0	(s)	(s)	0.1	0.0	0.0	0.5	0.0	0.0	0.0	0.9	1.4	3.4
1999	0.0	0.0	0.2	0.8	(s)	(s)	(s)	0.1	0.0	0.0	1.1	0.0	0.0	0.0	0.9	2.0	3.9
2000	0.0	0.0	0.2	0.2	(s)	(s)	(s)	0.1	(s)	0.0	0.6	0.0	0.0	0.0	0.9	1.5	3.6
2001	0.0	0.0	0.2	0.2	0.0	(s)	(s)	0.7	0.0	0.0	1.1	0.0	0.0	0.0	1.0	2.0	4.2
2002	0.0	0.0	0.2	0.4	0.0	(s)	(s)	0.5	0.0	0.0	1.1	0.0	0.0	0.0	1.0	2.1	4.3
2003	0.0	0.0	0.1	0.5	0.0	(s)	(s)	0.8	0.0	0.0	1.6	0.0	0.0	0.0	0.9	2.5	4.5
2004	0.0	0.0	0.1	0.3	0.0	(s)	(s)	0.7	0.0	0.0	1.1	0.0	0.0	0.0	1.0	2.1	4.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, District of Columbia

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	8	(s)	0	305	0	(s)	112	4,872	28	5,317	0	32	--	80	--
1965	(s)	0	0	874	(s)	(s)	59	5,391	6	6,331	0	0	--	0	--
1970	1	(s)	0	492	(s)	(s)	53	5,623	13	6,182	0	0	--	0	--
1975	(s)	(s)	0	820	0	1	46	5,670	350	6,887	0	0	--	0	--
1980	0	0	0	587	329	(s)	54	3,841	59	4,870	0	106	--	256	--
1985	0	(s)	0	898	7	1	49	3,716	202	4,873	^f (s)	130	--	299	--
1990	0	(s)	0	804	5	1	55	3,882	3	4,750	0	142	--	328	--
1995	0	(s)	4	634	2	1	53	3,997	0	4,690	0	170	--	387	--
1996	0	(s)	(s)	674	0	1	51	3,803	0	4,529	0	163	--	370	--
1997	0	(s)	3	619	252	1	54	3,962	0	4,891	0	158	--	359	--
1998	0	(s)	3	598	559	(s)	56	3,833	0	5,049	0	162	--	368	--
1999	0	(s)	3	588	0	(s)	57	3,938	0	4,586	0	172	--	394	--
2000	0	(s)	2	728	0	1	56	3,993	0	4,779	0	179	--	407	--
2001	0	(s)	2	832	0	(s)	51	3,511	(s)	4,396	0	185	--	^R 416	--
2002	0	(s)	2	794	0	(s)	51	3,320	0	4,167	0	179	--	400	--
2003	0	1	2	852	0	(s)	47	3,093	0	3,994	0	285	--	634	--
2004	0	1	(s)	938	0	(s)	48	3,280	0	4,266	0	304	--	677	--

Trillion Btu															
1960	0.2	(s)	0.0	1.8	0.0	(s)	0.7	25.6	0.2	28.2	0.0	0.1	28.5	0.3	28.8
1965	(s)	0.0	0.0	5.1	(s)	(s)	0.4	28.3	(s)	33.8	0.0	0.0	33.8	0.0	33.8
1970	(s)	(s)	0.0	2.9	(s)	(s)	0.3	29.5	0.1	32.8	0.0	0.0	32.8	0.0	32.8
1975	(s)	(s)	0.0	4.8	0.0	(s)	0.3	29.8	2.2	37.0	0.0	0.0	37.1	0.0	37.1
1980	0.0	0.0	0.0	3.4	1.9	(s)	0.3	20.2	0.4	26.2	0.0	0.4	26.5	0.9	27.4
1985	0.0	0.4	0.0	5.2	(s)	(s)	0.3	19.5	1.3	26.4	^f (s)	0.4	^f 27.2	1.0	^f 28.2
1990	0.0	0.3	0.0	4.7	(s)	(s)	0.3	20.4	(s)	25.5	0.0	0.5	26.2	1.1	27.3
1995	0.0	0.3	(s)	3.7	(s)	(s)	0.3	20.8	0.0	24.9	0.0	0.6	25.8	1.3	27.1
1996	0.0	0.3	(s)	3.9	0.0	(s)	0.3	19.8	0.0	24.1	0.0	0.6	24.9	1.3	26.2
1997	0.0	0.3	(s)	3.6	1.4	(s)	0.3	20.7	0.0	26.0	0.0	0.5	26.9	1.2	28.1
1998	0.0	0.3	(s)	3.5	3.2	(s)	0.3	20.0	0.0	27.0	0.0	0.6	27.8	1.3	29.1
1999	0.0	0.3	(s)	3.4	0.0	(s)	0.3	20.5	0.0	24.3	0.0	0.6	25.2	1.3	26.6
2000	0.0	0.3	(s)	4.2	0.0	(s)	0.3	20.8	0.0	25.4	0.0	0.6	26.3	1.4	27.7
2001	0.0	0.3	(s)	4.8	0.0	(s)	0.3	18.3	(s)	23.5	0.0	0.6	24.4	1.4	25.8
2002	0.0	0.3	(s)	4.6	0.0	(s)	0.3	17.3	0.0	22.2	0.0	0.6	23.2	1.4	24.5
2003	0.0	0.6	(s)	5.0	0.0	(s)	0.3	16.1	0.0	21.4	0.0	1.0	22.9	2.2	25.1
2004	0.0	0.6	(s)	5.5	0.0	(s)	0.3	17.1	0.0	22.9	0.0	1.0	24.5	2.3	26.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, District of Columbia

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	446	0	9	4	0	12	0	3	--	0	0	0	0	--
1965	293	0	10	4	0	14	0	3	--	0	0	0	0	--
1970	673	0	2,755	1,135	0	3,889	0	1	--	0	0	0	0	--
1975	111	0	2,088	90	0	2,178	0	1	--	0	0	0	0	--
1980	0	0	1,462	109	0	1,572	0	0	--	0	0	0	0	--
1985	0	0	250	66	0	316	0	0	--	0	0	0	0	--
1990	0	0	798	72	0	871	0	0	--	0	0	0	0	--
1995	0	0	402	75	0	477	0	0	--	0	0	0	0	--
1996	0	0	241	49	0	290	0	0	--	0	0	0	0	--
1997	0	0	126	71	0	197	0	0	--	0	0	0	0	--
1998	0	0	450	116	0	566	0	0	--	0	0	0	0	--
1999	0	0	440	107	0	547	0	0	--	0	0	0	0	--
2000	0	0	209	169	0	379	0	0	--	0	0	0	0	--
2001	0	0	284	52	0	336	0	0	--	0	0	0	0	--
2002	0	0	0	620	0	620	0	0	--	0	0	0	0	--
2003	0	0	0	190	0	190	0	0	--	0	0	0	0	--
2004	0	0	0	130	0	130	0	0	--	0	0	0	0	--
Trillion Btu														
1960	12.2	0.0	0.1	(s)	0.0	0.1	0.0	(s)	0.0	0.0	0.0	0.0	0.0	12.4
1965	7.9	0.0	0.1	(s)	0.0	0.1	0.0	(s)	0.0	0.0	0.0	0.0	0.0	8.0
1970	17.4	0.0	17.3	6.6	0.0	23.9	0.0	(s)	0.0	0.0	0.0	0.0	0.0	41.4
1975	2.8	0.0	13.1	0.5	0.0	13.6	0.0	(s)	0.0	0.0	0.0	0.0	0.0	16.5
1980	0.0	0.0	9.2	0.6	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
1985	0.0	0.0	1.6	0.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
1990	0.0	0.0	5.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
1995	0.0	0.0	2.5	0.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
1996	0.0	0.0	1.5	0.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
1997	0.0	0.0	0.8	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
1998	0.0	0.0	2.8	0.7	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
1999	0.0	0.0	2.8	0.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
2000	0.0	0.0	1.3	1.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
2001	0.0	0.0	1.8	0.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
2002	0.0	0.0	0.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
2003	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
2004	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Florida

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total					Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh		Other	Million kWh	Total	
1960	1,104	138	3,304	4,517	8,621	9,482	3,962	4,936	911	43,148	30,199	356	109,435	0	278	--	--	-2,373	--
1965	2,323	185	3,506	4,273	12,279	17,525	4,449	5,663	1,014	53,136	43,344	1,349	146,537	0	298	--	--	615	--
1970	5,131	337	4,076	3,138	15,639	23,840	3,657	7,828	1,089	76,254	53,642	1,380	190,543	0	292	--	--	-1,862	--
1975	5,779	280	3,659	1,921	23,387	24,224	879	7,478	1,189	100,592	79,315	1,651	244,296	8,370	234	--	--	-1,367	--
1980	9,543	317	4,487	1,339	29,431	35,911	952	10,718	1,409	109,279	96,756	3,036	293,318	16,737	215	--	--	10,638	--
1985	19,305	290	6,666	841	31,906	23,101	2,530	9,932	1,282	125,346	37,777	3,100	242,481	23,461	244	--	--	69,905	--
1990	25,512	328	6,804	808	35,310	31,958	329	7,744	1,443	142,351	54,283	3,677	284,708	21,780	175	--	--	90,925	--
1995	28,223	561	6,630	599	39,733	28,045	313	7,796	1,377	157,657	47,245	3,110	292,505	28,741	231	--	--	74,054	--
1996	30,551	534	5,920	519	38,333	29,345	402	8,081	1,336	159,028	47,414	10,308	300,686	25,470	216	--	--	84,336	--
1997	30,842	522	3,517	567	41,584	30,507	308	5,839	1,411	161,878	49,697	14,200	309,508	22,968	241	--	--	87,476	--
1998	30,841	504	3,826	431	43,644	28,482	396	6,269	1,477	169,201	70,590	15,575	339,890	31,115	199	--	--	64,887	--
1999	29,368	559	3,672	591	46,011	28,977	332	7,170	1,493	173,543	63,926	15,647	341,362	31,526	140	--	--	74,327	--
2000	31,100	542	4,023	612	47,692	35,134	224	7,386	1,470	178,336	65,253	14,069	354,199	32,291	87	--	--	91,913	--
2001	29,927	543	5,355	483	49,243	30,658	237	7,170	1,347	181,063	69,088	8,025	352,669	31,583	148	--	--	^R 101,531	--
2002	29,345	689	5,649	492	50,084	27,035	81	6,047	1,331	188,082	55,210	11,375	345,386	33,704	184	--	--	^R 98,743	--
2003	29,450	690	5,014	398	53,719	25,653	126	6,259	1,231	191,578	53,424	14,029	351,431	30,979	263	--	--	^R 106,029	--
2004	28,689	734	6,704	398	57,724	29,246	152	7,498	1,247	201,700	62,471	15,529	382,670	31,216	265	--	--	100,345	--
Trillion Btu																			
1960	27.2	142.9	21.9	22.8	50.2	51.5	22.5	19.8	5.5	226.7	189.9	2.1	612.8	0.0	3.0	32.7	0.0	-8.1	810.5
1965	55.2	191.7	23.3	21.6	71.5	97.2	25.2	22.7	6.2	279.1	272.5	7.4	826.6	0.0	3.1	36.8	0.0	2.1	1,115.5
1970	116.7	350.6	27.0	15.8	91.1	133.2	20.7	29.6	6.6	400.6	337.2	7.5	1,069.4	0.0	3.1	48.0	0.0	-6.4	1,581.4
1975	133.5	292.1	24.3	9.7	136.2	135.7	5.0	27.8	7.2	528.4	498.7	9.1	1,382.0	92.2	2.4	47.6	0.0	-4.7	1,945.1
1980	225.5	329.6	29.8	6.8	171.4	201.6	5.4	39.4	8.5	574.0	608.3	16.7	1,661.9	182.6	2.2	87.8	0.0	36.3	2,525.8
1985	472.4	305.1	44.2	4.2	185.9	129.2	14.3	35.8	7.8	658.4	237.5	16.8	1,334.1	249.2	2.5	108.1	0.0	238.5	2,713.8
1990	633.4	342.0	45.1	4.1	205.7	179.6	1.9	28.1	8.8	747.8	341.3	19.9	1,582.1	230.5	1.8	ⁱ 170.3	ⁱ 27.5	310.2	ⁱ 3,298.5
1995	686.9	579.3	44.0	3.0	231.4	159.0	1.8	28.2	8.3	822.2	297.0	16.8	1,611.8	302.0	2.4	186.3	32.6	252.7	3,653.9
1996	745.8	561.1	39.3	2.6	223.3	166.4	2.3	29.2	8.1	829.5	298.1	55.4	1,654.1	267.5	2.2	206.0	33.2	287.8	3,757.8
1997	751.3	547.2	23.3	2.9	242.2	173.0	1.7	21.1	8.6	843.9	312.4	78.7	1,707.8	241.0	2.5	196.9	33.3	298.5	3,778.5
1998	749.5	529.6	25.4	2.2	254.2	161.5	2.2	22.7	9.0	881.9	443.8	87.0	1,889.8	326.4	2.0	171.7	33.3	221.4	3,923.7
1999	716.3	583.4	24.4	3.0	268.0	164.3	1.9	25.9	9.1	904.3	401.9	87.0	1,889.8	329.4	1.4	171.7	32.9	253.6	3,978.6
2000	760.4	574.5	26.7	3.1	277.8	199.2	1.3	26.6	8.9	929.1	410.2	77.5	1,960.5	336.8	0.9	164.2	32.0	313.6	4,142.8
2001	725.9	569.8	35.5	2.4	286.8	173.8	1.3	25.9	8.2	943.3	434.4	46.2	1,958.0	330.0	1.5	^R 150.6	31.7	^R 346.4	^R 4,113.9
2002	719.7	705.9	37.5	2.5	291.7	153.3	0.5	21.8	8.1	979.5	347.1	66.3	1,908.3	351.8	1.9	^R 172.3	31.2	336.9	^R 4,228.0
2003	723.8	720.3	33.3	2.0	312.9	145.5	0.7	22.7	7.5	997.5	335.9	82.3	1,940.3	322.8	2.7	^R 184.0	31.5	361.8	^R 4,287.3
2004	699.1	755.2	44.5	2.0	336.2	165.8	0.9	27.1	7.6	1,051.9	392.8	91.2	2,119.9	325.5	2.7	176.1	31.6	342.4	4,452.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Florida

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	0	6	541	3,150	3,458	7,149	436	--	--	7,258	--	17,949	--
1965	0	8	976	3,001	4,095	8,073	292	--	--	12,283	--	29,331	--
1970	0	15	1,010	2,414	5,698	9,121	373	--	--	24,610	--	59,566	--
1975	0	15	1,097	724	5,157	6,977	481	--	--	34,756	--	83,583	--
1980	2	15	1,215	774	4,434	6,422	2,290	--	--	44,746	--	107,889	--
1985	24	14	634	864	5,994	7,492	2,942	--	--	54,118	--	124,670	--
1990	1	13	277	154	4,989	5,421	1,266	--	--	71,115	--	164,505	--
1995	(s)	15	228	211	3,944	4,382	487	--	--	85,770	--	194,836	--
1996	(s)	16	213	264	4,030	4,507	505	--	--	88,315	--	200,882	--
1997	0	13	145	202	3,992	4,340	319	--	--	87,845	--	199,077	--
1998	1	14	109	167	4,455	4,731	284	--	--	95,768	--	217,250	--
1999	1	14	101	161	4,433	4,695	298	--	--	93,846	--	214,717	--
2000	1	15	119	99	4,387	4,605	321	--	--	99,006	--	225,254	--
2001	7	16	122	91	3,663	3,876	238	--	--	101,377	--	^R 228,004	--
2002	1	15	94	63	3,965	4,122	242	--	--	108,164	--	242,316	--
2003	1	16	111	97	3,872	4,080	254	--	--	112,650	--	^R 250,236	--
2004	0	16	127	95	5,193	5,414	261	--	--	112,203	--	249,745	--
Trillion Btu													
1960	0.0	6.6	3.2	17.9	13.9	34.9	8.7	0.0	0.0	24.8	75.0	61.2	136.2
1965	0.0	8.4	5.7	17.0	16.4	39.1	5.8	0.0	0.0	41.9	95.3	100.1	195.4
1970	0.0	15.3	5.9	13.7	21.5	41.1	7.5	0.0	0.0	84.0	147.8	203.2	351.1
1975	0.0	16.4	6.4	4.1	19.2	29.6	9.6	0.0	0.0	118.6	174.2	285.2	459.4
1980	0.1	16.2	7.1	4.4	16.3	27.8	45.8	0.0	0.0	152.7	242.5	368.1	610.6
1985	0.6	15.0	3.7	4.9	21.6	30.2	58.8	0.0	0.0	184.7	289.3	425.4	714.7
1990	(s)	14.1	1.6	0.9	18.1	20.6	25.3	^f 1.1	^f 26.2	242.6	^f 330.0	561.3	^f 891.2
1995	(s)	15.6	1.3	1.2	14.3	16.8	9.7	1.4	31.0	292.6	367.1	664.8	1,031.9
1996	(s)	18.2	1.2	1.5	14.6	17.3	10.1	1.5	31.4	301.3	379.8	685.4	1,065.2
1997	0.0	13.9	0.8	1.1	14.4	16.4	6.4	1.6	31.3	299.7	369.3	679.3	1,048.6
1998	(s)	14.9	0.6	0.9	16.1	17.7	5.7	1.6	31.2	326.8	397.8	741.3	1,139.0
1999	(s)	14.4	0.6	0.9	16.0	17.5	6.0	1.6	30.8	320.2	390.6	732.6	1,123.2
2000	(s)	16.8	0.7	0.6	15.8	17.1	6.4	1.6	29.9	337.8	409.6	768.6	1,178.2
2001	0.2	16.6	0.7	0.5	13.2	14.5	4.8	1.9	29.3	345.9	413.0	^R 778.0	^R 1,191.0
2002	(s)	15.4	0.5	0.4	14.3	15.2	4.8	2.0	28.6	369.1	435.2	826.8	1,262.0
2003	(s)	17.1	0.6	0.5	14.1	15.2	5.1	2.6	28.1	384.4	452.5	853.8	1,306.3
2004	0.0	15.7	0.7	0.5	18.8	20.1	5.2	2.8	28.0	382.8	454.5	852.1	1,306.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Florida

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	0	7	1,097	175	610	685	2,126	4,693	0	--	--	5,586	--	13,814	--
1965	0	13	1,981	166	723	712	1,608	5,190	0	--	--	9,369	--	22,371	--
1970	0	27	2,049	134	1,005	1,382	1,467	6,038	0	--	--	16,244	--	39,316	--
1975	0	32	2,226	40	910	1,038	1,555	5,769	0	--	--	22,904	--	55,081	--
1980	8	30	1,926	28	782	1,340	1,476	5,552	0	--	--	27,422	--	66,119	--
1985	86	31	4,083	1,047	1,058	1,368	2,170	9,726	0	--	--	41,290	--	95,118	--
1990	4	36	3,853	125	880	1,412	2,365	8,636	9 0	--	--	55,769	--	129,008	--
1995	1	40	2,944	95	696	100	138	3,973	0	--	--	65,201	--	148,111	--
1996	1	42	2,120	106	711	100	99	3,136	0	--	--	66,255	--	150,704	--
1997	0	37	1,785	54	705	241	124	2,909	0	--	--	68,879	--	156,096	--
1998	5	38	1,393	65	786	247	10	2,501	0	--	--	73,087	--	165,798	--
1999	6	36	1,801	61	782	251	13	2,908	0	--	--	74,790	--	171,118	--
2000	8	48	2,641	28	774	303	15	3,761	0	--	--	77,900	--	177,234	--
2001	53	49	3,037	25	646	243	15	3,965	0	--	--	79,455	--	R 178,700	--
2002	9	56	2,568	16	700	397	71	3,751	0	--	--	83,279	--	186,567	--
2003	7	54	2,661	19	683	260	17	3,641	0	--	--	85,257	--	R 189,386	--
2004	0	56	3,980	20	916	281	117	5,315	0	--	--	86,765	--	193,125	--

Trillion Btu															
1960	0.0	7.2	6.4	1.0	2.4	3.6	13.4	26.8	0.0	0.2	0.0	19.1	53.2	47.1	100.4
1965	0.0	13.2	11.5	0.9	2.9	3.7	10.1	29.2	0.0	0.1	0.0	32.0	74.5	76.3	150.8
1970	0.0	28.0	11.9	0.8	3.8	7.3	9.2	33.0	0.0	0.1	0.0	55.4	116.6	134.1	250.7
1975	0.0	34.2	13.0	0.2	3.4	5.5	9.8	31.8	0.0	0.2	0.0	78.1	144.3	187.9	332.3
1980	0.2	32.3	11.2	0.2	2.9	7.0	9.3	30.6	0.0	1.1	0.0	93.6	157.7	225.6	383.3
1985	2.1	34.0	23.8	5.9	3.8	7.2	13.6	54.4	0.0	1.4	0.0	140.9	232.8	324.5	557.3
1990	0.1	39.3	22.4	0.7	3.2	7.4	14.9	48.6	9 0.0	9 3.2	9 0.2	190.3	9 281.7	440.2	9 721.9
1995	(s)	43.2	17.1	0.5	2.5	0.5	0.9	21.6	0.0	1.7	0.3	222.5	289.2	505.4	794.6
1996	(s)	46.7	12.4	0.6	2.6	0.5	0.6	16.7	0.0	1.8	0.3	226.1	291.5	514.2	805.7
1997	0.0	38.8	10.4	0.3	2.5	1.3	0.8	15.3	0.0	1.4	0.4	235.0	291.0	532.6	823.6
1998	0.1	39.7	8.1	0.4	2.8	1.3	0.1	12.7	0.0	1.4	0.5	249.4	303.8	565.7	869.5
1999	0.1	37.9	10.5	0.3	2.8	1.3	0.1	15.1	0.0	1.4	0.5	255.2	310.3	583.9	894.1
2000	0.2	53.1	15.4	0.2	2.8	1.6	0.1	20.0	0.0	1.5	0.5	265.8	341.1	604.7	945.8
2001	1.2	52.6	17.7	0.1	2.3	1.3	0.1	21.5	0.0	1.2	0.6	271.1	348.3	R 609.7	R 958.0
2002	0.2	56.9	15.0	0.1	2.5	2.1	0.4	20.1	0.0	1.3	0.6	284.1	363.3	636.6	999.9
2003	0.2	58.5	15.5	0.1	2.5	1.4	0.1	19.6	0.0	1.1	0.8	290.9	371.0	646.2	1,017.2
2004	0.0	55.6	23.2	0.1	3.3	1.5	0.7	28.8	0.0	1.4	0.9	296.0	382.7	658.9	1,041.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Florida

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	0	35	3,304	2,934	638	785	237	182	10,883	356	19,320	0	--	--	3,963	--	9,801	--
1965	0	74	3,506	4,451	1,281	711	291	180	9,636	1,349	21,404	0	--	--	6,449	--	15,399	--
1970	0	92	4,076	4,494	1,109	928	420	202	8,148	1,380	20,757	0	--	--	9,365	--	22,667	--
1975	21	90	3,659	4,724	115	1,242	567	92	7,369	1,651	19,421	0	--	--	13,294	--	31,970	--
1980	748	102	4,487	7,077	150	5,341	604	86	13,673	3,036	34,453	0	--	--	18,598	--	44,843	--
1985	911	76	6,666	5,181	620	2,489	550	1,022	6,283	3,100	25,910	0	--	--	15,742	--	36,263	--
1990	1,207	87	6,804	4,148	50	1,662	619	1,069	3,220	3,677	21,248	⁹ 0	--	--	16,605	--	38,410	--
1995	1,325	129	6,630	5,792	7	3,008	590	1,148	4,980	3,110	25,265	0	--	--	16,473	--	37,420	--
1996	1,270	133	5,920	5,649	33	3,221	573	1,139	3,903	9,994	30,432	0	--	--	17,212	--	39,151	--
1997	1,347	128	3,517	5,740	52	1,039	605	1,144	3,440	10,864	26,401	0	--	--	18,266	--	41,394	--
1998	1,279	124	3,826	5,515	163	936	633	1,900	4,137	10,953	28,063	0	--	--	18,448	--	41,849	--
1999	1,189	137	3,672	6,361	109	1,822	640	1,069	3,174	11,024	27,872	0	--	--	18,579	--	42,509	--
2000	1,245	107	4,023	6,230	96	2,087	630	1,139	3,495	10,864	28,565	0	--	--	18,884	--	42,964	--
2001	1,171	97	5,355	6,820	121	2,547	578	2,371	2,804	3,385	23,981	0	--	--	19,854	--	^R 44,654	--
2002	1,196	85	5,649	7,115	2	1,211	571	2,452	1,589	3,500	22,088	0	--	--	18,959	--	42,474	--
2003	1,111	75	5,014	10,195	10	1,531	528	2,665	1,882	3,582	25,406	0	--	--	19,375	--	^R 43,038	--
2004	1,045	65	6,704	8,401	37	1,121	535	2,875	3,066	3,880	26,619	0	--	--	19,518	--	43,444	--
Trillion Btu																		
1960	0.0	36.4	21.9	17.1	3.6	3.2	1.4	1.0	68.4	2.1	118.7	0.0	23.8	0.0	13.5	192.4	33.4	225.9
1965	0.0	77.2	23.3	25.9	7.3	2.9	1.8	0.9	60.6	7.4	130.0	0.0	30.8	0.0	22.0	260.0	52.5	312.5
1970	0.0	96.3	27.0	26.2	6.3	3.5	2.5	1.1	51.2	7.5	125.4	0.0	40.4	0.0	32.0	294.0	77.3	371.3
1975	0.5	96.6	24.3	27.5	0.7	4.6	3.4	0.5	46.3	9.1	116.4	0.0	37.8	0.0	45.4	296.7	109.1	405.7
1980	17.1	108.6	29.8	41.2	0.9	19.6	3.7	0.5	86.0	16.7	198.2	0.0	40.9	0.0	63.5	428.3	153.0	581.3
1985	22.6	84.2	44.2	30.2	3.5	9.0	3.3	5.4	39.5	16.8	151.9	0.0	47.9	0.0	53.7	360.3	123.7	484.0
1990	30.2	93.9	45.1	24.2	0.3	6.0	3.8	5.6	20.2	19.9	125.2	⁹ 0.0	⁹ 111.0	⁹ 0.0	56.7	⁹ 416.9	131.1	⁹ 547.9
1995	33.3	137.9	44.0	33.7	(s)	10.9	3.6	6.0	31.3	16.8	146.3	0.0	112.9	0.0	56.2	486.6	127.7	614.3
1996	31.9	148.6	39.3	32.9	0.2	11.6	3.5	5.9	24.5	53.5	171.5	0.0	120.4	0.0	58.7	531.1	133.6	664.7
1997	33.7	135.0	23.3	33.4	0.3	3.8	3.7	6.0	21.6	58.6	150.7	0.0	117.3	0.0	62.3	499.0	141.2	640.2
1998	32.0	131.0	25.4	32.1	0.9	3.4	3.8	9.9	26.0	59.1	160.7	0.0	99.8	0.0	62.9	486.4	142.8	629.2
1999	29.7	142.9	24.4	37.1	0.6	6.6	3.9	5.6	20.0	59.2	157.2	0.0	95.8	0.0	63.4	489.1	145.0	634.1
2000	32.1	118.7	26.7	36.3	0.5	7.5	3.8	5.9	22.0	58.2	161.0	0.0	90.2	0.0	64.4	466.3	146.6	612.9
2001	30.1	103.5	35.5	39.7	0.7	9.2	3.5	12.4	17.6	18.2	136.9	0.0	^R 88.6	0.0	67.7	^R 426.9	^R 152.4	579.3
2002	30.6	86.6	37.5	41.4	(s)	4.4	3.5	12.8	10.0	18.9	128.4	0.0	^R 93.8	0.0	64.7	^R 404.1	144.9	^R 549.0
2003	28.3	80.3	33.3	59.4	0.1	5.6	3.2	13.9	11.8	19.4	146.5	0.0	^R 101.2	0.0	66.1	^R 422.6	146.8	^R 569.4
2004	27.0	63.9	44.5	48.9	0.2	4.1	3.2	15.0	19.3	21.0	156.2	0.0	92.2	0.0	66.6	405.9	148.2	554.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Florida

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	0	1	4,517	3,858	9,482	82	674	42,281	3,770	64,663	0	0	--	0	--
1965	0	3	4,273	4,482	17,525	134	723	52,244	4,751	84,132	0	0	--	0	--
1970	0	4	3,138	7,493	23,840	197	669	74,670	2,244	112,252	0	0	--	0	--
1975	(s)	2	1,921	10,160	24,199	169	622	99,462	2,211	138,744	0	0	--	0	--
1980	0	4	1,339	16,014	35,911	161	805	107,853	11,613	173,695	0	0	--	0	--
1985	0	4	841	20,762	23,101	390	733	122,956	6,892	175,675	^f 1,093	18	--	42	--
1990	0	3	808	25,155	31,958	213	824	139,870	9,946	208,776	183	46	--	107	--
1995	0	8	599	28,915	28,045	148	786	156,410	8,435	223,338	57	49	--	111	--
1996	0	6	519	28,649	29,345	120	763	157,789	8,126	225,310	20	51	--	115	--
1997	0	6	567	32,321	30,507	103	806	160,492	8,485	233,281	34	51	--	115	--
1998	0	4	431	33,143	28,482	92	844	167,054	7,664	237,710	35	51	--	116	--
1999	0	7	591	34,490	28,977	132	853	172,223	7,609	244,875	24	55	--	125	--
2000	0	8	612	35,141	35,134	138	840	176,893	9,977	258,735	44	54	--	122	--
2001	0	7	483	36,439	30,658	314	770	178,449	8,488	255,601	26	66	--	148	--
2002	0	12	492	36,609	27,035	171	761	185,233	10,437	260,739	11	72	--	161	--
2003	0	10	398	37,634	25,653	173	703	188,653	4,525	257,740	0	97	--	216	--
2004	0	11	398	42,771	29,246	269	712	198,544	12,752	284,692	1	98	--	219	--

Trillion Btu															
1960	0.0	1.0	22.8	22.5	51.5	0.3	4.1	222.1	23.7	347.0	0.0	0.0	348.0	0.0	348.0
1965	0.0	2.6	21.6	26.1	97.2	0.5	4.4	274.4	29.9	454.1	0.0	0.0	456.7	0.0	456.7
1970	0.0	4.5	15.8	43.6	133.2	0.7	4.1	392.2	14.1	603.8	0.0	0.0	608.3	0.0	608.3
1975	(s)	2.5	9.7	59.2	135.5	0.6	3.8	522.5	13.9	745.2	0.0	0.0	747.7	0.0	747.7
1980	0.0	3.9	6.8	93.3	201.6	0.6	4.9	566.6	73.0	946.6	0.0	0.0	950.6	0.0	950.6
1985	0.0	4.3	4.2	120.9	129.2	1.4	4.4	645.9	43.3	949.4	^f 3.9	0.1	^f 957.6	0.1	^f 957.8
1990	0.0	3.0	4.1	146.5	179.6	0.8	5.0	734.7	62.5	1,133.2	0.6	0.2	1,137.0	0.4	1,137.4
1995	0.0	8.2	3.0	168.4	159.0	0.5	4.8	815.7	53.0	1,204.5	0.2	0.2	1,212.8	0.4	1,213.2
1996	0.0	6.6	2.6	166.9	166.4	0.4	4.6	823.0	51.1	1,215.1	0.1	0.2	1,221.8	0.4	1,222.2
1997	0.0	6.2	2.9	188.3	173.0	0.4	4.9	836.6	53.3	1,259.4	0.1	0.2	1,265.8	0.4	1,266.2
1998	0.0	4.3	2.2	193.1	161.5	0.3	5.1	870.7	48.2	1,281.0	0.1	0.2	1,285.5	0.4	1,285.9
1999	0.0	7.5	3.0	200.9	164.3	0.5	5.2	897.5	47.8	1,319.1	0.1	0.2	1,326.8	0.4	1,327.2
2000	0.0	8.3	3.1	204.7	199.2	0.5	5.1	921.6	62.7	1,396.9	0.2	0.2	1,405.4	0.4	1,405.8
2001	0.0	7.5	2.4	212.3	173.8	1.1	4.7	929.7	53.4	1,377.4	0.1	0.2	1,385.1	0.5	1,385.6
2002	0.0	11.8	2.5	213.2	153.3	0.6	4.6	964.7	65.6	1,404.6	(s)	0.2	1,416.6	0.5	1,417.2
2003	0.0	10.9	2.0	219.2	145.5	0.6	4.3	982.3	28.4	1,382.3	0.0	0.3	1,393.6	0.7	1,394.4
2004	0.0	11.1	2.0	249.1	165.8	1.0	4.3	1,035.4	80.2	1,537.8	(s)	0.3	1,549.3	0.7	1,550.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Florida

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	1,104	89	13,419	191	0	13,610	0	278	--	0	0	0	0	--
1965	2,323	87	27,349	388	0	27,737	0	298	--	0	0	0	0	--
1970	5,131	198	41,783	593	0	42,376	0	292	--	0	0	0	0	--
1975	5,758	141	68,180	5,205	0	73,385	8,370	234	--	0	0	0	0	--
1980	8,785	166	69,994	3,200	0	73,194	16,737	215	--	0	0	0	0	--
1985	18,283	166	22,432	1,246	0	23,678	23,461	244	--	0	0	0	0	--
1990	24,301	189	38,752	1,877	0	40,628	21,780	175	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	26,897	369	33,692	1,854	0	35,546	28,741	231	--	0	0	0	0	--
1996	29,280	337	35,286	1,701	313	37,301	25,470	216	--	0	0	0	0	--
1997	29,495	339	37,648	1,592	3,336	42,577	22,968	241	--	0	0	0	0	--
1998	29,557	324	58,780	3,484	4,622	66,885	31,115	199	--	0	0	0	0	--
1999	28,173	366	53,130	3,259	4,624	61,012	31,526	140	--	0	0	0	0	--
2000	29,846	364	51,766	3,561	3,205	58,533	32,291	87	--	0	0	0	0	--
2001	28,696	374	57,781	2,825	4,640	65,246	31,583	148	--	0	0	0	0	--
2002	28,139	522	43,112	3,698	7,876	54,686	33,704	184	--	0	0	0	0	--
2003	28,331	535	47,001	3,117	10,447	60,565	30,979	263	--	0	0	0	0	--
2004	27,644	586	46,536	2,445	11,649	60,630	31,216	265	--	0	0	0	0	--
Trillion Btu														
1960	27.2	91.6	84.4	1.1	0.0	85.5	0.0	3.0	0.0	0.0	0.0	0.0	0.0	207.3
1965	55.2	90.2	171.9	2.3	0.0	174.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	322.7
1970	116.7	206.5	262.7	3.5	0.0	266.1	0.0	3.1	0.0	0.0	0.0	0.0	0.0	592.4
1975	133.0	142.4	428.6	30.3	0.0	459.0	92.2	2.4	0.0	0.0	0.0	0.0	0.0	829.0
1980	208.1	168.5	440.1	18.6	0.0	458.7	182.6	2.2	0.0	0.0	0.0	0.0	0.0	1,020.1
1985	447.0	167.5	141.0	7.3	0.0	148.3	249.2	2.5	0.0	0.0	0.0	0.0	0.0	1,014.6
1990	603.1	191.6	243.6	10.9	0.0	254.6	230.5	1.8	ⁱ 30.8	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 1,312.4
1995	653.6	374.5	211.8	10.8	0.0	222.6	302.0	2.4	61.9	0.0	0.0	0.0	0.0	1,617.0
1996	713.9	341.1	221.8	9.9	1.9	233.6	267.5	2.2	73.8	0.0	0.0	0.0	0.0	1,632.1
1997	717.6	353.3	236.7	9.3	20.1	266.1	241.0	2.5	71.8	0.0	0.0	0.0	0.0	1,652.2
1998	717.4	339.7	369.5	20.3	27.8	417.7	326.4	2.0	64.8	0.0	0.0	0.0	0.0	1,868.0
1999	686.4	380.7	334.0	19.0	27.9	380.9	329.4	1.4	68.5	0.0	0.0	0.0	0.0	1,847.3
2000	728.1	377.5	325.5	20.7	19.3	365.5	336.8	0.9	66.1	0.0	0.0	0.0	0.0	1,874.9
2001	694.4	389.6	363.3	16.5	27.9	407.7	330.0	1.5	56.0	0.0	0.0	0.0	0.0	1,879.1
2002	688.8	535.2	271.0	21.5	47.4	340.0	351.8	1.9	72.3	0.0	0.0	0.0	0.0	1,990.0
2003	695.3	553.5	295.5	18.2	62.9	376.6	322.8	2.7	76.6	0.0	0.0	0.0	0.0	2,027.5
2004	672.0	608.9	292.6	14.2	70.2	377.0	325.5	2.7	77.4	0.0	0.0	0.0	0.0	2,063.5

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Georgia

Year	Coal ^a Thousand Short Tons	Natural Gas ^b Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
			Thousand Barrels															Million kWh	
1960	3,548	182	2,482	262	5,140	2,306	1,554	4,253	819	32,079	6,551	273	55,720	0	2,306	--	--	7,668	--
1965	6,116	211	4,007	928	8,531	2,158	1,297	5,424	967	39,136	8,413	1,005	71,867	0	3,234	--	--	13,606	--
1970	8,131	333	3,916	600	12,781	10,506	457	7,430	1,023	54,081	10,279	1,031	102,104	0	2,519	--	--	27,302	--
1975	13,141	327	4,198	399	16,115	12,887	246	8,168	1,126	65,541	10,809	2,038	121,527	3,093	4,334	--	--	8,872	--
1980	21,892	315	4,795	386	19,437	16,421	552	7,444	1,250	65,506	9,036	5,272	130,097	8,436	4,423	--	--	-16,491	--
1985	29,898	282	4,580	212	24,639	16,236	367	6,825	1,137	72,993	11,931	4,372	143,292	10,130	2,826	--	--	-31,317	--
1990	30,067	311	6,398	196	28,927	18,439	198	6,021	1,279	83,148	3,491	5,081	153,179	24,797	4,589	--	--	-18,112	--
1995	31,288	374	5,526	156	34,292	18,451	195	7,288	1,221	97,672	4,103	8,827	177,732	30,661	4,197	--	--	6,144	--
1996	31,158	385	5,428	168	40,426	17,293	212	7,490	1,185	101,063	4,777	7,224	185,265	29,925	4,679	--	--	25,375	--
1997	32,846	372	4,890	157	36,178	15,233	187	7,800	1,251	101,576	4,251	7,800	179,323	30,414	4,280	--	--	11,401	--
1998	32,720	369	5,497	138	37,511	15,134	245	6,188	1,310	106,860	2,367	8,048	183,296	31,380	5,235	--	--	26,606	--
1999	33,491	338	7,428	149	40,637	15,316	314	6,899	1,324	109,920	2,199	8,393	192,580	31,478	2,751	--	--	38,646	--
2000	35,149	414	5,643	106	42,597	13,046	280	9,112	1,304	111,119	2,710	7,804	193,720	32,473	2,481	--	--	43,233	--
2001	32,896	351	5,944	92	45,554	9,903	266	6,692	1,195	113,550	1,726	8,033	192,955	33,682	2,596	--	--	R 49,020	--
2002	34,470	384	5,627	114	41,946	7,430	148	6,820	1,181	116,875	3,699	8,694	192,533	31,108	2,716	--	--	57,338	--
2003	35,111	380	5,412	140	42,889	8,789	158	6,290	1,091	118,244	4,429	8,693	196,136	33,257	4,140	--	--	R 46,757	--
2004	37,872	393	6,624	206	45,733	9,177	220	6,504	1,106	120,747	6,753	9,175	206,244	33,748	3,692	--	--	57,868	--
Trillion Btu																			
1960	89.0	188.5	16.5	1.3	29.9	12.4	8.8	17.1	5.0	168.5	41.2	1.6	302.2	0.0	24.8	71.2	0.0	26.2	701.8
1965	152.6	219.8	26.6	4.7	49.7	11.6	7.4	21.8	5.9	205.6	52.9	5.4	391.4	0.0	33.8	74.2	0.0	46.4	918.2
1970	193.2	342.8	26.0	3.0	74.5	59.0	2.6	28.1	6.2	284.1	64.6	5.6	553.6	0.0	26.4	71.8	0.0	93.2	1,281.0
1975	312.0	335.4	27.9	2.0	93.9	72.6	1.4	30.3	6.8	344.3	68.0	11.2	658.3	34.1	45.1	78.3	0.0	30.3	1,493.4
1980	521.5	325.3	31.8	1.9	113.2	92.6	3.1	27.3	7.6	344.1	56.8	28.8	707.3	92.0	45.9	98.1	0.0	-56.3	1,733.9
1985	725.7	289.7	30.4	1.1	143.5	91.5	2.1	24.6	6.9	383.4	75.0	23.8	782.3	107.6	29.5	116.7	0.0	-106.9	1,944.6
1990	714.1	319.4	42.5	1.0	168.5	104.2	1.1	21.8	7.8	436.8	21.9	27.7	833.3	262.4	47.7	187.6	0.1	-61.8	2,303.7
1995	723.8	383.5	36.7	0.8	199.8	104.6	1.1	26.4	7.4	509.4	25.8	48.3	960.2	322.2	43.3	205.6	0.2	21.0	2,659.7
1996	723.1	393.5	36.0	0.8	235.5	98.0	1.2	27.1	7.2	527.1	30.0	39.6	1,002.6	314.3	48.4	208.3	0.2	86.6	2,776.9
1997	768.0	381.7	32.4	0.8	210.7	86.4	1.1	28.2	7.6	529.5	26.7	43.0	966.4	319.2	43.7	218.5	0.2	38.9	2,736.7
1998	767.4	378.6	36.5	0.7	218.5	85.8	1.4	22.4	7.9	557.0	14.9	44.4	989.4	329.2	53.4	202.9	0.3	90.8	2,811.9
1999	782.6	347.1	49.3	0.8	236.7	86.8	1.8	24.9	8.0	572.8	13.8	46.1	1,041.1	328.9	28.1	203.0	0.3	131.9	2,863.1
2000	819.5	421.3	37.4	0.5	248.1	74.0	1.6	32.9	7.9	578.9	17.0	42.7	1,041.1	338.7	25.3	196.9	0.3	147.5	2,990.7
2001	772.0	362.7	39.4	0.5	265.4	56.2	1.5	24.2	7.2	591.6	10.8	44.1	1,040.9	351.9	26.8	R 166.0	0.3	R 167.3	R 2,887.9
2002	807.1	392.8	37.3	0.6	244.3	42.1	0.8	24.6	7.2	608.7	23.3	47.9	1,036.8	324.7	27.6	R 257.8	0.4	195.6	3,042.9
2003	819.0	396.1	35.9	0.7	249.8	49.8	0.9	22.8	6.6	615.7	27.8	47.9	1,058.1	346.6	42.4	R 181.5	0.4	159.5	R 3,003.6
2004	835.0	410.3	44.0	1.0	266.4	52.0	1.2	23.5	6.7	629.7	42.5	50.6	1,117.6	351.9	37.0	191.5	0.4	197.4	3,141.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Georgia

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	226	56	131	633	2,279	3,042	1,719	--	--	4,469	--	11,053	--
1965	110	67	211	460	3,092	3,764	1,173	--	--	6,936	--	16,562	--
1970	71	87	250	121	4,164	4,536	729	--	--	12,474	--	30,193	--
1975	15	87	298	34	3,896	4,229	758	--	--	16,457	--	39,576	--
1980	5	90	578	91	3,553	4,222	1,033	--	--	20,033	--	48,303	--
1985	8	84	395	257	3,952	4,604	1,297	--	--	23,505	--	54,146	--
1990	4	90	297	111	3,400	3,808	548	--	--	29,933	--	69,242	--
1995	8	115	164	126	4,001	4,290	829	--	--	35,812	--	81,352	--
1996	(s)	127	151	144	4,072	4,367	861	--	--	37,763	--	85,896	--
1997	2	114	79	135	4,387	4,601	686	--	--	36,831	--	83,466	--
1998	1	107	93	171	3,770	4,035	609	--	--	41,519	--	94,186	--
1999	2	99	55	241	4,106	4,401	641	--	--	41,767	--	95,561	--
2000	1	141	72	198	4,671	4,941	689	--	--	44,560	--	101,381	--
2001	1	120	61	181	3,285	3,527	453	--	--	44,380	--	^R 99,814	--
2002	1	127	55	81	3,289	3,425	460	--	--	48,600	--	108,877	--
2003	0	130	38	66	3,528	3,632	484	--	--	48,174	--	^R 107,012	--
2004	1	126	40	93	3,848	3,982	497	--	--	51,124	--	113,792	--
Trillion Btu													
1960	5.6	57.8	0.8	3.6	9.1	13.5	34.4	0.0	0.0	15.2	126.5	37.7	164.2
1965	2.7	69.9	1.2	2.6	12.4	16.2	23.5	0.0	0.0	23.7	135.9	56.5	192.4
1970	1.7	90.1	1.5	0.7	15.7	17.9	14.6	0.0	0.0	42.6	166.8	103.0	269.8
1975	0.4	89.5	1.7	0.2	14.5	16.4	15.2	0.0	0.0	56.2	177.6	135.0	312.6
1980	0.1	93.1	3.4	0.5	13.1	16.9	20.7	0.0	0.0	68.4	199.2	164.8	364.0
1985	0.2	86.4	2.3	1.5	14.2	18.0	25.9	0.0	0.0	80.2	210.7	184.7	395.5
1990	0.1	92.7	1.7	0.6	12.3	14.7	11.0	^f (s)	^f 0.1	102.1	^f 220.7	236.3	^f 457.0
1995	0.2	117.6	1.0	0.7	14.5	16.2	16.6	(s)	0.2	122.2	273.0	277.6	550.6
1996	(s)	130.0	0.9	0.8	14.7	16.4	17.2	(s)	0.2	128.8	292.7	293.1	585.8
1997	(s)	117.6	0.5	0.8	15.9	17.1	13.7	0.1	0.2	125.7	274.3	284.8	559.1
1998	(s)	110.3	0.5	1.0	13.6	15.1	12.2	0.1	0.2	141.7	279.6	321.4	601.0
1999	0.1	101.4	0.3	1.4	14.8	16.5	12.8	0.1	0.2	142.5	273.7	326.1	599.7
2000	(s)	143.4	0.4	1.1	16.8	18.4	13.8	0.1	0.2	152.0	327.9	345.9	673.9
2001	(s)	124.1	0.4	1.0	11.9	13.3	9.1	0.1	0.2	151.4	298.2	^R 340.6	^R 638.8
2002	(s)	129.8	0.3	0.5	11.9	12.7	9.2	0.1	0.3	165.8	317.8	371.5	689.3
2003	0.0	135.7	0.2	0.4	12.8	13.4	9.7	0.1	0.3	164.4	323.5	365.1	688.7
2004	(s)	132.0	0.2	0.5	13.9	14.7	9.9	0.1	0.3	174.4	331.5	388.3	719.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Georgia

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	157	21	373	206	402	269	59	1,308	0	--	--	2,765	--	6,838	--
1965	83	26	603	149	546	306	83	1,687	0	--	--	4,560	--	10,888	--
1970	56	39	713	39	735	349	108	1,945	0	--	--	8,174	--	19,783	--
1975	36	49	851	11	688	372	80	2,002	0	--	--	11,226	--	26,998	--
1980	17	59	315	12	627	363	10	1,327	0	--	--	11,965	--	28,849	--
1985	30	52	1,726	46	697	310	468	3,247	0	--	--	17,009	--	39,183	--
1990	18	49	1,510	64	600	519	68	2,761	^g 0	--	--	23,715	--	54,858	--
1995	52	57	1,453	35	706	62	11	2,267	0	--	--	28,793	--	65,406	--
1996	3	61	1,156	31	719	62	11	1,979	0	--	--	30,273	--	68,859	--
1997	15	57	869	28	774	632	6	2,309	0	--	--	31,352	--	71,051	--
1998	10	55	716	27	665	155	1	1,565	0	--	--	34,026	--	77,189	--
1999	15	44	1,211	37	725	142	(s)	2,115	0	--	--	35,536	--	81,306	--
2000	8	59	1,238	41	824	223	5	2,330	0	--	--	38,443	--	87,465	--
2001	10	51	1,611	61	580	78	(s)	2,330	0	--	--	39,364	--	^R 88,533	--
2002	5	49	1,027	47	580	68	0	1,722	0	--	--	40,401	--	90,508	--
2003	0	50	914	48	623	68	11	1,662	0	--	--	40,554	--	^R 90,085	--
2004	6	55	1,077	21	679	68	0	1,846	0	--	--	42,316	--	94,189	--

Trillion Btu															
1960	3.9	22.1	2.2	1.2	1.6	1.4	0.4	6.7	0.0	0.7	0.0	9.4	42.8	23.3	66.2
1965	2.0	27.1	3.5	0.8	2.2	1.6	0.5	8.7	0.0	0.4	0.0	15.6	53.8	37.2	91.0
1970	1.3	39.9	4.2	0.2	2.8	1.8	0.7	9.7	0.0	0.3	0.0	27.9	79.1	67.5	146.6
1975	0.8	50.8	5.0	0.1	2.6	2.0	0.5	10.0	0.0	0.3	0.0	38.3	100.2	92.1	192.3
1980	0.4	60.6	1.8	0.1	2.3	1.9	0.1	6.2	0.0	0.5	0.0	40.8	108.6	98.4	207.0
1985	0.7	53.0	10.1	0.3	2.5	1.6	2.9	17.4	0.0	0.6	0.0	58.0	129.7	133.7	263.4
1990	0.4	50.8	8.8	0.4	2.2	2.7	0.4	14.5	^g 0.0	^g 1.2	^g (s)	80.9	^g 147.9	187.2	^g 335.0
1995	1.3	58.0	8.5	0.2	2.6	0.3	0.1	11.6	0.0	2.3	(s)	98.2	171.4	223.2	394.6
1996	0.1	62.8	6.7	0.2	2.6	0.3	0.1	9.9	0.0	2.4	(s)	103.3	178.4	234.9	413.4
1997	0.4	58.8	5.1	0.2	2.8	3.3	(s)	11.3	0.0	2.3	(s)	107.0	179.8	242.4	422.2
1998	0.2	56.9	4.2	0.2	2.4	0.8	(s)	7.5	0.0	2.0	(s)	116.1	182.8	263.4	446.2
1999	0.4	44.8	7.1	0.2	2.6	0.7	(s)	10.6	0.0	2.1	(s)	121.3	179.1	277.4	456.5
2000	0.2	59.9	7.2	0.2	3.0	1.2	(s)	11.6	0.0	2.3	(s)	131.2	205.1	298.4	503.5
2001	0.3	52.4	9.4	0.3	2.1	0.4	(s)	12.2	0.0	1.6	(s)	134.3	200.8	^R 302.1	^R 502.9
2002	0.1	49.8	6.0	0.3	2.1	0.4	0.0	8.7	0.0	1.6	(s)	137.8	198.1	308.8	506.9
2003	0.0	52.5	5.3	0.3	2.3	0.4	0.1	8.3	0.0	1.7	(s)	138.4	200.9	307.4	^R 508.2
2004	0.2	57.5	6.3	0.1	2.5	0.4	0.0	9.2	0.0	1.7	(s)	144.4	212.9	321.4	534.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
^b Includes supplemental gaseous fuels.
^c Liquefied petroleum gases.
^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.
^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.
^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R = Revised data.
-- = Not applicable.
(s) = Btu value less than 0.05 or physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Georgia

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	548	76	2,482	2,043	715	1,507	289	936	4,909	273	13,153	63	--	--	4,713	--	11,656	--
1965	630	113	4,007	3,538	687	1,716	384	616	7,117	1,005	19,070	64	--	--	6,903	--	16,483	--
1970	506	141	3,916	4,014	296	2,430	474	124	8,457	1,031	20,741	58	--	--	10,853	--	26,268	--
1975	434	145	4,198	3,557	200	3,478	610	60	6,243	2,038	20,384	56	--	--	13,866	--	33,345	--
1980	679	155	4,795	3,993	449	3,188	632	26	5,361	5,272	23,717	54	--	--	19,195	--	46,282	--
1985	1,575	140	4,580	4,079	65	1,964	575	1,251	10,397	4,372	27,282	54	--	--	23,122	--	53,266	--
1990	2,232	162	6,398	4,833	23	1,916	647	1,288	2,002	5,081	22,189	^g 36	--	--	26,717	--	61,804	--
1995	1,949	184	5,526	4,990	35	2,441	617	829	2,599	8,827	25,864	41	--	--	31,493	--	71,541	--
1996	1,985	182	5,428	5,484	37	2,579	599	907	3,445	7,224	25,702	41	--	--	33,175	--	75,461	--
1997	2,046	175	4,890	4,873	24	2,503	633	890	3,058	7,800	24,670	40	--	--	33,957	--	76,955	--
1998	1,978	164	5,497	5,246	46	1,711	663	954	1,209	8,048	23,373	26	--	--	35,077	--	79,571	--
1999	1,968	154	7,428	6,224	37	1,949	670	982	1,053	8,393	26,736	20	--	--	35,255	--	80,663	--
2000	1,990	166	5,643	6,475	41	3,498	659	981	1,300	7,804	26,401	22	--	--	36,085	--	82,100	--
2001	1,994	138	5,944	7,900	24	2,708	604	2,338	922	8,033	28,473	29	--	--	33,941	--	^R 76,335	--
2002	1,828	143	5,627	6,556	20	2,823	597	2,387	1,812	8,694	28,515	29	--	--	34,603	--	^R 77,520	--
2003	1,761	159	5,412	6,332	44	1,956	552	2,556	2,297	8,693	27,842	27	--	--	34,768	--	^R 77,232	--
2004	1,771	159	6,624	6,167	106	1,788	559	2,811	2,853	9,175	30,084	24	--	--	35,846	--	79,786	--
Trillion Btu																		
1960	13.9	78.6	16.5	11.9	4.1	6.0	1.8	4.9	30.9	1.6	77.6	0.7	36.2	0.0	16.1	223.0	39.8	262.8
1965	15.9	117.0	26.6	20.6	3.9	6.9	2.3	3.2	44.7	5.4	113.7	0.7	50.3	0.0	23.6	321.1	56.2	377.4
1970	12.0	145.3	26.0	23.4	1.7	9.2	2.9	0.7	53.2	5.6	122.5	0.6	56.9	0.0	37.0	374.3	89.6	464.0
1975	10.2	149.4	27.9	20.7	1.1	12.9	3.7	0.3	39.2	11.2	117.1	0.6	62.9	0.0	47.3	387.4	113.8	501.2
1980	16.5	160.1	31.8	23.3	2.5	11.7	3.8	0.1	33.7	28.8	135.8	0.6	76.9	0.0	65.5	455.4	157.9	613.4
1985	39.1	143.9	30.4	23.8	0.4	7.1	3.5	6.6	65.4	23.8	160.8	0.6	90.1	0.0	78.9	513.4	181.7	695.1
1990	56.1	166.4	42.5	28.2	0.1	6.9	3.9	6.8	12.6	27.7	128.7	^g 0.4	^g 175.5	^g 0.0	91.2	^g 618.2	210.9	^g 829.1
1995	49.1	188.5	36.7	29.1	0.2	8.8	3.7	4.3	16.3	48.3	147.4	0.4	186.5	0.0	107.5	679.4	244.1	923.5
1996	49.9	185.9	36.0	31.9	0.2	9.3	3.6	4.7	21.7	39.6	147.1	0.4	188.4	0.0	113.2	685.0	257.5	942.4
1997	51.3	179.6	32.4	28.4	0.1	9.0	3.8	4.6	19.2	43.0	140.7	0.4	201.0	0.0	115.9	688.9	262.6	951.5
1998	49.6	169.0	36.5	30.6	0.3	6.2	4.0	5.0	7.6	44.4	134.4	0.3	188.5	0.0	119.7	661.5	271.5	933.0
1999	49.4	158.0	49.3	36.3	0.2	7.0	4.1	5.1	6.6	46.1	154.7	0.2	187.8	(s)	120.3	670.4	275.2	945.7
2000	51.0	169.2	37.4	37.7	0.2	12.6	4.0	5.1	8.2	42.7	148.0	0.2	180.7	(s)	123.1	672.3	280.1	952.4
2001	51.3	142.7	39.4	46.0	0.1	9.8	3.7	12.2	5.8	44.1	161.1	0.3	^R 155.1	(s)	115.8	^R 626.3	^R 260.5	^R 886.7
2002	47.3	146.6	37.3	38.2	0.1	10.2	3.6	12.4	11.4	47.9	161.2	0.3	^R 246.7	(s)	118.1	^R 720.2	264.5	^R 984.7
2003	45.5	166.5	35.9	36.9	0.3	7.1	3.3	13.3	14.4	47.9	159.2	0.3	^R 169.9	(s)	118.6	^R 660.1	263.5	^R 923.6
2004	45.5	166.2	44.0	35.9	0.6	6.5	3.4	14.7	17.9	50.6	173.5	0.2	179.7	(s)	122.3	687.4	272.2	959.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Georgia

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	9	4	262	2,592	2,306	66	530	30,875	1,544	38,175	0	43	--	106	--
1965	2	5	928	4,177	2,158	69	583	38,215	1,162	47,292	0	0	--	0	--
1970	1	7	600	7,747	10,506	100	549	53,608	172	73,283	0	0	--	0	--
1975	(s)	4	399	10,331	12,887	106	516	65,110	427	89,776	0	0	--	0	--
1980	0	7	386	14,135	16,421	76	618	65,116	2,995	99,747	0	16	--	39	--
1985	0	5	212	18,205	16,236	212	562	71,432	1,009	107,868	^f 0	61	--	139	--
1990	0	7	196	22,069	18,439	105	632	81,341	1,307	124,089	209	75	--	174	--
1995	0	8	156	27,300	18,451	140	603	96,781	1,383	144,815	3	94	--	213	--
1996	0	9	168	33,077	17,293	120	586	100,094	1,237	152,574	0	96	--	218	--
1997	0	8	157	29,899	15,233	136	619	100,054	1,106	147,204	0	109	--	248	--
1998	0	8	138	30,055	15,134	41	648	105,751	912	152,678	0	98	--	223	--
1999	0	9	149	32,082	15,316	120	654	108,795	755	157,872	0	98	--	223	--
2000	0	6	106	33,804	13,046	118	644	109,916	823	158,456	0	96	--	219	--
2001	0	8	92	35,439	9,903	119	591	111,135	650	157,929	0	105	--	^R 237	--
2002	0	9	114	33,867	7,430	128	584	114,419	1,795	158,337	0	186	--	416	--
2003	0	8	140	34,991	8,789	183	539	115,621	1,991	162,255	0	180	--	401	--
2004	0	7	206	38,198	9,177	188	547	117,868	3,812	169,996	0	180	--	401	--

Trillion Btu															
1960	0.2	3.7	1.3	15.1	12.4	0.3	3.2	162.2	9.7	204.2	0.0	0.1	208.2	0.4	208.6
1965	0.1	5.0	4.7	24.3	11.6	0.3	3.5	200.7	7.3	252.5	0.0	0.0	257.5	0.0	257.5
1970	(s)	7.1	3.0	45.1	59.0	0.4	3.3	281.6	1.1	393.5	0.0	0.0	400.6	0.0	400.6
1975	(s)	4.3	2.0	60.2	72.6	0.4	3.1	342.0	2.7	483.0	0.0	0.0	487.3	0.0	487.3
1980	0.0	7.6	1.9	82.3	92.6	0.3	3.7	342.1	18.8	541.8	0.0	0.1	549.4	0.1	549.6
1985	0.0	5.5	1.1	106.0	91.5	0.8	3.4	375.2	6.3	584.4	^f 0.0	0.2	^f 590.1	0.5	^f 590.6
1990	0.0	7.5	1.0	128.6	104.2	0.4	3.8	427.3	8.2	673.4	0.7	0.3	682.0	0.6	682.6
1995	0.0	8.0	0.8	159.0	104.6	0.5	3.7	504.7	8.7	782.0	(s)	0.3	790.3	0.7	791.1
1996	0.0	8.9	0.8	192.7	98.0	0.4	3.6	522.1	7.8	825.4	0.0	0.3	834.6	0.7	835.4
1997	0.0	8.5	0.8	174.2	86.4	0.5	3.8	521.6	7.0	794.1	0.0	0.4	803.0	0.8	803.8
1998	0.0	8.2	0.7	175.1	85.8	0.1	3.9	551.2	5.7	822.6	0.0	0.3	831.1	0.8	831.8
1999	0.0	9.5	0.8	186.9	86.8	0.4	4.0	566.9	4.7	850.6	0.0	0.3	860.4	0.8	861.2
2000	0.0	6.2	0.5	196.9	74.0	0.4	3.9	572.7	5.2	853.6	0.0	0.3	860.1	0.7	860.9
2001	0.0	8.2	0.5	206.4	56.2	0.4	3.6	579.0	4.1	850.2	0.0	0.4	858.7	0.8	859.5
2002	0.0	8.7	0.6	197.3	42.1	0.5	3.5	595.9	11.3	851.2	0.0	0.6	860.5	1.4	861.9
2003	0.0	8.3	0.7	203.8	49.8	0.7	3.3	602.0	12.5	872.9	0.0	0.6	881.7	1.4	883.1
2004	0.0	7.3	1.0	222.5	52.0	0.7	3.3	614.7	24.0	918.2	0.0	0.6	926.1	1.4	927.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Georgia

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	2,608	25	39	1	0	40	0	2,243	--	0	0	0	0	--
1965	5,291	1	52	2	0	54	0	3,170	--	0	0	0	0	--
1970	7,498	59	1,542	58	0	1,600	0	2,461	--	0	0	0	0	--
1975	12,656	40	4,059	1,077	0	5,136	3,093	4,278	--	0	0	0	0	--
1980	21,191	4	670	415	0	1,085	8,436	4,369	--	0	0	0	0	--
1985	28,285	1	57	235	0	292	10,130	2,772	--	0	0	0	0	--
1990	27,812	2	115	218	0	333	24,797	4,553	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	29,280	11	109	386	0	495	30,661	4,156	--	0	0	0	0	--
1996	29,170	6	84	559	0	643	29,925	4,638	--	0	0	0	0	--
1997	30,784	17	81	458	0	539	30,414	4,239	--	0	0	0	0	--
1998	30,731	33	245	1,400	0	1,645	31,380	5,209	--	0	0	0	0	--
1999	31,506	33	391	1,065	0	1,456	31,478	2,731	--	0	0	0	0	--
2000	33,150	42	583	1,009	0	1,591	32,473	2,459	--	0	0	0	0	--
2001	30,891	35	153	543	0	696	33,682	2,567	--	0	0	0	0	--
2002	32,637	57	93	441	0	534	31,108	2,687	--	0	0	0	0	--
2003	33,350	32	130	614	0	744	33,257	4,113	--	0	0	0	0	--
2004	36,094	46	87	250	0	337	33,748	3,668	--	0	0	0	0	--
Trillion Btu														
1960	65.3	26.2	0.2	(s)	0.0	0.3	0.0	24.1	0.0	0.0	0.0	0.0	0.0	115.9
1965	131.9	0.9	0.3	(s)	0.0	0.3	0.0	33.1	0.0	0.0	0.0	0.0	0.0	166.3
1970	178.1	60.5	9.7	0.3	0.0	10.0	0.0	25.8	0.0	0.0	0.0	0.0	0.0	274.5
1975	300.6	41.5	25.5	6.3	0.0	31.8	34.1	44.5	0.0	0.0	0.0	0.0	0.0	452.4
1980	504.5	3.8	4.2	2.4	0.0	6.6	92.0	45.4	0.0	0.0	0.0	0.0	0.0	652.3
1985	685.7	0.9	0.4	1.4	0.0	1.7	107.6	29.0	0.0	0.0	0.0	0.0	0.0	824.8
1990	657.4	2.0	0.7	1.3	0.0	2.0	262.4	47.4	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 971.2
1995	673.2	11.4	0.7	2.2	0.0	2.9	322.2	42.9	0.2	0.0	0.0	0.0	0.0	1,052.8
1996	673.1	5.9	0.5	3.3	0.0	3.8	314.3	48.0	0.2	0.0	0.0	0.0	0.0	1,045.3
1997	716.2	17.2	0.5	2.7	0.0	3.2	319.2	43.3	1.5	0.0	0.0	0.0	0.0	1,100.6
1998	717.5	34.2	1.5	8.2	0.0	9.7	329.2	53.1	0.2	0.0	0.0	0.0	0.0	1,144.0
1999	732.8	33.4	2.5	6.2	0.0	8.7	328.9	27.9	0.2	0.0	0.0	0.0	0.0	1,132.0
2000	768.3	42.7	3.7	5.9	0.0	9.5	338.7	25.1	0.1	0.0	0.0	0.0	0.0	1,184.4
2001	^R 720.5	35.3	1.0	3.2	0.0	4.1	351.9	26.5	0.2	0.0	0.0	0.0	0.0	1,138.5
2002	759.7	57.8	0.6	2.6	0.0	3.2	324.7	27.3	0.2	0.0	0.0	0.0	0.0	1,172.9
2003	773.5	33.0	0.8	3.6	0.0	4.4	346.6	42.1	0.2	0.0	0.0	0.0	0.0	1,199.8
2004	789.3	47.3	0.5	1.5	0.0	2.0	351.9	36.8	0.2	0.0	0.0	0.0	0.0	1,227.5

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	0	0	29	2,640	886	4,321	91	112	38	3,429	4,766	533	16,844	0	27	--	--	0	--
1965	0	0	306	613	1,612	7,618	49	219	94	4,082	7,230	655	22,478	0	105	--	--	0	--
1970	0	0	377	133	1,695	14,273	153	938	71	5,691	10,154	619	34,105	0	108	--	--	0	--
1975	0	0	379	116	1,948	14,849	76	872	104	6,766	11,255	734	37,097	0	89	--	--	0	--
1980	0	3	285	199	5,987	14,116	9	1,573	94	7,231	13,196	872	43,562	0	86	--	--	0	--
1985	46	2	308	155	4,526	13,260	2	133	86	7,594	13,185	757	40,006	0	86	--	--	0	--
1990	29	3	381	272	6,489	12,646	(s)	178	96	8,670	19,067	2,215	50,015	0	80	--	--	0	--
1995	895	3	438	218	5,787	9,940	1	1,316	92	9,416	14,473	2,161	43,842	0	98	--	--	0	--
1996	930	3	401	165	4,950	10,087	1	1,319	89	9,374	12,667	2,577	41,631	0	104	--	--	0	--
1997	933	3	396	121	4,640	10,217	1	241	94	9,358	12,218	2,540	39,824	0	115	--	--	0	--
1998	822	3	322	107	4,451	9,990	(s)	844	99	9,342	13,243	2,085	40,484	0	121	--	--	0	--
1999	801	3	353	58	5,314	9,474	(s)	376	100	8,953	12,945	2,091	39,662	0	115	--	--	0	--
2000	816	3	604	45	5,094	9,438	(s)	562	98	9,289	13,520	1,941	40,591	0	103	--	--	0	--
2001	829	3	342	48	6,040	8,895	(s)	582	90	9,710	13,284	2,488	41,479	0	101	--	--	0	--
2002	748	3	107	18	8,086	10,485	(s)	770	89	10,419	12,738	2,356	45,068	0	95	--	--	0	--
2003	837	3	110	15	8,031	12,984	(s)	492	82	10,597	12,079	2,571	46,963	0	91	--	--	0	--
2004	857	3	120	40	8,634	13,310	(s)	462	83	10,741	13,110	2,529	49,029	0	94	--	--	0	--
Trillion Btu																			
1960	0.0	0.0	0.2	13.3	5.2	23.5	0.5	0.4	0.2	18.0	30.0	3.2	94.6	0.0	0.3	0.0	0.0	0.0	94.9
1965	0.0	0.0	2.0	3.1	9.4	42.3	0.3	0.9	0.6	21.4	45.5	3.9	129.3	0.0	1.1	0.2	0.0	0.0	130.6
1970	0.0	0.0	2.5	0.7	9.9	80.1	0.9	3.5	0.4	29.9	63.8	3.7	195.4	0.0	1.1	0.4	0.0	0.0	197.0
1975	0.0	0.0	2.5	0.6	11.3	83.5	0.4	3.2	0.6	35.5	70.8	4.4	212.9	0.0	0.9	0.6	0.0	0.0	214.4
1980	0.0	3.0	1.9	1.0	34.9	79.2	0.1	5.8	0.6	38.0	83.0	5.2	249.6	0.0	0.9	11.9	0.0	0.0	265.4
1985	1.1	2.7	2.0	0.8	26.4	74.4	(s)	0.5	0.5	39.9	82.9	4.7	232.1	0.0	0.9	14.2	0.4	0.0	251.4
1990	0.7	3.0	2.5	1.4	37.8	71.1	(s)	0.6	0.6	45.5	119.9	13.3	292.7	0.0	0.8	ⁱ 25.9	ⁱ 1.2	0.0	ⁱ 324.4
1995	19.9	2.9	2.9	1.1	33.7	56.4	(s)	4.8	0.6	49.1	91.0	13.1	252.6	0.0	1.0	19.8	6.3	0.0	302.5
1996	20.4	2.8	2.7	0.8	28.8	57.2	(s)	4.8	0.5	48.9	79.6	15.5	238.9	0.0	1.1	19.1	6.6	0.0	288.7
1997	20.5	2.7	2.6	0.6	27.0	57.9	(s)	0.9	0.6	48.8	76.8	15.3	230.5	0.0	1.2	17.4	6.6	0.0	278.9
1998	18.2	2.8	2.1	0.5	25.9	56.6	(s)	3.1	0.6	48.7	83.3	12.6	233.4	0.0	1.2	16.5	6.5	0.0	278.8
1999	17.7	2.9	2.3	0.3	31.0	53.7	(s)	1.4	0.6	46.7	81.4	12.6	229.9	0.0	1.2	17.0	6.0	0.0	274.6
2000	17.7	3.0	4.0	0.2	29.7	53.5	(s)	2.0	0.6	48.4	85.0	11.8	235.2	0.0	1.1	15.2	7.1	0.0	279.1
2001	17.8	2.9	2.3	0.2	35.2	50.4	(s)	2.1	0.5	50.6	83.5	14.9	239.8	0.0	1.0	^R 11.7	5.7	0.0	^R 279.0
2002	16.6	2.9	0.7	0.1	47.1	59.5	(s)	2.8	0.5	54.3	80.1	14.2	259.2	0.0	1.0	^R 9.5	2.9	0.0	^R 292.1
2003	19.3	2.9	0.7	0.1	46.8	73.6	(s)	1.8	0.5	55.2	75.9	15.4	270.1	0.0	0.9	^R 11.7	5.2	0.0	^R 310.0
2004	19.3	2.9	0.8	0.2	50.3	75.5	(s)	1.7	0.5	56.0	82.4	15.2	282.6	0.0	0.9	11.8	6.0	0.0	323.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	0	0	(s)	0	57	58	0	--	--	514	--	1,550	--
1965	0	0	1	0	113	114	0	--	--	861	--	1,976	--
1970	0	0	1	0	447	449	0	--	--	1,285	--	3,021	--
1975	0	0	1	0	320	321	0	--	--	1,663	--	3,732	--
1980	0	1	1	0	430	431	0	--	--	1,841	--	4,103	--
1985	0	1	(s)	0	101	101	0	--	--	1,879	--	3,928	--
1990	0	1	(s)	0	127	128	0	--	--	2,324	--	6,358	--
1995	0	1	2	(s)	86	88	0	--	--	2,606	--	6,374	--
1996	0	1	(s)	(s)	107	107	0	--	--	2,676	--	6,524	--
1997	0	1	(s)	(s)	198	198	0	--	--	2,668	--	6,515	--
1998	0	1	(s)	(s)	563	563	0	--	--	2,641	--	6,402	--
1999	0	1	(s)	(s)	319	319	0	--	--	2,689	--	6,457	--
2000	0	1	(s)	(s)	436	437	0	--	--	2,765	--	6,544	--
2001	0	1	(s)	(s)	443	443	0	--	--	2,802	--	6,385	--
2002	0	1	(s)	(s)	444	445	0	--	--	2,898	--	6,865	--
2003	0	1	(s)	(s)	329	330	0	--	--	3,028	--	6,646	--
2004	0	1	(s)	(s)	0	(s)	0	--	--	3,162	--	6,628	--
Trillion Btu													
1960	0.0	0.0	(s)	0.0	0.2	0.2	0.0	0.0	0.0	1.8	2.0	5.3	7.3
1965	0.0	0.0	(s)	0.0	0.5	0.5	0.0	0.0	0.0	2.9	3.4	6.7	10.1
1970	0.0	0.0	(s)	0.0	1.7	1.7	0.0	0.0	0.0	4.4	6.1	10.3	16.4
1975	0.0	0.0	(s)	0.0	1.2	1.2	0.0	0.0	0.0	5.7	6.9	12.7	19.6
1980	0.0	1.4	(s)	0.0	1.6	1.6	0.0	0.0	0.0	6.3	9.2	14.0	23.2
1985	0.0	0.7	(s)	0.0	0.4	0.4	0.0	0.0	0.0	6.4	7.5	13.4	20.9
1990	0.0	0.6	(s)	0.0	0.5	0.5	0.0	^f 0.0	^f 0.9	7.9	^f 9.9	21.7	^f 31.6
1995	0.0	0.6	(s)	(s)	0.3	0.3	0.0	0.0	1.2	8.9	11.0	21.7	32.8
1996	0.0	0.6	(s)	(s)	0.4	0.4	0.0	0.0	1.3	9.1	11.3	22.3	33.6
1997	0.0	0.5	(s)	(s)	0.7	0.7	0.0	0.0	1.3	9.1	11.6	22.2	33.9
1998	0.0	0.6	(s)	(s)	2.0	2.0	0.0	0.0	1.3	9.0	12.9	21.8	34.8
1999	0.0	0.6	(s)	(s)	1.2	1.2	0.0	0.0	1.4	9.2	12.2	22.0	34.3
2000	0.0	0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.4	9.4	12.9	22.3	35.3
2001	0.0	0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.3	9.6	13.1	21.8	34.8
2002	0.0	0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.4	9.9	13.4	23.4	36.9
2003	0.0	0.6	(s)	(s)	1.2	1.2	0.0	0.0	1.4	10.3	13.5	22.7	36.2
2004	0.0	0.5	(s)	(s)	0.0	(s)	0.0	0.0	1.5	10.8	12.8	22.6	35.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	0	0	48	23	10	55	41	177	0	--	--	306	--	921	--
1965	0	0	71	39	20	59	31	220	0	--	--	495	--	1,136	--
1970	0	0	174	87	79	133	38	511	0	--	--	771	--	1,813	--
1975	0	0	84	45	57	98	15	299	0	--	--	1,109	--	2,489	--
1980	0	2	398	0	76	54	25	552	0	--	--	1,462	--	3,259	--
1985	0	2	132	1	18	47	21	219	0	--	--	1,612	--	3,371	--
1990	0	2	453	(s)	22	59	825	1,360	^g 0	--	--	2,253	--	6,163	--
1995	0	2	343	(s)	15	11	62	432	0	--	--	2,779	--	6,796	--
1996	0	2	224	(s)	19	11	13	266	0	--	--	2,819	--	6,873	--
1997	0	2	392	(s)	35	11	11	449	0	--	--	2,839	--	6,931	--
1998	0	2	211	(s)	99	11	1,704	2,025	0	--	--	2,833	--	6,869	--
1999	0	2	260	(s)	56	11	6	333	0	--	--	2,944	--	7,070	--
2000	0	2	218	(s)	77	11	8	315	0	--	--	3,092	--	7,319	--
2001	0	2	136	(s)	78	12	5	231	0	--	--	3,192	--	7,273	--
2002	0	2	310	(s)	78	12	(s)	400	0	--	--	3,223	--	7,634	--
2003	0	2	274	(s)	58	12	0	344	0	--	--	3,517	--	7,720	--
2004	0	2	382	(s)	0	12	4	398	0	--	--	3,632	--	7,613	--
Trillion Btu															
1960	0.0	0.0	0.3	0.1	(s)	0.3	0.3	1.0	0.0	0.0	0.0	1.0	2.0	3.1	5.2
1965	0.0	0.0	0.4	0.2	0.1	0.3	0.2	1.2	0.0	0.0	0.0	1.7	2.9	3.9	6.8
1970	0.0	0.0	1.0	0.5	0.3	0.7	0.2	2.7	0.0	0.0	0.0	2.6	5.4	6.2	11.6
1975	0.0	0.0	0.5	0.3	0.2	0.5	0.1	1.6	0.0	0.0	0.0	3.8	5.4	8.5	13.8
1980	0.0	1.7	2.3	0.0	0.3	0.3	0.2	3.0	0.0	0.0	0.0	5.0	9.7	11.1	20.8
1985	0.0	2.0	0.8	(s)	0.1	0.2	0.1	1.2	0.0	0.0	0.0	5.5	8.7	11.5	20.2
1990	0.0	2.4	2.6	(s)	0.1	0.3	5.2	8.2	^g 0.0	^g 0.0	^g 0.0	7.7	^g 18.3	21.0	^g 39.3
1995	0.0	2.3	2.0	(s)	0.1	0.1	0.4	2.5	0.0	0.0	0.0	9.5	14.3	23.2	37.5
1996	0.0	2.3	1.3	(s)	0.1	0.1	0.1	1.5	0.0	0.0	0.0	9.6	13.4	23.4	36.8
1997	0.0	1.8	2.3	(s)	0.1	0.1	0.1	2.5	0.0	0.0	0.0	9.7	14.0	23.6	37.7
1998	0.0	1.8	1.2	(s)	0.4	0.1	10.7	12.4	0.0	0.0	0.0	9.7	23.9	23.4	47.3
1999	0.0	1.8	1.5	(s)	0.2	0.1	(s)	1.8	0.0	0.0	(s)	10.0	13.7	24.1	37.8
2000	0.0	1.9	1.3	(s)	0.3	0.1	0.1	1.7	0.0	0.0	(s)	10.6	14.1	25.0	39.0
2001	0.0	1.8	0.8	(s)	0.3	0.1	(s)	1.2	0.0	0.0	(s)	10.9	13.9	24.8	38.7
2002	0.0	1.8	1.8	(s)	0.3	0.1	(s)	2.2	0.0	0.0	(s)	11.0	15.0	26.0	41.0
2003	0.0	1.8	1.6	(s)	0.2	0.1	0.0	1.9	0.0	0.0	(s)	12.0	15.7	26.3	42.1
2004	0.0	1.9	2.2	(s)	0.0	0.1	(s)	2.3	0.0	4.6	(s)	12.4	21.2	26.0	47.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	0	0	29	554	68	43	18	83	1,038	533	2,367	0	--	--	465	--	1,403	--
1965	0	0	306	635	10	82	21	76	1,712	655	3,497	83	--	--	1,096	--	2,516	--
1970	0	0	377	701	66	386	4	49	1,671	619	3,874	86	--	--	1,720	--	4,044	--
1975	0	0	379	603	31	472	30	53	1,346	734	3,648	71	--	--	2,538	--	5,696	--
1980	0	0	285	1,369	9	1,041	20	49	1,491	872	5,135	67	--	--	3,028	--	6,749	--
1985	46	0	308	458	(s)	9	18	104	1,344	757	2,997	67	--	--	3,143	--	6,571	--
1990	28	0	381	725	(s)	15	20	133	1,740	2,215	5,231	⁹ 57	--	--	3,734	--	10,214	--
1995	192	0	438	548	(s)	1,207	19	245	1,024	2,161	5,643	64	--	--	3,803	--	9,300	--
1996	169	0	401	475	(s)	1,191	19	259	957	2,577	5,880	65	--	--	3,884	--	9,470	--
1997	166	(s)	396	623	(s)	6	20	242	845	2,540	4,672	67	--	--	3,856	--	9,417	--
1998	146	(s)	322	584	(s)	181	21	266	305	2,085	3,765	75	--	--	3,787	--	9,182	--
1999	117	(s)	353	427	(s)	(s)	21	155	332	2,091	3,380	70	--	--	3,748	--	8,999	--
2000	110	1	604	473	(s)	49	21	160	438	1,941	3,685	60	--	--	3,834	--	9,075	--
2001	113	1	342	473	(s)	61	19	122	8	2,488	3,513	50	--	--	3,790	--	8,634	--
2002	50	(s)	107	459	(s)	247	19	145	446	2,356	3,779	60	--	--	3,770	--	8,931	--
2003	52	(s)	110	426	(s)	94	17	137	364	2,571	3,721	50	--	--	3,846	--	8,442	--
2004	53	(s)	120	407	(s)	462	17	169	395	2,529	4,099	37	--	--	3,937	--	8,252	--
Trillion Btu																		
1960	0.0	0.0	0.2	3.2	0.4	0.2	0.1	0.4	6.5	3.2	14.3	0.0	0.0	0.0	1.6	15.8	4.8	20.6
1965	0.0	0.0	2.0	3.7	0.1	0.3	0.1	0.4	10.8	3.9	21.3	0.9	0.2	0.0	3.7	26.1	8.6	34.7
1970	0.0	0.0	2.5	4.1	0.4	1.5	(s)	0.3	10.5	3.7	22.9	0.9	0.2	0.0	5.9	29.9	13.8	43.7
1975	0.0	0.0	2.5	3.5	0.2	1.8	0.2	0.3	8.5	4.4	21.3	0.7	0.3	0.0	8.7	31.0	19.4	50.4
1980	0.0	0.0	1.9	8.0	0.1	3.8	0.1	0.3	9.4	5.2	28.7	0.7	11.9	0.0	10.3	51.7	23.0	74.7
1985	1.1	0.0	2.0	2.7	(s)	(s)	0.1	0.5	8.4	4.7	18.5	0.7	14.0	0.0	10.7	45.0	22.4	67.4
1990	0.7	0.0	2.5	4.2	(s)	0.1	0.1	0.7	10.9	13.3	31.9	⁹ 0.6	⁹ 18.2	⁹ (s)	12.7	⁹ 64.1	34.9	⁹ 98.9
1995	4.1	0.0	2.9	3.2	(s)	4.4	0.1	1.3	6.4	13.1	31.4	0.7	13.3	(s)	13.0	62.4	31.7	94.1
1996	3.6	0.0	2.7	2.8	(s)	4.3	0.1	1.3	6.0	15.5	32.7	0.7	14.1	(s)	13.3	64.4	32.3	96.7
1997	3.7	0.4	2.6	3.6	(s)	(s)	0.1	1.3	5.3	15.3	28.2	0.7	11.8	(s)	13.2	58.0	32.1	90.1
1998	3.4	0.4	2.1	3.4	(s)	0.7	0.1	1.4	1.9	12.6	22.2	0.8	11.1	(s)	12.9	50.8	31.3	82.1
1999	2.7	0.5	2.3	2.5	(s)	(s)	0.1	0.8	2.1	12.6	20.5	0.7	11.6	(s)	12.8	48.7	30.7	79.4
2000	2.1	0.6	4.0	2.8	(s)	0.2	0.1	0.8	2.8	11.8	22.4	0.6	9.9	(s)	13.1	48.7	31.0	79.6
2001	2.0	0.6	2.3	2.8	(s)	0.2	0.1	0.6	0.1	14.9	21.0	0.5	^R 6.9	(s)	12.9	^R 44.0	29.5	^R 73.4
2002	0.7	0.5	0.7	2.7	(s)	0.9	0.1	0.8	2.8	14.2	22.1	0.6	^R 5.2	(s)	12.9	^R 41.9	30.5	^R 72.4
2003	1.4	0.5	0.7	2.5	(s)	0.3	0.1	0.7	2.3	15.4	22.1	0.5	^R 1.8	(s)	13.1	^R 39.4	28.8	^R 68.2
2004	1.3	0.5	0.8	2.4	(s)	1.7	0.1	0.9	2.5	15.2	23.5	0.4	1.9	(s)	13.4	40.9	28.2	69.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Hawaii

Year			Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
	Coal ^a	Natural Gas ^b	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total				Electrical System Energy Losses ^d	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	0	0	2,640	247	4,321	2	19	3,290	968	11,487	0	0	--	0	--
1965	0	0	613	844	7,618	4	73	3,947	1,195	14,294	0	0	--	0	--
1970	0	0	133	722	14,273	26	68	5,508	1,744	22,473	0	0	--	0	--
1975	0	0	116	831	14,849	22	74	6,615	1,013	23,520	0	0	--	0	--
1980	0	0	199	3,331	14,116	26	74	7,129	1,441	26,317	0	0	--	0	--
1985	0	0	155	3,184	13,260	6	68	7,443	1,526	25,641	^f 0	0	--	0	--
1990	0	0	272	3,498	12,646	13	76	8,477	2,657	27,639	0	0	--	0	--
1995	0	0	218	2,683	9,940	8	73	9,160	2,677	24,759	0	0	--	0	--
1996	0	0	165	1,928	10,087	2	71	9,104	702	22,058	0	0	--	0	--
1997	0	0	121	1,322	10,217	2	75	9,104	489	21,330	0	0	--	0	--
1998	0	0	107	1,242	9,990	1	78	9,065	383	20,867	0	0	--	0	--
1999	0	0	58	2,071	9,474	0	79	8,786	1,708	22,177	0	0	--	0	--
2000	0	0	45	1,627	9,438	0	78	9,118	2,226	22,532	0	0	--	0	--
2001	0	0	48	2,455	8,895	0	71	9,576	2,658	23,704	0	0	--	0	--
2002	0	0	18	3,329	10,485	0	70	10,262	1,437	25,601	0	0	--	0	--
2003	0	0	15	5,033	12,984	10	65	10,448	914	29,470	0	0	--	0	--
2004	0	0	40	5,359	13,310	0	66	10,560	1,493	30,827	0	0	--	0	--
Trillion Btu															
1960	0.0	0.0	13.3	1.4	23.5	(s)	0.1	17.3	6.1	61.8	0.0	0.0	61.8	0.0	61.8
1965	0.0	0.0	3.1	4.9	42.3	(s)	0.4	20.7	7.5	79.0	0.0	0.0	79.0	0.0	79.0
1970	0.0	0.0	0.7	4.2	80.1	0.1	0.4	28.9	11.0	125.3	0.0	0.0	125.3	0.0	125.3
1975	0.0	0.0	0.6	4.8	83.5	0.1	0.5	34.7	6.4	130.5	0.0	0.0	130.5	0.0	130.5
1980	0.0	0.0	1.0	19.4	79.2	0.1	0.5	37.4	9.1	146.7	0.0	0.0	146.7	0.0	146.7
1985	0.0	0.0	0.8	18.5	74.4	(s)	0.4	39.1	9.6	142.9	^f 0.0	0.0	^f 142.9	0.0	^f 142.9
1990	0.0	0.0	1.4	20.4	71.1	(s)	0.5	44.5	16.7	154.5	0.0	0.0	154.5	0.0	154.5
1995	0.0	0.0	1.1	15.6	56.4	(s)	0.4	47.8	16.8	138.2	0.0	0.0	138.2	0.0	138.2
1996	0.0	0.0	0.8	11.2	57.2	(s)	0.4	47.5	4.4	121.6	0.0	0.0	121.6	0.0	121.6
1997	0.0	0.0	0.6	7.7	57.9	(s)	0.5	47.5	3.1	117.2	0.0	0.0	117.2	0.0	117.2
1998	0.0	0.0	0.5	7.2	56.6	(s)	0.5	47.2	2.4	114.6	0.0	0.0	114.6	0.0	114.6
1999	0.0	0.0	0.3	12.1	53.7	0.0	0.5	45.8	10.7	123.1	0.0	0.0	123.1	0.0	123.1
2000	0.0	0.0	0.2	9.5	53.5	0.0	0.5	47.5	14.0	125.2	0.0	0.0	125.2	0.0	125.2
2001	0.0	0.0	0.2	14.3	50.4	0.0	0.4	49.9	16.7	132.0	0.0	0.0	132.0	0.0	132.0
2002	0.0	0.0	0.1	19.4	59.5	0.0	0.4	53.4	9.0	141.8	0.0	0.0	141.8	0.0	141.8
2003	0.0	0.0	0.1	29.3	73.6	(s)	0.4	54.4	5.7	163.6	0.0	0.0	163.6	0.0	163.6
2004	0.0	0.0	0.2	31.2	75.5	0.0	0.4	55.1	9.4	171.7	0.0	0.0	171.7	0.0	171.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Hawaii

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	0	2,719	37	0	2,756	0	27	--	0	0	0	0	--
1965	0	0	4,292	61	0	4,353	0	22	--	0	0	0	0	--
1970	0	0	6,702	96	0	6,798	0	22	--	0	0	0	0	--
1975	0	0	8,880	429	0	9,309	0	18	--	0	0	0	0	--
1980	0	0	10,239	888	0	11,127	0	20	--	0	0	0	0	--
1985	0	0	10,295	752	0	11,047	0	19	--	19	0	0	0	--
1990	1	0	13,844	1,813	0	15,657	0	23	--	ⁱ 0	ⁱ 0	ⁱ 29	0	--
1995	703	0	10,709	2,211	0	12,921	0	34	--	235	0	20	0	--
1996	761	0	10,996	2,323	0	13,319	0	39	--	242	0	23	0	--
1997	767	0	10,873	2,302	0	13,175	0	49	--	245	0	16	0	--
1998	676	0	10,851	2,413	0	13,264	0	46	--	237	0	19	0	--
1999	684	0	10,898	2,555	0	13,453	0	45	--	211	0	16	0	--
2000	706	0	10,848	2,775	0	13,623	0	43	--	262	0	17	0	--
2001	716	0	10,613	2,975	0	13,588	0	50	--	207	0	2	0	--
2002	698	0	10,855	3,987	0	14,842	0	35	--	73	0	2	0	--
2003	785	0	10,801	2,297	0	13,098	0	40	--	178	0	2	0	--
2004	804	0	11,218	2,486	0	13,704	0	57	--	213	0	7	0	--
Trillion Btu														
1960	0.0	0.0	17.1	0.2	0.0	17.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	17.6
1965	0.0	0.0	27.0	0.4	0.0	27.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	27.6
1970	0.0	0.0	42.1	0.6	0.0	42.7	0.0	0.2	0.3	0.0	0.0	0.0	0.0	43.2
1975	0.0	0.0	55.8	2.5	0.0	58.3	0.0	0.2	0.3	0.0	0.0	0.0	0.0	58.8
1980	0.0	0.0	64.4	5.2	0.0	69.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	69.7
1985	0.0	0.0	64.7	4.4	0.0	69.1	0.0	0.2	0.3	0.4	0.0	0.0	0.0	70.0
1990	(s)	0.0	87.0	10.6	0.0	97.6	0.0	0.2	ⁱ 7.8	ⁱ 0.0	ⁱ 0.0	ⁱ 0.3	0.0	ⁱ 105.9
1995	15.8	0.0	67.3	12.9	0.0	80.2	0.0	0.4	6.5	4.9	0.0	0.2	0.0	108.0
1996	16.7	0.0	69.1	13.5	0.0	82.7	0.0	0.4	4.9	5.1	0.0	0.2	0.0	110.0
1997	16.8	0.0	68.4	13.4	0.0	81.8	0.0	0.5	5.6	5.1	0.0	0.2	0.0	110.0
1998	14.9	0.0	68.2	14.1	0.0	82.3	0.0	0.5	5.4	5.0	0.0	0.2	0.0	108.2
1999	15.0	0.0	68.5	14.9	0.0	83.4	0.0	0.5	5.4	4.4	0.0	0.2	0.0	108.9
2000	15.5	0.0	68.2	16.2	0.0	84.4	0.0	0.4	5.3	5.5	0.0	0.2	0.0	111.3
2001	15.7	0.0	66.7	17.3	0.0	84.1	0.0	0.5	4.8	4.3	0.0	(s)	0.0	109.4
2002	16.0	0.0	68.2	23.2	0.0	91.5	0.0	0.4	4.4	1.5	0.0	(s)	0.0	113.7
2003	17.9	0.0	67.9	13.4	0.0	81.3	0.0	0.4	9.9	3.7	0.0	(s)	0.0	113.3
2004	18.0	0.0	70.5	14.5	0.0	85.0	0.0	0.6	5.2	4.5	0.0	0.1	0.0	113.4

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Idaho

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	699	22	491	133	4,072	899	107	455	147	6,965	205	9	13,484	0	6,165	--	--	-84	--
1965	673	34	710	177	4,803	870	521	560	160	7,654	356	8	15,819	0	6,641	--	--	4,754	--
1970	353	47	1,147	154	5,600	960	230	1,057	151	9,684	277	17	19,278	0	7,076	--	--	14,128	--
1975	647	60	880	120	7,560	950	145	1,184	163	11,288	684	0	22,973	0	10,274	--	--	11,256	--
1980	514	49	797	162	5,662	1,243	0	993	182	11,078	613	0	20,731	0	9,507	--	--	17,797	--
1985	486	39	632	80	5,287	1,122	7	778	166	10,672	86	0	18,829	0	10,863	--	--	20,859	--
1990	549	46	1,281	39	7,079	1,143	9	610	186	11,453	47	0	21,847	0	9,115	--	--	31,402	--
1995	465	64	2,014	48	7,567	1,568	20	758	178	13,521	7	21	25,702	0	10,989	--	--	30,584	--
1996	397	67	2,034	55	8,023	874	17	2,656	173	14,174	7	26	28,039	0	13,283	--	--	30,490	--
1997	361	69	2,080	72	8,478	760	18	550	182	14,462	2	24	26,627	0	14,676	--	--	28,133	--
1998	479	69	3,049	61	7,813	718	21	419	191	15,284	5	23	27,584	0	12,936	--	--	32,437	--
1999	430	71	3,052	67	8,925	856	13	954	193	15,886	6	20	29,972	0	13,499	--	--	33,441	--
2000	623	73	3,081	27	9,047	880	14	2,045	190	15,392	2	18	30,696	0	10,967	--	--	41,138	--
2001	553	80	1,849	56	9,126	724	11	1,495	174	15,098	23	22	28,578	0	7,223	--	--	^R 43,285	--
2002	487	71	2,646	67	8,893	793	5	926	172	15,511	80	19	29,112	0	8,769	--	--	39,773	--
2003	503	70	753	57	8,389	686	5	871	159	14,711	(s)	18	25,649	0	8,354	--	--	^R 40,033	--
2004	607	75	1,739	89	9,542	822	12	1,412	161	14,969	0	18	28,765	0	8,462	--	--	41,465	--

Trillion Btu																			
1960	16.8	22.8	3.3	0.7	23.7	4.8	0.6	1.8	0.9	36.6	1.3	0.1	73.7	0.0	66.3	11.4	0.0	-0.3	190.7
1965	15.9	36.1	4.7	0.9	28.0	4.7	3.0	2.2	1.0	40.2	2.2	(s)	86.9	0.0	69.4	10.4	(s)	16.2	234.9
1970	7.9	49.4	7.6	0.8	32.6	5.2	1.3	4.0	0.9	50.9	1.7	0.1	105.1	0.0	74.3	11.5	(s)	48.2	296.4
1975	13.4	63.8	5.8	0.6	44.0	5.2	0.8	4.4	1.0	59.3	4.3	0.0	125.5	0.0	106.9	11.1	0.0	38.4	359.1
1980	9.6	51.6	5.3	0.8	33.0	6.8	0.0	3.7	1.1	58.2	3.9	0.0	112.7	0.0	98.8	14.6	0.0	60.7	348.1
1985	8.9	41.1	4.2	0.4	30.8	6.1	(s)	2.8	1.0	56.1	0.5	0.0	101.9	0.0	113.5	18.3	0.2	71.2	355.2
1990	10.1	46.8	8.5	0.2	41.2	6.3	0.1	2.2	1.1	60.2	0.3	0.0	120.1	0.0	94.8	^j 23.5	^j 0.9	107.1	^j 403.8
1995	8.9	65.7	13.4	0.2	44.1	8.6	0.1	2.7	1.1	70.5	(s)	0.1	140.9	0.0	113.3	25.2	0.5	104.4	459.0
1996	7.3	69.2	13.5	0.3	46.7	4.9	0.1	9.6	1.0	73.9	(s)	0.1	150.3	0.0	137.3	26.0	1.1	104.0	495.3
1997	6.4	70.8	13.8	0.4	49.4	4.3	0.1	2.0	1.1	75.4	(s)	0.1	146.6	0.0	149.9	28.4	1.1	96.0	499.1
1998	8.8	71.9	20.2	0.3	45.5	4.1	0.1	1.5	1.2	79.7	(s)	0.1	152.7	0.0	131.9	27.1	1.1	110.7	504.1
1999	8.0	73.4	20.3	0.3	52.0	4.9	0.1	3.5	1.2	82.8	(s)	0.1	165.1	0.0	138.0	27.9	1.5	114.1	527.9
2000	13.7	74.5	20.4	0.1	52.7	5.0	0.1	7.4	1.2	80.2	(s)	0.1	167.2	0.0	111.9	27.6	1.7	140.4	537.0
2001	11.4	81.8	12.3	0.3	53.2	4.1	0.1	5.4	1.1	78.7	0.1	0.1	155.3	0.0	74.6	28.2	1.5	^R 147.7	^R 500.5
2002	10.2	72.8	17.6	0.3	51.8	4.5	(s)	3.3	1.0	80.8	0.5	0.1	160.0	0.0	89.2	^R 22.0	1.5	135.7	491.5
2003	10.2	71.4	5.0	0.3	48.9	3.9	(s)	3.2	1.0	76.6	(s)	0.1	138.9	0.0	85.6	22.5	1.4	136.6	466.6
2004	12.3	77.2	11.5	0.4	55.6	4.7	0.1	5.1	1.0	78.1	0.0	0.1	156.6	0.0	84.8	25.8	1.7	141.5	499.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Idaho

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	279	2	663	0	314	977	278	--	--	1,463	--	3,619	--
1965	200	5	708	0	348	1,056	200	--	--	1,779	--	4,247	--
1970	102	8	837	0	711	1,548	146	--	--	2,354	--	5,699	--
1975	57	14	972	0	712	1,684	160	--	--	3,870	--	9,308	--
1980	24	7	485	0	316	801	144	--	--	4,936	--	11,901	--
1985	10	8	569	2	328	898	222	--	--	5,780	--	13,316	--
1990	12	9	535	5	318	859	102	--	--	5,626	--	13,015	--
1995	5	13	440	15	374	829	104	--	--	6,193	--	14,069	--
1996	3	15	391	13	449	852	107	--	--	6,508	--	14,803	--
1997	3	15	435	4	432	871	123	--	--	6,628	--	15,020	--
1998	6	16	372	14	177	563	109	--	--	6,610	--	14,995	--
1999	7	18	475	6	733	1,215	115	--	--	6,806	--	15,573	--
2000	2	19	396	10	1,460	1,866	123	--	--	7,006	--	15,941	--
2001	2	19	365	5	1,195	1,566	68	--	--	6,906	--	^R 15,531	--
2002	2	20	350	3	754	1,107	69	--	--	7,056	--	15,807	--
2003	2	19	313	4	640	957	73	--	--	7,090	--	15,749	--
2004	1	21	414	7	1,098	1,519	75	--	--	7,314	--	16,280	--
Trillion Btu													
1960	6.9	2.3	3.9	0.0	1.3	5.1	5.6	0.0	0.0	5.0	24.9	12.3	37.2
1965	4.9	5.2	4.1	0.0	1.4	5.5	4.0	0.0	0.0	6.1	25.7	14.5	40.2
1970	2.4	8.2	4.9	0.0	2.7	7.6	2.9	0.0	0.0	8.0	29.1	19.4	48.6
1975	1.3	14.9	5.7	0.0	2.6	8.3	3.2	0.0	0.0	13.2	40.9	31.8	72.6
1980	0.5	7.8	2.8	0.0	1.2	4.0	2.9	0.0	0.0	16.8	32.0	40.6	72.6
1985	0.2	8.1	3.3	(s)	1.2	4.5	4.4	0.0	0.0	19.7	37.0	45.4	82.5
1990	0.3	8.8	3.1	(s)	1.2	4.3	2.0	^f 0.1	^f (s)	19.2	^f 34.7	44.4	^f 79.1
1995	0.1	13.4	2.6	0.1	1.4	4.0	2.1	0.1	(s)	21.1	40.8	48.0	88.8
1996	0.1	15.4	2.3	0.1	1.6	4.0	2.1	0.1	(s)	22.2	43.9	50.5	94.4
1997	0.1	15.7	2.5	(s)	1.6	4.1	2.5	0.1	(s)	22.6	45.1	51.2	96.3
1998	0.1	16.6	2.2	0.1	0.6	2.9	2.2	0.1	(s)	22.6	44.5	51.2	95.6
1999	0.1	18.6	2.8	(s)	2.7	5.5	2.3	(s)	(s)	23.2	49.7	53.1	102.9
2000	(s)	19.6	2.3	0.1	5.3	7.6	2.5	0.1	(s)	23.9	53.7	54.4	108.1
2001	(s)	19.5	2.1	(s)	4.3	6.5	1.4	0.1	(s)	23.6	51.0	^R 53.0	^R 104.0
2002	(s)	20.8	2.0	(s)	2.7	4.8	1.4	0.1	(s)	24.1	51.2	53.9	105.1
2003	(s)	19.4	1.8	(s)	2.3	4.2	1.5	0.1	(s)	24.2	49.3	53.7	103.1
2004	(s)	21.2	2.4	(s)	4.0	6.4	1.5	0.1	(s)	25.0	54.2	55.5	109.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Idaho

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	194	3	232	102	55	45	0	435	0	--	--	1,261	--	3,118	--
1965	151	5	248	500	61	52	0	862	0	--	--	1,290	--	3,080	--
1970	80	6	294	116	125	65	0	600	0	--	--	2,088	--	5,053	--
1975	132	12	341	81	126	90	0	637	0	--	--	3,530	--	8,489	--
1980	89	6	218	0	56	100	487	860	0	--	--	3,973	--	9,579	--
1985	36	9	328	3	58	134	25	548	0	--	--	4,592	--	10,579	--
1990	48	9	344	1	56	148	19	568	^g 0	--	--	5,212	--	12,056	--
1995	34	10	392	3	66	38	4	504	0	--	--	5,584	--	12,684	--
1996	25	12	455	4	79	167	4	709	0	--	--	6,231	--	14,173	--
1997	27	11	351	1	76	39	1	468	0	--	--	6,285	--	14,243	--
1998	51	12	412	3	31	33	3	483	0	--	--	6,273	--	14,231	--
1999	48	13	515	1	129	40	0	685	0	--	--	6,745	--	15,433	--
2000	17	13	432	2	258	32	0	724	0	--	--	7,420	--	16,881	--
2001	17	14	372	5	211	32	0	619	0	--	--	6,885	--	^R 15,485	--
2002	16	14	328	1	133	26	0	488	0	--	--	7,292	--	16,335	--
2003	12	12	297	1	113	15	0	426	0	--	--	5,466	--	12,143	--
2004	6	13	401	4	194	16	0	615	0	--	--	5,484	--	12,206	--
Trillion Btu															
1960	4.8	2.9	1.4	0.6	0.2	0.2	0.0	2.4	0.0	0.1	0.0	4.3	14.5	10.6	25.1
1965	3.7	5.4	1.4	2.8	0.2	0.3	0.0	4.8	0.0	0.1	0.0	4.4	18.4	10.5	28.9
1970	1.9	6.2	1.7	0.7	0.5	0.3	0.0	3.2	0.0	0.1	0.0	7.1	18.5	17.2	35.7
1975	3.0	12.8	2.0	0.5	0.5	0.5	0.0	3.4	0.0	0.1	0.0	12.0	31.3	29.0	60.3
1980	2.0	6.1	1.3	0.0	0.2	0.5	3.1	5.1	0.0	0.1	0.0	13.6	26.7	32.7	59.4
1985	0.8	9.4	1.9	(s)	0.2	0.7	0.2	3.0	0.0	0.1	0.0	15.7	29.0	36.1	65.1
1990	1.1	8.8	2.0	(s)	0.2	0.8	0.1	3.1	^g 0.0	^g 0.2	^g 0.2	17.8	^g 31.2	41.1	^g 72.3
1995	0.7	10.7	2.3	(s)	0.2	0.2	(s)	2.8	0.0	0.3	0.2	19.1	33.7	43.3	76.9
1996	0.5	11.9	2.6	(s)	0.3	0.9	(s)	3.9	0.0	0.3	0.2	21.3	38.0	48.4	86.3
1997	0.6	11.8	2.0	(s)	0.3	0.2	(s)	2.5	0.0	0.4	0.2	21.4	36.9	48.6	85.5
1998	1.0	12.1	2.4	(s)	0.1	0.2	(s)	2.7	0.0	0.4	0.2	21.4	37.8	48.6	86.4
1999	1.0	13.1	3.0	(s)	0.5	0.2	0.0	3.7	0.0	0.4	0.4	23.0	41.6	52.7	94.3
2000	0.4	13.7	2.5	(s)	0.9	0.2	0.0	3.6	0.0	0.4	0.5	25.3	43.9	57.6	101.5
2001	0.4	13.9	2.2	(s)	0.8	0.2	0.0	3.1	0.0	0.2	0.5	23.5	41.6	^R 52.8	^R 94.5
2002	0.4	13.9	1.9	(s)	0.5	0.1	0.0	2.5	0.0	0.2	0.5	24.9	42.4	55.7	98.2
2003	0.3	12.3	1.7	(s)	0.4	0.1	0.0	2.2	0.0	0.3	0.7	18.7	34.4	41.4	75.8
2004	0.1	13.3	2.3	(s)	0.7	0.1	0.0	3.1	0.0	0.2	0.7	18.7	36.3	41.6	77.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Idaho

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	222	17	491	2,529	5	79	19	930	153	9	4,217	(s)	--	--	2,849	--	7,046	--
1965	321	23	710	2,768	21	146	32	859	301	8	4,846	(s)	--	--	4,340	--	10,363	--
1970	171	29	1,147	3,206	114	212	32	626	275	17	5,630	0	--	--	6,052	--	14,647	--
1975	459	30	880	3,935	64	325	44	801	684	0	6,734	0	--	--	5,112	--	12,294	--
1980	401	32	797	2,209	0	598	44	639	126	0	4,413	0	--	--	4,798	--	11,569	--
1985	439	19	632	1,568	2	333	40	511	61	0	3,147	0	--	--	6,029	--	13,890	--
1990	489	23	1,281	2,756	3	187	45	352	28	0	4,652	9 0	--	--	7,165	--	16,575	--
1995	426	34	2,014	2,265	2	291	43	400	3	21	5,038	0	--	--	7,843	--	17,817	--
1996	369	35	2,034	2,169	1	2,106	42	412	2	26	6,793	0	--	--	9,042	--	20,567	--
1997	330	35	2,080	2,351	13	31	44	425	1	24	4,970	0	--	--	9,481	--	21,486	--
1998	421	34	3,049	2,039	4	209	46	425	1	23	5,796	0	--	--	9,193	--	20,855	--
1999	376	34	3,052	2,450	6	82	47	335	6	20	5,998	0	--	--	9,171	--	20,982	--
2000	603	32	3,081	2,414	3	307	46	309	2	18	6,179	0	--	--	8,408	--	19,129	--
2001	534	30	1,849	2,535	1	86	42	562	23	22	5,119	0	--	--	7,305	--	^R 16,430	--
2002	469	29	2,646	2,386	1	37	41	581	80	19	5,792	0	--	--	6,352	--	14,231	--
2003	490	25	753	2,077	1	106	38	603	(s)	18	3,597	0	--	--	8,663	--	19,243	--
2004	600	24	1,739	2,540	2	77	39	703	0	18	5,117	0	--	--	9,011	--	20,056	--
Trillion Btu																		
1960	5.0	17.1	3.3	14.7	(s)	0.3	0.1	4.9	1.0	0.1	24.4	(s)	5.7	0.0	9.7	61.9	24.0	86.0
1965	7.2	24.4	4.7	16.1	0.1	0.6	0.2	4.5	1.9	(s)	28.2	(s)	6.3	0.0	14.8	80.8	35.4	116.2
1970	3.6	30.6	7.6	18.7	0.6	0.8	0.2	3.3	1.7	0.1	33.0	0.0	8.5	0.0	20.6	96.4	50.0	146.3
1975	9.1	31.6	5.8	22.9	0.4	1.2	0.3	4.2	4.3	0.0	39.1	0.0	7.8	0.0	17.4	105.1	41.9	147.1
1980	7.1	33.3	5.3	12.9	0.0	2.2	0.3	3.4	0.8	0.0	24.8	0.0	11.7	0.0	16.4	93.3	39.5	132.7
1985	7.8	20.4	4.2	9.1	(s)	1.2	0.2	2.7	0.4	0.0	17.8	0.0	13.7	0.0	20.6	80.4	47.4	127.7
1990	8.7	24.0	8.5	16.1	(s)	0.7	0.3	1.9	0.2	0.0	27.5	9 0.0	9 20.0	9 0.3	24.4	9 105.0	56.6	9 161.5
1995	8.1	35.0	13.4	13.2	(s)	1.1	0.3	2.1	(s)	0.1	30.1	0.0	21.6	0.3	26.8	121.8	60.8	182.6
1996	6.7	35.6	13.5	12.6	(s)	7.6	0.3	2.1	(s)	0.1	36.3	0.0	22.4	0.3	30.9	132.1	70.2	202.3
1997	5.7	36.1	13.8	13.7	0.1	0.1	0.3	2.2	(s)	0.1	30.3	0.0	24.2	0.3	32.3	129.0	73.3	202.3
1998	7.6	35.6	20.2	11.9	(s)	0.8	0.3	2.2	(s)	0.1	35.5	0.0	23.2	0.3	31.4	133.6	71.2	204.8
1999	6.8	35.1	20.3	14.3	(s)	0.3	0.3	1.7	(s)	0.1	37.0	0.0	24.5	0.8	31.3	135.6	71.6	207.1
2000	13.3	33.3	20.4	14.1	(s)	1.1	0.3	1.6	(s)	0.1	37.6	0.0	24.1	0.8	28.7	137.7	65.3	203.0
2001	11.0	31.0	12.3	14.8	(s)	0.3	0.3	2.9	0.1	0.1	30.8	0.0	^R 25.8	0.9	24.9	124.4	^R 56.1	^R 180.5
2002	9.8	29.3	17.6	13.9	(s)	0.1	0.3	3.0	0.5	0.1	35.5	0.0	^R 19.1	0.9	21.7	^R 116.3	48.6	164.9
2003	9.9	25.3	5.0	12.1	(s)	0.4	0.2	3.1	(s)	0.1	21.0	0.0	19.4	0.7	29.6	105.8	65.7	171.4
2004	12.2	24.5	11.5	14.8	(s)	0.3	0.2	3.7	0.0	0.1	30.6	0.0	22.6	0.7	30.7	121.4	68.4	189.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Idaho

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	4	(s)	133	648	899	7	127	5,990	52	7,856	0	0	--	0	--
1965	1	1	177	1,079	870	4	128	6,743	55	9,055	0	0	--	0	--
1970	(s)	4	154	1,263	960	9	119	8,993	2	11,500	0	0	--	0	--
1975	(s)	4	120	2,306	950	21	119	10,396	0	13,912	0	0	--	0	--
1980	0	4	162	2,750	1,243	23	138	10,339	0	14,655	0	0	--	0	--
1985	0	3	80	2,821	1,122	59	126	10,026	0	14,234	^f 40	0	--	0	--
1990	0	5	39	3,443	1,143	48	141	10,952	0	15,766	166	0	--	0	--
1995	0	6	48	4,470	1,568	27	135	13,083	0	19,331	11	0	--	0	--
1996	0	6	55	5,008	874	21	131	13,595	0	19,684	0	0	--	0	--
1997	0	5	72	5,341	760	10	138	13,998	0	20,318	0	0	--	0	--
1998	0	6	61	4,989	718	2	145	14,827	0	20,741	0	0	--	0	--
1999	0	5	67	5,484	856	10	146	15,511	0	22,075	0	0	--	0	--
2000	0	6	27	5,799	880	20	144	15,051	0	21,922	0	0	--	0	--
2001	0	7	56	5,847	724	4	132	14,505	0	21,267	0	0	--	0	--
2002	0	6	67	5,828	793	2	130	14,904	0	21,724	0	0	--	0	--
2003	0	5	57	5,701	686	12	121	14,092	0	20,669	0	0	--	0	--
2004	0	6	89	6,187	822	43	122	14,250	0	21,514	0	0	--	0	--

Trillion Btu															
1960	0.1	0.5	0.7	3.8	4.8	(s)	0.8	31.5	0.3	41.9	0.0	0.0	42.4	0.0	42.4
1965	(s)	1.1	0.9	6.3	4.7	(s)	0.8	35.4	0.3	48.4	0.0	0.0	49.6	0.0	49.6
1970	(s)	4.5	0.8	7.4	5.2	(s)	0.7	47.2	(s)	61.3	0.0	0.0	65.8	0.0	65.8
1975	(s)	4.5	0.6	13.4	5.2	0.1	0.7	54.6	0.0	74.6	0.0	0.0	79.1	0.0	79.1
1980	0.0	4.4	0.8	16.0	6.8	0.1	0.8	54.3	0.0	78.9	0.0	0.0	83.3	0.0	83.3
1985	0.0	3.1	0.4	16.4	6.1	0.2	0.8	52.7	0.0	76.6	^f 0.1	0.0	^f 79.8	0.0	^f 79.8
1990	0.0	5.2	0.2	20.1	6.3	0.2	0.9	57.5	0.0	85.1	0.6	0.0	90.9	0.0	90.9
1995	0.0	6.6	0.2	26.0	8.6	0.1	0.8	68.2	0.0	104.0	(s)	0.0	110.6	0.0	110.6
1996	0.0	6.1	0.3	29.2	4.9	0.1	0.8	70.9	0.0	106.1	0.0	0.0	112.3	0.0	112.3
1997	0.0	5.4	0.4	31.1	4.3	(s)	0.8	73.0	0.0	109.6	0.0	0.0	115.0	0.0	115.0
1998	0.0	5.7	0.3	29.1	4.1	(s)	0.9	77.3	0.0	111.6	0.0	0.0	117.3	0.0	117.3
1999	0.0	4.7	0.3	31.9	4.9	(s)	0.9	80.8	0.0	118.9	0.0	0.0	123.6	0.0	123.6
2000	0.0	6.1	0.1	33.8	5.0	0.1	0.9	78.4	0.0	118.3	0.0	0.0	124.4	0.0	124.4
2001	0.0	6.7	0.3	34.1	4.1	(s)	0.8	75.6	0.0	114.8	0.0	0.0	121.6	0.0	121.6
2002	0.0	6.2	0.3	33.9	4.5	(s)	0.8	77.6	0.0	117.2	0.0	0.0	123.4	0.0	123.4
2003	0.0	4.7	0.3	33.2	3.9	(s)	0.7	73.4	0.0	111.5	0.0	0.0	116.3	0.0	116.3
2004	0.0	6.0	0.4	36.0	4.7	0.2	0.7	74.3	0.0	116.4	0.0	0.0	122.4	0.0	122.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Idaho

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	0	0	(s)	0	(s)	0	6,165	--	0	0	0	0	--
1965	0	0	0	(s)	0	(s)	0	6,641	--	0	0	0	-1	--
1970	0	0	0	1	0	1	0	7,076	--	0	0	0	-1	--
1975	0	(s)	0	5	0	5	0	10,274	--	0	0	0	0	--
1980	0	(s)	0	(s)	0	(s)	0	9,507	--	0	0	0	0	--
1985	0	(s)	0	1	0	1	0	10,863	--	0	0	0	56	--
1990	0	0	0	2	0	2	0	9,115	--	0	0	0	106	--
1995	0	0	0	1	0	1	0	10,989	--	0	0	0	3	--
1996	0	(s)	0	(s)	0	(s)	0	13,283	--	0	0	0	170	--
1997	0	2	0	(s)	0	(s)	0	14,676	--	0	0	0	170	--
1998	0	2	0	1	0	1	0	12,936	--	0	0	0	148	--
1999	0	2	0	(s)	0	(s)	0	13,499	--	0	0	0	64	--
2000	0	2	0	5	0	5	0	10,967	--	0	0	0	126	--
2001	0	10	0	7	0	7	0	7,223	--	0	0	0	(s)	--
2002	0	3	0	(s)	0	(s)	0	8,769	--	0	0	0	(s)	--
2003	0	10	0	(s)	0	(s)	0	8,354	--	0	0	0	2	--
2004	0	12	0	(s)	0	(s)	0	8,462	--	0	0	0	33	--
Trillion Btu														
1960	0.0	0.0	0.0	(s)	0.0	(s)	0.0	66.3	0.0	0.0	0.0	0.0	0.0	66.3
1965	0.0	0.0	0.0	(s)	0.0	(s)	0.0	69.4	0.0	0.0	0.0	0.0	(s)	69.4
1970	0.0	0.0	0.0	(s)	0.0	(s)	0.0	74.3	0.0	0.0	0.0	0.0	(s)	74.3
1975	0.0	(s)	0.0	(s)	0.0	(s)	0.0	106.9	0.0	0.0	0.0	0.0	0.0	107.0
1980	0.0	(s)	0.0	(s)	0.0	(s)	0.0	98.8	0.0	0.0	0.0	0.0	0.0	98.8
1985	0.0	(s)	0.0	(s)	0.0	(s)	0.0	113.5	0.0	0.0	0.0	0.0	0.2	113.7
1990	0.0	0.0	0.0	(s)	0.0	(s)	0.0	94.8	ⁱ 1.2	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.4	ⁱ 96.4
1995	0.0	0.0	0.0	(s)	0.0	(s)	0.0	113.3	1.3	0.0	0.0	0.0	(s)	114.7
1996	0.0	0.2	0.0	(s)	0.0	(s)	0.0	137.3	1.2	0.0	0.0	0.0	0.6	139.3
1997	0.0	1.8	0.0	(s)	0.0	(s)	0.0	149.9	1.3	0.0	0.0	0.0	0.6	153.6
1998	0.0	1.8	0.0	(s)	0.0	(s)	0.0	131.9	1.3	0.0	0.0	0.0	0.5	135.5
1999	0.0	1.8	0.0	(s)	0.0	(s)	0.0	138.0	0.7	0.0	0.0	0.0	0.2	140.8
2000	0.0	1.8	0.0	(s)	0.0	(s)	0.0	111.9	0.7	0.0	0.0	0.0	0.4	114.8
2001	0.0	10.8	0.0	(s)	0.0	(s)	0.0	74.6	0.7	0.0	0.0	0.0	(s)	86.2
2002	0.0	2.7	0.0	(s)	0.0	(s)	0.0	89.2	1.3	0.0	0.0	0.0	(s)	93.1
2003	0.0	9.6	0.0	(s)	0.0	(s)	0.0	85.6	1.4	0.0	0.0	0.0	(s)	96.6
2004	0.0	12.2	0.0	(s)	0.0	(s)	0.0	84.8	1.4	0.0	0.0	0.0	0.1	98.6

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Illinois

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total					Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh					
1960	39,673	518	7,244	3,733	42,592	4,356	5,369	14,958	2,672	78,026	26,533	13,726	199,209	254	185	--	--	-18,971	--
1965	44,714	757	9,751	383	41,011	12,176	5,337	18,763	2,616	88,769	23,091	20,417	222,314	965	175	--	--	-8,771	--
1970	42,136	1,174	12,651	264	44,495	22,644	3,583	28,481	3,255	107,084	27,949	24,151	274,558	2,514	166	--	--	5,183	--
1975	40,374	1,095	10,213	82	51,249	24,769	2,622	35,135	3,120	118,637	28,142	28,264	302,231	22,315	122	--	--	-5,011	--
1980	40,147	1,090	8,094	132	36,704	19,664	606	38,811	3,473	109,062	28,271	31,213	276,030	27,742	138	--	--	2,057	--
1985	37,706	962	7,502	212	32,585	2,748	755	27,168	3,160	111,114	6,508	19,530	211,282	39,106	136	--	--	3,820	--
1990	33,904	940	8,339	164	43,227	3,952	174	12,471	3,556	105,948	3,594	30,810	212,234	71,887	144	--	--	-34,315	--
1995	39,623	1,078	7,457	215	35,309	10,360	293	25,822	3,392	111,207	1,457	34,524	230,037	78,481	124	--	--	-43,891	--
1996	44,431	1,119	9,127	202	37,003	12,076	398	25,109	3,292	111,554	1,996	30,175	230,933	69,774	106	--	--	-39,771	--
1997	47,638	1,077	8,350	197	37,494	12,497	367	24,777	3,478	113,343	1,430	30,879	232,810	51,069	97	--	--	838	--
1998	46,067	957	9,859	168	40,520	13,152	349	15,783	3,641	113,707	1,046	30,348	228,573	55,596	138	--	--	4,710	--
1999	46,719	1,004	11,282	172	43,362	18,245	661	22,588	3,679	118,810	535	31,313	250,646	81,744	142	--	--	-71,713	--
2000	51,865	1,031	9,047	156	42,945	22,699	261	20,131	3,624	119,985	1,144	28,636	248,628	89,438	144	--	--	-108,533	--
2001	^R 50,671	952	9,124	113	42,195	18,664	257	18,346	3,320	121,126	3,176	26,693	243,014	92,358	144	--	--	^R -117,513	--
2002	^R 53,619	1,050	9,881	185	39,798	13,583	228	20,185	3,281	122,661	392	27,462	237,656	90,860	129	--	--	-117,695	--
2003	^R 54,751	999	10,529	162	46,732	13,365	198	15,477	3,033	122,747	2,228	28,755	243,226	94,733	139	--	--	^R -133,145	--
2004	58,523	956	9,535	179	46,746	21,547	215	17,553	3,073	125,366	1,512	29,384	255,110	92,047	154	--	--	-132,350	--
Trillion Btu																			
1960	914.6	536.1	48.1	18.8	248.1	24.4	30.4	60.0	16.2	409.9	166.8	82.2	1,105.0	3.0	2.0	31.0	0.0	-64.7	2,527.0
1965	1,014.5	778.7	64.7	1.9	238.9	68.8	30.3	75.3	15.9	466.3	145.2	118.8	1,226.0	11.4	1.8	33.2	0.0	-29.9	3,035.6
1970	920.3	1,203.2	84.0	1.3	259.2	128.2	20.3	107.6	19.7	562.5	175.7	140.4	1,498.9	27.6	1.7	39.3	0.0	17.7	3,708.8
1975	845.6	1,123.6	67.8	0.4	298.5	140.2	14.9	130.5	18.9	623.2	176.9	165.6	1,637.0	245.8	1.3	41.6	0.0	-17.1	3,877.7
1980	844.5	1,113.7	53.7	0.7	213.8	111.3	3.4	142.6	21.1	572.9	177.7	180.9	1,478.1	302.6	1.4	90.9	0.0	7.0	3,838.2
1985	811.1	1,000.5	49.8	1.1	189.8	15.4	4.3	97.9	19.2	583.7	40.9	113.8	1,115.8	415.4	1.4	99.2	0.0	13.0	3,463.7
1990	748.2	960.2	55.3	0.8	251.8	22.3	1.0	45.2	21.6	556.5	22.6	177.3	1,154.5	760.7	1.5	^j 69.6	^j 0.3	-117.1	^j 3,589.5
1995	826.7	1,099.7	49.5	1.1	205.7	58.7	1.7	93.6	20.6	579.9	9.2	197.2	1,217.0	824.6	1.3	52.2	0.4	-149.8	3,872.1
1996	919.9	1,140.5	60.6	1.0	215.5	68.5	2.3	90.7	20.0	581.9	12.5	174.1	1,227.1	732.8	1.1	59.3	0.5	-135.7	3,945.4
1997	974.9	1,099.8	55.4	1.0	218.4	70.9	2.1	89.6	21.1	590.9	9.0	178.2	1,236.5	535.9	1.0	53.2	0.5	2.9	3,904.7
1998	949.0	978.3	65.4	0.8	236.0	74.6	2.0	57.0	22.1	592.6	6.6	175.1	1,232.3	583.3	1.4	46.6	0.6	16.1	3,807.5
1999	958.8	1,026.4	74.9	0.9	252.6	103.4	3.7	81.7	22.3	619.1	3.4	179.9	1,341.9	854.2	1.5	49.8	0.7	-244.7	3,988.6
2000	1,016.6	1,053.3	60.0	0.8	250.2	128.7	1.5	72.6	22.0	625.1	7.2	164.7	1,332.8	932.7	1.5	45.2	0.7	-370.3	4,012.4
2001	^R 983.7	970.6	60.5	0.6	245.8	105.8	1.5	66.3	20.1	631.1	20.0	153.6	1,305.3	965.0	1.5	^R 44.4	0.7	^R -401.0	^R 3,870.3
2002	^R 986.8	1,081.4	65.6	0.9	231.8	77.0	1.3	72.9	19.9	638.8	2.5	158.0	1,268.8	948.5	1.3	^R 47.4	0.4	-401.6	^R 3,933.0
2003	^R 1,010.1	^R 999.3	69.9	0.8	272.2	75.8	1.1	56.2	18.4	639.1	14.0	165.8	1,313.3	987.2	1.4	^R 48.4	0.7	-454.3	^R 3,906.2
2004	1,069.5	956.2	63.3	0.9	272.3	122.2	1.2	63.5	18.6	653.8	9.5	169.2	1,374.5	959.8	1.5	48.5	2.0	-451.6	3,960.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Illinois

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	3,761	232	15,330	2,052	5,192	22,574	739	--	--	9,969	--	24,655	--
1965	2,250	342	13,154	2,518	5,989	21,661	550	--	--	14,173	--	33,843	--
1970	1,231	439	11,980	1,336	8,616	21,932	634	--	--	22,533	--	54,538	--
1975	230	479	12,384	1,225	9,145	22,754	681	--	--	26,366	--	63,407	--
1980	39	478	3,512	161	4,051	7,724	2,534	--	--	29,930	--	72,166	--
1985	59	447	2,344	568	3,518	6,430	2,616	--	--	29,976	--	69,054	--
1990	53	442	1,394	101	3,209	4,704	1,608	--	--	32,871	--	76,040	--
1995	29	501	761	84	3,871	4,715	861	--	--	38,386	--	87,199	--
1996	22	539	746	96	5,216	6,058	894	--	--	37,554	--	85,421	--
1997	32	497	708	109	5,295	6,112	579	--	--	37,264	--	84,449	--
1998	26	410	418	120	4,498	5,036	515	--	--	39,707	--	90,075	--
1999	22	445	508	520	6,514	7,542	542	--	--	39,631	--	90,674	--
2000	25	467	412	121	5,434	5,968	582	--	--	40,146	--	91,339	--
2001	25	427	320	120	4,086	4,526	774	--	--	41,820	--	^R 94,056	--
2002	21	459	264	142	5,429	5,835	786	--	--	45,030	--	100,880	--
2003	35	473	246	106	4,700	5,052	828	--	--	43,161	--	95,877	--
2004	27	443	304	100	4,416	4,820	848	--	--	43,443	--	96,696	--
Trillion Btu													
1960	90.4	240.2	89.3	11.6	20.8	121.8	14.8	0.0	0.0	34.0	501.2	84.1	585.3
1965	53.8	351.9	76.6	14.3	24.0	114.9	11.0	0.0	0.0	48.4	580.0	115.5	695.5
1970	28.4	450.1	69.8	7.6	32.6	109.9	12.7	0.0	0.0	76.9	678.0	186.1	864.1
1975	5.2	491.0	72.1	6.9	34.0	113.1	13.6	0.0	0.0	90.0	712.8	216.3	929.2
1980	0.9	489.0	20.5	0.9	14.9	36.3	50.7	0.0	0.0	102.1	678.9	246.2	925.2
1985	1.3	464.5	13.7	3.2	12.7	29.5	52.3	0.0	0.0	102.3	649.9	235.6	885.5
1990	1.2	451.9	8.1	0.6	11.6	20.3	32.2	^f 0.3	^f 0.1	112.2	^f 618.0	259.4	^f 877.5
1995	0.7	510.9	4.4	0.5	14.0	18.9	17.2	0.3	0.1	131.0	679.1	297.5	976.6
1996	0.5	549.0	4.3	0.5	18.8	23.7	17.9	0.4	0.1	128.1	719.7	291.5	1,011.2
1997	0.7	507.8	4.1	0.6	19.1	23.9	11.6	0.4	0.1	127.1	671.7	288.1	959.8
1998	0.6	418.9	2.4	0.7	16.3	19.4	10.3	0.4	0.2	135.5	585.2	307.3	892.5
1999	0.5	455.0	3.0	2.9	23.6	29.5	10.8	0.4	0.2	135.2	631.7	309.4	941.0
2000	0.6	477.4	2.4	0.7	19.6	22.7	11.6	0.4	0.2	137.0	649.9	311.7	961.6
2001	0.6	435.9	1.9	0.7	14.8	17.3	15.5	0.5	0.3	142.7	612.7	^R 320.9	^R 933.6
2002	0.5	473.9	1.5	0.8	19.6	22.0	15.7	0.5	0.4	153.6	666.6	344.2	1,010.8
2003	0.8	473.2	1.4	0.6	17.1	19.1	16.6	0.7	0.4	147.3	658.0	327.1	985.1
2004	0.6	442.8	1.8	0.6	16.0	18.3	17.0	0.7	0.6	148.2	628.3	329.9	958.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Illinois

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	2,614	47	4,834	78	916	358	8,336	14,523	0	--	--	10,002	--	24,735	--
1965	1,697	129	4,148	96	1,057	469	7,453	13,223	0	--	--	15,059	--	35,961	--
1970	967	193	3,778	51	1,520	533	7,627	13,509	0	--	--	22,406	--	54,231	--
1975	536	216	3,905	47	1,614	678	4,960	11,203	0	--	--	28,097	--	67,570	--
1980	147	228	2,100	16	715	1,008	2,633	6,471	0	--	--	31,579	--	76,143	--
1985	210	214	4,127	96	621	549	343	5,735	0	--	--	32,578	--	75,048	--
1990	212	200	1,799	26	566	560	204	3,155	^g 0	--	--	38,999	--	90,214	--
1995	194	204	1,870	80	683	138	45	2,816	5	--	--	45,201	--	102,680	--
1996	165	218	1,818	67	921	184	190	3,180	5	--	--	45,586	--	103,691	--
1997	263	203	2,205	108	934	224	129	3,600	5	--	--	46,426	--	105,212	--
1998	211	175	1,862	39	794	228	115	3,038	4	--	--	48,191	--	109,321	--
1999	159	189	1,466	84	1,150	152	78	2,930	3	--	--	50,642	--	115,868	--
2000	205	202	1,602	68	959	223	14	2,866	2	--	--	53,152	--	120,930	--
2001	203	189	1,815	65	721	253	58	2,913	3	--	--	52,976	--	^R 119,147	--
2002	152	205	1,640	37	958	379	13	3,027	(s)	--	--	53,654	--	120,200	--
2003	231	212	1,389	37	829	365	7	2,627	(s)	--	--	49,561	--	^R 110,092	--
2004	222	207	837	45	779	397	49	2,107	3	--	--	47,358	--	105,412	--
Trillion Btu															
1960	62.8	48.9	28.2	0.4	3.7	1.9	52.4	86.6	0.0	0.3	0.0	34.1	232.7	84.4	317.1
1965	40.6	132.7	24.2	0.5	4.2	2.5	46.9	78.3	0.0	0.2	0.0	51.4	303.2	122.7	425.9
1970	22.3	198.3	22.0	0.3	5.7	2.8	47.9	78.8	0.0	0.2	0.0	76.4	376.1	185.0	561.1
1975	12.1	221.3	22.7	0.3	6.0	3.6	31.2	63.8	0.0	0.3	0.0	95.9	393.3	230.5	623.8
1980	3.2	233.2	12.2	0.1	2.6	5.3	16.6	36.8	0.0	1.2	0.0	107.7	382.2	259.8	642.0
1985	4.7	222.1	24.0	0.5	2.2	2.9	2.2	31.9	0.0	1.2	0.0	111.2	371.0	256.1	627.1
1990	4.8	204.7	10.5	0.1	2.1	2.9	1.3	16.9	^g 0.0	^g 3.5	^g 0.0	133.1	^g 362.9	307.8	^g 670.7
1995	4.4	207.9	10.9	0.5	2.5	0.7	0.3	14.8	0.1	2.4	0.0	154.2	383.8	350.3	734.1
1996	3.7	222.2	10.6	0.4	3.3	1.0	1.2	16.5	0.1	2.5	0.0	155.5	400.4	353.8	754.2
1997	6.0	207.2	12.8	0.6	3.4	1.2	0.8	18.8	(s)	1.9	0.0	158.4	392.4	359.0	751.3
1998	4.6	178.6	10.8	0.2	2.9	1.2	0.7	15.8	(s)	1.7	0.0	164.4	365.2	373.0	738.2
1999	3.5	192.7	8.5	0.5	4.2	0.8	0.5	14.5	(s)	1.9	0.0	172.8	385.3	395.3	780.6
2000	4.5	206.2	9.3	0.4	3.5	1.2	0.1	14.4	(s)	2.0	0.0	181.4	408.5	412.6	821.1
2001	4.7	193.0	10.6	0.4	2.6	1.3	0.4	15.2	(s)	2.8	0.0	180.8	396.6	^R 406.5	^R 803.1
2002	3.5	211.0	9.6	0.2	3.5	2.0	0.1	15.3	(s)	2.9	0.0	183.1	415.7	410.1	825.9
2003	5.3	^R 211.6	8.1	0.2	3.0	1.9	(s)	13.3	(s)	2.9	0.0	169.1	^R 402.2	375.6	^R 777.8
2004	5.1	206.7	4.9	0.3	2.8	2.1	0.3	10.3	(s)	2.8	0.0	161.6	386.6	359.7	746.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Illinois

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total	
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}				Total		Million kWh		Million kWh
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh		
1960	13,842	186	7,244	13,545	3,239	8,534	1,340	6,476	16,835	13,726	70,939	19	--	--	13,722	--	33,936	--
1965	15,669	238	9,751	12,074	2,723	11,399	1,321	6,512	15,064	20,417	79,260	17	--	--	18,708	--	44,674	--
1970	10,928	381	12,651	10,836	2,196	17,818	2,015	6,017	16,694	24,151	92,380	20	--	--	25,647	--	62,076	--
1975	7,257	352	10,213	11,138	1,351	23,889	1,668	4,290	15,728	28,264	96,540	19	--	--	30,330	--	72,939	--
1980	5,350	349	8,094	7,842	429	33,867	1,959	3,505	12,598	31,213	99,506	17	--	--	35,158	--	84,771	--
1985	5,829	285	7,502	6,617	91	22,607	1,782	1,738	3,410	19,530	63,277	17	--	--	36,178	--	83,341	--
1990	6,243	276	8,339	8,848	47	8,368	2,006	1,264	1,717	30,810	61,398	0	--	--	39,299	--	90,907	--
1995	5,937	321	7,457	7,846	129	20,981	1,913	1,500	363	34,139	74,328	0	--	--	42,251	--	95,978	--
1996	6,154	322	9,127	7,691	235	18,725	1,857	1,464	592	29,934	69,625	0	--	--	42,423	--	96,496	--
1997	6,325	318	8,350	8,112	150	18,373	1,962	1,489	677	30,859	69,971	0	--	--	42,837	--	97,078	--
1998	6,170	303	9,859	9,535	190	10,222	2,054	1,347	150	30,003	63,359	0	--	--	43,377	--	98,401	--
1999	5,990	305	11,282	7,385	57	14,587	2,075	1,087	157	31,219	67,850	0	--	--	41,972	--	96,030	--
2000	5,590	301	9,047	7,798	71	13,521	2,044	1,032	243	28,636	62,392	0	--	--	40,939	--	93,143	--
2001	^R 4,710	277	9,124	7,557	72	13,426	1,873	2,089	309	26,693	61,143	0	--	--	40,780	--	^R 91,717	--
2002	^R 4,180	291	9,881	7,394	49	13,574	1,850	2,248	87	27,462	62,546	0	--	--	39,288	--	88,015	--
2003	^R 4,305	270	10,529	6,967	56	9,737	1,711	2,445	132	28,755	60,331	0	--	--	43,042	--	^R 95,611	--
2004	4,195	264	9,535	8,056	70	12,168	1,733	2,714	335	29,187	63,797	0	--	--	48,008	--	106,858	--

Trillion Btu

1960	338.8	192.7	48.1	78.9	18.4	34.2	8.1	34.0	105.8	82.2	409.8	0.2	16.0	0.0	46.8	1,004.3	115.8	1,120.1
1965	381.7	244.6	64.7	70.3	15.4	45.7	8.0	34.2	94.7	118.8	451.9	0.2	22.0	0.0	63.8	1,164.2	152.4	1,316.6
1970	260.2	390.5	84.0	63.1	12.5	67.3	12.2	31.6	105.0	140.4	516.0	0.2	26.4	0.0	87.5	1,280.8	211.8	1,492.6
1975	172.9	361.4	67.8	64.9	7.7	88.7	10.1	22.5	98.9	165.6	526.2	0.2	27.7	0.0	103.5	1,192.0	248.9	1,440.8
1980	127.7	357.0	53.7	45.7	2.4	124.4	11.9	18.4	79.2	180.9	516.6	0.2	39.0	0.0	120.0	1,160.4	289.2	1,449.6
1985	142.3	296.3	49.8	38.5	0.5	81.5	10.8	9.1	21.4	113.8	325.5	0.2	45.7	0.0	123.4	933.4	284.4	1,217.8
1990	150.8	281.8	55.3	51.5	0.3	30.3	12.2	6.6	10.8	177.3	344.4	⁹ 0.0	⁹ 31.6	⁹ 0.0	134.1	⁹ 942.8	310.2	⁹ 1,252.9
1995	144.6	327.4	49.5	45.7	0.7	76.0	11.6	7.8	2.3	194.8	388.5	0.0	28.3	0.0	144.2	1,033.0	327.5	1,360.4
1996	150.1	328.2	60.6	44.8	1.3	67.7	11.3	7.6	3.7	172.7	369.6	0.0	33.3	0.0	144.7	1,026.1	329.2	1,355.3
1997	155.4	324.4	55.4	47.3	0.8	66.4	11.9	7.8	4.3	178.1	372.0	0.0	29.7	0.0	146.2	1,027.6	331.2	1,358.9
1998	152.4	309.8	65.4	55.5	1.1	36.9	12.5	7.0	0.9	173.0	352.4	0.0	25.8	0.0	148.0	988.4	335.7	1,324.1
1999	148.4	311.9	74.9	43.0	0.3	52.7	12.6	5.7	1.0	179.4	369.6	0.0	25.9	0.0	143.2	999.0	327.7	1,326.6
2000	136.3	307.8	60.0	45.4	0.4	48.8	12.4	5.4	1.5	164.7	338.7	0.0	20.7	0.0	139.7	943.1	317.8	1,260.9
2001	^R 111.3	283.0	60.5	44.0	0.4	48.5	11.4	10.9	1.9	153.6	331.3	0.0	^R 16.6	0.0	139.1	^R 881.3	^R 312.9	^R 1,194.3
2002	^R 96.8	299.7	65.6	43.1	0.3	49.0	11.2	11.7	0.5	158.0	339.5	0.0	^R 17.6	0.0	134.0	^R 887.6	300.3	^R 1,187.9
2003	^R 98.1	270.2	69.9	40.6	0.3	35.3	10.4	12.7	0.8	165.8	335.8	0.0	^R 17.8	0.0	146.9	^R 868.8	326.2	^R 1,195.0
2004	93.6	263.2	63.3	46.9	0.4	44.0	10.5	14.2	2.1	168.0	349.4	0.0	17.8	0.0	163.8	887.9	364.6	1,252.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.^c Liquefied petroleum gases.^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Illinois

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	238	10	3,733	8,721	4,356	316	1,333	71,193	1,168	90,819	0	308	--	762	--
1965	51	13	383	11,509	12,176	318	1,295	81,788	423	107,891	0	302	--	722	--
1970	17	28	264	15,234	22,644	526	1,239	100,534	408	140,850	0	296	--	716	--
1975	1	14	82	20,488	24,271	486	1,452	113,669	215	160,662	0	262	--	630	--
1980	0	15	132	22,560	19,508	178	1,514	104,550	279	148,721	0	282	--	679	--
1985	0	11	212	19,061	2,748	423	1,378	108,826	187	132,835	^f 2,040	379	--	874	--
1990	0	12	164	30,695	3,952	328	1,550	104,123	51	140,863	3,278	408	--	943	--
1995	0	13	215	24,293	10,360	287	1,479	109,570	35	146,240	4,321	393	--	892	--
1996	0	15	202	26,201	12,076	247	1,435	109,906	30	150,097	3,136	427	--	970	--
1997	0	15	197	25,917	12,497	175	1,516	111,630	47	151,979	4,562	426	--	966	--
1998	0	13	168	28,110	13,152	269	1,587	112,132	37	155,456	5,405	422	--	957	--
1999	0	12	172	33,544	18,245	337	1,604	117,570	30	171,503	5,740	437	--	1,000	--
2000	0	14	156	32,770	22,699	217	1,580	118,731	92	176,244	6,907	459	--	1,045	--
2001	0	11	113	32,215	18,664	112	1,448	118,783	134	171,469	7,879	457	--	^R 1,028	--
2002	0	13	185	30,265	13,583	224	1,430	120,034	74	165,796	7,280	475	--	1,065	--
2003	0	12	162	37,874	13,365	211	1,322	119,937	120	172,991	9,425	484	--	1,075	--
2004	0	12	179	37,340	21,547	191	1,340	122,255	16	182,867	9,749	445	--	991	--

Trillion Btu															
1960	5.7	10.4	18.8	50.8	24.4	1.3	8.1	374.0	7.3	484.7	0.0	1.1	501.9	2.6	504.5
1965	1.2	13.8	1.9	67.0	68.8	1.3	7.9	429.6	2.7	579.2	0.0	1.0	595.2	2.5	597.6
1970	0.4	28.7	1.3	88.7	128.2	2.0	7.5	528.1	2.6	758.4	0.0	1.0	788.5	2.4	790.9
1975	(s)	14.6	0.4	119.3	137.4	1.8	8.8	597.1	1.4	866.2	0.0	0.9	881.8	2.1	883.9
1980	0.0	14.9	0.7	131.4	110.4	0.7	9.2	549.2	1.8	803.3	0.0	1.0	819.1	2.3	821.4
1985	0.0	11.6	1.1	111.0	15.4	1.5	8.4	571.7	1.2	710.2	^f 7.2	1.3	^f 730.3	3.0	^f 733.3
1990	0.0	12.4	0.8	178.8	22.3	1.2	9.4	547.0	0.3	759.8	11.6	1.4	785.1	3.2	788.3
1995	0.0	13.6	1.1	141.5	58.7	1.0	9.0	571.4	0.2	783.0	15.3	1.3	797.9	3.0	800.9
1996	0.0	14.8	1.0	152.6	68.5	0.9	8.7	573.3	0.2	805.2	11.1	1.5	821.4	3.3	824.7
1997	0.0	15.0	1.0	151.0	70.9	0.6	9.2	581.9	0.3	814.9	16.1	1.5	831.4	3.3	834.7
1998	0.0	13.5	0.8	163.7	74.6	1.0	9.6	584.4	0.2	834.4	19.1	1.4	849.4	3.3	852.6
1999	0.0	11.8	0.9	195.4	103.4	1.2	9.7	612.7	0.2	923.5	20.3	1.5	936.8	3.4	940.2
2000	0.0	13.8	0.8	190.9	128.7	0.8	9.6	618.6	0.6	949.9	24.4	1.6	965.3	3.6	968.9
2001	0.0	11.4	0.6	187.6	105.8	0.4	8.8	618.9	0.8	922.9	27.9	1.6	935.9	3.5	939.4
2002	0.0	13.9	0.9	176.3	77.0	0.8	8.7	625.1	0.5	889.3	25.8	1.6	904.9	3.6	908.5
2003	0.0	11.7	0.8	220.6	75.8	0.8	8.0	624.5	0.8	931.3	33.4	1.7	944.6	3.7	948.2
2004	0.0	11.6	0.9	217.5	122.2	0.7	8.1	637.6	0.1	987.1	34.5	1.5	1,000.2	3.4	1,003.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Illinois

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	19,218	42	194	161	0	355	254	166	--	0	0	0	0	--
1965	25,047	35	152	126	0	278	965	158	--	0	0	0	0	--
1970	28,993	132	3,221	2,667	0	5,888	2,514	146	--	0	0	0	0	--
1975	32,350	34	7,239	3,833	0	11,072	22,315	104	--	0	0	0	0	--
1980	34,611	19	12,762	847	0	13,608	27,742	121	--	0	0	0	0	--
1985	31,608	6	2,569	436	0	3,005	39,106	119	--	0	0	0	0	--
1990	27,396	9	1,622	491	0	2,113	71,887	144	--	0	0	0	0	--
1995	33,463	39	1,013	539	385	1,938	78,481	119	--	0	0	0	0	--
1996	38,091	26	1,184	548	241	1,973	69,774	100	--	0	0	0	0	--
1997	41,017	45	577	551	19	1,147	51,069	92	--	0	0	0	0	--
1998	39,660	57	744	595	346	1,684	55,596	134	--	0	0	0	0	--
1999	40,548	54	269	459	93	821	81,744	139	--	0	0	0	0	--
2000	46,046	47	795	363	0	1,158	89,438	142	--	0	0	0	0	--
2001	45,732	47	2,675	289	0	2,964	92,358	141	--	0	0	0	0	--
2002	49,266	82	218	234	0	453	90,860	129	--	0	0	0	-125	--
2003	50,180	32	1,969	256	0	2,225	94,733	138	--	0	0	18	-160	--
2004	54,078	31	1,112	210	197	1,518	92,047	150	--	0	0	78	-16	--
Trillion Btu														
1960	416.9	43.8	1.2	0.9	0.0	2.2	3.0	1.8	0.0	0.0	0.0	0.0	0.0	467.6
1965	537.2	35.6	1.0	0.7	0.0	1.7	11.4	1.7	(s)	0.0	0.0	0.0	0.0	587.6
1970	608.9	135.7	20.3	15.5	0.0	35.8	27.6	1.5	(s)	0.0	0.0	0.0	0.0	809.5
1975	655.4	35.2	45.5	22.2	0.0	67.8	245.8	1.1	0.0	0.0	0.0	0.0	0.0	1,005.2
1980	712.7	19.6	80.2	4.9	0.0	85.1	302.6	1.3	0.0	0.0	0.0	0.0	0.0	1,121.4
1985	662.8	6.0	16.2	2.5	0.0	18.7	415.4	1.2	0.0	0.0	0.0	0.0	0.0	1,104.1
1990	591.4	9.4	10.2	2.9	0.0	13.1	760.7	1.5	2.4	0.0	0.0	0.0	0.0	1,378.4
1995	677.0	39.9	6.4	3.1	2.3	11.8	824.6	1.2	4.3	0.0	0.0	0.0	0.0	1,558.8
1996	765.5	26.3	7.4	3.2	1.5	12.1	732.8	1.0	5.6	0.0	0.0	0.0	0.0	1,543.4
1997	812.8	45.4	3.6	3.2	0.1	7.0	535.9	0.9	10.0	0.0	0.0	0.0	0.0	1,412.0
1998	791.5	57.6	4.7	3.5	2.1	10.2	583.3	1.4	8.7	0.0	0.0	0.0	0.0	1,452.6
1999	806.5	54.9	1.7	2.7	0.6	4.9	854.2	1.4	11.2	0.0	0.0	0.0	0.0	1,733.2
2000	875.2	48.1	5.0	2.1	0.0	7.1	932.7	1.4	10.9	0.0	0.0	0.0	0.0	1,875.5
2001	^R 867.2	47.4	16.8	1.7	0.0	18.5	965.0	1.5	9.5	0.0	0.0	0.0	0.0	^R 1,909.0
2002	886.1	82.8	1.4	1.4	0.0	2.7	948.5	1.3	11.2	0.0	0.0	0.0	-0.4	1,932.2
2003	905.8	32.6	12.4	1.5	0.0	13.9	987.2	1.4	11.2	0.0	0.0	0.2	-0.5	1,951.8
2004	970.2	31.8	7.0	1.2	1.2	9.4	959.8	1.5	10.9	0.0	0.0	0.8	-0.1	1,984.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Indiana

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	32,592	212	3,277	453	25,707	1,316	3,899	5,751	1,181	43,595	13,076	9,555	107,809	0	100	--	--	-32,082	--
1965	37,349	358	4,283	1,110	25,948	1,848	3,444	6,654	1,458	48,051	13,033	11,559	117,388	0	94	--	--	-38,130	--
1970	42,776	545	6,101	367	29,379	2,558	2,130	8,978	1,583	58,905	9,769	14,130	133,900	0	495	--	--	-27,880	--
1975	46,210	477	6,067	217	32,655	2,619	841	12,335	1,604	64,639	15,007	13,954	149,938	0	444	--	--	-265	--
1980	50,485	489	5,165	260	30,795	2,151	659	7,961	1,788	60,192	14,615	12,296	135,881	0	474	--	--	-10,596	--
1985	53,291	433	5,336	393	31,046	15,445	731	4,947	1,627	57,936	3,768	10,792	132,022	0	426	--	--	-30,731	--
1990	61,701	451	8,552	302	32,957	17,889	368	9,563	1,831	61,930	3,827	14,104	151,323	0	441	--	--	-55,619	--
1995	62,631	535	7,085	144	33,345	17,344	330	6,788	1,747	70,100	1,833	15,034	153,751	0	467	--	--	-36,543	--
1996	64,021	573	8,528	171	34,713	12,576	441	8,555	1,695	69,578	1,328	18,518	156,103	0	448	--	--	-34,508	--
1997	66,051	557	9,233	136	36,839	10,991	459	7,379	1,791	69,828	1,478	19,132	157,267	0	562	--	--	-49,470	--
1998	66,480	522	7,187	113	36,727	9,647	433	5,346	1,875	74,133	1,162	19,789	156,411	0	479	--	--	-47,967	--
1999	67,364	557	7,460	119	39,274	11,198	1,450	6,730	1,895	72,552	562	20,622	161,861	0	407	--	--	-39,478	--
2000	72,273	571	6,048	113	40,117	14,006	457	8,429	1,866	73,878	767	18,834	164,515	0	588	--	--	-58,203	--
2001	71,082	502	5,512	67	32,921	11,763	450	6,230	1,710	75,199	564	16,050	150,466	0	571	--	--	R -45,596	--
2002	71,312	539	6,038	122	42,161	10,778	487	8,632	1,690	74,297	419	15,795	160,416	0	411	--	--	-34,018	--
2003	72,156	527	6,558	106	45,163	9,357	276	9,013	1,562	76,844	453	16,130	165,462	0	424	--	--	R -43,548	--
2004	73,665	527	7,031	104	41,161	8,558	358	8,171	1,582	77,163	809	17,264	162,202	0	444	--	--	-41,966	--
Trillion Btu																			
1960	794.9	219.8	21.7	2.3	149.7	7.1	22.1	23.1	7.2	229.0	82.2	57.3	601.7	0.0	1.1	23.5	0.0	-109.5	1,531.5
1965	900.6	357.5	28.4	5.6	151.1	10.2	19.5	26.7	8.8	252.4	81.9	68.5	653.3	0.0	1.0	22.1	0.0	-130.1	1,804.3
1970	1,006.8	548.6	40.5	1.9	171.1	14.2	12.1	33.9	9.6	309.4	61.4	83.6	737.7	0.0	5.2	23.3	0.0	-95.1	2,226.6
1975	1,061.2	472.6	40.3	1.1	190.2	14.6	4.8	45.8	9.7	339.6	94.3	82.6	823.0	0.0	4.6	26.7	0.0	-0.9	2,387.2
1980	1,157.0	483.9	34.3	1.3	179.4	12.0	3.7	29.2	10.8	316.2	91.9	72.4	751.3	0.0	4.9	51.2	0.0	-36.2	2,412.1
1985	1,193.3	436.4	35.4	2.0	180.8	87.4	4.1	17.8	9.9	304.3	23.7	63.5	729.0	0.0	4.5	56.7	0.0	-104.9	2,319.6
1990	1,361.8	459.1	56.7	1.5	192.0	101.3	2.1	34.7	11.1	325.3	24.1	82.8	831.6	0.0	4.6	46.9	0.5	-189.8	j 2,520.0
1995	1,344.4	541.6	47.0	0.7	194.2	98.3	1.9	24.6	10.6	365.6	11.5	86.9	841.4	0.0	4.8	37.2	0.8	-124.7	2,645.5
1996	1,374.5	579.5	56.6	0.9	202.2	71.3	2.5	30.9	10.3	362.9	8.3	106.4	852.3	0.0	4.6	38.6	0.8	-117.7	2,732.6
1997	1,423.5	562.8	61.3	0.7	214.6	62.3	2.6	26.7	10.9	364.0	9.3	109.9	862.3	0.0	5.7	32.2	0.9	-168.8	2,718.5
1998	1,448.0	530.6	47.7	0.6	213.9	54.7	2.5	19.3	11.4	386.4	7.3	114.1	857.8	0.0	4.9	30.2	1.0	-163.7	2,708.8
1999	1,477.2	567.0	49.5	0.6	228.8	63.5	8.2	24.3	11.5	378.1	3.5	118.8	886.8	0.0	4.2	30.5	1.1	-134.7	2,832.0
2000	1,595.0	584.8	40.1	0.6	233.7	79.4	2.6	30.4	11.3	384.9	4.8	108.1	896.0	0.0	6.0	28.1	1.1	-198.6	2,912.4
2001	R 1,569.2	513.8	36.6	0.3	191.8	66.7	2.6	22.5	10.4	391.8	3.5	94.1	820.2	0.0	5.9	R 37.9	1.2	R -155.6	R 2,792.5
2002	1,547.5	512.1	40.1	0.6	245.6	61.1	2.8	31.2	10.2	386.9	2.6	92.5	873.7	0.0	4.2	R 39.1	1.3	-116.1	R 2,861.7
2003	1,570.7	541.8	43.5	0.5	263.1	53.1	1.6	32.7	9.5	400.1	2.8	94.4	901.4	0.0	4.3	R 39.9	1.6	-148.6	R 2,911.1
2004	1,614.2	542.5	46.7	0.5	239.8	48.5	2.0	29.6	9.6	402.4	5.1	101.1	885.2	0.0	4.4	40.7	1.7	-143.2	2,945.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Indiana

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	1,251	76	8,536	3,370	3,389	15,296	770	--	--	6,371	--	15,756	--
1965	618	114	8,146	2,498	3,993	14,637	580	--	--	8,651	--	20,659	--
1970	393	159	8,027	1,837	6,312	16,175	567	--	--	13,488	--	32,647	--
1975	270	163	8,647	717	6,665	16,029	562	--	--	16,375	--	39,380	--
1980	47	164	5,398	492	3,351	9,241	1,234	--	--	19,262	--	46,444	--
1985	115	146	2,656	466	2,340	5,462	1,284	--	--	19,803	--	45,620	--
1990	110	140	1,997	278	3,494	5,770	802	--	--	22,111	--	51,148	--
1995	37	161	1,476	215	3,768	5,459	435	--	--	26,560	--	60,334	--
1996	43	180	1,447	288	5,058	6,793	452	--	--	26,860	--	61,097	--
1997	44	169	1,264	303	5,003	6,569	301	--	--	26,550	--	60,169	--
1998	41	140	1,054	300	3,684	5,039	268	--	--	27,334	--	62,008	--
1999	41	152	1,047	1,328	4,466	6,841	282	--	--	28,806	--	65,906	--
2000	30	161	976	359	5,045	6,381	303	--	--	28,649	--	65,180	--
2001	28	147	779	358	3,705	4,842	405	--	--	29,420	--	^R 66,167	--
2002	40	157	843	284	5,139	6,265	411	--	--	31,568	--	70,721	--
2003	46	157	1,140	206	5,398	6,745	432	--	--	30,726	--	68,254	--
2004	47	149	1,016	256	4,519	5,792	443	--	--	31,192	--	69,429	--
Trillion Btu													
1960	30.1	78.7	49.7	19.1	13.6	82.4	15.4	0.0	0.0	21.7	228.3	53.8	282.1
1965	14.8	114.2	47.5	14.2	16.0	77.6	11.6	0.0	0.0	29.5	247.8	70.5	318.3
1970	9.1	159.7	46.8	10.4	23.9	81.0	11.3	0.0	0.0	46.0	307.1	111.4	418.5
1975	6.0	161.2	50.4	4.1	24.8	79.2	11.2	0.0	0.0	55.9	313.5	134.4	447.8
1980	1.0	161.9	31.4	2.8	12.3	46.5	24.7	0.0	0.0	65.7	299.8	158.5	458.3
1985	2.6	147.4	15.5	2.6	8.4	26.5	25.7	0.0	0.0	67.6	269.8	155.7	425.4
1990	2.5	143.1	11.6	1.6	12.7	25.9	16.0	^f 0.5	^f (s)	75.4	^f 263.4	174.5	^f 437.9
1995	0.8	163.0	8.6	1.2	13.7	23.5	8.7	0.6	(s)	90.6	287.2	205.9	493.1
1996	1.0	181.9	8.4	1.6	18.3	28.3	9.0	0.7	(s)	91.6	312.6	208.5	521.0
1997	1.0	171.0	7.4	1.7	18.1	27.2	6.0	0.7	(s)	90.6	296.5	205.3	501.8
1998	0.9	142.5	6.1	1.7	13.3	21.2	5.4	0.7	(s)	93.3	264.0	211.6	475.5
1999	1.0	154.3	6.1	7.5	16.1	29.8	5.6	0.8	(s)	98.3	289.8	224.9	514.7
2000	0.7	165.3	5.7	2.0	18.2	25.9	6.1	0.8	(s)	97.7	296.6	222.4	519.0
2001	0.6	150.9	4.5	2.0	13.4	20.0	8.1	0.9	(s)	100.4	280.9	^R 225.8	^R 506.6
2002	0.9	148.1	4.9	1.6	18.6	25.1	8.2	1.0	(s)	107.7	291.0	241.3	532.3
2003	1.0	161.8	6.6	1.2	19.6	27.4	8.6	1.2	(s)	104.8	305.0	232.9	537.9
2004	1.1	153.1	5.9	1.5	16.3	23.7	8.9	1.3	0.1	106.4	294.6	236.9	531.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Indiana

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	869	20	2,968	328	598	168	1,394	5,456	0	--	--	2,900	--	7,172	--
1965	466	42	2,832	243	705	171	1,520	5,472	0	--	--	4,243	--	10,133	--
1970	309	78	2,791	179	1,114	251	844	5,178	0	--	--	6,520	--	15,781	--
1975	630	71	3,007	70	1,176	120	1,645	6,017	0	--	--	9,071	--	21,815	--
1980	175	70	1,985	31	591	223	2,431	5,262	0	--	--	10,423	--	25,131	--
1985	408	70	2,738	133	413	352	388	4,024	0	--	--	12,257	--	28,236	--
1990	441	67	1,244	35	617	561	62	2,518	^g 0	--	--	16,116	--	37,280	--
1995	249	83	1,104	70	665	175	32	2,045	0	--	--	18,654	--	42,375	--
1996	314	87	965	69	893	159	14	2,099	0	--	--	18,822	--	42,814	--
1997	352	82	1,095	87	883	171	9	2,244	0	--	--	19,030	--	43,127	--
1998	330	73	1,422	51	650	167	121	2,412	0	--	--	19,861	--	45,055	--
1999	302	74	1,289	41	788	183	2	2,303	0	--	--	20,685	--	47,326	--
2000	245	90	1,344	48	890	87	2	2,370	0	--	--	21,070	--	47,939	--
2001	223	78	1,576	44	654	254	1	2,528	0	--	--	26,219	--	^R 58,967	--
2002	291	82	1,379	31	907	231	1	2,548	0	--	--	22,363	--	50,099	--
2003	311	87	1,682	33	953	247	63	2,977	0	--	--	22,441	--	^R 49,850	--
2004	382	85	1,691	44	797	262	114	2,908	0	--	--	22,957	--	51,098	--

Trillion Btu															
1960	20.9	20.7	17.3	1.9	2.4	0.9	8.8	31.2	0.0	0.3	0.0	9.9	83.0	24.5	107.5
1965	11.2	42.2	16.5	1.4	2.8	0.9	9.6	31.2	0.0	0.2	0.0	14.5	99.2	34.6	133.8
1970	7.1	78.0	16.3	1.0	4.2	1.3	5.3	28.1	0.0	0.2	0.0	22.2	135.7	53.8	189.6
1975	13.9	69.8	17.5	0.4	4.4	0.6	10.3	33.3	0.0	0.2	0.0	31.0	148.1	74.4	222.6
1980	3.8	69.3	11.6	0.2	2.2	1.2	15.3	30.4	0.0	0.6	0.0	35.6	139.6	85.7	225.4
1985	9.1	70.2	15.9	0.8	1.5	1.8	2.4	22.5	0.0	0.6	0.0	41.8	144.2	96.3	240.5
1990	9.9	68.4	7.2	0.2	2.2	2.9	0.4	13.0	^g 0.0	^g 8.9	^g 0.0	55.0	^g 155.3	127.2	^g 282.5
1995	5.6	83.7	6.4	0.4	2.4	0.9	0.2	10.3	0.0	8.5	0.1	63.6	171.9	144.6	316.5
1996	7.0	88.4	5.6	0.4	3.2	0.8	0.1	10.2	0.0	8.6	0.1	64.2	178.5	146.1	324.6
1997	7.8	82.6	6.4	0.5	3.2	0.9	0.1	11.0	0.0	8.5	0.2	64.9	175.0	147.1	322.2
1998	7.5	74.4	8.3	0.3	2.3	0.9	0.8	12.6	0.0	8.2	0.2	67.8	170.6	153.7	324.3
1999	7.5	75.0	7.5	0.2	2.8	1.0	(s)	11.6	0.0	7.9	0.2	70.6	172.8	161.5	334.2
2000	5.8	92.7	7.8	0.3	3.2	0.5	(s)	11.8	0.0	7.9	0.2	71.9	190.2	163.6	353.7
2001	5.0	80.4	9.2	0.2	2.4	1.3	(s)	13.1	0.0	8.6	0.2	89.5	196.7	^R 201.2	^R 397.9
2002	6.5	77.9	8.0	0.2	3.3	1.2	(s)	12.7	0.0	8.6	0.3	76.3	182.2	170.9	353.1
2003	7.0	89.7	9.8	0.2	3.5	1.3	0.4	15.1	0.0	9.0	0.3	76.6	197.6	170.1	367.7
2004	8.5	87.5	9.8	0.2	2.9	1.4	0.7	15.1	0.0	8.9	0.3	78.3	198.6	174.3	373.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Indiana

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	16,702	102	3,277	9,976	202	1,716	489	2,813	11,229	9,555	39,256	(s)	--	--	8,226	--	20,344	--
1965	18,093	180	4,283	9,766	703	1,904	843	2,686	10,866	11,559	42,611	0	--	--	12,360	--	29,514	--
1970	19,394	268	6,101	10,180	115	1,455	974	2,238	8,391	13,876	43,329	0	--	--	17,952	--	43,451	--
1975	18,006	223	6,067	9,324	55	4,369	842	1,263	11,688	13,954	47,560	0	--	--	26,675	--	64,149	--
1980	16,599	245	5,165	5,053	136	3,930	1,096	752	11,984	12,296	40,412	0	--	--	30,730	--	74,095	--
1985	14,457	211	5,336	4,675	131	2,046	998	901	3,348	10,792	28,227	0	--	--	31,784	--	73,219	--
1990	13,496	228	8,552	5,293	54	5,300	1,123	625	3,570	13,148	37,665	⁹ 0	--	--	35,743	--	82,682	--
1995	10,255	275	7,085	4,766	45	2,250	1,071	849	1,567	14,952	32,585	0	--	--	41,777	--	94,901	--
1996	10,810	289	8,528	4,671	84	2,485	1,039	808	1,022	18,220	36,856	0	--	--	43,203	--	98,270	--
1997	10,811	290	9,233	5,028	70	1,427	1,098	847	1,075	18,224	37,003	0	--	--	43,550	--	98,694	--
1998	10,843	287	7,187	5,881	81	962	1,149	650	738	18,562	35,211	0	--	--	44,848	--	101,738	--
1999	10,703	312	7,460	5,668	81	1,442	1,161	655	314	19,547	36,328	0	--	--	47,230	--	108,061	--
2000	12,567	299	6,048	5,465	50	2,433	1,144	591	464	17,661	33,855	0	--	--	48,040	--	109,299	--
2001	13,434	251	5,512	6,234	49	1,798	1,048	1,086	392	15,703	31,823	0	--	--	42,080	--	^R 94,640	--
2002	13,290	259	6,038	6,001	172	2,451	1,036	1,160	171	15,175	32,203	0	--	--	47,481	--	106,371	--
2003	13,306	249	6,558	6,348	37	2,500	958	1,181	312	15,674	33,567	0	--	--	47,284	--	^R 105,034	--
2004	13,777	263	7,031	6,281	58	2,677	970	1,530	532	16,761	35,841	0	--	--	48,928	--	108,907	--
Trillion Btu																		
1960	431.8	106.1	21.7	58.1	1.1	6.9	3.0	14.8	70.6	57.3	233.5	(s)	7.8	0.0	28.1	807.2	69.4	876.6
1965	466.3	179.8	28.4	56.9	4.0	7.6	5.1	14.1	68.3	68.5	253.0	0.0	10.3	0.0	42.2	951.5	100.7	1,052.2
1970	490.9	270.1	40.5	59.3	0.6	5.5	5.9	11.8	52.8	82.1	258.4	0.0	11.7	0.0	61.3	1,092.4	148.3	1,240.7
1975	461.6	221.1	40.3	54.3	0.3	16.2	5.1	6.6	73.5	82.6	278.9	0.0	15.3	0.0	91.0	1,067.9	218.9	1,286.8
1980	423.9	242.0	34.3	29.4	0.8	14.4	6.6	3.9	75.3	72.4	237.3	0.0	25.9	0.0	104.9	1,034.0	252.8	1,286.8
1985	365.1	212.8	35.4	27.2	0.7	7.4	6.1	4.7	21.1	63.5	166.1	0.0	30.4	0.0	108.4	882.8	249.8	1,132.7
1990	342.8	232.3	56.7	30.8	0.3	19.2	6.8	3.3	22.4	77.1	216.7	⁹ 0.0	⁹ 21.9	⁹ 0.0	122.0	⁹ 935.6	282.1	⁹ 1,217.8
1995	258.5	278.7	47.0	27.8	0.3	8.2	6.5	4.4	9.9	86.4	190.4	0.0	19.4	0.0	142.5	889.5	323.8	1,213.3
1996	269.3	292.1	56.6	27.2	0.5	9.0	6.3	4.2	6.4	104.6	214.8	0.0	20.1	0.0	147.4	943.6	335.3	1,278.9
1997	271.3	293.3	61.3	29.3	0.4	5.2	6.7	4.4	6.8	104.5	218.4	0.0	16.6	0.0	148.6	948.2	336.7	1,284.9
1998	279.0	292.2	47.7	34.3	0.5	3.5	7.0	3.4	4.6	106.7	207.6	0.0	15.6	0.0	153.0	947.5	347.1	1,294.6
1999	276.3	317.3	49.5	33.0	0.5	5.2	7.0	3.4	2.0	112.3	212.9	0.0	15.9	0.0	161.1	983.7	368.7	1,352.4
2000	329.4	306.1	40.1	31.8	0.3	8.8	6.9	3.1	2.9	101.1	195.0	0.0	13.1	0.0	163.9	1,007.4	372.9	1,380.4
2001	354.1	256.9	36.6	36.3	0.3	6.5	6.4	5.7	2.5	92.0	186.1	0.0	^R 20.1	0.0	143.6	^R 960.7	^R 322.9	^R 1,283.6
2002	349.6	244.8	40.1	35.0	1.0	8.9	6.3	6.0	1.1	88.8	187.0	0.0	^R 21.2	0.0	162.0	^R 964.6	362.9	^R 1,327.5
2003	347.3	255.8	43.5	37.0	0.2	9.1	5.8	6.1	2.0	91.7	195.4	0.0	^R 21.3	0.0	161.3	^R 981.0	358.4	^R 1,339.4
2004	360.2	271.0	46.7	36.6	0.3	9.7	5.9	8.0	3.3	98.1	208.5	0.0	21.9	0.0	166.9	1,028.6	371.6	1,400.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Indiana

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	287	5	453	4,097	1,316	47	692	40,615	350	47,570	0	1	--	2	--
1965	59	8	1,110	5,124	1,848	52	615	45,194	583	54,526	0	0	--	0	--
1970	31	11	367	8,123	2,558	97	610	56,417	330	68,501	0	0	--	0	--
1975	3	10	217	11,200	2,619	125	763	63,256	331	78,510	0	0	--	0	--
1980	0	9	260	17,629	2,151	88	692	59,217	200	80,236	0	0	--	0	--
1985	0	5	393	20,564	15,445	148	630	56,684	31	93,895	^f 1,308	0	--	0	--
1990	0	8	302	24,000	17,889	153	709	60,744	195	103,991	1,507	12	--	28	--
1995	0	8	144	25,658	17,344	104	676	69,076	235	113,238	2,222	15	--	34	--
1996	0	13	171	27,277	12,576	120	656	68,611	293	109,703	1,132	15	--	35	--
1997	0	11	136	29,130	10,991	66	693	68,809	395	110,220	1,519	16	--	36	--
1998	0	8	113	27,923	9,647	50	726	73,315	303	112,076	1,447	15	--	34	--
1999	0	8	119	30,715	11,198	35	733	71,714	246	114,760	2,537	15	--	35	--
2000	0	6	113	31,803	14,006	60	722	73,199	302	120,205	2,832	16	--	36	--
2001	0	7	67	23,947	11,763	73	662	73,859	171	110,541	2,637	16	--	36	--
2002	0	6	122	33,616	10,778	136	654	72,906	246	118,456	2,996	16	--	37	--
2003	0	7	106	35,637	9,357	162	604	75,417	77	121,360	3,210	16	--	36	--
2004	0	7	104	31,892	8,558	177	612	75,371	161	116,876	3,245	17	--	37	--

Trillion Btu															
1960	6.9	5.2	2.3	23.9	7.1	0.2	4.2	213.3	2.2	253.2	0.0	(s)	265.3	(s)	265.3
1965	1.4	8.0	5.6	29.8	10.2	0.2	3.7	237.4	3.7	290.6	0.0	0.0	300.1	0.0	300.1
1970	0.7	11.2	1.9	47.3	14.2	0.4	3.7	296.4	2.1	365.9	0.0	0.0	377.8	0.0	377.8
1975	0.1	9.5	1.1	65.2	14.6	0.5	4.6	332.3	2.1	420.4	0.0	0.0	430.0	0.0	430.0
1980	0.0	8.8	1.3	102.7	12.0	0.3	4.2	311.1	1.3	432.8	0.0	0.0	441.6	0.0	441.6
1985	0.0	4.9	2.0	119.8	87.4	0.5	3.8	297.8	0.2	511.5	^f 4.6	0.0	^f 520.9	0.0	^f 520.9
1990	0.0	8.6	1.5	139.8	101.3	0.6	4.3	319.1	1.2	567.8	5.3	(s)	581.8	0.1	581.8
1995	0.0	7.8	0.7	149.5	98.3	0.4	4.1	360.2	1.5	614.7	7.9	0.1	622.5	0.1	622.7
1996	0.0	12.7	0.9	158.9	71.3	0.4	4.0	357.9	1.8	595.2	4.0	0.1	607.9	0.1	608.0
1997	0.0	11.1	0.7	169.7	62.3	0.2	4.2	358.7	2.5	598.3	5.4	0.1	609.5	0.1	609.6
1998	0.0	7.7	0.6	162.7	54.7	0.2	4.4	382.1	1.9	606.5	5.1	0.1	614.2	0.1	614.4
1999	0.0	7.7	0.6	178.9	63.5	0.1	4.4	373.7	1.5	622.8	9.0	0.1	630.6	0.1	630.7
2000	0.0	6.1	0.6	185.3	79.4	0.2	4.4	381.4	1.9	653.1	10.0	0.1	659.2	0.1	659.3
2001	0.0	7.5	0.3	139.5	66.7	0.3	4.0	384.8	1.1	596.7	9.3	0.1	604.2	0.1	604.4
2002	0.0	5.3	0.6	195.8	61.1	0.5	4.0	379.7	1.5	643.2	10.6	0.1	648.6	0.1	648.7
2003	0.0	7.3	0.5	207.6	53.1	0.6	3.7	392.7	0.5	658.6	11.4	0.1	665.9	0.1	666.1
2004	0.0	7.6	0.5	185.8	48.5	0.6	3.7	393.1	1.0	633.3	11.5	0.1	640.9	0.1	641.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Indiana

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	13,483	9	103	130	0	232	0	100	--	0	0	0	0	--
1965	18,113	13	63	80	0	142	0	94	--	0	0	0	0	--
1970	22,648	30	204	257	255	716	0	495	--	0	0	0	0	--
1975	27,301	11	1,344	477	0	1,821	0	444	--	0	0	0	0	--
1980	33,664	2	0	730	0	730	0	474	--	0	0	0	0	--
1985	38,310	1	0	414	0	414	0	426	--	0	0	0	0	--
1990	47,654	7	0	423	956	1,379	0	441	--	0	0	0	0	--
1995	52,089	8	0	342	82	424	0	467	--	0	0	0	0	--
1996	52,855	4	0	353	298	652	0	448	--	0	0	0	0	--
1997	54,845	5	0	322	908	1,230	0	562	--	0	0	0	0	--
1998	55,267	14	0	447	1,227	1,674	0	479	--	0	0	0	0	--
1999	56,317	13	0	554	1,075	1,630	0	407	--	0	0	0	0	--
2000	59,431	15	0	530	1,174	1,704	0	588	--	0	0	0	0	--
2001	57,397	18	1	385	347	733	0	571	--	0	0	0	0	--
2002	57,692	35	1	322	620	944	0	411	--	0	0	0	-1	--
2003	58,493	27	1	356	456	814	0	424	--	0	0	0	0	--
2004	59,459	23	1	280	503	784	0	444	--	0	0	0	0	--
Trillion Btu														
1960	305.2	9.1	0.6	0.8	0.0	1.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	316.8
1965	406.9	13.3	0.4	0.5	0.0	0.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	422.0
1970	498.9	29.7	1.3	1.5	1.5	4.3	0.0	5.2	0.0	0.0	0.0	0.0	0.0	538.1
1975	579.6	11.0	8.5	2.8	0.0	11.2	0.0	4.6	0.0	0.0	0.0	0.0	0.0	606.4
1980	728.2	1.9	0.0	4.3	0.0	4.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	739.3
1985	816.5	1.1	0.0	2.4	0.0	2.4	0.0	4.5	0.0	0.0	0.0	0.0	0.0	824.5
1990	1,006.7	6.6	0.0	2.5	5.8	8.2	0.0	4.6	0.0	0.0	0.0	0.0	0.0	1,026.1
1995	1,079.6	8.5	0.0	2.0	0.5	2.5	0.0	4.8	0.5	0.0	0.0	0.0	0.0	1,095.9
1996	1,097.2	4.4	0.0	2.1	1.8	3.9	0.0	4.6	0.9	0.0	0.0	0.0	0.0	1,111.0
1997	1,143.4	4.8	0.0	1.9	5.5	7.3	0.0	5.7	1.0	0.0	0.0	0.0	0.0	1,162.3
1998	1,160.5	13.9	0.0	2.6	7.4	10.0	0.0	4.9	1.0	0.0	0.0	0.0	0.0	1,190.3
1999	1,192.3	12.8	0.0	3.2	6.5	9.7	0.0	4.2	1.0	0.0	0.0	0.0	0.0	1,219.9
2000	1,259.2	14.8	0.0	3.1	7.1	10.2	0.0	6.0	1.1	0.0	0.0	0.0	0.0	1,291.2
2001	^R 1,209.6	18.1	(s)	2.2	2.1	4.3	0.0	5.9	1.1	0.0	0.0	0.0	0.0	^R 1,239.0
2002	1,190.6	36.0	(s)	1.9	3.7	5.6	0.0	4.2	1.1	0.0	0.0	0.0	(s)	1,237.4
2003	1,215.4	27.2	(s)	2.1	2.7	4.8	0.0	4.3	1.0	0.0	0.0	0.0	0.0	1,252.9
2004	1,244.5	23.3	(s)	1.6	3.0	4.7	0.0	4.4	1.0	0.0	0.0	0.0	0.0	1,277.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	5,258	187	2,579	366	11,163	195	2,587	5,017	713	29,463	1,071	44	53,197	0	881	--	--	-2,487	--
1965	5,722	248	2,569	358	11,068	232	1,523	7,448	698	30,792	531	542	55,760	0	928	--	--	3,245	--
1970	6,166	349	2,914	256	13,677	725	490	11,038	700	35,701	401	627	66,528	0	935	--	--	1,572	--
1975	6,407	346	2,294	191	14,553	835	214	13,645	655	39,042	608	986	73,024	2,291	879	--	--	13,583	--
1980	12,340	270	1,699	184	15,930	813	171	11,167	714	35,394	415	5,236	71,721	2,563	946	--	--	12,532	--
1985	14,342	226	2,023	83	15,823	592	155	8,507	649	31,465	182	1,778	61,258	1,927	989	--	--	7,138	--
1990	18,080	219	1,537	99	15,784	891	81	6,355	731	31,684	124	937	58,223	3,012	875	--	--	3,148	--
1995	20,728	261	1,636	72	17,748	1,046	69	16,989	697	34,418	92	661	73,427	3,730	1,003	--	--	4,361	--
1996	21,301	272	2,052	71	19,793	819	54	11,344	676	35,909	94	2,279	73,092	3,924	935	--	--	6,656	--
1997	21,798	254	2,623	78	19,652	793	63	10,296	715	35,577	71	2,447	72,316	4,149	805	--	--	7,743	--
1998	23,275	232	2,157	72	20,058	1,184	62	14,882	748	36,973	88	2,546	78,771	3,768	913	--	--	187	--
1999	23,590	231	2,942	81	19,588	885	72	18,746	756	36,993	100	2,644	82,807	3,640	946	--	--	2,672	--
2000	24,480	233	2,471	78	19,261	771	75	19,621	745	36,753	143	2,499	82,417	4,453	904	--	--	-2,639	--
2001	24,398	224	1,926	57	20,101	777	93	16,127	682	36,768	44	2,260	78,835	3,853	845	--	--	R -893	--
2002	24,676	226	2,403	109	19,706	782	53	18,317	674	38,004	62	2,327	82,437	4,574	946	--	--	850	--
2003	24,868	230	2,303	95	18,378	793	37	13,337	623	38,249	150	2,419	76,383	3,988	789	--	--	2,683	--
2004	24,975	227	3,020	88	20,407	910	48	18,974	631	39,444	282	2,704	86,508	4,929	946	--	--	-3,510	--
Trillion Btu																			
1960	115.9	193.7	17.1	1.8	65.0	1.0	14.7	20.1	4.3	154.8	6.7	0.2	285.9	0.0	9.5	6.4	0.0	-8.5	602.9
1965	126.6	250.0	17.0	1.8	64.5	1.3	8.6	29.9	4.2	161.7	3.3	2.9	295.3	0.0	9.7	5.5	0.0	11.1	698.1
1970	130.9	351.8	19.3	1.3	79.7	4.1	2.8	41.7	4.2	187.5	2.5	3.3	346.4	0.0	9.8	6.3	0.0	5.4	850.6
1975	131.6	348.6	15.2	1.0	84.8	4.7	1.2	50.7	4.0	205.1	3.8	5.4	375.8	25.2	9.1	7.9	0.0	46.3	944.5
1980	234.4	270.4	11.3	0.9	92.8	4.6	1.0	41.0	4.3	185.9	2.6	28.7	373.1	28.0	9.8	48.7	0.0	42.8	1,007.2
1985	268.8	228.4	13.4	0.4	92.2	3.3	0.9	30.7	3.9	165.3	1.1	9.6	320.8	20.5	10.3	58.1	3.6	24.4	937.8
1990	335.0	220.4	10.2	0.5	91.9	5.0	0.5	23.0	4.4	166.4	0.8	5.1	307.9	31.9	9.1	147.8	10.1	10.7	1,966.0
1995	372.3	262.5	10.9	0.4	103.4	5.9	0.4	61.5	4.2	179.5	0.6	3.6	370.3	39.2	10.3	40.8	0.2	14.9	1,110.6
1996	383.7	274.0	13.6	0.4	115.3	4.6	0.3	41.0	4.1	187.3	0.6	12.2	379.4	41.2	9.7	48.3	0.2	22.7	1,159.2
1997	391.7	256.8	17.4	0.4	114.5	4.5	0.4	37.2	4.3	185.5	0.4	13.2	377.8	43.5	8.2	40.4	0.8	26.4	1,145.7
1998	424.9	234.6	14.3	0.4	116.8	6.7	0.4	53.8	4.5	192.7	0.6	13.7	403.9	39.5	9.3	37.3	0.5	0.6	1,150.6
1999	432.0	235.1	19.5	0.4	114.1	5.0	0.4	67.8	4.6	192.8	0.6	14.2	419.4	38.0	9.7	37.7	3.8	9.1	1,184.7
2000	445.9	233.7	16.4	0.4	112.2	4.4	0.4	70.8	4.5	191.5	0.9	13.4	414.8	46.4	9.2	31.7	5.4	-9.0	1,178.1
2001	R 443.9	225.2	12.8	0.3	117.1	4.4	0.5	58.3	4.1	191.6	0.3	12.2	401.6	40.3	8.7	R 30.6	5.4	R -3.0	R 1,152.7
2002	441.5	228.3	15.9	0.5	114.8	4.4	0.3	66.2	4.1	197.9	0.4	12.6	417.2	47.7	9.6	R 33.8	9.7	2.9	R 1,190.8
2003	444.6	232.2	15.3	0.5	107.0	4.5	0.2	48.4	3.8	199.2	0.9	13.1	392.9	41.6	8.1	R 34.4	10.5	9.2	R 1,173.4
2004	443.2	228.6	20.0	0.4	118.9	5.2	0.3	68.6	3.8	205.7	1.8	14.7	439.4	51.4	9.5	34.6	11.0	-12.0	1,205.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Net Energy	
1960	537	58	2,610	2,301	3,312	8,223	163	--	--	3,720	--	9,200	--
1965	279	77	2,347	1,327	4,741	8,416	108	--	--	5,044	--	12,044	--
1970	100	96	2,232	325	6,826	9,383	99	--	--	6,480	--	15,684	--
1975	42	94	1,802	138	6,799	8,740	115	--	--	8,338	--	20,051	--
1980	19	85	2,388	47	3,890	6,325	517	--	--	10,038	--	24,203	--
1985	61	79	1,490	115	2,996	4,601	644	--	--	9,851	--	22,693	--
1990	49	71	926	24	2,742	3,692	348	--	--	10,513	--	24,319	--
1995	12	82	781	25	3,964	4,769	303	--	--	11,640	--	26,441	--
1996	27	88	774	30	5,321	6,125	314	--	--	11,537	--	26,243	--
1997	41	82	725	28	4,935	5,687	242	--	--	11,673	--	26,455	--
1998	31	69	550	25	4,178	4,753	215	--	--	11,855	--	26,894	--
1999	47	71	537	24	5,230	5,791	227	--	--	11,867	--	27,151	--
2000	29	74	481	26	5,308	5,815	244	--	--	12,029	--	27,367	--
2001	31	71	415	37	3,412	3,863	236	--	--	12,430	--	^R 27,955	--
2002	38	72	580	22	4,416	5,019	240	--	--	12,921	--	28,946	--
2003	38	74	377	20	4,612	5,009	253	--	--	12,768	--	28,361	--
2004	19	68	322	28	4,082	4,431	259	--	--	12,625	--	28,101	--
Trillion Btu													
1960	11.4	60.5	15.2	13.0	13.3	41.5	3.3	0.0	0.0	12.7	129.4	31.4	160.8
1965	5.9	78.0	13.7	7.5	19.0	40.2	2.2	0.0	0.0	17.2	143.5	41.1	184.6
1970	2.0	97.1	13.0	1.8	25.8	40.6	2.0	0.0	0.0	22.1	163.9	53.5	217.4
1975	0.8	95.1	10.5	0.8	25.3	36.5	2.3	0.0	0.0	28.4	163.2	68.4	231.6
1980	0.4	85.2	13.9	0.3	14.3	28.5	10.3	0.0	0.0	34.2	158.6	82.6	241.2
1985	1.3	79.6	8.7	0.7	10.8	20.1	12.9	0.0	0.0	33.6	147.5	77.4	225.0
1990	1.2	71.9	5.4	0.1	9.9	15.5	7.0	^f 0.1	^f (s)	35.9	^f 131.4	83.0	^f 214.4
1995	0.3	82.6	4.5	0.1	14.4	19.0	6.1	0.1	(s)	39.7	147.8	90.2	238.0
1996	0.7	88.6	4.5	0.2	19.2	23.9	6.3	0.1	(s)	39.4	158.9	89.5	248.4
1997	1.0	82.4	4.2	0.2	17.8	22.2	4.8	0.1	(s)	39.8	150.4	90.3	240.7
1998	0.7	69.7	3.2	0.1	15.1	18.4	4.3	0.1	(s)	40.5	133.7	91.8	225.5
1999	1.2	72.8	3.1	0.1	18.9	22.2	4.5	0.1	(s)	40.5	141.3	92.6	234.0
2000	0.7	74.2	2.8	0.1	19.1	22.1	4.9	0.1	(s)	41.0	143.1	93.4	236.5
2001	0.7	71.4	2.4	0.2	12.3	15.0	4.7	0.1	(s)	42.4	134.3	^R 95.4	^R 229.7
2002	0.9	72.1	3.4	0.1	16.0	19.5	4.8	0.1	(s)	44.1	141.5	98.8	240.3
2003	0.9	74.7	2.2	0.1	16.7	19.0	5.1	0.2	(s)	43.6	143.4	96.8	240.2
2004	0.5	68.9	1.9	0.2	14.8	16.8	5.2	0.2	(s)	43.1	134.6	95.9	230.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours						
1960	373	28	1,046	94	584	178	232	2,135	0	--	--	1,812	--	4,480	--
1965	211	39	941	54	837	194	135	2,161	0	--	--	2,797	--	6,680	--
1970	78	57	895	13	1,205	271	65	2,449	0	--	--	3,655	--	8,846	--
1975	97	67	722	6	1,200	323	115	2,366	0	--	--	5,121	--	12,315	--
1980	71	51	751	5	686	350	79	1,871	0	--	--	5,502	--	13,266	--
1985	217	48	1,167	7	529	237	1	1,941	0	--	--	6,306	--	14,527	--
1990	196	44	576	38	484	142	30	1,269	^g 0	--	--	7,532	--	17,423	--
1995	78	50	415	3	700	35	0	1,173	0	--	--	8,890	--	20,195	--
1996	195	55	356	4	939	244	1	1,563	0	--	--	8,673	--	19,729	--
1997	333	50	320	8	871	445	0	1,667	0	--	--	8,944	--	20,268	--
1998	249	43	463	3	737	470	1	1,695	0	--	--	9,384	--	21,288	--
1999	343	45	487	4	923	433	0	1,867	0	--	--	9,668	--	22,120	--
2000	232	46	481	6	937	533	3	1,987	0	--	--	9,932	--	22,598	--
2001	248	46	544	13	602	547	1	1,738	0	--	--	10,776	--	^R 24,236	--
2002	275	46	454	6	779	640	2	1,922	0	--	--	11,429	--	25,605	--
2003	252	48	677	4	814	653	0	2,202	0	--	--	11,637	--	25,850	--
2004	158	46	466	5	720	1,010	0	2,247	0	--	--	10,840	--	24,128	--
Trillion Btu															
1960	8.0	28.8	6.1	0.5	2.3	0.9	1.5	11.4	0.0	0.1	0.0	6.2	54.4	15.3	69.7
1965	4.5	39.1	5.5	0.3	3.4	1.0	0.9	11.0	0.0	(s)	0.0	9.5	64.2	22.8	86.9
1970	1.6	57.8	5.2	0.1	4.6	1.4	0.4	11.7	0.0	(s)	0.0	12.5	83.6	30.2	113.7
1975	1.8	67.5	4.2	(s)	4.5	1.7	0.7	11.1	0.0	(s)	0.0	17.5	97.9	42.0	139.9
1980	1.4	50.7	4.4	(s)	2.5	1.8	0.5	9.3	0.0	0.3	0.0	18.8	80.5	45.3	125.7
1985	4.6	48.2	6.8	(s)	1.9	1.2	(s)	10.0	0.0	0.3	0.0	21.5	84.6	49.6	134.2
1990	4.7	44.3	3.4	0.2	1.8	0.7	0.2	6.3	^g 0.0	^g 0.8	^g 0.0	25.7	^g 81.7	59.4	^g 141.1
1995	1.9	50.6	2.4	(s)	2.5	0.2	0.0	5.3	0.0	1.0	0.1	30.3	89.2	68.9	158.1
1996	4.8	54.9	2.1	(s)	3.4	1.3	(s)	6.9	0.0	1.0	0.1	29.6	97.3	67.3	164.6
1997	7.8	50.6	1.9	(s)	3.1	2.3	0.0	7.5	0.0	2.8	0.2	30.5	99.5	69.2	168.7
1998	6.1	43.5	2.7	(s)	2.7	2.4	(s)	8.0	0.0	1.3	0.2	32.0	91.0	72.6	163.7
1999	8.9	45.8	2.8	(s)	3.3	2.3	0.0	8.6	0.0	1.0	0.2	33.0	97.4	75.5	172.9
2000	6.1	45.8	2.8	(s)	3.4	2.8	(s)	9.2	0.0	1.0	0.2	33.9	96.2	77.1	173.3
2001	5.9	46.1	3.2	0.1	2.2	2.8	(s)	8.5	0.0	1.1	0.2	36.8	98.6	^R 82.7	^R 181.3
2002	6.7	46.8	2.6	(s)	2.8	3.3	(s)	9.1	0.0	1.2	0.3	39.0	103.0	87.4	190.3
2003	6.1	48.5	3.9	(s)	3.0	3.4	0.0	10.6	0.0	1.5	0.3	39.7	106.7	88.2	194.9
2004	3.7	46.4	2.7	(s)	2.6	5.3	0.0	10.9	0.0	1.6	0.3	37.0	100.0	82.3	182.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.^c Liquefied petroleum gases.^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	2,193	43	2,579	5,536	192	1,098	196	5,797	573	44	16,016	2	--	--	2,676	--	6,619	--
1965	2,464	68	2,569	5,607	142	1,815	218	5,373	354	542	16,620	2	--	--	3,719	--	8,880	--
1970	1,955	99	2,914	5,884	152	2,949	220	5,391	261	627	18,398	1	--	--	5,338	--	12,920	--
1975	1,333	121	2,294	4,670	70	5,593	155	3,791	279	986	17,838	1	--	--	6,626	--	15,935	--
1980	1,505	115	1,699	4,698	119	6,557	192	2,612	273	5,236	21,385	1	--	--	9,318	--	22,467	--
1985	1,572	87	2,023	4,971	33	4,893	175	1,703	179	1,778	15,754	1	--	--	9,520	--	21,931	--
1990	2,353	90	1,537	4,807	19	3,087	196	1,072	94	937	11,749	⁹ 0	--	--	11,392	--	26,354	--
1995	2,761	113	1,636	5,636	41	12,267	187	1,038	92	640	21,538	0	--	--	13,771	--	31,283	--
1996	3,085	114	2,052	6,247	20	4,986	182	1,105	93	2,261	16,947	0	--	--	14,789	--	33,639	--
1997	3,103	107	2,623	6,475	27	4,399	192	1,092	71	2,425	17,305	0	--	--	15,531	--	35,196	--
1998	2,832	105	2,157	6,572	34	9,946	201	900	88	2,525	22,423	0	--	--	16,079	--	36,474	--
1999	2,995	101	2,942	5,915	44	12,589	203	879	100	2,624	25,297	0	--	--	16,499	--	37,749	--
2000	2,902	100	2,471	6,027	43	13,368	200	784	140	2,471	25,504	0	--	--	17,127	--	38,966	--
2001	2,814	93	1,926	6,813	43	12,031	183	1,201	43	2,229	24,470	0	--	--	16,238	--	^R 36,521	--
2002	2,860	92	2,403	6,209	24	13,111	181	1,265	60	2,287	25,540	0	--	--	16,548	--	37,071	--
2003	2,898	94	2,303	4,583	13	7,863	168	1,323	150	2,364	18,766	0	--	--	16,803	--	37,325	--
2004	2,925	94	3,020	4,571	15	14,128	170	1,698	282	2,596	26,480	0	--	--	17,437	--	38,813	--
Trillion Btu																		
1960	51.7	44.9	17.1	32.2	1.1	4.4	1.2	30.5	3.6	0.2	90.3	(s)	2.8	0.0	9.1	198.8	22.6	221.4
1965	57.5	68.9	17.0	32.7	0.8	7.3	1.3	28.2	2.2	2.9	92.4	(s)	2.9	0.0	12.7	234.5	30.3	264.8
1970	43.0	99.9	19.3	34.3	0.9	11.1	1.3	28.3	1.6	3.3	100.2	(s)	3.9	0.0	18.2	265.1	44.1	309.2
1975	28.4	122.5	15.2	27.2	0.4	20.8	0.9	19.9	1.8	5.4	91.6	(s)	5.1	0.0	22.6	270.2	54.4	324.6
1980	32.4	114.9	11.3	27.4	0.7	24.1	1.2	13.7	1.7	28.7	108.7	(s)	37.8	0.0	31.8	325.6	76.7	402.2
1985	35.6	88.0	13.4	29.0	0.2	17.6	1.1	8.9	1.1	9.6	80.9	(s)	44.3	0.0	32.5	281.3	74.8	356.1
1990	53.1	90.9	10.2	28.0	0.1	11.2	1.2	5.6	0.6	5.1	62.0	⁹ 0.0	⁹ 39.9	⁹ 0.0	38.9	⁹ 284.8	89.9	⁹ 374.7
1995	57.9	113.5	10.9	32.8	0.2	44.4	1.1	5.4	0.6	3.4	98.9	0.0	33.1	0.0	47.0	350.4	106.7	457.1
1996	65.7	114.4	13.6	36.4	0.1	18.0	1.1	5.8	0.6	12.1	87.7	0.0	40.2	0.0	50.5	358.5	114.8	473.3
1997	65.0	108.1	17.4	37.7	0.2	15.9	1.2	5.7	0.4	13.1	91.6	0.0	32.0	0.0	53.0	349.6	120.1	469.7
1998	60.0	106.5	14.3	38.3	0.2	35.9	1.2	4.7	0.6	13.6	108.8	0.0	30.9	0.0	54.9	361.1	124.5	485.5
1999	63.4	103.3	19.5	34.5	0.2	45.5	1.2	4.6	0.6	14.1	120.2	0.0	31.3	0.0	56.3	374.5	128.8	503.3
2000	60.9	100.6	16.4	35.1	0.2	48.2	1.2	4.1	0.9	13.2	119.4	0.0	24.9	0.0	58.4	364.1	133.0	497.1
2001	59.1	93.0	12.8	39.7	0.2	43.5	1.1	6.3	0.3	12.0	115.9	0.0	^R 23.7	0.0	55.4	^R 347.0	^R 124.6	^R 471.6
2002	58.5	93.0	15.9	36.2	0.1	47.4	1.1	6.6	0.4	12.3	120.0	0.0	^R 26.8	0.0	56.5	^R 354.8	126.5	^R 481.2
2003	60.2	94.7	15.3	26.7	0.1	28.5	1.0	6.9	0.9	12.8	92.2	0.0	^R 26.7	0.0	57.3	^R 331.2	127.4	^R 458.5
2004	59.2	94.7	20.0	26.6	0.1	51.1	1.0	8.9	1.8	14.1	123.6	0.0	26.6	0.0	59.5	363.6	132.4	496.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	38	9	366	1,711	195	23	516	23,488	227	26,526	0	0	--	0	--
1965	8	11	358	1,991	232	55	480	25,224	15	28,354	0	0	--	0	--
1970	3	18	256	4,339	725	58	480	30,039	26	35,923	0	0	--	0	--
1975	(s)	16	191	6,851	835	53	501	34,929	0	43,359	0	0	--	0	--
1980	0	13	184	7,924	813	34	522	32,432	0	41,909	0	0	--	0	--
1985	0	10	83	8,094	592	90	475	29,525	0	38,858	^f 820	0	--	0	--
1990	0	9	99	9,352	891	42	534	30,470	(s)	41,389	885	0	--	0	--
1995	0	11	72	10,762	1,046	58	510	33,345	0	45,793	1,811	0	--	0	--
1996	0	13	71	12,275	819	98	495	34,561	0	48,318	1,158	0	--	0	--
1997	0	11	78	11,914	793	91	522	34,040	0	47,438	1,410	0	--	0	--
1998	0	9	72	12,198	1,184	21	547	35,603	0	49,625	1,744	(s)	--	(s)	--
1999	0	8	81	12,341	885	4	553	35,681	0	49,544	1,888	(s)	--	(s)	--
2000	0	8	78	12,049	771	9	544	35,436	0	48,888	2,217	(s)	--	(s)	--
2001	0	9	57	12,111	777	82	499	35,020	0	48,546	2,330	(s)	--	(s)	--
2002	0	11	109	12,327	782	10	493	36,099	0	49,820	2,391	(s)	--	(s)	--
2003	0	10	95	12,529	793	48	456	36,273	0	50,194	2,555	(s)	--	(s)	--
2004	0	10	88	14,871	910	44	462	36,737	0	53,111	2,701	(s)	--	(s)	--
Trillion Btu															
1960	0.9	9.2	1.8	10.0	1.0	0.1	3.1	123.4	1.4	140.9	0.0	0.0	151.0	0.0	151.0
1965	0.2	11.2	1.8	11.6	1.3	0.2	2.9	132.5	0.1	150.4	0.0	0.0	161.8	0.0	161.8
1970	0.1	18.5	1.3	25.3	4.1	0.2	2.9	157.8	0.2	191.7	0.0	0.0	210.2	0.0	210.2
1975	(s)	16.2	1.0	39.9	4.7	0.2	3.0	183.5	0.0	232.3	0.0	0.0	248.5	0.0	248.5
1980	0.0	12.7	0.9	46.2	4.6	0.1	3.2	170.4	0.0	225.3	0.0	0.0	238.0	0.0	238.0
1985	0.0	10.5	0.4	47.1	3.3	0.3	2.9	155.1	0.0	209.2	^f 2.9	0.0	^f 222.5	0.0	^f 222.5
1990	0.0	9.2	0.5	54.5	5.0	0.2	3.2	160.1	(s)	223.5	3.1	0.0	235.8	0.0	235.8
1995	0.0	11.1	0.4	62.7	5.9	0.2	3.1	173.9	0.0	246.2	6.4	0.0	257.3	0.0	257.3
1996	0.0	12.7	0.4	71.5	4.6	0.4	3.0	180.3	0.0	260.1	4.1	0.0	272.9	0.0	272.9
1997	0.0	11.4	0.4	69.4	4.5	0.3	3.2	177.4	0.0	255.2	5.0	0.0	266.7	0.0	266.7
1998	0.0	8.9	0.4	71.1	6.7	0.1	3.3	185.6	0.0	267.1	6.2	(s)	276.0	(s)	276.0
1999	0.0	7.9	0.4	71.9	5.0	(s)	3.4	185.9	0.0	266.6	6.7	(s)	274.5	(s)	274.5
2000	0.0	8.3	0.4	70.2	4.4	(s)	3.3	184.6	0.0	262.9	7.8	(s)	271.3	(s)	271.3
2001	0.0	9.1	0.3	70.5	4.4	0.3	3.0	182.5	0.0	261.0	8.2	(s)	270.1	(s)	270.1
2002	0.0	11.1	0.5	71.8	4.4	(s)	3.0	188.0	0.0	267.8	8.5	(s)	278.9	(s)	278.9
2003	0.0	10.0	0.5	73.0	4.5	0.2	2.8	188.9	0.0	269.8	9.0	(s)	279.8	(s)	279.8
2004	0.0	10.3	0.4	86.6	5.2	0.2	2.8	191.6	0.0	286.8	9.6	(s)	297.1	(s)	297.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Iowa

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	2,118	49	39	259	0	298	0	879	--	0	0	0	0	--
1965	2,760	52	27	183	0	210	0	926	--	0	0	0	0	--
1970	4,030	78	49	327	0	375	0	934	--	0	0	0	0	--
1975	4,936	47	214	507	0	722	2,291	877	--	0	0	0	0	--
1980	10,745	7	63	168	0	231	2,563	945	--	0	0	0	0	--
1985	12,491	2	2	101	0	103	1,927	988	--	0	0	0	1,059	--
1990	15,482	4	0	123	0	123	3,012	875	--	i 0	i 0	i 0	0	--
1995	17,877	5	0	154	0	154	3,730	1,003	--	0	0	(s)	0	--
1996	17,994	3	0	140	0	140	3,924	935	--	0	0	(s)	0	--
1997	18,322	4	0	219	0	219	4,149	805	--	0	0	(s)	165	--
1998	20,163	6	0	275	0	275	3,768	913	--	0	0	(s)	67	--
1999	20,206	5	0	308	0	308	3,640	946	--	0	0	326	28	--
2000	21,317	5	0	223	0	223	4,453	904	--	0	0	494	(s)	--
2001	21,305	6	0	218	0	218	3,853	845	--	0	0	488	5	--
2002	21,504	5	0	136	0	136	4,574	946	--	0	0	919	0	--
2003	21,680	4	0	212	0	212	3,988	789	--	0	0	982	-1	--
2004	21,873	8	0	177	62	239	4,929	946	--	0	0	1,050	-1	--
Trillion Btu														
1960	44.0	50.3	0.2	1.5	0.0	1.8	0.0	9.5	0.3	0.0	0.0	0.0	0.0	105.8
1965	58.6	52.8	0.2	1.1	0.0	1.2	0.0	9.7	0.3	0.0	0.0	0.0	0.0	122.6
1970	84.2	78.6	0.3	1.9	0.0	2.2	0.0	9.8	0.4	0.0	0.0	0.0	0.0	175.2
1975	100.6	47.3	1.3	3.0	0.0	4.3	25.2	9.1	0.4	0.0	0.0	0.0	0.0	187.0
1980	200.2	6.9	0.4	1.0	0.0	1.4	28.0	9.8	0.3	0.0	0.0	0.0	0.0	246.6
1985	227.3	2.1	(s)	0.6	0.0	0.6	20.5	10.3	0.6	0.0	0.0	0.0	3.6	265.1
1990	276.0	4.2	0.0	0.7	0.0	0.7	31.9	9.1	i 0.2	i 0.0	i 0.0	i 0.0	0.0	i 322.0
1995	312.2	4.7	0.0	0.9	0.0	0.9	39.2	10.3	0.7	0.0	0.0	(s)	0.0	368.0
1996	312.5	3.4	0.0	0.8	0.0	0.8	41.2	9.7	0.7	0.0	0.0	(s)	0.0	368.3
1997	317.9	4.2	0.0	1.3	0.0	1.3	43.5	8.2	0.7	0.0	0.0	(s)	0.6	376.4
1998	358.1	6.0	0.0	1.6	0.0	1.6	39.5	9.3	0.8	0.0	0.0	(s)	0.2	415.5
1999	358.5	5.3	0.0	1.8	0.0	1.8	38.0	9.7	0.9	0.0	0.0	3.3	0.1	417.6
2000	378.2	4.8	0.0	1.3	0.0	1.3	46.4	9.2	0.8	0.0	0.0	5.0	(s)	445.8
2001	^R 378.2	5.7	0.0	1.3	0.0	1.3	40.3	8.7	1.1	0.0	0.0	5.0	(s)	^R 440.3
2002	375.4	5.3	0.0	0.8	0.0	0.8	47.7	9.6	1.0	0.0	0.0	9.3	0.0	449.3
2003	377.4	4.3	0.0	1.2	0.0	1.2	41.6	8.1	1.2	0.0	0.0	10.1	(s)	443.8
2004	379.9	8.3	0.0	1.0	0.4	1.4	51.4	9.5	1.2	0.0	0.0	10.5	(s)	462.2

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Kansas

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	675	361	2,198	170	4,739	952	696	5,590	737	23,712	2,403	5,801	46,998	0	20	--	--	-4,281	--
1965	644	443	3,061	493	5,257	1,053	1,813	6,521	770	25,525	1,066	6,186	51,744	0	13	--	--	-3,743	--
1970	458	576	2,188	326	7,550	1,561	306	8,009	655	28,849	1,127	6,618	57,189	0	7	--	--	-5,146	--
1975	3,117	499	2,162	177	11,273	1,310	100	8,857	773	32,004	6,365	8,568	71,589	0	5	--	--	-5,172	--
1980	10,370	488	3,019	221	14,764	2,466	492	8,404	1,011	29,584	1,498	8,430	69,890	0	8	--	--	-9,533	--
1985	14,715	355	1,700	137	14,902	4,424	57	24,510	920	28,209	86	5,705	80,652	3,856	9	--	--	-14,414	--
1990	15,175	353	3,875	136	16,697	3,701	27	15,565	1,035	28,626	229	7,809	77,701	7,874	13	--	--	-21,253	--
1995	16,521	367	3,911	146	18,223	2,414	28	4,924	988	29,402	31	5,872	65,938	10,062	11	--	--	-23,728	--
1996	19,084	362	3,581	177	16,570	2,009	37	10,442	959	30,927	289	7,941	72,932	8,205	11	--	--	-27,526	--
1997	17,673	338	2,115	247	16,375	2,130	58	14,557	1,013	30,695	257	8,119	75,565	8,430	14	--	--	-18,596	--
1998	17,736	327	2,699	199	15,930	2,157	50	14,121	1,060	32,001	269	7,344	75,831	10,411	11	--	--	-21,718	--
1999	19,003	303	2,358	240	15,660	3,476	360	21,741	1,071	33,550	570	7,585	86,611	9,157	12	--	--	-24,310	--
2000	20,845	312	2,470	215	14,849	3,234	36	17,401	1,055	31,894	937	7,230	79,323	9,061	15	--	--	-26,770	--
2001	20,316	273	4,157	196	15,550	2,259	41	11,122	967	30,297	1,301	7,799	73,689	10,347	26	--	--	-26,265	--
2002	22,838	305	3,767	127	16,359	2,135	31	10,659	955	28,571	991	7,535	71,131	9,042	13	--	--	-31,621	--
2003	22,738	281	3,077	102	16,600	3,228	20	16,944	883	32,721	2,160	8,045	83,780	8,890	12	--	--	-30,293	--
2004	22,341	263	3,572	117	17,155	3,104	22	14,808	895	31,814	2,184	8,135	81,806	10,133	13	--	--	-29,844	--

Trillion Btu																			
1960	15.7	373.7	14.6	0.9	27.6	5.1	3.9	22.4	4.5	124.6	15.1	34.8	253.4	0.0	0.2	3.9	0.0	-14.6	632.3
1965	15.3	440.8	20.3	2.5	30.6	5.7	10.3	26.2	4.7	134.1	6.7	37.0	278.0	0.0	0.1	3.4	0.0	-12.8	724.8
1970	10.7	574.5	14.5	1.6	44.0	8.6	1.7	30.3	4.0	151.5	7.1	39.5	302.8	0.0	0.1	3.7	0.0	-17.6	874.2
1975	62.3	490.7	14.3	0.9	65.7	7.2	0.6	32.9	4.7	168.1	40.0	51.2	385.6	0.0	(s)	5.8	0.0	-17.6	926.8
1980	191.6	482.0	20.0	1.1	86.0	13.8	2.8	30.9	6.1	155.4	9.4	50.1	375.7	0.0	0.1	9.0	0.0	-32.5	1,025.8
1985	259.5	354.8	11.3	0.7	86.8	24.8	0.3	88.3	5.6	148.2	0.5	34.1	400.7	41.0	0.1	11.5	(s)	-49.2	1,020.1
1990	271.7	352.6	25.7	0.7	97.3	20.7	0.2	56.4	6.3	150.4	1.4	46.1	405.1	83.3	0.1	11.8	0.1	-72.5	1,052.9
1995	289.7	367.7	26.0	0.7	106.2	13.7	0.2	17.8	6.0	153.3	0.2	34.9	358.9	105.7	0.1	10.3	0.2	-81.0	1,051.8
1996	338.3	360.9	23.8	0.9	96.5	11.4	0.2	37.7	5.8	161.3	1.8	46.0	385.5	86.2	0.1	10.5	0.2	-93.9	1,087.8
1997	310.9	338.6	14.0	1.2	95.4	12.1	0.3	52.6	6.1	160.0	1.6	47.1	390.5	88.5	0.1	8.4	0.2	-63.4	1,073.8
1998	309.4	325.0	17.9	1.0	92.8	12.2	0.3	51.0	6.4	166.8	1.7	42.6	392.7	109.2	0.1	7.7	0.3	-74.1	1,070.4
1999	329.3	302.0	15.6	1.2	91.2	19.7	2.0	78.6	6.5	174.8	3.6	43.9	437.3	95.7	0.1	8.0	0.3	-82.9	1,089.7
2000	362.8	314.9	16.4	1.1	86.5	18.3	0.2	62.8	6.4	166.2	5.9	41.8	405.5	94.5	0.2	7.7	0.3	-91.3	1,094.5
2001	354.6	273.9	27.6	1.0	90.6	12.8	0.2	40.2	5.9	157.8	8.2	45.5	389.7	108.1	0.3	8.3	0.7	-89.6	1,046.0
2002	391.7	304.4	25.0	0.6	95.3	12.1	0.2	38.5	5.8	148.8	6.2	43.9	376.4	94.4	0.1	8.4	5.1	-107.9	1,072.6
2003	389.5	292.6	20.4	0.5	96.7	18.3	0.1	61.5	5.4	170.4	13.6	46.9	433.7	92.6	0.1	8.7	4.1	-103.4	1,118.0
2004	385.5	273.3	23.7	0.6	99.9	17.6	0.1	53.6	5.4	165.9	13.7	47.3	427.9	105.7	0.1	8.8	4.0	-101.8	1,103.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kansas

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	37	73	53	303	3,447	3,804	157	--	--	2,360	--	5,835	--
1965	10	87	50	1,285	3,991	5,327	102	--	--	3,251	--	7,763	--
1970	6	97	53	116	4,825	4,994	80	--	--	5,348	--	12,944	--
1975	0	98	96	60	4,563	4,719	93	--	--	5,695	--	13,695	--
1980	1	85	150	5	2,083	2,237	439	--	--	7,189	--	17,334	--
1985	(s)	78	68	27	1,469	1,564	560	--	--	8,195	--	18,877	--
1990	(s)	71	28	11	1,182	1,222	317	--	--	9,515	--	22,010	--
1995	5	76	14	13	1,469	1,496	278	--	--	10,356	--	23,524	--
1996	9	85	17	19	1,971	2,008	289	--	--	10,672	--	24,275	--
1997	(s)	69	35	12	2,382	2,429	225	--	--	10,862	--	24,616	--
1998	(s)	70	11	18	2,538	2,567	200	--	--	11,832	--	26,841	--
1999	1	68	14	346	3,342	3,702	211	--	--	11,347	--	25,962	--
2000	1	71	17	20	2,598	2,635	227	--	--	12,528	--	28,504	--
2001	(s)	70	44	14	1,871	1,929	218	--	--	12,062	--	^R 27,129	--
2002	(s)	71	36	10	2,250	2,295	221	--	--	12,745	--	28,553	--
2003	(s)	70	18	11	2,406	2,435	232	--	--	12,602	--	27,994	--
2004	0	65	13	10	2,230	2,253	238	--	--	12,417	--	27,637	--
Trillion Btu													
1960	0.8	76.1	0.3	1.7	13.8	15.9	3.1	0.0	0.0	8.1	103.9	19.9	123.8
1965	0.2	86.4	0.3	7.3	16.0	23.6	2.0	0.0	0.0	11.1	123.3	26.5	149.8
1970	0.1	97.1	0.3	0.7	18.2	19.2	1.6	0.0	0.0	18.2	136.3	44.2	180.5
1975	0.0	96.6	0.6	0.3	17.0	17.9	1.9	0.0	0.0	19.4	135.7	46.7	182.4
1980	(s)	84.8	0.9	(s)	7.7	8.6	8.8	0.0	0.0	24.5	126.7	59.1	185.8
1985	(s)	78.3	0.4	0.2	5.3	5.8	11.2	0.0	0.0	28.0	123.4	64.4	187.8
1990	(s)	71.3	0.2	0.1	4.3	4.5	6.3	^f (s)	^f (s)	32.5	^f 114.6	75.1	^f 189.7
1995	0.1	76.1	0.1	0.1	5.3	5.5	5.6	(s)	(s)	35.3	122.6	80.3	202.9
1996	0.2	85.1	0.1	0.1	7.1	7.3	5.8	(s)	(s)	36.4	134.9	82.8	217.7
1997	(s)	69.6	0.2	0.1	8.6	8.9	4.5	(s)	(s)	37.1	120.1	84.0	204.1
1998	(s)	69.8	0.1	0.1	9.2	9.3	4.0	(s)	(s)	40.4	123.6	91.6	215.1
1999	(s)	67.8	0.1	2.0	12.1	14.1	4.2	(s)	(s)	38.7	125.0	88.6	213.5
2000	(s)	71.1	0.1	0.1	9.4	9.6	4.5	(s)	(s)	42.7	128.1	97.3	225.3
2001	(s)	71.4	0.3	0.1	6.8	7.1	4.4	(s)	(s)	41.2	124.1	^R 92.6	^R 216.7
2002	(s)	70.7	0.2	0.1	8.1	8.4	4.4	(s)	(s)	43.5	127.1	97.4	224.5
2003	(s)	73.3	0.1	0.1	8.7	8.9	4.6	0.1	(s)	43.0	129.9	95.5	225.5
2004	0.0	67.7	0.1	0.1	8.1	8.2	4.8	0.1	(s)	42.4	123.1	94.3	217.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kansas

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	25	41	115	87	608	179	47	1,036	0	--	--	1,727	--	4,272	--
1965	7	38	109	367	704	204	19	1,403	0	--	--	2,597	--	6,201	--
1970	4	53	115	33	851	215	34	1,249	0	--	--	3,967	--	9,602	--
1975	0	52	209	17	805	268	36	1,335	0	--	--	5,614	--	13,501	--
1980	4	59	360	10	368	279	0	1,016	0	--	--	6,806	--	16,410	--
1985	1	57	725	10	259	177	0	1,172	0	--	--	8,174	--	18,831	--
1990	(s)	56	329	6	209	162	27	732	^g 0	--	--	9,547	--	22,084	--
1995	33	53	562	6	259	74	12	913	0	--	--	10,645	--	24,182	--
1996	69	57	554	5	348	99	2	1,008	0	--	--	11,388	--	25,903	--
1997	2	41	473	28	420	90	0	1,011	0	--	--	12,043	--	27,292	--
1998	(s)	42	441	9	448	94	79	1,071	0	--	--	12,546	--	28,461	--
1999	6	39	474	4	590	61	0	1,129	0	--	--	12,258	--	28,047	--
2000	10	40	571	5	458	85	3	1,123	0	--	--	13,171	--	29,966	--
2001	(s)	38	807	7	330	78	7	1,229	0	--	--	13,215	--	^R 29,723	--
2002	(s)	39	636	5	397	43	9	1,090	0	--	--	13,773	--	30,855	--
2003	(s)	38	636	5	425	108	0	1,173	0	--	--	13,751	--	30,546	--
2004	0	37	576	8	393	81	0	1,059	0	--	--	13,831	--	30,784	--
Trillion Btu															
1960	0.6	42.6	0.7	0.5	2.4	0.9	0.3	4.8	0.0	0.1	0.0	5.9	54.0	14.6	68.5
1965	0.2	38.3	0.6	2.1	2.8	1.1	0.1	6.7	0.0	(s)	0.0	8.9	54.1	21.2	75.2
1970	0.1	52.5	0.7	0.2	3.2	1.1	0.2	5.4	0.0	(s)	0.0	13.5	71.6	32.8	104.4
1975	0.0	50.8	1.2	0.1	3.0	1.4	0.2	5.9	0.0	(s)	0.0	19.2	75.9	46.1	122.0
1980	0.1	58.5	2.1	0.1	1.4	1.5	0.0	5.0	0.0	0.2	0.0	23.2	87.0	56.0	143.0
1985	(s)	56.5	4.2	0.1	0.9	0.9	0.0	6.1	0.0	0.3	0.0	27.9	90.8	64.3	155.1
1990	(s)	56.0	1.9	(s)	0.8	0.9	0.2	3.7	^g 0.0	^g 0.7	^g (s)	32.6	^g 93.0	75.4	^g 168.4
1995	0.8	53.3	3.3	(s)	0.9	0.4	0.1	4.7	0.0	0.8	0.1	36.3	96.0	82.5	178.5
1996	1.7	57.0	3.2	(s)	1.3	0.5	(s)	5.0	0.0	0.8	0.1	38.9	103.5	88.4	191.9
1997	(s)	41.6	2.8	0.2	1.5	0.5	0.0	4.9	0.0	0.8	0.2	41.1	88.5	93.1	181.7
1998	(s)	41.5	2.6	(s)	1.6	0.5	0.5	5.2	0.0	0.7	0.2	42.8	90.4	97.1	187.5
1999	0.1	38.8	2.8	(s)	2.1	0.3	0.0	5.2	0.0	0.7	0.2	41.8	86.9	95.7	182.6
2000	0.2	40.6	3.3	(s)	1.7	0.4	(s)	5.5	0.0	0.7	0.2	44.9	92.2	102.2	194.5
2001	(s)	38.2	4.7	(s)	1.2	0.4	(s)	6.4	0.0	0.8	0.2	45.1	90.7	^R 101.4	^R 192.1
2002	(s)	38.7	3.7	(s)	1.4	0.2	0.1	5.4	0.0	0.8	0.3	47.0	92.2	105.3	197.5
2003	(s)	^R 39.4	3.7	(s)	1.5	0.6	0.0	5.8	0.0	0.8	0.3	46.9	^R 93.3	104.2	197.5
2004	0.0	38.3	3.4	(s)	1.4	0.4	0.0	5.3	0.0	0.8	0.4	47.2	91.9	105.0	196.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kansas

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	175	121	2,198	1,405	306	1,321	230	4,557	1,924	5,801	17,742	0	--	--	2,932	--	7,251	--
1965	148	155	3,061	1,553	160	1,530	303	3,535	755	6,186	17,084	0	--	--	3,902	--	9,319	--
1970	103	184	2,188	2,515	157	1,985	207	2,777	701	6,618	17,149	0	--	--	4,548	--	11,009	--
1975	134	152	2,162	3,532	23	3,125	253	2,406	2,178	8,564	22,244	0	--	--	6,214	--	14,945	--
1980	331	191	3,019	3,476	477	5,844	408	1,198	1,004	8,430	23,856	0	--	--	7,845	--	18,915	--
1985	363	161	1,700	4,058	20	22,687	371	1,064	66	5,705	35,671	0	--	--	7,167	--	16,511	--
1990	157	158	3,875	4,545	10	14,032	418	765	181	7,809	31,634	⁹ 0	--	--	8,087	--	18,708	--
1995	138	175	3,911	4,818	10	3,140	398	995	18	5,872	19,162	0	--	--	9,356	--	21,253	--
1996	154	158	3,581	4,825	13	8,100	387	1,021	133	7,941	26,000	0	--	--	9,231	--	20,996	--
1997	137	162	2,115	5,268	19	11,657	408	1,055	168	8,119	28,807	0	--	--	9,365	--	21,223	--
1998	109	145	2,699	4,850	23	11,109	428	1,156	184	7,344	27,793	0	--	--	9,762	--	22,145	--
1999	108	128	2,358	4,824	10	17,786	432	725	223	7,585	33,945	0	--	--	10,215	--	23,371	--
2000	134	139	2,470	4,478	11	14,315	426	716	401	7,230	30,047	0	--	--	10,222	--	23,257	--
2001	165	116	4,157	4,902	20	8,865	390	969	317	7,799	27,420	0	--	--	10,569	--	^R 23,771	--
2002	178	138	3,767	4,470	16	7,962	385	1,017	172	7,535	25,325	0	--	--	10,195	--	22,841	--
2003	158	125	3,077	4,801	4	14,066	356	1,094	624	8,045	32,067	0	--	--	10,382	--	23,062	--
2004	203	116	3,572	5,402	3	12,142	361	1,289	667	8,135	31,570	0	--	--	10,879	--	24,216	--
Trillion Btu																		
1960	4.0	125.7	14.6	8.2	1.7	5.3	1.4	23.9	12.1	34.8	102.0	0.0	0.7	0.0	10.0	242.3	24.7	267.1
1965	3.3	154.3	20.3	9.0	0.9	6.1	1.8	18.6	4.7	37.0	98.6	0.0	1.3	0.0	13.3	270.8	31.8	302.6
1970	2.2	184.1	14.5	14.7	0.9	7.5	1.3	14.6	4.4	39.5	97.3	0.0	2.0	0.0	15.5	301.1	37.6	338.7
1975	2.7	148.8	14.3	20.6	0.1	11.6	1.5	12.6	13.7	51.2	125.7	0.0	3.9	0.0	21.2	302.3	51.0	353.3
1980	7.1	189.7	20.0	20.2	2.7	21.5	2.5	6.3	6.3	50.1	129.7	0.0	0.0	0.0	26.8	353.3	64.5	417.8
1985	7.8	161.3	11.3	23.6	0.1	81.7	2.3	5.6	0.4	34.1	159.1	0.0	0.0	0.0	24.5	352.7	56.3	409.0
1990	3.8	157.7	25.7	26.5	0.1	50.9	2.5	4.0	1.1	46.1	156.8	⁹ 0.0	⁹ 4.7	⁹ 0.0	27.6	⁹ 350.6	63.8	⁹ 414.5
1995	3.3	176.0	26.0	28.1	0.1	11.4	2.4	5.2	0.1	34.9	108.0	0.0	4.0	0.0	31.9	323.3	72.5	395.9
1996	3.9	157.9	23.8	28.1	0.1	29.3	2.3	5.3	0.8	46.0	135.7	0.0	3.9	0.0	31.5	332.9	71.6	404.6
1997	3.4	162.8	14.0	30.7	0.1	42.2	2.5	5.5	1.1	47.1	143.1	0.0	3.2	0.0	32.0	344.3	72.4	416.7
1998	2.7	144.0	17.9	28.2	0.1	40.1	2.6	6.0	1.2	42.6	138.8	0.0	3.0	0.0	33.3	321.8	75.6	397.3
1999	2.7	127.6	15.6	28.1	0.1	64.3	2.6	3.8	1.4	43.9	159.8	0.0	3.1	0.0	34.9	328.0	79.7	407.7
2000	3.2	139.7	16.4	26.1	0.1	51.6	2.6	3.7	2.5	41.8	144.8	0.0	2.5	0.0	34.9	325.1	79.4	404.4
2001	3.9	117.9	27.6	28.6	0.1	32.0	2.4	5.1	2.0	45.5	143.2	0.0	^R 3.2	0.0	36.1	^R 304.2	^R 81.1	^R 385.3
2002	4.3	137.5	25.0	26.0	0.1	28.8	2.3	5.3	1.1	43.9	132.5	0.0	^R 3.2	0.0	34.8	^R 312.3	77.9	^R 390.2
2003	3.8	^R 130.6	20.4	28.0	(s)	51.0	2.2	5.7	3.9	46.9	158.1	0.0	^R 3.2	0.0	35.4	^R 331.2	78.7	^R 409.9
2004	5.0	120.6	23.7	31.5	(s)	43.9	2.2	6.7	4.2	47.3	159.5	0.0	3.3	0.0	37.1	325.5	82.6	408.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kansas

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	3	43	170	3,056	952	215	507	18,976	190	24,065	0	0	--	0	--
1965	(s)	50	493	3,473	1,053	295	467	21,786	137	27,704	0	0	--	0	--
1970	(s)	73	326	4,691	1,561	348	448	25,857	8	33,238	0	0	--	0	--
1975	(s)	69	177	5,898	1,310	364	520	29,331	17	37,615	0	0	--	0	--
1980	0	52	221	10,397	2,466	110	603	28,107	2	41,906	0	0	--	0	--
1985	0	38	137	9,856	4,424	95	549	26,968	0	42,031	^f 529	0	--	0	--
1990	0	41	136	11,665	3,701	142	618	27,700	0	43,962	175	0	--	0	--
1995	0	35	146	12,678	2,414	56	589	28,333	0	44,217	110	0	--	0	--
1996	0	38	177	10,998	2,009	23	572	29,807	0	43,586	68	0	--	0	--
1997	0	39	247	10,435	2,130	97	604	29,551	0	43,065	68	0	--	0	--
1998	0	33	199	10,333	2,157	26	633	30,751	3	44,102	84	0	--	0	--
1999	0	32	240	10,054	3,476	23	639	32,764	8	47,203	140	0	--	0	--
2000	0	29	215	9,513	3,234	30	630	31,094	0	44,715	62	0	--	0	--
2001	0	26	196	9,603	2,259	56	577	29,249	1	41,942	58	0	--	0	--
2002	0	36	127	11,097	2,135	50	570	27,511	7	41,498	705	0	--	0	--
2003	0	33	102	10,998	3,228	47	527	31,519	8	46,430	999	0	--	0	--
2004	0	35	117	11,059	3,104	43	534	30,444	8	45,309	100	0	--	0	--

Trillion Btu															
1960	0.1	44.3	0.9	17.8	5.1	0.9	3.1	99.7	1.2	128.6	0.0	0.0	172.9	0.0	172.9
1965	(s)	49.5	2.5	20.2	5.7	1.2	2.8	114.4	0.9	147.7	0.0	0.0	197.2	0.0	197.2
1970	(s)	73.2	1.6	27.3	8.6	1.3	2.7	135.8	0.1	177.5	0.0	0.0	250.7	0.0	250.7
1975	(s)	68.0	0.9	34.4	7.2	1.4	3.2	154.1	0.1	201.1	0.0	0.0	269.1	0.0	269.1
1980	0.0	52.0	1.1	60.6	13.8	0.4	3.7	147.6	(s)	227.2	0.0	0.0	279.2	0.0	279.2
1985	0.0	38.1	0.7	57.4	24.8	0.3	3.3	141.7	0.0	228.3	^f 1.9	0.0	^f 268.3	0.0	^f 268.3
1990	0.0	40.6	0.7	67.9	20.7	0.5	3.7	145.5	0.0	239.1	0.6	0.0	280.3	0.0	280.3
1995	0.0	34.7	0.7	73.9	13.7	0.2	3.6	147.8	0.0	239.8	0.4	0.0	274.5	0.0	274.5
1996	0.0	38.1	0.9	64.1	11.4	0.1	3.5	155.5	0.0	235.4	0.2	0.0	273.5	0.0	273.5
1997	0.0	39.2	1.2	60.8	12.1	0.4	3.7	154.0	0.0	232.2	0.2	0.0	271.4	0.0	271.4
1998	0.0	32.7	1.0	60.2	12.2	0.1	3.8	160.3	(s)	237.6	0.3	0.0	270.3	0.0	270.3
1999	0.0	31.6	1.2	58.6	19.7	0.1	3.9	170.7	(s)	254.2	0.5	0.0	285.8	0.0	285.8
2000	0.0	29.6	1.1	55.4	18.3	0.1	3.8	162.0	0.0	240.8	0.2	0.0	270.3	0.0	270.3
2001	0.0	26.1	1.0	55.9	12.8	0.2	3.5	152.4	(s)	225.8	0.2	0.0	251.9	0.0	251.9
2002	0.0	36.1	0.6	64.6	12.1	0.2	3.5	143.3	(s)	224.4	2.5	0.0	260.4	0.0	260.4
2003	0.0	34.8	0.5	64.1	18.3	0.2	3.2	164.1	(s)	250.4	3.5	0.0	285.2	0.0	285.2
2004	0.0	36.2	0.6	64.4	17.6	0.2	3.2	158.8	(s)	244.8	0.4	0.0	281.0	0.0	281.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Kansas

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	435	82	241	110	0	351	0	20	--	0	0	0	0	--
1965	478	113	156	71	0	226	0	13	--	0	0	0	0	--
1970	344	168	385	175	0	560	0	7	--	0	0	0	0	--
1975	2,983	128	4,134	1,539	4	5,676	0	5	--	0	0	0	0	--
1980	10,034	101	492	382	0	875	0	8	--	0	0	0	0	--
1985	14,351	21	20	195	0	215	3,856	9	--	0	0	(s)	0	--
1990	15,018	27	22	130	0	152	7,874	13	--	ⁱ 0	ⁱ 0	ⁱ (s)	0	--
1995	16,345	28	1	150	0	151	10,062	11	--	0	0	(s)	0	--
1996	18,852	23	155	176	0	331	8,205	11	--	0	0	0	0	--
1997	17,534	26	89	163	0	252	8,430	14	--	0	0	0	(s)	--
1998	17,627	37	4	294	0	298	10,411	11	--	0	0	0	4	--
1999	18,888	36	339	293	0	632	9,157	12	--	0	0	0	-7	--
2000	20,699	34	533	269	0	803	9,061	15	--	0	0	0	0	--
2001	20,150	23	976	193	0	1,169	10,347	26	--	0	0	40	0	--
2002	22,660	21	802	121	0	923	9,042	13	--	0	0	467	0	--
2003	22,580	14	1,528	147	0	1,675	8,890	12	--	0	0	366	0	--
2004	22,139	10	1,510	105	0	1,615	10,133	13	--	0	0	359	(s)	--
Trillion Btu														
1960	10.3	85.1	1.5	0.6	0.0	2.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	97.8
1965	11.6	112.4	1.0	0.4	0.0	1.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	125.5
1970	8.3	167.5	2.4	1.0	0.0	3.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	179.4
1975	59.5	126.7	26.0	9.0	(s)	35.0	0.0	(s)	0.0	0.0	0.0	0.0	0.0	221.2
1980	184.3	97.0	3.1	2.2	0.0	5.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	286.7
1985	251.7	20.5	0.1	1.1	0.0	1.3	41.0	0.1	0.0	0.0	0.0	(s)	0.0	314.5
1990	267.9	27.1	0.1	0.8	0.0	0.9	83.3	0.1	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ (s)	0.0	ⁱ 379.4
1995	285.5	27.6	(s)	0.9	0.0	0.9	105.7	0.1	0.0	0.0	0.0	(s)	0.0	419.8
1996	332.5	22.7	1.0	1.0	0.0	2.0	86.2	0.1	0.0	0.0	0.0	0.0	0.0	443.5
1997	307.5	25.5	0.6	1.0	0.0	1.5	88.5	0.1	0.0	0.0	0.0	0.0	(s)	423.1
1998	306.7	37.1	(s)	1.7	0.0	1.7	109.2	0.1	0.0	0.0	0.0	0.0	(s)	454.8
1999	326.5	36.3	2.1	1.7	0.0	3.8	95.7	0.1	0.0	0.0	0.0	0.0	(s)	462.4
2000	359.3	33.9	3.4	1.6	0.0	4.9	94.5	0.2	0.0	0.0	0.0	0.0	0.0	492.8
2001	350.8	20.2	6.1	1.1	0.0	7.3	108.1	0.3	0.0	0.0	0.0	0.4	0.0	487.0
2002	387.4	21.4	5.0	0.7	0.0	5.7	94.4	0.1	0.0	0.0	0.0	4.7	0.0	513.8
2003	385.6	14.5	9.6	0.9	0.0	10.5	92.6	0.1	0.0	0.0	0.0	3.7	0.0	507.1
2004	380.5	10.5	9.5	0.6	0.0	10.1	105.7	0.1	0.0	0.0	0.0	3.6	(s)	510.5

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Kentucky

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	12,010	149	1,482	652	4,850	497	1,585	4,152	544	21,535	337	2,195	37,827	0	2,633	--	--	38,552	--
1965	17,585	172	2,112	1,052	5,567	1,284	2,375	5,869	755	25,780	600	3,933	49,327	0	2,464	--	--	1,232	--
1970	23,558	248	3,090	330	8,211	3,089	3,094	9,564	842	33,581	1,063	7,036	69,900	0	3,174	--	--	-26,120	--
1975	25,556	208	2,622	129	10,924	2,150	1,577	10,977	1,048	40,816	2,169	9,060	81,471	0	3,463	--	--	8,653	--
1980	27,728	202	2,021	112	22,906	2,897	2,912	10,223	1,057	39,829	1,012	13,564	96,533	0	2,940	--	--	-3,849	--
1985	31,066	173	1,872	66	22,088	3,434	1,507	5,539	962	39,924	622	7,360	83,374	0	2,941	--	--	-23,490	--
1990	34,449	184	3,032	51	24,226	5,713	567	6,154	1,082	43,040	537	8,827	93,228	0	3,160	--	--	-16,549	--
1995	39,516	224	2,778	44	27,325	6,305	647	5,607	1,032	48,104	201	18,067	110,111	0	3,423	--	--	-11,018	--
1996	40,862	236	2,714	47	27,693	5,590	670	7,207	1,002	43,543	243	27,706	116,415	0	3,497	--	--	-10,215	--
1997	41,889	228	3,417	28	28,052	4,556	735	8,757	1,058	50,174	165	28,759	125,702	0	3,380	--	--	-20,154	--
1998	41,153	205	3,199	62	28,104	5,347	851	7,517	1,108	50,222	55	31,065	127,531	0	3,116	--	--	-23,447	--
1999	42,378	218	4,191	33	27,466	6,962	1,062	9,278	1,120	50,950	77	31,579	132,718	0	2,557	--	--	-17,838	--
2000	42,585	225	3,974	32	29,641	6,651	495	9,959	1,103	48,912	90	29,379	130,234	0	2,325	--	--	-25,676	--
2001	^R 43,907	209	3,334	90	30,721	6,001	403	9,928	1,010	51,268	143	16,398	119,295	0	3,856	--	--	^R -30,237	--
2002	^R 40,920	228	3,490	69	33,820	6,353	244	10,917	999	50,827	94	23,085	129,898	0	4,025	--	--	-6,650	--
2003	^R 40,827	223	3,817	60	25,934	8,046	256	8,830	923	52,702	123	21,986	122,678	0	3,948	--	--	^R -7,856	--
2004	41,874	225	3,326	71	30,286	9,042	285	9,621	935	55,267	64	25,287	134,185	0	3,780	--	--	-8,946	--
Trillion Btu																			
1960	286.7	153.8	9.8	3.3	28.2	2.7	9.0	16.7	3.3	113.1	2.1	13.0	201.3	0.0	28.3	22.4	0.0	131.5	824.1
1965	415.5	176.7	14.0	5.3	32.4	7.2	13.5	23.5	4.6	135.4	3.8	22.4	262.1	0.0	25.8	21.7	0.0	4.2	905.9
1970	527.1	252.3	20.5	1.7	47.8	17.4	17.5	36.1	5.1	176.4	6.7	40.0	369.3	0.0	33.3	23.7	0.0	-89.1	1,116.5
1975	558.3	209.2	17.4	0.6	63.6	12.1	8.9	40.8	6.4	214.4	13.6	52.0	429.9	0.0	36.0	30.8	0.0	29.5	1,293.8
1980	641.7	204.1	13.4	0.6	133.4	16.3	16.5	37.6	6.4	209.2	6.4	76.5	516.3	0.0	30.5	25.3	0.0	-13.1	1,404.8
1985	716.9	177.7	12.4	0.3	128.7	19.3	8.5	20.0	5.8	209.7	3.9	42.9	451.7	0.0	30.7	38.8	0.0	-80.1	1,339.4
1990	803.5	191.7	20.1	0.3	141.1	32.3	3.2	22.3	6.6	226.1	3.4	51.7	507.1	0.0	32.9	^j 17.4	^j 0.2	-56.5	^j 1,499.3
1995	929.4	245.6	18.4	0.2	159.2	35.7	3.7	20.3	6.3	250.9	1.3	101.4	597.3	0.0	35.3	15.5	0.4	-37.6	1,785.9
1996	952.1	248.1	18.0	0.2	161.3	31.7	3.8	26.0	6.1	227.1	1.5	153.1	628.9	0.0	36.2	18.5	0.5	-34.9	1,849.3
1997	977.8	239.3	22.7	0.1	163.4	25.8	4.2	31.7	6.4	261.6	1.0	159.1	676.0	0.0	34.5	13.0	0.5	-68.8	1,872.3
1998	959.0	212.1	21.2	0.3	163.7	30.3	4.8	27.2	6.7	261.8	0.3	173.1	689.5	0.0	31.8	11.1	0.6	-80.0	1,824.1
1999	987.6	225.4	27.8	0.2	160.0	39.5	6.0	33.5	6.8	265.5	0.5	175.4	715.2	0.0	26.1	11.6	0.6	-60.9	1,905.7
2000	997.6	234.2	26.4	0.2	172.7	37.7	2.8	35.9	6.7	254.8	0.6	162.1	699.8	0.0	23.7	11.9	0.6	-87.6	1,880.2
2001	^R 1,013.1	216.7	22.1	0.5	179.0	34.0	2.3	35.9	6.1	267.1	0.9	93.9	641.8	0.0	39.8	^R 12.7	0.7	^R -103.2	^R 1,821.6
2002	^R 950.9	235.0	23.2	0.3	197.0	36.0	1.4	39.4	6.1	264.7	0.6	134.1	702.8	0.0	40.9	^R 21.2	0.7	-22.7	^R 1,928.9
2003	^R 943.7	^R 230.4	25.3	0.3	151.1	45.6	1.5	32.0	5.6	274.4	0.8	127.4	664.1	0.0	40.4	^R 25.0	0.9	-26.8	^R 1,877.6
2004	961.8	231.8	22.1	0.4	176.4	51.3	1.6	34.8	5.7	288.2	0.4	147.0	727.8	0.0	37.9	26.7	1.0	-30.5	1,956.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kentucky

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	428	63	242	897	1,396	2,534	744	--	--	2,760	--	6,826	--
1965	274	64	278	1,653	1,594	3,526	562	--	--	3,763	--	8,985	--
1970	296	86	403	2,077	3,356	5,836	505	--	--	6,987	--	16,912	--
1975	88	79	442	1,073	3,740	5,255	542	--	--	9,586	--	23,052	--
1980	60	74	820	1,751	2,063	4,633	759	--	--	13,075	--	31,526	--
1985	55	60	856	833	1,586	3,276	1,338	--	--	14,539	--	33,494	--
1990	30	56	748	321	1,825	2,895	683	--	--	16,814	--	38,894	--
1995	17	66	723	415	2,260	3,397	542	--	--	20,537	--	46,653	--
1996	14	70	662	438	3,033	4,134	563	--	--	21,353	--	48,570	--
1997	39	66	658	486	3,018	4,162	294	--	--	20,998	--	47,587	--
1998	26	56	585	611	2,289	3,485	261	--	--	21,669	--	49,157	--
1999	48	59	523	864	2,797	4,184	275	--	--	22,548	--	51,588	--
2000	21	65	527	316	2,775	3,618	295	--	--	23,374	--	53,181	--
2001	24	57	456	271	1,841	2,568	237	--	--	23,698	--	^R 53,299	--
2002	30	59	405	169	1,997	2,571	241	--	--	25,347	--	56,784	--
2003	26	62	485	182	2,321	2,989	253	--	--	24,704	--	54,876	--
2004	30	56	440	207	2,256	2,903	260	--	--	25,187	--	56,061	--
Trillion Btu													
1960	10.5	65.2	1.4	5.1	5.6	12.1	14.9	0.0	0.0	9.4	112.1	23.3	135.4
1965	6.6	65.9	1.6	9.4	6.4	17.4	11.2	0.0	0.0	12.8	114.0	30.7	144.7
1970	6.9	87.9	2.3	11.8	12.7	26.8	10.1	0.0	0.0	23.8	155.6	57.7	213.3
1975	2.0	79.8	2.6	6.1	13.9	22.6	10.8	0.0	0.0	32.7	147.9	78.7	226.6
1980	1.4	74.9	4.8	9.9	7.6	22.3	15.2	0.0	0.0	44.6	158.4	107.6	266.0
1985	1.3	61.9	5.0	4.7	5.7	15.4	26.8	0.0	0.0	49.6	155.0	114.3	269.3
1990	0.7	58.3	4.4	1.8	6.6	12.8	13.7	^f 0.2	^f (s)	57.4	^f 143.1	132.7	^f 275.8
1995	0.4	72.5	4.2	2.4	8.2	14.7	10.8	0.3	(s)	70.1	168.9	159.2	328.1
1996	0.3	73.7	3.9	2.5	11.0	17.3	11.3	0.3	(s)	72.9	175.8	165.7	341.5
1997	0.9	69.4	3.8	2.8	10.9	17.5	5.9	0.3	(s)	71.6	165.6	162.4	328.0
1998	0.7	57.5	3.4	3.5	8.3	15.1	5.2	0.3	(s)	73.9	152.7	167.7	320.5
1999	1.3	61.1	3.0	4.9	10.1	18.1	5.5	0.4	(s)	76.9	163.3	176.0	339.3
2000	0.6	67.3	3.1	1.8	10.0	14.9	5.9	0.4	(s)	79.8	168.7	181.5	350.2
2001	0.6	59.1	2.7	1.5	6.7	10.8	4.7	0.4	(s)	80.9	156.6	^R 181.9	^R 338.4
2002	0.7	61.0	2.4	1.0	7.2	10.5	4.8	0.5	(s)	86.5	164.0	193.7	357.8
2003	0.6	^R 63.9	2.8	1.0	8.4	12.3	5.1	0.6	(s)	84.3	^R 166.8	187.2	^R 354.0
2004	0.7	58.0	2.6	1.2	8.2	11.9	5.2	0.6	(s)	85.9	162.4	191.3	353.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kentucky

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	298	18	501	176	246	336	4	1,263	0	--	--	1,590	--	3,933	--
1965	206	21	576	325	281	268	8	1,459	0	--	--	2,166	--	5,172	--
1970	233	42	835	408	592	263	11	2,110	0	--	--	3,465	--	8,386	--
1975	204	38	915	211	660	275	7	2,069	0	--	--	6,489	--	15,605	--
1980	227	39	2,632	622	364	250	19	3,887	0	--	--	8,432	--	20,331	--
1985	194	34	1,579	92	280	377	1	2,329	0	--	--	9,465	--	21,804	--
1990	121	32	762	94	322	445	(s)	1,623	^g 0	--	--	11,740	--	27,158	--
1995	113	39	1,114	117	399	42	0	1,672	0	--	--	13,521	--	30,714	--
1996	103	41	1,193	111	535	40	(s)	1,879	0	--	--	13,736	--	31,244	--
1997	315	39	934	113	533	40	0	1,619	0	--	--	15,238	--	34,532	--
1998	206	32	1,059	130	404	80	0	1,673	0	--	--	15,921	--	36,117	--
1999	353	36	1,097	67	494	39	1	1,697	0	--	--	16,496	--	37,743	--
2000	170	39	1,082	70	490	40	8	1,689	0	--	--	17,252	--	39,252	--
2001	194	35	1,123	58	325	42	6	1,553	0	--	--	17,601	--	^R 39,585	--
2002	222	36	1,068	32	352	42	0	1,494	0	--	--	18,107	--	40,565	--
2003	177	38	766	39	410	42	0	1,256	0	--	--	17,946	--	39,864	--
2004	244	37	804	32	398	42	0	1,276	0	--	--	18,443	--	41,052	--
Trillion Btu															
1960	7.3	18.9	2.9	1.0	1.0	1.8	(s)	6.7	0.0	0.3	0.0	5.4	38.6	13.4	52.0
1965	5.0	21.9	3.4	1.8	1.1	1.4	(s)	7.8	0.0	0.2	0.0	7.4	42.3	17.6	60.0
1970	5.5	43.2	4.9	2.3	2.2	1.4	0.1	10.9	0.0	0.2	0.0	11.8	71.5	28.6	100.1
1975	4.7	38.8	5.3	1.2	2.5	1.4	(s)	10.5	0.0	0.2	0.0	22.1	76.4	53.2	129.6
1980	5.4	39.7	15.3	3.5	1.3	1.3	0.1	21.6	0.0	0.4	0.0	28.8	95.9	69.4	165.3
1985	4.7	34.8	9.2	0.5	1.0	2.0	(s)	12.7	0.0	0.6	0.0	32.3	85.1	74.4	159.5
1990	2.9	33.1	4.4	0.5	1.2	2.3	(s)	8.5	^g 0.0	^g 1.5	^g 0.0	40.1	^g 86.1	92.7	^g 178.7
1995	2.8	42.3	6.5	0.7	1.4	0.2	0.0	8.8	0.0	1.5	0.1	46.1	101.7	104.8	206.5
1996	2.5	43.0	6.9	0.6	1.9	0.2	(s)	9.7	0.0	1.5	0.1	46.9	103.8	106.6	210.4
1997	7.3	40.6	5.4	0.6	1.9	0.2	0.0	8.2	0.0	1.0	0.2	52.0	109.2	117.8	227.1
1998	5.3	33.6	6.2	0.7	1.5	0.4	0.0	8.8	0.0	0.9	0.2	54.3	103.0	123.2	226.2
1999	9.3	37.0	6.4	0.4	1.8	0.2	(s)	8.8	0.0	0.9	0.2	56.3	112.4	128.8	241.2
2000	4.5	40.2	6.3	0.4	1.8	0.2	0.1	8.7	0.0	1.0	0.2	58.9	113.5	133.9	247.4
2001	4.8	36.6	6.5	0.3	1.2	0.2	(s)	8.3	0.0	0.8	0.2	60.1	110.8	^R 135.1	^R 245.9
2002	5.5	37.1	6.2	0.2	1.3	0.2	0.0	7.9	0.0	0.9	0.3	61.8	113.3	138.4	251.8
2003	4.3	39.4	4.5	0.2	1.5	0.2	0.0	6.4	0.0	0.9	0.3	61.2	112.6	136.0	248.6
2004	5.9	38.0	4.7	0.2	1.4	0.2	0.0	6.5	0.0	0.9	0.4	62.9	114.6	140.1	254.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kentucky

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	3,754	46	1,482	1,558	512	2,476	138	485	289	2,195	9,134	0	--	--	23,818	--	58,904
1965	4,879	58	2,112	1,987	397	3,957	346	430	536	3,933	13,698	0	--	--	20,893	--	49,890
1970	4,325	75	3,090	2,078	608	5,562	474	209	786	7,036	19,843	0	--	--	20,586	--	49,826
1975	2,898	66	2,622	3,346	293	6,511	518	195	2,059	9,060	24,603	0	--	--	31,006	--	74,564
1980	3,058	66	2,021	6,433	539	7,784	539	89	857	13,564	31,825	0	--	--	28,280	--	68,187
1985	3,732	63	1,872	5,838	582	3,574	490	843	621	7,360	21,180	0	--	--	26,564	--	61,193
1990	3,431	72	3,032	6,054	152	3,941	552	848	537	8,827	23,942	⁹ 0	--	--	32,543	--	75,280
1995	3,679	93	2,778	6,120	115	2,902	526	1,168	201	18,067	31,877	0	--	--	40,490	--	91,978
1996	3,674	97	2,714	6,097	121	3,589	511	1,199	243	27,706	42,180	0	--	--	41,930	--	95,373
1997	3,254	98	3,417	5,682	136	5,148	540	1,230	165	28,759	45,078	0	--	--	40,600	--	92,007
1998	2,724	96	3,199	5,889	110	4,805	565	821	55	30,344	45,788	0	--	--	38,260	--	86,792
1999	2,382	101	4,191	4,946	131	5,962	571	820	77	31,579	48,276	0	--	--	40,054	--	91,643
2000	2,214	104	3,974	4,436	110	6,638	562	827	81	29,379	46,007	0	--	--	37,689	--	85,749
2001	^R 2,384	97	3,334	5,340	74	7,698	515	1,720	136	16,398	35,214	0	--	--	38,676	--	^R 86,986
2002	^R 2,063	107	3,490	5,252	43	8,429	509	1,739	92	16,171	35,726	0	--	--	43,812	--	98,152
2003	^R 2,103	105	3,817	4,240	35	6,043	471	1,919	120	16,234	32,878	0	--	--	42,570	--	94,564
2004	2,257	117	3,326	4,154	46	6,886	477	2,196	58	18,192	35,334	0	--	--	42,891	--	95,469

Trillion Btu																	
1960	95.9	47.7	9.8	9.1	2.9	9.9	0.8	2.5	1.8	13.0	50.0	0.0	7.3	0.0	81.3	282.1	483.1
1965	123.9	60.0	14.0	11.6	2.3	15.9	2.1	2.3	3.4	22.4	73.8	0.0	10.2	0.0	71.3	339.3	509.5
1970	105.9	76.1	20.5	12.1	3.4	21.0	2.9	1.1	4.9	40.0	106.0	0.0	13.4	0.0	70.2	371.7	541.7
1975	71.1	66.6	17.4	19.5	1.7	24.2	3.1	1.0	12.9	52.0	131.9	0.0	19.8	0.0	105.8	395.2	649.6
1980	76.1	66.4	13.4	37.5	3.1	28.6	3.3	0.5	5.4	76.5	168.2	0.0	9.7	0.0	96.5	416.9	649.6
1985	94.2	65.1	12.4	34.0	3.3	12.9	3.0	4.4	3.9	42.9	116.8	0.0	11.4	0.0	90.6	378.2	587.0
1990	87.1	74.4	20.1	35.3	0.9	14.3	3.3	4.5	3.4	51.7	133.4	⁹ 0.0	⁹ 2.2	⁹ 0.0	111.0	⁹ 408.2	⁹ 665.0
1995	94.2	102.4	18.4	35.6	0.7	10.5	3.2	6.1	1.3	101.4	177.2	0.0	3.2	0.0	138.2	515.1	828.9
1996	93.7	101.7	18.0	35.5	0.7	13.0	3.1	6.3	1.5	153.1	231.1	0.0	5.7	0.0	143.1	575.3	900.7
1997	82.8	103.1	22.7	33.1	0.8	18.6	3.3	6.4	1.0	159.1	245.0	0.0	6.1	0.0	138.5	575.5	889.4
1998	70.9	98.8	21.2	34.3	0.6	17.4	3.4	4.3	0.3	168.8	250.4	0.0	5.1	0.0	130.5	555.7	851.9
1999	62.3	104.3	27.8	28.8	0.7	21.6	3.5	4.3	0.5	175.4	262.6	0.0	5.2	0.0	136.7	571.0	883.7
2000	59.6	107.9	26.4	25.8	0.6	23.9	3.4	4.3	0.5	162.1	247.1	0.0	5.0	0.0	128.6	548.2	840.8
2001	^R 63.6	101.0	22.1	31.1	0.4	27.8	3.1	9.0	0.9	93.9	188.3	0.0	^R 7.1	0.0	132.0	^R 492.0	^R 788.7
2002	^R 55.8	110.5	23.2	30.6	0.2	30.5	3.1	9.1	0.6	92.4	189.6	0.0	^R 15.5	0.0	149.5	^R 520.9	^R 855.8
2003	^R 56.2	108.5	25.3	24.7	0.2	21.9	2.9	10.0	0.8	92.8	178.5	0.0	^R 18.7	0.0	145.2	^R 507.2	^R 829.8
2004	60.4	120.2	22.1	24.2	0.3	24.9	2.9	11.5	0.4	104.2	190.4	0.0	19.6	0.0	146.3	537.0	862.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Kentucky

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	64	19	652	2,549	497	34	405	20,715	35	24,886	0	0	--	0	--
1965	16	28	1,052	2,725	1,284	36	409	25,082	42	30,630	0	0	--	0	--
1970	7	36	330	4,891	3,089	54	368	33,109	145	41,986	0	0	--	0	--
1975	(s)	24	129	6,215	2,150	66	530	40,346	2	49,437	0	0	--	0	--
1980	0	21	112	12,795	2,897	13	518	39,490	136	55,961	0	0	--	0	--
1985	0	14	66	13,546	3,434	98	471	38,704	0	56,319	^f 1,046	0	--	0	--
1990	0	25	51	16,449	5,713	65	531	41,748	0	64,555	841	0	--	0	--
1995	0	25	44	19,086	6,305	47	506	46,894	0	72,882	130	0	--	0	--
1996	0	27	47	19,433	5,590	50	491	42,303	0	67,914	134	0	--	0	--
1997	0	23	28	20,512	4,556	58	519	48,904	0	74,578	159	0	--	0	--
1998	0	16	62	20,278	5,347	19	543	49,322	0	75,571	94	0	--	0	--
1999	0	17	33	20,637	6,962	26	549	50,091	0	78,298	88	0	--	0	--
2000	0	14	32	23,286	6,651	56	541	48,045	0	78,610	67	0	--	0	--
2001	0	15	90	23,577	6,001	65	495	49,506	1	79,735	97	0	--	0	--
2002	0	12	69	26,760	6,353	139	490	49,046	2	82,858	630	0	--	0	--
2003	0	14	60	20,134	8,046	56	453	50,741	3	79,493	1,407	0	--	0	--
2004	0	10	71	24,634	9,042	81	458	53,029	6	87,322	1,229	0	--	0	--

Trillion Btu															
1960	1.6	19.6	3.3	14.8	2.7	0.1	2.5	108.8	0.2	132.5	0.0	0.0	153.6	0.0	153.6
1965	0.4	28.4	5.3	15.9	7.2	0.1	2.5	131.8	0.3	163.0	0.0	0.0	191.8	0.0	191.8
1970	0.2	36.3	1.7	28.5	17.4	0.2	2.2	173.9	0.9	224.8	0.0	0.0	261.3	0.0	261.3
1975	(s)	23.7	0.6	36.2	12.1	0.2	3.2	211.9	(s)	264.4	0.0	0.0	288.1	0.0	288.1
1980	0.0	21.1	0.6	74.5	16.3	(s)	3.1	207.4	0.9	302.9	0.0	0.0	324.0	0.0	324.0
1985	0.0	14.7	0.3	78.9	19.3	0.4	2.9	203.3	0.0	305.1	^f 3.7	0.0	^f 323.5	0.0	^f 323.5
1990	0.0	25.6	0.3	95.8	32.3	0.2	3.2	219.3	0.0	351.1	3.0	0.0	379.7	0.0	379.7
1995	0.0	27.4	0.2	111.2	35.7	0.2	3.1	244.6	0.0	394.9	0.5	0.0	422.4	0.0	422.4
1996	0.0	27.8	0.2	113.2	31.7	0.2	3.0	220.7	0.0	368.9	0.5	0.0	396.8	0.0	396.8
1997	0.0	24.1	0.1	119.5	25.8	0.2	3.1	254.9	0.0	403.8	0.6	0.0	427.8	0.0	427.8
1998	0.0	16.3	0.3	118.1	30.3	0.1	3.3	257.1	0.0	409.2	0.3	0.0	425.5	0.0	425.5
1999	0.0	17.2	0.2	120.2	39.5	0.1	3.3	261.0	0.0	424.3	0.3	0.0	441.5	0.0	441.5
2000	0.0	14.5	0.2	135.6	37.7	0.2	3.3	250.3	0.0	427.3	0.2	0.0	441.8	0.0	441.8
2001	0.0	15.5	0.5	137.3	34.0	0.2	3.0	257.9	(s)	433.0	0.3	0.0	448.5	0.0	448.5
2002	0.0	12.5	0.3	155.9	36.0	0.5	3.0	255.4	(s)	451.2	2.2	0.0	463.6	0.0	463.6
2003	0.0	14.8	0.3	117.3	45.6	0.2	2.7	264.2	(s)	430.4	5.0	0.0	445.2	0.0	445.2
2004	0.0	10.5	0.4	143.5	51.3	0.3	2.8	276.5	(s)	474.8	4.3	0.0	485.3	0.0	485.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Kentucky

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	7,466	2	9	(s)	0	10	0	2,633	--	0	0	0	0	--
1965	12,210	(s)	14	(s)	0	14	0	2,464	--	0	0	0	0	--
1970	18,698	9	121	4	0	124	0	3,174	--	0	0	0	0	--
1975	22,366	(s)	100	7	0	108	0	3,463	--	0	0	0	0	--
1980	24,383	2	0	227	0	227	0	2,940	--	0	0	0	0	--
1985	27,085	1	0	270	0	270	0	2,941	--	0	0	0	0	--
1990	30,867	(s)	0	212	0	212	0	3,160	--	i 0	i 0	i 0	0	--
1995	35,707	1	0	282	0	282	0	3,423	--	0	0	0	0	--
1996	37,071	2	0	308	0	308	0	3,497	--	0	0	0	0	--
1997	38,281	2	0	266	0	266	0	3,380	--	0	0	0	0	--
1998	38,197	6	0	292	721	1,013	0	3,116	--	0	0	0	0	--
1999	39,595	6	0	263	0	263	0	2,557	--	0	0	0	0	--
2000	40,180	4	0	309	0	309	0	2,325	--	0	0	0	0	--
2001	41,305	4	0	225	0	225	0	3,856	--	0	0	0	0	--
2002	38,605	14	0	335	6,914	7,249	0	4,025	--	0	0	0	0	--
2003	38,521	4	0	310	5,752	6,062	0	3,948	--	0	0	0	0	--
2004	39,342	5	0	255	7,096	7,351	0	3,780	--	0	0	0	0	--
Trillion Btu														
1960	171.5	2.4	0.1	(s)	0.0	0.1	0.0	28.3	0.0	0.0	0.0	0.0	0.0	202.3
1965	279.5	0.5	0.1	(s)	0.0	0.1	0.0	25.8	0.0	0.0	0.0	0.0	0.0	305.8
1970	408.6	8.7	0.8	(s)	0.0	0.8	0.0	33.3	0.0	0.0	0.0	0.0	0.0	451.3
1975	480.4	0.3	0.6	(s)	0.0	0.7	0.0	36.0	0.0	0.0	0.0	0.0	0.0	517.4
1980	558.8	1.9	0.0	1.3	0.0	1.3	0.0	30.5	0.0	0.0	0.0	0.0	0.0	592.6
1985	616.7	1.1	0.0	1.6	0.0	1.6	0.0	30.7	0.0	0.0	0.0	0.0	0.0	650.2
1990	712.8	0.3	0.0	1.2	0.0	1.2	0.0	32.9	i 0.0	i 0.0	i 0.0	i 0.0	0.0	i 747.2
1995	831.9	0.9	0.0	1.6	0.0	1.6	0.0	35.3	0.0	0.0	0.0	0.0	0.0	869.8
1996	855.6	1.9	0.0	1.8	0.0	1.8	0.0	36.2	0.0	0.0	0.0	0.0	0.0	895.4
1997	886.7	2.2	0.0	1.5	0.0	1.5	0.0	34.5	0.0	0.0	0.0	0.0	0.0	925.0
1998	882.2	5.9	0.0	1.7	4.3	6.0	0.0	31.8	0.0	0.0	0.0	0.0	0.0	925.9
1999	914.8	5.8	0.0	1.5	0.0	1.5	0.0	26.1	0.0	0.0	0.0	0.0	0.0	948.2
2000	933.0	4.3	0.0	1.8	0.0	1.8	0.0	23.7	0.0	0.0	0.0	0.0	0.0	962.8
2001	R 944.1	4.5	0.0	1.3	0.0	1.3	0.0	39.8	0.0	0.0	0.0	0.0	0.0	R 989.8
2002	888.9	14.0	0.0	2.0	41.7	43.6	0.0	40.9	0.0	0.0	0.0	0.0	0.0	987.5
2003	882.5	3.8	0.0	1.8	34.7	36.5	0.0	40.4	0.3	0.0	0.0	0.0	0.0	963.5
2004	894.7	5.0	0.0	1.5	42.7	44.2	0.0	37.9	1.0	0.0	0.0	0.0	0.0	982.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Louisiana

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	0	970	2,201	847	10,710	3,207	927	21,646	1,259	22,550	8,769	16,663	88,779	0	0	--	--	-2,207	--
1965	(s)	1,110	2,539	1,055	8,357	6,097	803	31,150	1,483	27,404	7,889	22,380	109,158	0	0	--	--	367	--
1970	0	1,841	2,210	447	11,799	5,879	2,509	47,555	1,590	34,850	11,118	32,499	150,456	0	0	--	--	235	--
1975	0	1,789	2,812	295	21,502	6,082	2,418	52,953	1,826	43,192	28,410	50,685	210,174	0	0	--	--	1,801	--
1980	111	1,794	1,946	255	22,579	8,644	5,711	52,872	1,999	47,157	64,084	88,497	293,743	0	0	--	--	35,627	--
1985	9,217	1,386	1,835	171	26,702	12,803	187	70,430	1,819	49,302	24,717	52,809	240,776	2,457	0	--	--	61,577	--
1990	12,547	1,588	1,672	108	30,065	25,879	81	47,504	2,047	43,967	22,982	85,229	259,533	14,197	656	--	--	20,355	--
1995	13,357	1,679	1,652	87	36,584	28,853	37	66,974	1,953	47,247	23,059	82,552	288,998	15,686	952	--	--	20,743	--
1996	12,534	1,616	1,720	81	42,641	29,030	54	66,649	1,895	50,871	26,543	59,808	279,292	15,765	964	--	--	51,402	--
1997	13,874	1,661	5,289	98	43,942	30,459	122	47,298	2,002	46,918	21,535	60,628	258,290	13,511	1,036	--	--	44,652	--
1998	13,891	1,569	1,697	78	40,826	28,643	130	46,693	2,096	50,105	21,955	55,871	248,094	16,428	1,063	--	--	28,817	--
1999	13,953	1,495	1,520	87	36,166	34,016	87	75,103	2,118	49,717	22,123	57,989	278,926	13,112	802	--	--	43,468	--
2000	15,737	1,537	1,390	84	38,779	35,399	99	111,059	2,086	54,489	29,246	55,061	327,692	15,796	532	--	--	41,090	--
2001	14,934	1,306	1,552	286	42,485	34,460	1,140	75,798	1,911	53,482	13,596	101,118	325,828	17,336	732	--	--	^R 32,323	--
2002	14,676	1,426	1,806	62	41,229	37,678	738	80,954	1,889	55,065	11,749	100,353	331,522	17,305	891	--	--	29,917	--
2003	15,592	1,308	1,961	102	32,632	38,123	1,522	45,831	1,746	57,453	14,218	107,310	300,899	16,126	892	--	--	45,651	--
2004	16,059	1,346	1,178	56	33,189	35,840	2,104	52,196	1,769	55,744	15,277	113,139	310,492	17,080	1,099	--	--	41,205	--
Trillion Btu																			
1960	0.0	1,003.8	14.6	4.3	62.4	17.4	5.3	86.8	7.6	118.5	55.1	99.8	471.8	0.0	0.0	39.0	0.0	-7.5	1,507.0
1965	(s)	1,156.4	16.8	5.3	48.7	33.8	4.6	124.9	9.0	144.0	49.6	133.1	569.8	0.0	0.0	38.3	0.0	1.3	1,765.8
1970	0.0	1,894.2	14.7	2.3	68.7	32.6	14.2	179.7	9.6	183.1	69.9	191.7	766.5	0.0	0.0	41.6	0.0	0.8	2,703.1
1975	0.0	1,854.8	18.7	1.5	125.2	33.9	13.7	196.7	11.1	226.9	178.6	294.9	1,101.1	0.0	0.0	42.4	0.0	6.1	3,004.4
1980	2.5	1,862.2	12.9	1.3	131.5	48.4	32.4	194.3	12.1	247.7	402.9	505.5	1,589.0	0.0	0.0	64.7	0.0	121.6	3,639.9
1985	159.1	1,441.8	12.2	0.9	155.5	72.0	1.1	253.8	11.0	259.0	155.4	309.0	1,229.8	26.1	0.0	78.5	0.0	210.1	3,146.2
1990	208.9	1,654.7	11.1	0.5	175.1	146.1	0.5	172.2	12.4	231.0	144.5	487.6	1,381.0	150.2	6.8	ⁱ 118.2	ⁱ 0.2	69.5	ⁱ 3,589.8
1995	216.8	1,737.3	11.0	0.4	213.1	163.6	0.2	242.6	11.8	246.4	145.0	473.9	1,508.0	164.8	9.8	141.4	0.3	70.8	3,849.3
1996	205.4	1,687.6	11.4	0.4	248.4	164.6	0.3	240.8	11.5	265.3	166.9	354.6	1,464.2	165.6	10.0	142.1	0.4	175.4	3,850.6
1997	226.1	1,857.1	35.1	0.5	256.0	172.7	0.7	171.0	12.1	244.6	135.4	359.3	1,387.3	141.8	10.6	138.7	0.4	152.4	3,914.3
1998	225.3	1,679.0	11.3	0.4	237.8	162.4	0.7	168.7	12.7	261.1	138.0	332.0	1,325.2	172.3	10.8	136.2	0.5	98.3	3,647.7
1999	227.7	1,558.3	10.1	0.4	210.7	192.9	0.5	271.6	12.8	259.1	139.1	344.3	1,441.4	137.0	8.2	139.7	0.5	148.3	3,661.1
2000	253.3	1,625.9	9.2	0.4	225.9	200.7	0.6	400.6	12.7	283.9	183.9	327.2	1,645.0	164.7	5.4	136.5	0.5	140.2	3,971.5
2001	240.0	^R 1,341.8	10.3	1.4	247.5	195.4	6.5	273.9	11.6	278.6	85.5	580.4	1,691.1	181.1	7.6	^R 130.1	0.6	^R 110.3	^R 3,702.5
2002	232.1	^R 1,526.3	12.0	0.3	240.2	213.6	4.2	292.5	11.5	286.8	73.9	576.0	1,710.8	180.7	9.1	^R 133.7	0.6	102.1	^R 3,895.4
2003	248.0	^R 1,359.9	13.0	0.5	190.1	216.2	8.6	166.3	10.6	299.2	89.4	616.5	1,610.4	168.1	9.1	^R 142.5	0.7	155.8	^R 3,694.4
2004	256.7	1,400.0	7.8	0.3	193.3	203.2	11.9	188.8	10.7	290.7	96.0	648.2	1,651.1	178.1	11.0	178.1	0.8	140.6	3,816.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatt-hours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Louisiana

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	0	56	11	7	1,567	1,585	453	--	--	3,014	--	7,455	--
1965	0	61	6	14	2,159	2,178	304	--	--	5,161	--	12,324	--
1970	0	86	6	20	2,709	2,735	219	--	--	9,334	--	22,592	--
1975	0	96	10	21	2,086	2,117	257	--	--	11,923	--	28,674	--
1980	1	73	5	0	1,147	1,152	178	--	--	16,832	--	40,584	--
1985	0	61	6	18	989	1,012	342	--	--	20,168	--	46,460	--
1990	0	53	6	13	774	794	271	--	--	21,434	--	49,581	--
1995	1	53	1	9	626	637	388	--	--	24,116	--	54,783	--
1996	0	57	1	17	791	809	403	--	--	24,311	--	55,298	--
1997	(s)	53	(s)	92	871	963	195	--	--	24,502	--	55,526	--
1998	0	48	1	69	1,270	1,340	173	--	--	26,709	--	60,589	--
1999	0	45	3	62	1,889	1,955	182	--	--	26,426	--	60,461	--
2000	0	50	1	26	2,246	2,274	196	--	--	27,719	--	63,066	--
2001	0	49	1	27	2,100	2,128	175	--	--	25,800	--	^R 58,027	--
2002	0	49	9	13	1,112	1,134	177	--	--	28,157	--	63,079	--
2003	0	^R 47	4	9	908	921	187	--	--	28,572	--	^R 63,469	--
2004	0	42	4	10	836	849	191	--	--	28,863	--	64,244	--
Trillion Btu													
1960	0.0	57.8	0.1	(s)	6.3	6.4	9.1	0.0	0.0	10.3	83.5	25.4	108.9
1965	0.0	63.6	(s)	0.1	8.7	8.8	6.1	0.0	0.0	17.6	96.1	42.1	138.1
1970	0.0	88.6	(s)	0.1	10.2	10.4	4.4	0.0	0.0	31.8	135.3	77.1	212.4
1975	0.0	99.3	0.1	0.1	7.7	7.9	5.1	0.0	0.0	40.7	153.0	97.8	250.8
1980	(s)	75.8	(s)	0.0	4.2	4.2	3.6	0.0	0.0	57.4	141.1	138.5	279.5
1985	0.0	63.0	(s)	0.1	3.6	3.7	6.8	0.0	0.0	68.8	142.3	158.5	300.9
1990	0.0	55.6	(s)	0.1	2.8	2.9	5.4	^f 0.1	^f 0.1	73.1	^f 137.3	169.2	^f 306.4
1995	(s)	54.3	(s)	0.1	2.3	2.3	7.8	0.1	0.1	82.3	147.0	186.9	333.9
1996	0.0	59.1	(s)	0.1	2.9	3.0	8.1	0.2	0.1	82.9	153.3	188.7	342.0
1997	(s)	59.8	(s)	0.5	3.1	3.7	3.9	0.2	0.1	83.6	151.2	189.5	340.7
1998	0.0	51.2	(s)	0.4	4.6	5.0	3.5	0.2	0.1	91.1	151.1	206.7	357.8
1999	0.0	47.0	(s)	0.4	6.8	7.2	3.6	0.2	0.1	90.2	148.3	206.3	354.6
2000	0.0	52.9	(s)	0.1	8.1	8.3	3.9	0.2	0.1	94.6	159.9	215.2	375.1
2001	0.0	50.2	(s)	0.2	7.6	7.7	3.5	0.2	0.1	88.0	149.8	^R 198.0	^R 347.8
2002	0.0	53.2	0.1	0.1	4.0	4.1	3.5	0.2	0.1	96.1	157.3	215.2	372.5
2003	0.0	^R 49.3	(s)	0.1	3.3	3.4	3.7	0.3	0.1	97.5	^R 154.3	216.6	^R 370.8
2004	0.0	44.3	(s)	0.1	3.0	3.1	3.8	0.3	0.1	98.5	150.1	219.2	369.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Louisiana

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowattsales	Million Kilowattlosses ^e							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	0	23	1,604	156	276	259	304	2,599	0	--	--	2,493	--	6,166	--
1965	0	23	815	305	381	299	206	2,006	0	--	--	4,890	--	11,677	--
1970	0	70	838	445	478	381	502	2,645	0	--	--	8,427	--	20,396	--
1975	0	51	1,458	467	368	465	1,830	4,588	0	--	--	9,225	--	22,186	--
1980	3	40	399	549	202	168	13,466	14,784	0	--	--	12,809	--	30,884	--
1985	0	30	2,647	65	174	235	575	3,698	0	--	--	16,548	--	38,120	--
1990	0	25	741	21	137	318	40	1,256	^g 0	--	--	16,528	--	38,232	--
1995	4	24	257	6	110	41	0	415	0	--	--	18,016	--	40,925	--
1996	0	26	134	7	140	41	1	323	0	--	--	18,411	--	41,878	--
1997	(s)	26	311	3	154	41	0	508	0	--	--	18,888	--	42,805	--
1998	0	24	303	5	224	41	0	573	0	--	--	20,005	--	45,382	--
1999	0	25	550	9	333	41	0	933	0	--	--	20,354	--	46,570	--
2000	0	26	337	8	396	2,166	0	2,907	0	--	--	21,018	--	47,819	--
2001	0	25	277	16	371	951	0	1,615	0	--	--	20,315	--	^R 45,690	--
2002	0	26	380	7	196	784	(s)	1,367	0	--	--	21,439	--	48,030	--
2003	0	^R 25	345	6	160	2,122	71	2,705	0	--	--	21,944	--	48,745	--
2004	0	25	293	77	147	1,472	61	2,051	0	--	--	22,568	--	50,232	--
Trillion Btu															
1960	0.0	24.3	9.3	0.9	1.1	1.4	1.9	14.6	0.0	0.2	0.0	8.5	47.6	21.0	68.6
1965	0.0	23.5	4.7	1.7	1.5	1.6	1.3	10.9	0.0	0.1	0.0	16.7	51.2	39.8	91.0
1970	0.0	72.4	4.9	2.5	1.8	2.0	3.2	14.4	0.0	0.1	0.0	28.8	115.6	69.6	185.2
1975	0.0	52.3	8.5	2.6	1.4	2.4	11.5	26.5	0.0	0.1	0.0	31.5	110.3	75.7	186.0
1980	0.1	41.5	2.3	3.1	0.7	0.9	84.7	91.7	0.0	0.1	0.0	43.7	177.1	105.4	282.4
1985	0.0	31.4	15.4	0.4	0.6	1.2	3.6	21.3	0.0	0.2	0.0	56.5	109.3	130.1	239.3
1990	0.0	26.0	4.3	0.1	0.5	1.7	0.2	6.8	^g 0.0	^g 0.6	^g 0.0	56.4	^g 89.8	130.4	^g 220.3
1995	0.1	24.6	1.5	(s)	0.4	0.2	0.0	2.1	0.0	1.1	0.1	61.5	89.5	139.6	229.2
1996	0.0	26.9	0.8	(s)	0.5	0.2	(s)	1.5	0.0	1.1	0.1	62.8	92.5	142.9	235.4
1997	(s)	29.1	1.8	(s)	0.6	0.2	0.0	2.6	0.0	0.7	0.2	64.4	96.9	146.1	243.0
1998	0.0	25.9	1.8	(s)	0.8	0.2	0.0	2.8	0.0	0.6	0.2	68.3	97.8	154.8	252.6
1999	0.0	25.6	3.2	0.1	1.2	0.2	0.0	4.7	0.0	0.6	0.2	69.4	100.5	158.9	259.4
2000	0.0	27.3	2.0	(s)	1.4	11.3	0.0	14.7	0.0	0.6	0.2	71.7	114.6	163.2	277.8
2001	0.0	25.2	1.6	0.1	1.3	5.0	0.0	8.0	0.0	0.6	0.2	69.3	103.4	^R 155.9	^R 259.3
2002	0.0	^R 27.6	2.2	(s)	0.7	4.1	(s)	7.0	0.0	0.6	0.3	73.2	108.7	163.9	272.6
2003	0.0	^R 26.2	2.0	(s)	0.6	11.1	0.4	14.1	0.0	0.7	0.3	74.9	^R 116.2	166.3	^R 282.5
2004	0.0	25.7	1.7	0.4	0.5	7.7	0.4	10.7	0.0	0.6	0.4	77.0	114.5	171.4	285.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Louisiana

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	0	739	2,201	3,383	764	19,606	559	562	485	16,663	44,222	0	--	--	4,326	--	10,700
1965	0	797	2,539	3,129	484	28,451	821	548	353	22,380	58,706	0	--	--	5,905	--	14,101
1970	0	1,281	2,210	4,241	2,044	44,017	1,052	302	819	32,499	87,183	0	--	--	11,637	--	28,167
1975	0	1,224	2,812	6,391	1,931	50,191	1,299	173	4,046	50,685	117,528	0	--	--	14,969	--	35,999
1980	107	1,182	1,946	8,543	5,162	51,364	1,278	62	12,363	88,497	169,215	0	--	--	23,233	--	56,018
1985	457	968	1,835	6,748	104	69,158	1,163	486	6,806	52,809	139,109	0	--	--	23,952	--	55,178
1990	799	1,168	1,672	9,143	47	46,519	1,309	337	1,131	85,104	145,261	9	--	--	25,862	--	59,825
1995	422	1,213	1,652	11,348	22	66,176	1,249	771	382	79,523	161,123	0	--	--	30,692	--	69,720
1996	84	1,212	1,720	12,525	30	65,673	1,212	773	745	56,854	139,531	0	--	--	32,544	--	74,026
1997	67	1,232	5,289	12,565	27	46,228	1,280	825	1,013	57,388	124,616	0	--	--	32,493	--	73,636
1998	41	1,117	1,697	12,260	56	45,178	1,340	655	733	52,618	114,537	0	--	--	30,999	--	70,322
1999	37	1,055	1,520	10,720	15	72,855	1,354	570	1,194	55,049	143,277	0	--	--	31,484	--	72,034
2000	57	1,106	1,390	11,517	65	108,408	1,334	607	1,368	52,290	176,979	0	--	--	31,950	--	72,692
2001	80	942	1,552	12,192	1,097	73,311	1,222	1,162	992	97,809	189,338	0	--	--	28,574	--	^R 64,266
2002	53	977	1,806	12,728	717	79,573	1,208	1,220	1,315	97,144	195,711	0	--	--	29,662	--	66,450
2003	130	^R 952	1,961	5,224	1,506	44,727	1,117	1,306	2,854	103,914	162,610	0	--	--	27,251	--	60,533
2004	84	989	1,178	5,281	2,017	51,159	1,131	1,497	1,369	109,783	173,415	0	--	--	28,290	--	62,970

Trillion Btu																	
1960	0.0	764.9	14.6	19.7	4.3	78.6	3.4	3.0	3.0	99.8	226.5	0.0	29.8	0.0	14.8	1,035.9	1,072.4
1965	0.0	830.0	16.8	18.2	2.7	114.1	5.0	2.9	2.2	133.1	295.1	0.0	32.1	0.0	20.1	1,177.4	1,225.5
1970	0.0	1,318.4	14.7	24.7	11.6	166.3	6.4	1.6	5.1	191.7	422.1	0.0	37.2	0.0	39.7	1,817.4	1,913.5
1975	0.0	1,263.1	18.7	37.2	10.9	186.5	7.9	0.9	25.4	294.9	582.4	0.0	37.1	0.0	51.1	1,933.7	2,056.5
1980	2.4	1,225.4	12.9	49.8	29.3	188.7	7.8	0.3	77.7	505.5	872.0	0.0	61.1	0.0	79.3	2,240.1	2,431.2
1985	11.0	1,005.1	12.2	39.3	0.6	249.2	7.1	2.6	42.8	309.0	662.6	0.0	71.5	0.0	81.7	1,832.0	2,020.2
1990	16.0	1,216.4	11.1	53.3	0.3	168.6	7.9	1.8	7.1	486.9	736.9	9	110.8	9	88.2	^g 2,168.4	^g 2,372.5
1995	7.7	1,252.9	11.0	66.1	0.1	239.8	7.6	4.0	2.4	455.6	786.6	0.0	131.3	0.0	104.7	2,283.2	2,521.1
1996	2.1	1,266.0	11.4	73.0	0.2	237.3	7.4	4.0	4.7	336.8	674.6	0.0	131.8	0.0	111.0	2,185.6	2,438.2
1997	1.7	1,398.0	35.1	73.2	0.2	167.2	7.8	4.3	6.4	339.7	633.8	0.0	132.9	0.0	110.9	2,277.2	2,528.5
1998	1.0	1,203.2	11.3	71.4	0.3	163.3	8.1	3.4	4.6	312.4	574.8	0.0	130.9	0.0	105.8	2,015.8	2,255.7
1999	0.9	1,100.5	10.1	62.4	0.1	263.4	8.2	3.0	7.5	326.6	681.3	0.0	134.1	(s)	107.4	2,024.4	2,270.2
2000	1.4	1,176.4	9.2	67.1	0.4	391.0	8.1	3.2	8.6	310.5	798.1	0.0	130.9	(s)	109.0	2,215.8	2,463.8
2001	2.0	965.2	10.3	71.0	6.2	264.9	7.4	6.1	6.2	560.5	932.7	0.0	^R 125.1	(s)	97.5	^R 2,122.4	^R 2,341.7
2002	1.3	^R 1,057.9	12.0	74.1	4.1	287.5	7.3	6.4	8.3	556.7	956.3	0.0	^R 128.6	(s)	101.2	^R 2,245.3	^R 2,472.0
2003	3.1	^R 991.2	13.0	30.4	8.5	162.3	6.8	6.8	17.9	596.1	841.9	0.0	^R 137.0	(s)	93.0	^R 2,066.3	^R 2,272.8
2004	2.1	1,030.8	7.8	30.8	11.4	185.1	6.9	7.8	8.6	628.0	886.4	0.0	172.4	(s)	96.5	2,188.2	2,403.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Louisiana

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	0	32	847	5,690	3,207	197	700	21,729	7,944	40,314	0	25	--	62	--
1965	0	54	1,055	4,387	6,097	159	661	26,557	7,297	46,213	0	7	--	17	--
1970	0	71	447	6,655	5,879	350	539	34,167	9,699	57,736	0	4	--	8	--
1975	0	61	295	13,554	6,082	307	527	42,554	16,835	80,154	0	3	--	6	--
1980	0	74	255	12,457	8,644	159	721	46,927	31,159	100,321	0	3	--	8	--
1985	0	42	171	17,168	12,803	109	656	48,581	17,277	96,767	^f 232	3	--	7	--
1990	0	56	108	20,015	25,879	73	738	43,312	21,737	111,863	92	3	--	7	--
1995	0	65	87	24,900	28,853	61	704	46,434	22,664	123,704	186	3	--	7	--
1996	0	68	81	29,783	29,030	45	683	50,057	25,489	135,168	45	3	--	7	--
1997	0	72	98	30,980	30,459	45	722	46,053	19,497	127,853	19	3	--	7	--
1998	0	60	78	28,180	28,643	21	756	49,410	20,255	127,342	16	3	--	6	--
1999	0	48	87	24,841	34,016	26	764	49,106	20,336	129,177	39	3	--	7	--
2000	0	51	84	26,583	35,399	8	752	51,716	27,170	141,711	7	3	--	7	--
2001	0	48	286	29,362	34,460	17	689	51,368	10,243	126,424	(s)	3	--	6	--
2002	0	51	62	28,006	37,678	73	681	53,061	10,400	129,961	898	3	--	6	--
2003	0	47	102	26,848	38,123	36	630	54,025	9,670	129,433	1,144	3	--	6	--
2004	0	45	56	27,420	35,840	54	638	52,774	10,875	127,657	1,159	16	--	35	--
Trillion Btu															
1960	0.0	32.8	4.3	33.1	17.4	0.8	4.2	114.1	49.9	223.9	0.0	0.1	256.8	0.2	257.0
1965	0.0	56.4	5.3	25.6	33.8	0.6	4.0	139.5	45.9	254.7	0.0	(s)	311.1	0.1	311.1
1970	0.0	73.4	2.3	38.8	32.6	1.3	3.3	179.5	61.0	318.7	0.0	(s)	392.1	(s)	392.1
1975	0.0	63.0	1.5	79.0	33.9	1.1	3.2	223.5	105.8	448.0	0.0	(s)	511.0	(s)	511.1
1980	0.0	77.0	1.3	72.6	48.4	0.6	4.4	246.5	195.9	569.6	0.0	(s)	646.6	(s)	646.7
1985	0.0	43.9	0.9	100.0	72.0	0.4	4.0	255.2	108.6	541.0	^f 0.8	(s)	^f 585.8	(s)	^f 585.8
1990	0.0	58.1	0.5	116.6	146.1	0.3	4.5	227.5	136.7	632.1	0.3	(s)	690.5	(s)	690.6
1995	0.0	66.9	0.4	145.0	163.6	0.2	4.3	242.2	142.5	698.2	0.7	(s)	765.1	(s)	765.1
1996	0.0	70.8	0.4	173.5	164.6	0.2	4.1	261.1	160.3	764.1	0.2	(s)	835.0	(s)	835.0
1997	0.0	81.2	0.5	180.5	172.7	0.2	4.4	240.1	122.6	720.8	0.1	(s)	802.1	(s)	802.1
1998	0.0	65.1	0.4	164.1	162.4	0.1	4.6	257.5	127.3	716.5	0.1	(s)	781.6	(s)	781.6
1999	0.0	50.4	0.4	144.7	192.9	0.1	4.6	255.9	127.9	726.5	0.1	(s)	776.9	(s)	776.9
2000	0.0	54.0	0.4	154.8	200.7	(s)	4.6	269.4	170.8	800.8	(s)	(s)	854.8	(s)	854.8
2001	0.0	49.6	1.4	171.0	195.4	0.1	4.2	267.6	64.4	704.1	(s)	(s)	753.7	(s)	753.7
2002	0.0	55.0	0.3	163.1	213.6	0.3	4.1	276.3	65.4	723.2	3.2	(s)	778.2	(s)	778.2
2003	0.0	49.1	0.5	156.4	216.2	0.1	3.8	281.3	60.8	719.1	4.0	(s)	768.2	(s)	768.2
2004	0.0	47.0	0.3	159.7	203.2	0.2	3.9	275.2	68.4	710.9	4.1	0.1	758.0	0.1	758.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Louisiana

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	120	36	22	0	58	0	0	--	0	0	0	0	--
1965	(s)	176	34	20	0	54	0	0	--	0	0	0	0	--
1970	0	332	98	58	0	156	0	0	--	0	0	0	0	--
1975	0	356	5,699	88	0	5,787	0	0	--	0	0	0	0	--
1980	0	425	7,096	1,174	0	8,270	0	0	--	0	0	0	0	--
1985	8,760	285	59	132	0	191	2,457	0	--	0	0	0	0	--
1990	11,748	286	75	159	125	359	14,197	656	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	12,930	325	13	78	3,028	3,119	15,686	952	--	0	0	0	0	--
1996	12,450	254	308	198	2,954	3,461	15,765	964	--	0	0	0	0	--
1997	13,807	279	1,024	86	3,240	4,350	13,511	1,036	--	0	0	0	0	--
1998	13,850	320	968	82	3,253	4,302	16,428	1,063	--	0	0	0	0	--
1999	13,916	322	592	51	2,940	3,584	13,112	802	--	0	0	0	0	--
2000	15,680	305	709	341	2,771	3,820	15,796	532	--	0	0	0	0	--
2001	14,854	243	2,361	653	3,309	6,323	17,336	732	--	0	0	0	0	--
2002	14,623	324	34	106	3,208	3,349	17,305	891	--	0	0	0	0	--
2003	15,462	236	1,623	211	3,395	5,229	16,126	892	--	0	0	0	0	--
2004	15,975	245	2,971	191	3,357	6,519	17,080	1,099	--	0	0	0	0	--

Trillion Btu														
1960	0.0	124.0	0.2	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	124.4
1965	(s)	182.9	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	183.3
1970	0.0	341.4	0.6	0.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	342.3
1975	0.0	377.1	35.8	0.5	0.0	36.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	413.5
1980	0.0	442.4	44.6	6.8	0.0	51.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	493.9
1985	148.1	298.4	0.4	0.8	0.0	1.1	26.1	0.0	0.0	0.0	0.0	0.0	0.0	473.8
1990	192.9	298.6	0.5	0.9	0.8	2.2	150.2	6.8	ⁱ 1.3	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 652.1
1995	209.0	338.4	0.1	0.5	18.2	18.8	164.8	9.8	1.3	0.0	0.0	0.0	0.0	742.2
1996	203.3	264.7	1.9	1.2	17.8	20.9	165.6	10.0	1.1	0.0	0.0	0.0	0.0	665.6
1997	224.4	288.9	6.4	0.5	19.5	26.5	141.8	10.6	1.2	0.0	0.0	0.0	0.0	693.3
1998	224.3	333.6	6.1	0.5	19.6	26.2	172.3	10.8	1.2	0.0	0.0	0.0	0.0	768.4
1999	226.8	334.7	3.7	0.3	17.7	21.7	137.0	8.2	1.3	0.0	0.0	0.0	0.0	729.7
2000	251.9	315.3	4.5	2.0	16.7	23.1	164.7	5.4	1.0	0.0	0.0	0.0	0.0	761.5
2001	238.0	251.6	14.8	3.8	19.9	38.6	181.1	7.6	0.9	0.0	0.0	0.0	0.0	717.7
2002	230.8	332.5	0.2	0.6	19.3	20.2	180.7	9.1	1.0	0.0	0.0	0.0	0.0	774.2
2003	244.8	244.1	10.2	1.2	20.5	31.9	168.1	9.1	1.1	0.0	0.0	0.0	0.0	699.0
2004	254.7	252.1	18.7	1.1	20.2	40.0	178.1	11.0	1.2	0.0	0.0	0.0	0.0	737.0

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Maine

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	794	0	729	57	7,415	1,904	2,294	442	175	8,378	5,408	10	26,811	0	2,844	--	--	-208	--
1965	316	0	745	89	9,220	1,812	2,052	550	169	9,131	6,340	25	30,132	0	2,069	--	--	98	--
1970	91	1	701	93	11,822	2,300	1,783	635	169	11,025	11,605	72	40,206	0	2,853	--	--	1,984	--
1975	56	2	696	71	11,505	1,988	1,036	963	167	12,645	9,929	0	39,001	4,502	2,664	--	--	-4,568	--
1980	124	2	435	82	10,628	1,875	504	874	196	11,768	8,557	0	34,919	4,404	2,417	--	--	-1,086	--
1985	206	3	2,185	41	10,370	1,639	1,042	674	179	12,548	7,900	0	36,578	5,354	2,691	--	--	3,468	--
1990	401	5	645	62	13,331	2,528	657	1,391	201	14,126	10,630	0	43,572	4,861	4,091	--	--	-1,543	--
1995	436	6	482	35	14,744	841	1,281	1,545	192	14,368	9,417	398	43,303	198	3,354	--	--	16,000	--
1996	390	6	379	28	14,950	891	1,536	1,832	186	14,959	9,576	1,409	45,747	5,062	4,157	--	--	312	--
1997	353	6	557	36	14,666	954	1,506	1,242	197	15,987	9,880	1,498	46,522	0	3,648	--	--	16,541	--
1998	291	6	297	25	15,242	929	2,183	1,403	206	15,319	8,943	1,504	46,052	0	3,716	--	--	12,979	--
1999	274	7	324	34	14,913	864	1,698	1,131	208	16,158	11,263	1,484	48,077	0	3,756	--	--	8,481	--
2000	388	45	335	25	15,317	908	1,839	1,321	205	16,328	9,499	1,372	47,149	0	3,591	--	--	5,719	--
2001	307	96	555	58	14,300	712	1,860	1,710	188	14,290	7,012	16	40,701	0	2,645	--	--	R -7,515	--
2002	311	102	465	37	14,567	671	1,132	1,236	185	16,871	6,095	15	41,273	0	2,768	--	--	-11,335	--
2003	285	71	494	38	18,911	922	1,572	1,828	171	18,270	5,044	14	47,265	0	3,173	--	--	-3,819	--
2004	286	73	734	33	19,539	1,088	2,029	1,240	174	17,005	4,731	14	46,587	0	3,430	--	--	-5,485	--
Trillion Btu																			
1960	20.4	0.0	4.8	0.3	43.2	10.2	13.0	1.8	1.1	44.0	34.0	0.1	152.4	0.0	30.6	29.2	0.5	-0.7	232.4
1965	8.0	0.0	4.9	0.4	53.7	9.7	11.6	2.2	1.0	48.0	39.9	0.1	171.6	0.0	21.6	30.0	0.8	0.3	232.4
1970	2.2	1.3	4.7	0.5	68.9	12.5	10.1	2.4	1.0	57.9	73.0	0.4	231.3	0.0	29.9	29.5	1.8	6.8	302.7
1975	1.3	2.0	4.6	0.4	67.0	10.8	5.9	3.6	1.0	66.4	62.4	0.0	222.1	49.6	27.7	32.7	4.9	-15.6	324.7
1980	3.0	2.3	2.9	0.4	61.9	10.2	2.9	3.2	1.2	61.8	53.8	0.0	198.3	48.0	25.1	96.0	12.8	-3.7	381.9
1985	5.1	2.6	14.5	0.2	60.4	8.9	5.9	2.4	1.1	65.9	49.7	0.0	209.0	56.9	28.1	107.9	2.3	11.8	423.9
1990	10.4	4.6	4.3	0.3	77.7	14.0	3.7	5.0	1.2	74.2	66.8	0.0	247.3	51.4	42.5	109.0	7.7	-5.3	467.7
1995	11.0	5.6	3.2	0.2	85.9	4.8	7.3	5.6	1.2	74.9	59.2	2.3	244.5	2.1	34.6	126.2	15.8	54.6	494.3
1996	9.8	5.9	2.5	0.1	87.1	5.1	8.7	6.6	1.1	78.0	60.2	7.7	257.2	53.2	43.0	124.1	14.8	1.1	509.0
1997	9.0	6.5	3.7	0.2	85.4	5.4	8.5	4.5	1.2	83.3	62.1	8.2	262.6	0.0	37.3	124.5	11.8	56.4	508.1
1998	7.3	5.8	2.0	0.1	88.8	5.3	12.4	5.1	1.2	79.8	56.2	8.3	259.2	0.0	37.9	113.2	13.6	44.3	481.3
1999	6.9	6.7	2.1	0.2	86.9	4.9	9.6	4.1	1.3	84.2	70.8	8.1	272.2	0.0	38.4	120.7	13.3	28.9	487.1
2000	10.0	48.0	2.2	0.1	89.2	5.1	10.4	4.8	1.2	85.1	59.7	7.4	265.4	0.0	36.6	126.4	13.3	19.5	519.2
2001	7.9	101.2	3.7	0.3	83.3	4.0	10.5	6.2	1.1	74.4	44.1	0.1	227.8	0.0	27.3	123.4	9.7	R -25.6	R 471.7
2002	8.0	107.8	3.1	0.2	84.9	3.8	6.4	4.5	1.1	87.9	38.3	0.1	230.2	0.0	28.2	119.2	7.2	-38.7	462.0
2003	7.5	75.1	3.3	0.2	110.2	5.2	8.9	6.6	1.0	95.1	31.7	0.1	262.4	0.0	32.5	105.7	8.4	-13.0	478.5
2004	7.3	76.3	4.9	0.2	113.8	6.2	11.5	4.5	1.1	88.7	29.7	0.1	260.6	0.0	34.4	107.4	13.1	-18.7	480.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maine

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	122	0	4,727	2,091	342	7,160	426	--	--	993	--	2,457	--
1965	71	0	6,139	1,691	381	8,210	322	--	--	1,224	--	2,923	--
1970	24	1	7,877	1,649	383	9,909	222	--	--	1,723	--	4,170	--
1975	7	1	7,646	932	604	9,182	292	--	--	2,487	--	5,981	--
1980	5	1	6,372	405	395	7,173	478	--	--	2,998	--	7,229	--
1985	11	1	5,451	910	348	6,709	338	--	--	3,419	--	7,877	--
1990	9	1	5,987	563	863	7,412	215	--	--	3,932	--	9,096	--
1995	(s)	1	7,627	1,089	1,120	9,836	235	--	--	3,629	--	8,243	--
1996	(s)	1	7,549	1,370	1,315	10,234	244	--	--	3,679	--	8,369	--
1997	(s)	1	7,407	1,310	971	9,688	177	--	--	3,659	--	8,292	--
1998	(s)	1	7,553	1,880	1,074	10,507	157	--	--	3,589	--	8,142	--
1999	(s)	1	7,443	1,539	948	9,930	165	--	--	3,704	--	8,476	--
2000	(s)	1	6,957	1,681	1,046	9,684	178	--	--	3,737	--	8,502	--
2001	(s)	1	6,850	1,674	1,284	9,809	144	--	--	3,903	--	R 8,778	--
2002	(s)	1	6,749	1,002	789	8,540	146	--	--	4,043	--	9,058	--
2003	(s)	1	8,830	1,392	1,471	11,693	153	--	--	4,219	--	9,372	--
2004	(s)	1	9,881	1,740	1,023	12,644	157	--	--	4,331	--	9,640	--
Trillion Btu													
1960	3.0	0.0	27.5	11.9	1.4	40.8	8.5	0.0	0.0	3.4	55.7	8.4	64.1
1965	1.8	0.0	35.8	9.6	1.5	46.9	6.4	0.0	0.0	4.2	59.2	10.0	69.2
1970	0.6	0.5	45.9	9.4	1.4	56.7	4.4	0.0	0.0	5.9	68.1	14.2	82.3
1975	0.2	0.7	44.5	5.3	2.2	52.1	5.8	0.0	0.0	8.5	67.3	20.4	87.7
1980	0.1	0.6	37.1	2.3	1.5	40.9	9.6	0.0	0.0	10.2	61.4	24.7	86.0
1985	0.3	0.5	31.8	5.2	1.3	38.2	6.8	0.0	0.0	11.7	57.4	26.9	84.3
1990	0.2	0.7	34.9	3.2	3.1	41.2	4.3	f 0.0	f 0.1	13.4	f 59.9	31.0	f 90.9
1995	(s)	0.9	44.4	6.2	4.1	54.7	4.7	0.0	0.1	12.4	72.8	28.1	100.9
1996	(s)	1.0	44.0	7.8	4.8	56.5	4.9	0.0	0.1	12.6	75.0	28.6	103.6
1997	(s)	1.0	43.1	7.4	3.5	54.1	3.5	0.0	0.1	12.5	71.3	28.3	99.6
1998	(s)	0.9	44.0	10.7	3.9	58.5	3.1	0.0	0.1	12.2	75.0	27.8	102.8
1999	(s)	1.0	43.4	8.7	3.4	55.5	3.3	(s)	0.1	12.6	72.6	28.9	101.5
2000	(s)	1.2	40.5	9.5	3.8	53.8	3.6	(s)	0.1	12.7	71.5	29.0	100.5
2001	(s)	1.1	39.9	9.5	4.6	54.0	2.9	(s)	0.1	13.3	71.5	R 30.0	101.4
2002	(s)	1.3	39.3	5.7	2.9	47.8	2.9	(s)	0.1	13.8	66.0	30.9	96.9
2003	(s)	1.5	51.4	7.9	5.3	64.7	3.1	(s)	0.1	14.4	83.7	32.0	115.7
2004	(s)	1.3	57.6	9.9	3.7	71.1	3.1	(s)	0.1	14.8	90.5	32.9	123.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maine

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	84	0	996	100	60	29	145	1,331	0	--	--	542	--	1,341	--
1965	54	0	1,294	81	67	34	72	1,549	0	--	--	819	--	1,957	--
1970	19	(s)	1,660	79	68	40	292	2,139	0	--	--	975	--	2,361	--
1975	17	1	1,611	45	107	40	334	2,136	0	--	--	1,568	--	3,770	--
1980	20	1	1,840	70	70	48	682	2,710	0	--	--	1,717	--	4,140	--
1985	38	1	1,082	99	61	104	1,040	2,386	0	--	--	2,338	--	5,386	--
1990	34	2	2,006	68	152	101	2,137	4,463	^g 0	--	--	2,847	--	6,585	--
1995	3	2	2,285	161	198	12	369	3,025	0	--	--	2,973	--	6,754	--
1996	4	3	2,424	148	232	12	508	3,323	0	--	--	3,276	--	7,451	--
1997	4	3	2,351	157	171	12	587	3,278	0	--	--	3,343	--	7,576	--
1998	3	2	2,748	242	190	12	281	3,473	0	--	--	3,388	--	7,685	--
1999	3	3	2,792	135	167	12	109	3,214	0	--	--	3,553	--	8,128	--
2000	3	3	3,223	136	185	12	253	3,809	0	--	--	3,876	--	8,818	--
2001	3	3	2,516	152	227	12	187	3,094	0	--	--	3,836	--	^R 8,628	--
2002	2	5	2,721	112	139	12	396	3,381	0	--	--	3,848	--	8,622	--
2003	2	5	3,670	161	260	20	319	4,428	0	--	--	3,959	--	8,795	--
2004	2	5	3,478	251	181	25	348	4,283	0	--	--	4,325	--	9,628	--
Trillion Btu															
1960	2.1	0.0	5.8	0.6	0.2	0.2	0.9	7.7	0.0	0.2	0.0	1.9	11.8	4.6	16.4
1965	1.3	0.0	7.5	0.5	0.3	0.2	0.5	8.9	0.0	0.1	0.0	2.8	13.1	6.7	19.8
1970	0.4	0.4	9.7	0.4	0.3	0.2	1.8	12.4	0.0	0.1	0.0	3.3	16.7	8.1	24.8
1975	0.4	0.5	9.4	0.3	0.4	0.2	2.1	12.3	0.0	0.1	0.0	5.3	18.7	12.9	31.6
1980	0.5	0.9	10.7	0.4	0.3	0.3	4.3	15.9	0.0	0.2	0.0	5.9	23.4	14.1	37.5
1985	0.9	1.2	6.3	0.6	0.2	0.5	6.5	14.2	0.0	0.2	0.0	8.0	24.4	18.4	42.8
1990	0.9	1.7	11.7	0.4	0.6	0.5	13.4	26.6	^g 0.0	^g 3.1	^g 0.0	9.7	^g 41.9	22.5	^g 64.4
1995	0.1	2.5	13.3	0.9	0.7	0.1	2.3	17.3	0.0	4.0	0.0	10.1	34.0	23.0	57.0
1996	0.1	2.6	14.1	0.8	0.8	0.1	3.2	19.0	0.0	3.9	0.0	11.2	36.8	25.4	62.3
1997	0.1	2.8	13.7	0.9	0.6	0.1	3.7	19.0	0.0	3.9	0.0	11.4	37.1	25.8	62.9
1998	0.1	2.5	16.0	1.4	0.7	0.1	1.8	19.9	0.0	3.8	0.0	11.6	37.8	26.2	64.0
1999	0.1	2.6	16.3	0.8	0.6	0.1	0.7	18.4	0.0	3.6	0.0	12.1	36.7	27.7	64.5
2000	0.1	3.2	18.8	0.8	0.7	0.1	1.6	21.9	0.0	3.5	0.0	13.2	41.9	30.1	71.9
2001	0.1	3.1	14.7	0.9	0.8	0.1	1.2	17.6	0.0	3.3	0.0	13.1	37.2	29.4	^R 66.6
2002	(s)	6.5	15.9	0.6	0.5	0.1	2.5	19.5	0.0	3.7	0.0	13.1	43.0	29.4	72.4
2003	(s)	5.7	21.4	0.9	0.9	0.1	2.0	25.3	0.0	3.8	0.0	13.5	48.5	30.0	78.5
2004	(s)	5.4	20.3	1.4	0.7	0.1	2.2	24.7	0.0	3.6	0.0	14.8	48.5	32.8	81.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maine

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	562	0	729	402	103	38	42	166	2,639	10	4,130	906	--	--	1,246	--	3,082
1965	191	0	745	500	280	100	54	145	1,270	25	3,117	697	--	--	1,715	--	4,095
1970	48	(s)	701	805	54	182	55	137	5,128	72	7,134	940	--	--	2,370	--	5,736
1975	32	1	696	682	59	250	59	79	5,848	0	7,674	832	--	--	2,477	--	5,958
1980	99	1	435	762	29	400	65	76	4,047	0	5,812	974	--	--	3,470	--	8,367
1985	157	1	2,185	509	34	249	59	124	3,407	0	6,567	974	--	--	4,067	--	9,369
1990	222	2	645	841	27	358	66	94	4,789	0	6,821	^g 1,344	--	--	4,750	--	10,988
1995	279	2	482	1,201	31	216	63	169	7,378	153	9,693	1,155	--	--	4,959	--	11,266
1996	230	2	379	1,336	17	278	61	176	7,722	1,144	11,115	1,378	--	--	4,772	--	10,854
1997	190	3	557	1,253	39	87	65	179	6,682	1,248	10,109	1,285	--	--	4,957	--	11,234
1998	138	2	297	1,352	61	133	68	117	5,423	1,239	8,690	1,299	--	--	4,622	--	10,485
1999	117	3	324	1,033	25	11	68	86	5,281	1,226	8,054	1,303	--	--	4,687	--	10,723
2000	219	13	335	969	22	89	67	87	5,315	1,233	8,118	1,296	--	--	4,551	--	10,353
2001	124	11	555	798	33	198	62	216	4,419	16	6,297	935	--	--	4,413	--	^R 9,924
2002	88	4	465	818	18	307	61	228	4,156	15	6,068	937	--	--	3,550	--	7,953
2003	119	3	494	1,258	19	87	56	241	2,706	14	4,875	1,022	--	--	3,793	--	8,427
2004	116	3	734	1,484	38	28	57	281	3,155	14	5,792	563	--	--	3,711	--	8,260

Trillion Btu																	
1960	14.5	0.0	4.8	2.3	0.6	0.2	0.3	0.9	16.6	0.1	25.7	9.7	20.5	0.0	4.3	74.7	85.3
1965	4.9	0.0	4.9	2.9	1.6	0.4	0.3	0.8	8.0	0.1	19.0	7.3	23.5	0.0	5.9	60.6	74.5
1970	1.2	0.4	4.7	4.7	0.3	0.7	0.3	0.7	32.2	0.4	44.0	9.9	25.0	0.0	8.1	88.4	108.0
1975	0.8	0.7	4.6	4.0	0.3	0.9	0.4	0.4	36.8	0.0	47.4	8.7	26.8	0.0	8.5	92.7	113.1
1980	2.4	0.8	2.9	4.4	0.2	1.5	0.4	0.4	25.4	0.0	35.2	10.1	86.2	0.0	11.8	146.5	175.1
1985	3.9	0.9	14.5	3.0	0.2	0.9	0.4	0.7	21.4	0.0	41.0	10.2	101.0	0.0	13.9	170.8	202.8
1990	5.5	2.0	4.3	4.9	0.2	1.3	0.4	0.5	30.1	0.0	41.6	^g 14.0	^g 80.1	^g 0.0	16.2	^g 159.5	^g 197.0
1995	7.0	2.0	3.2	7.0	0.2	0.8	0.4	0.9	46.4	0.8	59.6	11.9	98.4	0.0	16.9	195.8	234.3
1996	5.8	2.2	2.5	7.8	0.1	1.0	0.4	0.9	48.6	6.1	67.4	14.2	94.8	0.0	16.3	200.7	237.8
1997	4.7	2.6	3.7	7.3	0.2	0.3	0.4	0.9	42.0	6.7	61.6	13.1	97.6	0.0	16.9	196.5	234.9
1998	3.4	2.3	2.0	7.9	0.3	0.5	0.4	0.6	34.1	6.7	52.5	13.2	83.5	0.0	15.8	170.7	206.5
1999	2.9	2.6	2.1	6.0	0.1	(s)	0.4	0.4	33.2	6.6	49.0	13.3	88.9	0.0	16.0	172.7	209.3
2000	5.7	15.0	2.2	5.6	0.1	0.3	0.4	0.5	33.4	6.6	49.2	13.2	92.8	0.0	15.5	191.4	226.8
2001	3.2	12.9	3.7	4.6	0.2	0.7	0.4	1.1	27.8	0.1	38.6	9.7	83.2	0.0	15.1	162.6	^R 196.5
2002	2.3	4.6	3.1	4.8	0.1	1.1	0.4	1.2	26.1	0.1	36.8	9.5	77.8	0.0	12.1	143.2	170.3
2003	3.1	4.0	3.3	7.3	0.1	0.3	0.3	1.3	17.0	0.1	29.7	10.5	65.1	0.0	12.9	125.4	154.1
2004	3.0	3.0	4.9	8.6	0.2	0.1	0.3	1.5	19.8	0.1	35.6	5.6	65.8	0.0	12.7	125.7	153.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maine

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	10	0	57	1,251	1,904	1	133	8,183	776	12,305	0	0	--	0	--
1965	1	0	89	1,199	1,812	2	116	8,952	625	12,794	0	0	--	0	--
1970	(s)	0	93	1,385	2,300	3	114	10,848	1,415	16,158	0	0	--	0	--
1975	(s)	0	71	1,524	1,988	3	108	12,526	934	17,155	0	0	--	0	--
1980	0	(s)	82	1,593	1,875	9	132	11,644	209	15,544	0	0	--	0	--
1985	0	(s)	41	3,300	1,639	15	120	12,320	21	17,455	^f 0	0	--	0	--
1990	0	(s)	62	4,474	2,528	17	135	13,931	147	21,295	0	0	--	0	--
1995	0	(s)	35	3,598	841	11	129	14,187	204	19,004	0	0	--	0	--
1996	0	(s)	28	3,624	891	7	125	14,771	202	19,648	0	(s)	--	(s)	--
1997	0	(s)	36	3,634	954	13	132	15,796	107	20,672	0	(s)	--	(s)	--
1998	0	(s)	25	3,572	929	6	138	15,190	281	20,141	0	(s)	--	(s)	--
1999	0	(s)	34	3,617	864	5	140	16,061	187	20,908	0	(s)	--	(s)	--
2000	0	1	25	4,126	908	1	138	16,229	697	22,122	0	(s)	--	(s)	--
2001	0	1	58	4,128	712	(s)	126	14,062	544	19,630	0	(s)	--	(s)	--
2002	0	1	37	4,228	671	1	124	16,631	832	22,524	0	(s)	--	(s)	--
2003	0	1	38	5,022	922	11	115	18,010	3	24,121	0	(s)	--	(s)	--
2004	0	1	33	4,566	1,088	8	117	16,698	27	22,537	0	(s)	--	(s)	--
Trillion Btu															
1960	0.2	0.0	0.3	7.3	10.2	(s)	0.8	43.0	4.9	66.4	0.0	0.0	66.7	0.0	66.7
1965	(s)	0.0	0.4	7.0	9.7	(s)	0.7	47.0	3.9	68.8	0.0	0.0	68.8	0.0	68.8
1970	(s)	0.0	0.5	8.1	12.5	(s)	0.7	57.0	8.9	87.6	0.0	0.0	87.6	0.0	87.6
1975	(s)	0.0	0.4	8.9	10.8	(s)	0.7	65.8	5.9	92.4	0.0	0.0	92.4	0.0	92.4
1980	0.0	0.1	0.4	9.3	10.2	(s)	0.8	61.2	1.3	83.2	0.0	0.0	83.3	0.0	83.3
1985	0.0	(s)	0.2	19.2	8.9	0.1	0.7	64.7	0.1	94.0	^f 0.0	0.0	^f 94.0	0.0	^f 94.0
1990	0.0	(s)	0.3	26.1	14.0	0.1	0.8	73.2	0.9	115.4	0.0	0.0	115.4	0.0	115.4
1995	0.0	0.1	0.2	21.0	4.8	(s)	0.8	74.0	1.3	102.0	0.0	0.0	102.1	0.0	102.1
1996	0.0	(s)	0.1	21.1	5.1	(s)	0.8	77.0	1.3	105.4	0.0	(s)	105.4	(s)	105.4
1997	0.0	0.1	0.2	21.2	5.4	(s)	0.8	82.3	0.7	110.6	0.0	(s)	110.7	(s)	110.7
1998	0.0	(s)	0.1	20.8	5.3	(s)	0.8	79.2	1.8	108.0	0.0	(s)	108.0	(s)	108.0
1999	0.0	(s)	0.2	21.1	4.9	(s)	0.8	83.7	1.2	111.9	0.0	(s)	111.9	(s)	111.9
2000	0.0	0.9	0.1	24.0	5.1	(s)	0.8	84.6	4.4	119.1	0.0	(s)	120.0	(s)	120.0
2001	0.0	1.4	0.3	24.0	4.0	(s)	0.8	73.3	3.4	105.8	0.0	(s)	107.2	(s)	107.2
2002	0.0	1.1	0.2	24.6	3.8	(s)	0.8	86.6	5.2	121.2	0.0	(s)	122.3	(s)	122.3
2003	0.0	1.0	0.2	29.3	5.2	(s)	0.7	93.8	(s)	129.2	0.0	(s)	130.2	(s)	130.2
2004	0.0	0.7	0.2	26.6	6.2	(s)	0.7	87.1	0.2	120.9	0.0	(s)	121.7	(s)	121.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Maine

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	17	0	1,847	38	0	1,885	0	1,939	--	0	0	0	149	--
1965	0	0	4,373	89	0	4,462	0	1,372	--	0	0	0	221	--
1970	0	0	4,770	95	0	4,865	0	1,913	--	0	0	0	516	--
1975	0	0	2,812	42	0	2,854	4,502	1,832	--	0	0	0	1,436	--
1980	0	0	3,620	61	0	3,680	4,404	1,443	--	0	0	0	3,759	--
1985	0	0	3,432	28	0	3,461	5,354	1,718	--	0	0	0	687	--
1990	136	(s)	3,557	23	0	3,581	4,861	2,746	--	ⁱ 0	ⁱ 0	ⁱ 0	2,224	--
1995	154	(s)	1,466	33	245	1,744	198	2,199	--	0	0	0	4,596	--
1996	156	(s)	1,144	18	265	1,427	5,062	2,780	--	0	0	0	4,296	--
1997	159	(s)	2,503	21	250	2,774	0	2,363	--	0	0	0	3,433	--
1998	150	(s)	2,958	17	265	3,240	0	2,417	--	0	0	0	3,941	--
1999	154	1	5,686	27	258	5,971	0	2,453	--	0	0	0	3,853	--
2000	165	27	3,235	41	139	3,415	0	2,295	--	0	0	0	3,855	--
2001	180	80	1,862	8	0	1,870	0	1,710	--	0	0	0	2,821	--
2002	221	91	711	50	0	760	0	1,831	--	0	0	0	2,085	--
2003	164	61	2,017	131	0	2,148	0	2,150	--	0	0	0	2,439	--
2004	168	63	1,201	130	0	1,331	0	2,867	--	0	0	0	3,798	--
Trillion Btu														
1960	0.5	0.0	11.6	0.2	0.0	11.8	0.0	20.9	0.0	0.0	0.0	0.0	0.5	33.7
1965	0.0	0.0	27.5	0.5	0.0	28.0	0.0	14.3	0.0	0.0	0.0	0.0	0.8	43.1
1970	0.0	0.0	30.0	0.6	0.0	30.5	0.0	20.1	0.0	0.0	0.0	0.0	1.8	52.4
1975	0.0	0.0	17.7	0.2	0.0	17.9	49.6	19.1	0.0	0.0	0.0	0.0	4.9	91.5
1980	0.0	0.0	22.8	0.4	0.0	23.1	48.0	15.0	0.0	0.0	0.0	0.0	12.8	99.0
1985	0.0	0.0	21.6	0.2	0.0	21.7	56.9	17.9	0.0	0.0	0.0	0.0	2.3	98.9
1990	3.8	0.2	22.4	0.1	0.0	22.5	51.4	28.6	ⁱ 21.5	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	7.6	ⁱ 135.6
1995	3.9	0.1	9.2	0.2	1.5	10.9	2.1	22.7	19.1	0.0	0.0	0.0	15.7	74.5
1996	4.0	0.1	7.2	0.1	1.6	8.9	53.2	28.7	20.5	0.0	0.0	0.0	14.7	130.0
1997	4.1	(s)	15.7	0.1	1.5	17.4	0.0	24.1	19.4	0.0	0.0	0.0	11.7	76.8
1998	3.8	0.1	18.6	0.1	1.6	20.3	0.0	24.7	22.8	0.0	0.0	0.0	13.4	85.1
1999	3.9	0.5	35.8	0.2	1.6	37.5	0.0	25.1	24.9	0.0	0.0	0.0	13.1	105.1
2000	4.2	27.8	20.3	0.2	0.8	21.4	0.0	23.4	26.5	0.0	0.0	0.0	13.2	116.4
2001	4.6	82.7	11.7	(s)	0.0	11.8	0.0	17.7	34.0	0.0	0.0	0.0	9.6	160.4
2002	5.7	94.2	4.5	0.3	0.0	4.8	0.0	18.6	34.8	0.0	0.0	0.0	7.1	165.2
2003	4.3	62.9	12.7	0.8	0.0	13.4	0.0	22.0	33.6	0.0	0.0	0.0	8.3	144.6
2004	4.3	65.7	7.5	0.8	0.0	8.3	0.0	28.7	34.8	0.0	0.0	0.0	13.0	154.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Maryland

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	8,528	71	1,813	279	12,870	2,457	2,445	1,051	565	22,552	16,835	978	61,844	0	1,358	--	--	1,688	--
1965	12,372	99	3,289	474	16,967	2,856	2,371	1,473	627	27,510	15,510	1,697	72,774	0	1,141	--	--	-5,186	--
1970	12,216	156	2,798	309	19,817	4,477	2,331	1,841	624	37,159	22,046	2,895	94,297	0	1,907	--	--	4,834	--
1975	7,761	140	3,246	205	21,034	3,049	1,193	2,395	763	43,688	26,941	2,166	104,680	4,386	2,311	--	--	9,716	--
1980	9,312	160	2,638	173	21,908	3,522	1,168	2,060	724	44,003	16,480	2,504	95,181	10,947	1,270	--	--	17,788	--
1985	10,012	151	4,520	76	18,958	3,901	1,247	1,805	659	45,632	7,916	2,640	87,354	9,926	1,524	--	--	30,726	--
1990	11,193	176	5,008	74	18,327	3,637	466	1,965	742	47,415	10,542	3,599	91,775	1,251	2,299	--	--	64,117	--
1995	11,198	194	4,236	48	19,176	3,430	801	2,687	708	51,475	4,065	3,319	89,946	12,938	1,442	--	--	48,410	--
1996	11,366	196	3,610	35	21,670	3,897	802	2,995	687	51,800	4,517	3,682	93,695	12,093	2,457	--	--	49,599	--
1997	11,239	212	5,619	43	19,586	4,096	865	2,856	725	53,594	4,212	3,523	95,120	13,213	1,588	--	--	45,475	--
1998	11,790	189	4,679	56	20,657	3,920	1,146	2,410	759	54,585	7,572	4,643	100,429	13,331	1,740	--	--	37,935	--
1999	11,824	196	4,375	39	21,741	3,938	814	2,143	767	56,886	9,084	5,319	105,106	13,312	1,424	--	--	40,633	--
2000	12,221	212	4,701	40	22,387	4,108	898	2,406	756	57,157	5,154	4,259	101,866	13,827	1,733	--	--	46,050	--
2001	12,519	178	4,315	105	23,134	2,929	891	2,544	692	59,263	5,776	2,915	102,564	13,656	1,184	--	--	^R 52,799	--
2002	12,571	196	4,561	100	21,479	1,718	521	2,367	684	60,445	4,571	2,939	99,385	12,128	1,661	--	--	75,915	--
2003	13,039	197	3,455	88	21,827	2,343	626	3,498	633	61,908	6,299	2,651	103,326	13,691	2,647	--	--	^R 74,208	--
2004	13,006	193	3,165	83	22,830	3,140	714	2,872	641	63,612	6,567	3,097	106,722	14,580	2,508	--	--	60,676	--
Trillion Btu																			
1960	226.6	73.3	12.0	1.4	75.0	13.5	13.9	4.2	3.4	118.5	105.8	5.7	353.4	0.0	14.6	23.8	0.0	5.8	697.5
1965	327.4	101.0	21.8	2.4	98.8	15.7	13.4	5.9	3.8	144.5	97.5	9.4	413.4	0.0	11.9	27.1	0.0	-17.7	863.1
1970	311.3	159.6	18.6	1.6	115.4	25.0	13.2	7.0	3.8	195.2	138.6	16.2	534.4	0.0	20.0	31.8	0.0	16.5	1,073.6
1975	197.2	141.9	21.5	1.0	122.5	16.9	6.8	8.9	4.6	229.5	169.4	12.4	593.6	48.3	24.0	31.8	0.0	33.2	1,069.9
1980	235.7	163.4	17.5	0.9	127.6	19.5	6.6	7.6	4.4	231.1	103.6	14.1	533.0	119.4	13.2	32.6	0.0	60.7	1,158.0
1985	256.2	156.0	30.0	0.4	110.4	21.7	7.1	6.5	4.0	239.7	49.8	14.9	484.4	105.4	15.9	39.2	0.0	104.8	1,162.0
1990	286.5	180.6	33.2	0.4	106.8	20.3	2.6	7.1	4.5	249.1	66.3	20.2	510.5	13.2	23.9	^j 26.5	^j 0.1	218.8	^j 1,260.1
1995	289.6	199.2	28.1	0.2	111.7	19.4	4.5	9.7	4.3	268.4	25.6	18.5	490.6	135.9	14.9	36.8	0.1	165.2	1,332.2
1996	292.5	201.7	24.0	0.2	126.2	22.1	4.5	10.8	4.2	270.2	28.4	20.4	511.0	127.0	25.4	40.5	0.1	169.2	1,367.4
1997	289.7	219.2	37.3	0.2	114.1	23.2	4.9	10.3	4.4	279.4	26.5	19.4	519.8	138.7	16.2	36.5	0.2	155.2	1,375.4
1998	303.9	195.5	31.1	0.3	120.3	22.2	6.5	8.7	4.6	284.5	47.6	26.0	551.8	139.9	17.7	34.6	0.2	129.4	1,373.0
1999	305.2	203.0	29.0	0.2	126.6	22.3	4.6	7.7	4.7	296.4	57.1	29.8	578.6	139.1	14.6	36.2	0.2	138.6	1,415.5
2000	312.2	219.4	31.2	0.2	130.4	23.3	5.1	8.7	4.6	297.8	32.4	23.7	557.3	144.2	17.7	36.3	0.2	157.1	1,444.3
2001	318.9	185.0	28.6	0.5	134.8	16.6	5.1	9.2	4.2	308.8	36.3	16.8	560.9	142.7	12.2	^R 26.5	0.3	^R 180.1	^R 1,426.6
2002	325.8	201.8	30.3	0.5	125.1	9.7	3.0	8.6	4.2	314.8	28.7	16.8	541.6	126.6	16.9	^R 27.3	0.2	259.0	^R 1,499.2
2003	329.6	202.9	22.9	0.4	127.1	13.3	3.5	12.7	3.8	322.4	39.6	15.2	561.0	142.7	27.1	^R 33.6	0.2	253.2	^R 1,550.4
2004	327.2	198.7	21.0	0.4	133.0	17.8	4.0	10.4	3.9	331.7	41.3	18.1	581.6	152.0	25.1	34.5	0.3	207.0	1,526.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maryland

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	169	46	6,053	2,234	617	8,903	406	--	--	2,772	--	6,856	--
1965	133	57	7,191	2,177	893	10,261	328	--	--	4,384	--	10,468	--
1970	46	73	8,234	2,166	1,007	11,407	377	--	--	7,690	--	18,612	--
1975	10	69	8,453	1,014	1,242	10,708	452	--	--	9,660	--	23,230	--
1980	8	68	8,797	830	740	10,367	794	--	--	12,119	--	29,221	--
1985	27	68	5,609	1,113	987	7,709	972	--	--	14,319	--	32,986	--
1990	10	66	5,090	385	1,088	6,563	393	--	--	19,102	--	44,187	--
1995	39	77	4,923	535	1,647	7,104	588	--	--	22,234	--	50,507	--
1996	5	86	5,811	593	1,853	8,257	611	--	--	22,986	--	52,284	--
1997	6	77	5,016	597	1,989	7,602	458	--	--	21,937	--	49,713	--
1998	6	68	4,314	720	1,814	6,848	407	--	--	22,407	--	50,830	--
1999	6	75	4,668	523	1,661	6,853	428	--	--	23,342	--	53,407	--
2000	9	84	4,865	505	1,346	6,717	460	--	--	23,949	--	54,489	--
2001	8	71	4,798	471	1,619	6,887	290	--	--	24,294	--	^R 54,639	--
2002	(s)	80	4,400	305	1,686	6,391	294	--	--	25,489	--	57,102	--
2003	1	91	4,119	404	2,350	6,873	310	--	--	26,671	--	59,247	--
2004	6	86	4,098	550	2,025	6,673	318	--	--	27,952	--	62,216	--
Trillion Btu													
1960	4.2	47.5	35.3	12.7	2.5	50.4	8.1	0.0	0.0	9.5	119.7	23.4	143.1
1965	3.3	58.1	41.9	12.3	3.6	57.8	6.6	0.0	0.0	15.0	140.7	35.7	176.4
1970	1.1	74.5	48.0	12.3	3.8	64.0	7.5	0.0	0.0	26.2	173.4	63.5	237.0
1975	0.2	70.1	49.2	5.7	4.6	59.6	9.0	0.0	0.0	33.0	171.9	79.3	251.2
1980	0.2	69.4	51.2	4.7	2.7	58.7	15.9	0.0	0.0	41.4	185.5	99.7	285.2
1985	0.7	70.7	32.7	6.3	3.6	42.5	19.4	0.0	0.0	48.9	182.2	112.5	294.8
1990	0.2	68.2	29.6	2.2	3.9	35.8	7.9	^f 0.1	^f (s)	65.2	^f 177.4	150.8	^f 328.2
1995	1.0	78.5	28.7	3.0	6.0	37.7	11.8	0.1	0.1	75.9	204.9	172.3	377.2
1996	0.1	88.0	33.9	3.4	6.7	43.9	12.2	0.1	0.1	78.4	222.8	178.4	401.2
1997	0.2	80.1	29.2	3.4	7.2	39.8	9.2	0.1	0.1	74.8	204.2	169.6	373.8
1998	0.1	70.6	25.1	4.1	6.6	35.8	8.1	0.1	0.1	76.5	191.2	173.4	364.6
1999	0.1	77.4	27.2	3.0	6.0	36.2	8.6	0.1	(s)	79.6	202.0	182.2	384.3
2000	0.2	86.8	28.3	2.9	4.9	36.1	9.2	0.1	(s)	81.7	214.2	185.9	400.1
2001	0.2	73.3	27.9	2.7	5.9	36.5	5.8	0.1	(s)	82.9	198.9	^R 186.4	^R 385.3
2002	(s)	82.2	25.6	1.7	6.1	33.5	5.9	0.1	(s)	87.0	208.7	194.8	403.6
2003	(s)	93.3	24.0	2.3	8.5	34.8	6.2	0.2	(s)	91.0	225.6	202.1	427.8
2004	0.2	88.4	23.9	3.1	7.3	34.3	6.4	0.2	0.1	95.4	224.8	212.3	437.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maryland

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours	Million Kilowatthours				Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	117	8	2,357	72	109	72	2,442	5,052	0	--	--	2,696	--	6,667	--
1965	100	13	2,800	70	158	90	1,920	5,039	0	--	--	3,937	--	9,402	--
1970	36	26	3,206	70	178	103	1,498	5,054	0	--	--	6,347	--	15,362	--
1975	24	25	3,291	33	219	120	1,169	4,833	0	--	--	8,573	--	20,617	--
1980	29	29	2,865	20	131	121	1,159	4,296	0	--	--	9,387	--	22,635	--
1985	94	24	2,169	89	174	170	252	2,855	0	--	--	9,621	--	22,163	--
1990	38	24	2,489	48	192	231	548	3,508	^g 0	--	--	11,021	--	25,495	--
1995	258	47	3,097	210	291	32	119	3,749	0	--	--	23,730	--	53,906	--
1996	36	46	3,270	151	327	32	108	3,886	0	--	--	23,780	--	54,091	--
1997	49	50	2,481	227	351	31	50	3,140	0	--	--	24,070	--	54,547	--
1998	47	57	2,555	313	320	31	42	3,262	0	--	--	24,950	--	56,598	--
1999	41	58	2,212	254	293	31	52	2,843	0	--	--	25,662	--	58,713	--
2000	74	56	2,582	363	238	116	87	3,385	0	--	--	26,506	--	60,305	--
2001	67	60	2,513	347	286	33	34	3,212	0	--	--	26,995	--	^R 60,714	--
2002	3	64	2,499	171	298	33	63	3,064	0	--	--	21,845	--	48,940	--
2003	5	71	2,232	195	415	33	280	3,155	0	--	--	16,950	--	37,653	--
2004	50	70	2,108	126	357	33	87	2,711	0	--	--	17,264	--	38,427	--
Trillion Btu															
1960	2.9	8.3	13.7	0.4	0.4	0.4	15.4	30.3	0.0	0.2	0.0	9.2	50.9	22.7	73.6
1965	2.5	13.3	16.3	0.4	0.6	0.5	12.1	29.9	0.0	0.1	0.0	13.4	59.2	32.1	91.3
1970	0.9	26.5	18.7	0.4	0.7	0.5	9.4	29.7	0.0	0.1	0.0	21.7	78.8	52.4	131.2
1975	0.5	25.5	19.2	0.2	0.8	0.6	7.4	28.2	0.0	0.2	0.0	29.3	83.7	70.3	154.0
1980	0.7	29.1	16.7	0.1	0.5	0.6	7.3	25.2	0.0	0.4	0.0	32.0	87.5	77.2	164.7
1985	2.3	25.0	12.6	0.5	0.6	0.9	1.6	16.2	0.0	0.5	0.0	32.8	76.8	75.6	152.4
1990	1.0	24.7	14.5	0.3	0.7	1.2	3.4	20.1	^g 0.0	^g 1.6	^g 0.0	37.6	^g 85.0	87.0	^g 172.0
1995	6.4	48.0	18.0	1.2	1.1	0.2	0.7	21.2	0.0	3.6	0.0	81.0	160.2	183.9	344.2
1996	0.9	47.2	19.0	0.9	1.2	0.2	0.7	21.9	0.0	3.8	0.0	81.1	155.0	184.6	339.5
1997	1.2	51.5	14.5	1.3	1.3	0.2	0.3	17.5	0.0	3.9	0.0	82.1	156.2	186.1	342.3
1998	1.2	59.5	14.9	1.8	1.2	0.2	0.3	18.2	0.0	3.3	0.0	85.1	167.3	193.1	360.5
1999	1.0	60.1	12.9	1.4	1.1	0.2	0.3	15.9	0.0	3.2	0.0	87.6	167.7	200.3	368.0
2000	1.9	57.5	15.0	2.1	0.9	0.6	0.5	19.1	0.0	3.4	0.0	90.4	172.3	205.8	378.1
2001	1.7	62.0	14.6	2.0	1.0	0.2	0.2	18.0	0.0	2.9	0.0	92.1	176.7	^R 207.2	^R 383.9
2002	0.1	65.7	14.6	1.0	1.1	0.2	0.4	17.2	0.0	2.5	0.0	74.5	160.0	167.0	327.0
2003	0.1	72.6	13.0	1.1	1.5	0.2	1.8	17.5	0.0	3.0	0.0	57.8	151.1	128.5	279.6
2004	1.2	71.6	12.3	0.7	1.3	0.2	0.5	15.0	0.0	3.3	0.0	58.9	150.1	131.1	281.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maryland

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	5,067	16	1,813	2,093	138	317	247	670	10,333	978	16,589	1	--	--	3,269	--	8,085
1965	6,101	28	3,289	3,177	124	412	316	439	8,296	1,697	17,750	1	--	--	5,073	--	12,114
1970	6,174	44	2,798	3,248	95	624	325	261	6,672	2,895	16,918	(s)	--	--	8,469	--	20,499
1975	3,854	43	3,246	3,434	146	888	456	293	4,983	2,166	15,614	0	--	--	9,069	--	21,809
1980	3,367	54	2,638	3,297	318	1,163	414	145	2,669	2,504	13,148	0	--	--	13,057	--	31,482
1985	2,846	55	4,520	2,844	44	584	377	299	1,022	2,640	12,329	0	--	--	15,312	--	35,273
1990	2,200	62	5,008	2,059	33	633	424	297	1,224	3,599	13,277	⁹ 0	--	--	19,308	--	44,665
1995	760	49	4,236	1,737	57	701	405	328	728	3,319	11,513	0	--	--	10,057	--	22,846
1996	785	50	3,610	2,057	58	767	393	343	1,361	3,682	12,270	0	--	--	10,098	--	22,970
1997	768	66	5,619	1,711	41	414	415	363	839	3,523	12,924	0	--	--	10,128	--	22,952
1998	769	39	4,679	2,723	113	263	434	294	636	4,643	13,786	0	--	--	10,344	--	23,465
1999	798	37	4,375	2,366	36	176	439	238	592	5,319	13,541	0	--	--	9,936	--	22,734
2000	810	40	4,701	2,109	30	747	432	251	547	4,259	13,076	0	--	--	10,066	--	22,902
2001	1,286	27	4,315	2,334	74	633	396	787	540	2,915	11,994	0	--	--	10,177	--	^R 22,888
2002	1,323	27	4,561	1,767	45	371	391	860	413	2,939	11,347	0	--	--	20,875	--	46,765
2003	1,254	22	3,455	1,986	26	704	362	946	593	2,651	10,723	0	--	--	27,176	--	60,367
2004	1,375	23	3,165	2,057	38	456	366	1,037	719	3,097	10,936	0	--	--	21,195	--	47,176

Trillion Btu																	
1960	135.0	16.6	12.0	12.2	0.8	1.3	1.5	3.5	65.0	5.7	102.0	(s)	15.6	0.0	11.2	280.2	307.8
1965	162.4	28.3	21.8	18.5	0.7	1.7	1.9	2.3	52.2	9.4	108.5	(s)	20.4	0.0	17.3	336.9	378.2
1970	162.7	44.9	18.6	18.9	0.5	2.4	2.0	1.4	41.9	16.2	101.8	(s)	24.1	0.0	28.9	362.3	432.3
1975	102.2	43.6	21.5	20.0	0.8	3.3	2.8	1.5	31.3	12.4	93.7	0.0	22.6	0.0	30.9	293.0	367.4
1980	88.6	55.5	17.5	19.2	1.8	4.3	2.5	0.8	16.8	14.1	76.9	0.0	16.4	0.0	44.6	281.9	389.3
1985	74.8	56.5	30.0	16.6	0.2	2.1	2.3	1.6	6.4	14.9	74.1	0.0	19.2	0.0	52.2	276.8	397.2
1990	57.4	63.5	33.2	12.0	0.2	2.3	2.6	1.6	7.7	20.2	79.8	⁹ 0.0	⁹ 9.7	⁹ 0.0	65.9	⁹ 276.3	⁹ 428.7
1995	19.2	50.2	28.1	10.1	0.3	2.5	2.5	1.7	4.6	18.5	68.3	0.0	11.3	0.0	34.3	183.4	261.3
1996	19.7	51.5	24.0	12.0	0.3	2.8	2.4	1.8	8.6	20.4	72.2	0.0	12.3	0.0	34.5	190.1	268.5
1997	19.3	68.2	37.3	10.0	0.2	1.5	2.5	1.9	5.3	19.4	78.1	0.0	11.8	0.0	34.6	211.9	290.2
1998	19.2	40.0	31.1	15.9	0.6	1.0	2.6	1.5	4.0	26.0	82.7	0.0	11.1	0.0	35.3	188.2	268.3
1999	19.9	38.5	29.0	13.8	0.2	0.6	2.7	1.2	3.7	29.8	81.1	0.0	11.7	0.0	33.9	185.1	262.7
2000	20.3	41.4	31.2	12.3	0.2	2.7	2.6	1.3	3.4	23.7	77.4	0.0	11.3	0.0	34.3	184.7	262.9
2001	33.6	28.4	28.6	13.6	0.4	2.3	2.4	4.1	3.4	16.8	71.6	0.0	^R 5.7	0.0	34.7	^R 174.1	252.2
2002	34.1	27.9	30.3	10.3	0.3	1.3	2.4	4.5	2.6	16.8	68.4	0.0	^R 5.8	0.0	71.2	^R 207.4	^R 366.9
2003	31.8	22.5	22.9	11.6	0.1	2.6	2.2	4.9	3.7	15.2	63.3	0.0	^R 11.5	0.0	92.7	^R 221.8	^R 427.8
2004	34.5	23.4	21.0	12.0	0.2	1.6	2.2	5.4	4.5	18.1	65.1	0.0	11.6	0.0	72.3	207.0	367.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Maryland

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	87	1	279	2,352	2,457	9	318	21,810	3,893	31,117	0	19	--	48	--
1965	20	1	474	3,774	2,856	10	310	26,981	5,024	39,429	0	0	--	0	--
1970	10	2	309	4,184	4,477	32	299	36,795	3,931	50,027	0	0	--	0	--
1975	1	2	205	5,244	2,973	46	307	43,275	2,807	54,856	0	0	--	0	--
1980	0	4	173	5,848	3,512	26	310	43,737	4,514	58,121	0	23	--	54	--
1985	0	2	76	7,506	3,901	60	282	45,163	1,511	58,499	^f 1	75	--	172	--
1990	0	2	74	8,091	3,637	52	318	46,887	1,825	60,883	0	102	--	237	--
1995	0	3	48	8,744	3,430	48	303	51,115	931	64,619	76	137	--	311	--
1996	0	3	35	9,740	3,897	49	294	51,425	755	66,196	64	133	--	302	--
1997	0	3	43	9,729	4,096	102	311	53,200	724	68,204	73	130	--	295	--
1998	0	3	56	10,372	3,920	13	325	54,260	1,141	70,086	61	134	--	303	--
1999	0	3	39	11,960	3,938	12	329	56,617	977	73,872	62	146	--	334	--
2000	0	3	40	12,248	4,108	76	324	56,790	787	74,373	69	156	--	356	--
2001	0	3	105	12,513	2,929	7	297	58,442	613	74,905	7	174	--	^R 392	--
2002	0	3	100	12,104	1,718	12	293	59,552	694	74,472	881	171	--	383	--
2003	0	3	88	12,336	2,343	30	271	60,929	404	76,400	6	461	--	1,025	--
2004	0	3	83	13,430	3,140	34	274	62,543	1,245	80,749	7	481	--	1,071	--
Trillion Btu															
1960	2.3	0.9	1.4	13.7	13.5	(s)	1.9	114.6	24.5	169.6	0.0	0.1	172.8	0.2	172.9
1965	0.5	1.2	2.4	22.0	15.7	(s)	1.9	141.7	31.6	215.4	0.0	0.0	217.1	0.0	217.1
1970	0.2	2.1	1.6	24.4	25.0	0.1	1.8	193.3	24.7	270.8	0.0	0.0	273.1	0.0	273.1
1975	(s)	2.2	1.0	30.5	16.5	0.2	1.9	227.3	17.6	295.1	0.0	0.0	297.3	0.0	297.3
1980	0.0	4.0	0.9	34.1	19.5	0.1	1.9	229.8	28.4	314.5	0.0	0.1	318.6	0.2	318.8
1985	0.0	2.3	0.4	43.7	21.7	0.2	1.7	237.2	9.5	314.5	^f (s)	0.3	^f 317.0	0.6	^f 317.6
1990	0.0	2.5	0.4	47.1	20.3	0.2	1.9	246.3	11.5	327.7	0.0	0.3	330.5	0.8	331.3
1995	0.0	3.0	0.2	50.9	19.4	0.2	1.8	266.6	5.9	345.1	0.3	0.5	348.5	1.1	349.5
1996	0.0	2.8	0.2	56.7	22.1	0.2	1.8	268.2	4.7	354.0	0.2	0.5	357.2	1.0	358.2
1997	0.0	3.3	0.2	56.7	23.2	0.4	1.9	277.3	4.6	364.2	0.3	0.4	368.0	1.0	369.0
1998	0.0	3.2	0.3	60.4	22.2	(s)	2.0	282.8	7.2	374.9	0.2	0.5	378.6	1.0	379.6
1999	0.0	3.5	0.2	69.7	22.3	(s)	2.0	295.0	6.1	395.4	0.2	0.5	399.4	1.1	400.5
2000	0.0	3.5	0.2	71.3	23.3	0.3	2.0	295.9	4.9	397.9	0.2	0.5	401.9	1.2	403.2
2001	0.0	3.1	0.5	72.9	16.6	(s)	1.8	304.5	3.9	400.2	(s)	0.6	403.8	1.3	405.2
2002	0.0	2.8	0.5	70.5	9.7	(s)	1.8	310.1	4.4	397.1	3.1	0.6	400.4	1.3	401.7
2003	0.0	3.1	0.4	71.9	13.3	0.1	1.6	317.3	2.5	407.1	(s)	1.6	411.8	3.5	415.3
2004	0.0	2.8	0.4	78.2	17.8	0.1	1.7	326.2	7.8	432.2	(s)	1.6	436.7	3.7	440.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Maryland

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	3,088	(s)	166	16	0	182	0	1,356	--	0	0	0	0	--
1965	6,018	(s)	269	26	0	295	0	1,140	--	0	0	0	0	--
1970	5,950	11	9,946	945	0	10,891	0	1,906	--	0	0	0	0	--
1975	3,873	(s)	17,982	688	0	18,669	4,386	2,311	--	0	0	0	0	--
1980	5,908	5	8,139	1,111	0	9,250	10,947	1,270	--	0	0	0	0	--
1985	7,046	1	5,131	830	0	5,961	9,926	1,524	--	0	0	0	0	--
1990	8,945	21	6,945	598	0	7,543	1,251	2,299	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	10,141	19	2,287	674	0	2,961	12,938	1,442	--	0	0	0	0	--
1996	10,540	12	2,293	792	0	3,085	12,093	2,457	--	0	0	0	0	--
1997	10,417	16	2,600	650	0	3,250	13,213	1,588	--	0	0	0	0	--
1998	10,968	22	5,753	694	0	6,447	13,331	1,740	--	0	0	0	0	--
1999	10,980	23	7,462	535	0	7,997	13,312	1,424	--	0	0	0	0	--
2000	11,327	29	3,733	582	0	4,316	13,827	1,733	--	0	0	0	0	--
2001	11,158	18	4,590	976	0	5,565	13,656	1,184	--	0	0	0	37	--
2002	11,245	22	3,402	709	0	4,111	12,128	1,661	--	0	0	0	0	--
2003	11,780	11	5,022	1,154	0	6,176	13,691	2,647	--	0	0	0	0	--
2004	11,576	12	4,516	1,137	0	5,654	14,580	2,508	--	0	0	0	0	--
Trillion Btu														
1960	82.2	0.1	1.0	0.1	0.0	1.1	0.0	14.6	0.0	0.0	0.0	0.0	0.0	98.0
1965	158.7	0.1	1.7	0.1	0.0	1.8	0.0	11.9	0.0	0.0	0.0	0.0	0.0	172.5
1970	146.4	11.7	62.5	5.5	0.0	68.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	246.2
1975	94.2	0.4	113.0	4.0	0.0	117.0	48.3	24.0	0.0	0.0	0.0	0.0	0.0	284.0
1980	146.3	5.4	51.2	6.5	0.0	57.6	119.4	13.2	0.0	0.0	0.0	0.0	0.0	341.8
1985	178.4	1.4	32.3	4.8	0.0	37.1	105.4	15.9	0.2	0.0	0.0	0.0	0.0	338.5
1990	227.9	21.7	43.7	3.5	0.0	47.1	13.2	23.9	ⁱ 7.3	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 341.2
1995	262.9	19.5	14.4	3.9	0.0	18.3	135.9	14.9	10.1	0.0	0.0	0.0	0.0	461.7
1996	271.7	12.3	14.4	4.6	0.0	19.0	127.0	25.4	12.1	0.0	0.0	0.0	0.0	467.6
1997	269.0	16.1	16.3	3.8	0.0	20.1	138.7	16.2	11.7	0.0	0.0	0.0	0.0	471.9
1998	283.3	22.3	36.2	4.0	0.0	40.2	139.9	17.7	12.1	0.0	0.0	0.0	0.0	515.5
1999	284.1	23.7	46.9	3.1	0.0	50.0	139.1	14.6	12.7	0.0	0.0	0.0	0.0	524.2
2000	289.7	30.1	23.5	3.4	0.0	26.9	144.2	17.7	12.3	0.0	0.0	0.0	0.0	520.9
2001	283.3	18.1	28.9	5.7	0.0	34.5	142.7	12.2	12.2	0.0	0.0	0.0	0.1	503.2
2002	291.7	23.2	21.4	4.1	0.0	25.5	126.6	16.9	13.0	0.0	0.0	0.0	0.0	497.0
2003	297.6	11.4	31.6	6.7	0.0	38.3	142.7	27.1	12.9	0.0	0.0	0.0	0.0	530.0
2004	291.3	12.5	28.4	6.6	0.0	35.0	152.0	25.1	13.2	0.0	0.0	0.0	0.0	529.2

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	4,559	78	2,270	968	51,240	1,209	5,718	1,148	799	34,993	39,108	1,269	138,722	34	982	--	--	-888	--
1965	4,932	114	2,867	1,702	55,825	3,166	3,496	1,511	915	39,752	54,207	1,120	164,561	966	664	--	--	-6,359	--
1970	910	147	2,843	276	59,239	7,864	2,103	1,820	947	49,527	86,130	1,121	211,870	1,209	753	--	--	-7,263	--
1975	1,016	154	1,832	228	58,665	8,009	867	2,315	786	54,630	65,975	1,127	194,432	3,781	417	--	--	6,542	--
1980	874	183	1,231	274	37,613	8,573	698	2,125	841	51,443	54,143	2,312	159,253	3,232	158	--	--	10,770	--
1985	4,176	219	1,051	134	36,020	6,984	737	1,719	765	54,847	36,075	2,268	140,600	6,133	262	--	--	13,119	--
1990	4,370	264	1,339	97	38,606	9,806	308	2,631	861	56,125	31,948	2,337	144,056	5,070	1,249	--	--	26,526	--
1995	4,149	382	1,249	84	37,278	6,636	275	2,143	821	58,775	13,869	2,270	123,401	4,486	869	--	--	37,818	--
1996	4,498	377	1,270	90	34,449	6,873	209	2,563	797	59,794	15,396	4,911	126,352	5,324	1,189	--	--	41,788	--
1997	4,891	403	916	87	34,545	7,298	257	2,109	842	60,912	22,386	5,307	134,659	4,310	1,032	--	--	25,112	--
1998	4,373	359	838	87	32,837	7,728	290	1,969	882	62,284	25,658	5,387	137,959	5,698	1,030	--	--	21,599	--
1999	4,509	345	967	96	32,766	8,081	426	2,295	891	63,433	19,248	5,453	133,657	4,518	975	--	--	41,436	--
2000	4,556	343	1,793	116	37,019	8,204	308	2,923	877	65,029	16,653	5,312	138,235	5,512	1,065	--	--	52,281	--
2001	4,429	349	1,818	80	38,599	7,003	386	2,910	804	65,358	16,347	2,098	135,404	5,144	703	--	--	^R 55,632	--
2002	4,735	^R 393	1,885	77	37,750	5,609	195	2,315	794	67,106	12,843	2,203	130,777	5,769	863	--	--	52,251	--
2003	4,498	^R 404	1,405	81	38,654	6,396	324	2,608	734	66,973	13,762	2,199	133,135	4,978	1,075	--	--	^R 46,155	--
2004	4,446	373	1,448	97	37,923	8,235	381	1,962	744	68,240	14,152	2,299	135,480	5,939	998	--	--	50,699	--
Trillion Btu																			
1960	118.7	80.6	15.1	4.9	298.5	6.7	32.4	4.6	4.8	183.8	245.9	7.6	804.3	0.4	10.6	42.8	0.0	-3.0	1,054.3
1965	127.9	115.7	19.0	8.6	325.2	17.8	19.8	6.1	5.6	208.8	340.8	6.0	957.7	11.4	6.9	48.7	0.0	-21.7	1,246.7
1970	21.4	149.1	18.9	1.4	345.1	44.5	11.9	6.9	5.7	260.2	541.5	6.0	1,242.0	13.3	7.9	57.1	0.0	-24.8	1,466.0
1975	24.5	154.6	12.2	1.2	341.7	45.3	4.9	8.6	4.8	287.0	414.8	6.1	1,126.5	41.6	4.3	49.0	0.0	22.3	1,422.8
1980	22.8	185.5	8.2	1.4	219.1	48.5	4.0	7.8	5.1	270.2	340.4	12.6	917.2	35.3	1.6	70.8	0.0	36.7	1,270.0
1985	110.2	224.8	7.0	0.7	209.8	39.5	4.2	6.2	4.6	288.1	226.8	12.2	799.1	65.1	2.7	62.7	14.7	44.8	1,324.2
1990	114.0	273.9	8.9	0.5	224.9	55.5	1.7	9.5	5.2	294.8	200.9	12.7	814.5	53.6	13.0	^j 52.1	^j 6.8	90.5	^j 1,418.4
1995	105.4	391.6	8.3	0.4	217.1	37.6	1.6	7.8	5.0	306.5	87.2	12.2	683.7	47.1	9.0	63.3	6.4	129.0	1,435.5
1996	113.7	387.4	8.4	0.5	200.7	39.0	1.2	9.3	4.8	311.9	96.8	26.3	698.8	55.9	12.3	65.8	5.8	142.6	1,482.2
1997	122.9	411.6	6.1	0.4	201.2	41.4	1.5	7.6	5.1	317.5	140.7	28.6	750.2	45.2	10.5	61.4	6.7	85.7	1,494.3
1998	109.9	367.1	5.6	0.4	191.3	43.8	1.6	7.1	5.3	324.6	161.3	29.1	770.2	59.8	10.5	55.5	6.4	73.7	1,453.1
1999	113.6	361.4	6.4	0.5	190.9	45.8	2.4	8.3	5.4	330.6	121.0	29.3	740.5	47.2	10.0	55.1	7.0	141.4	1,476.2
2000	114.7	357.7	11.9	0.6	215.6	46.5	1.7	10.5	5.3	338.8	104.7	28.4	764.2	57.5	10.9	58.5	6.5	178.4	1,548.3
2001	109.0	364.1	12.1	0.4	224.8	39.7	2.2	10.5	4.9	340.5	102.8	11.3	749.2	53.7	7.3	53.7	4.3	^R 189.8	^R 1,531.1
2002	118.4	408.9	12.5	0.4	219.9	31.8	1.1	8.4	4.8	349.5	80.7	11.9	721.0	60.2	8.8	^R 50.4	2.1	178.3	1,548.0
2003	109.4	^R 420.2	9.3	0.4	225.2	36.3	1.8	9.5	4.5	348.7	86.5	11.9	734.0	51.9	11.0	^R 52.7	1.2	157.5	^R 1,537.8
2004	105.1	387.4	9.6	0.5	220.9	46.7	2.2	7.1	4.5	355.9	89.0	12.4	748.7	61.9	10.0	54.5	2.2	173.0	1,542.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	487	45	34,305	4,858	752	39,915	427	--	--	4,190	--	10,363	--
1965	210	65	37,082	2,682	926	40,689	378	--	--	5,766	--	13,768	--
1970	104	83	38,530	1,434	933	40,897	459	--	--	9,335	--	22,594	--
1975	30	90	37,860	591	1,006	39,456	491	--	--	10,648	--	25,607	--
1980	21	94	22,712	323	675	23,710	2,099	--	--	11,571	--	27,899	--
1985	30	98	20,064	577	1,021	21,663	1,470	--	--	12,907	--	29,733	--
1990	13	107	20,540	163	1,358	22,061	904	--	--	15,581	--	36,043	--
1995	4	106	20,064	130	1,451	21,644	976	--	--	15,993	--	36,330	--
1996	4	114	18,362	148	1,720	20,230	1,014	--	--	16,256	--	36,976	--
1997	3	112	18,332	190	1,614	20,136	726	--	--	16,278	--	36,890	--
1998	3	102	16,979	197	1,478	18,654	646	--	--	16,388	--	37,176	--
1999	4	106	17,825	179	1,522	19,526	680	--	--	17,392	--	39,793	--
2000	2	114	20,445	191	1,883	22,518	731	--	--	17,562	--	39,957	--
2001	2	107	22,293	197	1,709	24,199	575	--	--	17,984	--	^R 40,446	--
2002	11	109	22,066	127	1,383	23,576	583	--	--	18,695	--	41,881	--
2003	7	126	20,202	244	2,022	22,467	614	--	--	19,591	--	43,518	--
2004	4	113	19,337	279	1,583	21,199	629	--	--	19,769	--	44,001	--
Trillion Btu													
1960	12.1	46.6	199.8	27.5	3.0	230.4	8.5	0.0	0.0	14.3	311.9	35.4	347.3
1965	5.2	65.7	216.0	15.2	3.7	234.9	7.6	0.0	0.0	19.7	333.0	47.0	380.0
1970	2.5	83.6	224.4	8.1	3.5	236.1	9.2	0.0	0.0	31.8	363.2	77.1	440.3
1975	0.7	90.6	220.5	3.3	3.7	227.6	9.8	0.0	0.0	36.3	365.0	87.4	452.4
1980	0.5	96.0	132.3	1.8	2.5	136.6	42.0	0.0	0.0	39.5	314.5	95.2	409.7
1985	0.7	100.1	116.9	3.3	3.7	123.8	29.4	0.0	0.0	44.0	298.1	101.5	399.6
1990	0.3	110.6	119.6	0.9	4.9	125.5	18.1	^f 0.0	^f 0.2	53.2	^f 307.8	123.0	^f 430.8
1995	0.1	108.5	116.9	0.7	5.3	122.9	19.5	0.0	0.2	54.6	305.8	124.0	429.8
1996	0.1	117.3	107.0	0.8	6.2	114.0	20.3	0.0	0.2	55.5	307.4	126.2	433.6
1997	0.1	114.5	106.8	1.1	5.8	113.7	14.5	0.0	0.2	55.5	298.6	125.9	424.4
1998	0.1	103.6	98.9	1.1	5.3	105.4	12.9	0.0	0.2	55.9	278.1	126.8	404.9
1999	0.1	112.1	103.8	1.0	5.5	110.3	13.6	(s)	0.2	59.3	295.7	135.8	431.5
2000	(s)	119.1	119.1	1.1	6.8	127.0	14.6	(s)	0.2	59.9	320.9	136.3	457.2
2001	(s)	111.6	129.9	1.1	6.2	137.1	11.5	(s)	0.2	61.4	321.8	^R 138.0	^R 459.8
2002	0.3	^R 114.9	128.5	0.7	5.0	134.3	11.7	(s)	0.2	63.8	325.0	142.9	467.9
2003	0.2	^R 132.0	117.7	1.4	7.3	126.4	12.3	(s)	0.2	66.8	337.9	148.5	486.4
2004	0.1	117.4	112.6	1.6	5.7	119.9	12.6	(s)	0.2	67.5	317.6	150.1	467.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	338	10	11,965	404	133	135	10,036	22,672	0	--	--	3,011	--	7,446	--
1965	159	16	12,933	223	163	92	14,503	27,914	0	--	--	4,302	--	10,273	--
1970	82	35	13,438	119	165	102	14,872	28,696	0	--	--	7,782	--	18,836	--
1975	71	38	13,204	49	178	109	9,122	22,662	0	--	--	11,397	--	27,407	--
1980	79	53	7,510	30	119	191	4,854	12,704	0	--	--	13,047	--	31,458	--
1985	107	41	6,369	108	180	188	3,157	10,001	0	--	--	15,566	--	35,858	--
1990	50	51	7,409	127	240	69	4,473	12,317	^g 0	--	--	19,520	--	45,155	--
1995	23	82	6,478	110	256	65	3,069	9,978	0	--	--	20,255	--	46,012	--
1996	29	96	5,637	47	303	65	2,430	8,483	0	--	--	20,711	--	47,110	--
1997	26	106	5,678	47	285	48	2,239	8,297	0	--	--	21,203	--	48,051	--
1998	23	90	5,404	70	261	66	1,417	7,218	0	--	--	21,773	--	49,393	--
1999	33	65	3,830	225	269	63	1,184	5,571	0	--	--	21,815	--	49,913	--
2000	14	64	5,205	107	332	279	1,388	7,311	0	--	--	23,439	--	53,328	--
2001	14	62	4,218	156	302	84	523	5,282	0	--	--	24,510	--	^R 55,124	--
2002	77	65	3,835	59	244	117	642	4,896	4	--	--	24,685	--	55,300	--
2003	44	^R 63	5,569	72	357	104	1,811	7,912	6	--	--	25,648	--	56,973	--
2004	31	57	4,312	91	279	70	2,771	7,523	3	--	--	26,020	--	57,916	--

Trillion Btu															
1960	8.4	10.6	69.7	2.3	0.5	0.7	63.1	136.3	0.0	0.2	0.0	10.3	165.8	25.4	191.2
1965	3.9	16.5	75.3	1.3	0.7	0.5	91.2	168.9	0.0	0.1	0.0	14.7	204.1	35.1	239.2
1970	1.9	35.8	78.3	0.7	0.6	0.5	93.5	173.6	0.0	0.2	0.0	26.6	238.0	64.3	302.3
1975	1.6	38.0	76.9	0.3	0.7	0.6	57.4	135.8	0.0	0.2	0.0	38.9	214.4	93.5	307.9
1980	1.8	54.3	43.7	0.2	0.4	1.0	30.5	75.9	0.0	1.0	0.0	44.5	177.6	107.3	284.9
1985	2.5	42.4	37.1	0.6	0.6	1.0	19.8	59.2	0.0	0.7	0.0	53.1	157.9	122.3	280.3
1990	1.3	52.4	43.2	0.7	0.9	0.4	28.1	73.2	^g 0.0	^g 2.0	^g (s)	66.6	^g 195.5	154.1	^g 349.6
1995	0.6	84.4	37.7	0.6	0.9	0.3	19.3	58.9	0.0	2.7	0.1	69.1	215.8	157.0	372.8
1996	0.7	98.7	32.8	0.3	1.1	0.3	15.3	49.8	0.0	2.8	0.1	70.7	222.8	160.7	383.6
1997	0.6	107.9	33.1	0.3	1.0	0.3	14.1	48.7	0.0	2.4	0.2	72.3	232.1	163.9	396.1
1998	0.6	91.5	31.5	0.4	0.9	0.3	8.9	42.1	0.0	2.2	0.2	74.3	210.8	168.5	379.4
1999	0.9	69.1	22.3	1.3	1.0	0.3	7.4	32.3	0.0	2.8	0.2	74.4	179.7	170.3	350.0
2000	0.4	66.6	30.3	0.6	1.2	1.5	8.7	42.3	0.0	3.1	0.2	80.0	192.6	182.0	374.6
2001	0.4	64.5	24.6	0.9	1.1	0.4	3.3	30.3	0.0	2.7	0.2	83.6	181.7	^R 188.1	^R 369.8
2002	1.9	68.1	22.3	0.3	0.9	0.6	4.0	28.2	(s)	2.9	0.2	84.2	185.6	188.7	374.3
2003	1.1	^R 65.6	32.4	0.4	1.3	0.5	11.4	46.1	0.1	2.9	0.3	87.5	^R 203.6	194.4	^R 398.0
2004	0.8	59.2	25.1	0.5	1.0	0.4	17.4	44.4	(s)	3.8	0.3	88.8	197.4	197.6	395.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	1,266	12	2,270	2,322	456	260	356	133	17,875	1,269	24,942	117	--	--	5,075	--	12,552	--
1965	496	20	2,867	2,841	590	401	507	206	25,076	1,120	33,607	100	--	--	6,546	--	15,632	--
1970	149	23	2,843	2,897	549	693	506	111	25,742	1,121	34,463	72	--	--	7,418	--	17,954	--
1975	110	24	1,832	2,654	227	1,099	353	81	15,891	1,127	23,264	67	--	--	7,330	--	17,627	--
1980	98	29	1,231	1,886	345	1,305	377	91	2,663	2,312	10,209	63	--	--	8,486	--	20,461	--
1985	176	33	1,051	1,165	52	448	343	367	8,399	2,268	14,094	63	--	--	9,454	--	21,778	--
1990	73	44	1,339	2,585	18	973	386	414	2,604	2,337	10,657	⁹ 11	--	--	10,157	--	23,495	--
1995	42	64	1,249	1,278	35	387	369	373	1,458	2,270	7,418	11	--	--	10,026	--	22,775	--
1996	38	62	1,270	1,219	14	495	358	372	1,690	4,911	10,329	20	--	--	10,085	--	22,940	--
1997	37	65	916	1,130	21	163	378	392	1,723	5,307	10,029	17	--	--	10,148	--	22,998	--
1998	35	63	838	1,011	23	185	396	316	1,780	5,387	9,935	11	--	--	10,212	--	23,166	--
1999	33	78	967	1,217	22	348	400	297	900	5,453	9,605	12	--	--	9,966	--	22,802	--
2000	55	75	1,793	944	11	651	394	306	1,099	5,312	10,511	12	--	--	10,533	--	23,964	--
2001	54	81	1,818	1,283	32	859	361	913	2,153	2,098	9,517	8	--	--	9,757	--	^R 21,945	--
2002	44	86	1,885	978	9	649	357	916	1,732	2,203	8,729	6	--	--	10,087	--	22,597	--
2003	57	^R 44	1,405	1,903	9	193	330	937	969	2,199	7,945	5	--	--	9,984	--	^R 22,178	--
2004	54	44	1,448	1,947	11	67	334	969	720	2,299	7,795	2	--	--	9,947	--	22,140	--
Trillion Btu																		
1960	33.2	12.0	15.1	13.5	2.6	1.0	2.2	0.7	112.4	7.6	155.0	1.3	34.1	0.0	17.3	252.8	42.8	295.6
1965	12.8	20.0	19.0	16.5	3.3	1.6	3.1	1.1	157.6	6.0	208.3	1.0	41.0	0.0	22.3	305.6	53.3	358.9
1970	3.6	22.8	18.9	16.9	3.1	2.6	3.1	0.6	161.8	6.0	213.0	0.8	47.8	0.0	25.3	313.3	61.3	374.5
1975	2.6	24.1	12.2	15.5	1.3	4.1	2.1	0.4	99.9	6.1	141.6	0.7	39.0	0.0	25.0	233.0	60.1	293.1
1980	2.4	29.4	8.2	11.0	2.0	4.8	2.3	0.5	16.7	12.6	58.0	0.7	27.8	0.0	29.0	147.2	69.8	217.0
1985	4.4	33.9	7.0	6.8	0.3	1.6	2.1	1.9	52.8	12.2	84.7	0.7	32.6	0.0	32.3	188.5	74.3	262.8
1990	1.8	45.9	8.9	15.1	0.1	3.5	2.3	2.2	16.4	12.7	61.1	⁹ 0.1	⁹ 7.6	⁹ 0.0	34.7	⁹ 151.2	80.2	⁹ 231.4
1995	1.1	65.2	8.3	7.4	0.2	1.4	2.2	1.9	9.2	12.2	42.9	0.1	9.6	0.0	34.2	153.1	77.7	230.8
1996	0.9	63.4	8.4	7.1	0.1	1.8	2.2	1.9	10.6	26.3	58.4	0.2	9.8	0.0	34.4	167.2	78.3	245.4
1997	0.9	66.1	6.1	6.6	0.1	0.6	2.3	2.0	10.8	28.6	57.2	0.2	10.1	0.0	34.6	169.1	78.5	247.6
1998	0.9	64.0	5.6	5.9	0.1	0.7	2.4	1.6	11.2	29.1	56.6	0.1	6.8	0.0	34.8	163.2	79.0	242.2
1999	0.8	82.8	6.4	7.1	0.1	1.3	2.4	1.5	5.7	29.3	53.8	0.1	7.0	0.0	34.0	178.5	77.8	256.3
2000	1.5	78.2	11.9	5.5	0.1	2.3	2.4	1.6	6.9	28.4	59.1	0.1	6.7	0.0	35.9	181.6	81.8	263.3
2001	1.5	84.9	12.1	7.5	0.2	3.1	2.2	4.8	13.5	11.3	54.6	0.1	5.0	0.0	33.3	179.4	^R 74.9	^R 254.3
2002	1.2	90.4	12.5	5.7	0.1	2.3	2.2	4.8	10.9	11.9	50.3	0.1	3.3	0.0	34.4	179.6	77.1	256.7
2003	1.5	^R 46.3	9.3	11.1	0.1	0.7	2.0	4.9	6.1	11.9	46.0	0.1	3.3	0.0	34.1	^R 131.3	75.7	^R 207.0
2004	1.5	45.3	9.6	11.3	0.1	0.2	2.0	5.1	4.5	12.4	45.3	(s)	3.5	0.0	33.9	129.6	75.5	205.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	22	(s)	968	2,371	1,209	4	443	34,725	1,207	40,927	0	105	--	260	--
1965	2	(s)	1,702	2,632	3,166	22	408	39,454	2,472	49,856	0	105	--	251	--
1970	(s)	1	276	3,198	7,864	29	441	49,314	3,215	64,336	0	105	--	254	--
1975	(s)	1	228	4,485	7,967	33	433	54,440	1,049	68,634	0	105	--	253	--
1980	0	1	274	4,900	8,563	26	463	51,161	900	66,287	0	167	--	403	--
1985	0	1	134	7,600	6,984	70	422	54,292	874	70,375	^f 0	193	--	444	--
1990	0	1	97	7,457	9,806	59	475	55,642	1,366	74,901	0	183	--	424	--
1995	0	2	84	8,780	6,636	50	453	58,337	199	74,540	0	236	--	537	--
1996	0	2	90	8,628	6,873	45	439	59,356	2,002	77,434	0	241	--	549	--
1997	0	2	87	8,945	7,298	47	464	60,472	1,380	78,693	0	252	--	572	--
1998	0	2	87	8,884	7,728	45	486	61,902	30	79,162	0	234	--	531	--
1999	0	3	96	9,301	8,081	156	491	63,073	21	81,220	0	234	--	535	--
2000	0	3	116	10,050	8,204	56	484	64,443	539	83,891	0	239	--	543	--
2001	0	3	80	10,480	7,003	41	443	64,362	287	82,697	0	246	--	^R 553	--
2002	0	4	77	10,431	5,609	39	438	66,073	314	82,981	21	241	--	541	--
2003	0	2	81	10,028	6,396	36	405	65,931	7	82,884	21	292	--	648	--
2004	0	2	97	11,721	8,235	32	410	67,202	2	87,698	200	406	--	905	--
Trillion Btu															
1960	0.6	0.3	4.9	13.8	6.7	(s)	2.7	182.4	7.6	218.1	0.0	0.4	219.3	0.9	220.2
1965	(s)	0.2	8.6	15.3	17.8	0.1	2.5	207.3	15.5	267.1	0.0	0.4	267.7	0.9	268.6
1970	(s)	1.1	1.4	18.6	44.5	0.1	2.7	259.0	20.2	346.5	0.0	0.4	348.0	0.9	348.9
1975	(s)	0.5	1.2	26.1	45.1	0.1	2.6	286.0	6.6	367.7	0.0	0.4	368.5	0.9	369.4
1980	0.0	0.7	1.4	28.5	48.4	0.1	2.8	268.7	5.7	355.7	0.0	0.6	356.9	1.4	358.3
1985	0.0	1.4	0.7	44.3	39.5	0.3	2.6	285.2	5.5	377.9	^f 0.0	0.7	^f 380.0	1.5	^f 381.5
1990	0.0	1.3	0.5	43.4	55.5	0.2	2.9	292.3	8.6	403.4	0.0	0.6	405.3	1.4	406.7
1995	0.0	2.0	0.4	51.1	37.6	0.2	2.7	304.2	1.3	397.6	0.0	0.8	400.4	1.8	402.2
1996	0.0	2.3	0.5	50.3	39.0	0.2	2.7	309.6	12.6	414.7	0.0	0.8	417.8	1.9	419.6
1997	0.0	2.5	0.4	52.1	41.4	0.2	2.8	315.2	8.7	420.8	0.0	0.9	424.2	2.0	426.2
1998	0.0	2.0	0.4	51.7	43.8	0.2	2.9	322.6	0.2	421.9	0.0	0.8	424.8	1.8	426.6
1999	0.0	2.9	0.5	54.2	45.8	0.6	3.0	328.7	0.1	432.8	0.0	0.8	436.6	1.8	438.4
2000	0.0	2.6	0.6	58.5	46.5	0.2	2.9	335.8	3.4	447.9	0.0	0.8	451.3	1.9	453.2
2001	0.0	3.5	0.4	61.0	39.7	0.1	2.7	335.3	1.8	441.1	0.0	0.8	445.4	1.9	447.3
2002	0.0	4.6	0.4	60.8	31.8	0.1	2.7	344.1	2.0	441.8	0.1	0.8	447.2	1.8	449.1
2003	0.0	2.2	0.4	58.4	36.3	0.1	2.5	343.3	(s)	441.0	0.1	1.0	444.3	2.2	446.5
2004	0.0	2.0	0.5	68.3	46.7	0.1	2.5	350.5	(s)	468.5	0.7	1.4	471.9	3.1	475.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Massachusetts

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	2,446	11	9,990	277	0	10,267	34	865	--	0	0	0	0	--
1965	4,066	13	12,157	337	0	12,494	966	564	--	0	0	0	0	--
1970	575	6	42,301	1,176	0	43,477	1,209	682	--	0	0	0	0	--
1975	804	1	39,912	503	0	40,415	3,781	350	--	0	0	0	0	--
1980	676	5	45,726	616	0	46,342	3,232	96	--	0	0	0	0	--
1985	3,863	45	23,645	822	0	24,467	6,133	200	--	0	0	0	4,311	--
1990	4,234	61	23,505	614	0	24,120	5,070	1,238	--	ⁱ 0	ⁱ 0	ⁱ 0	1,921	--
1995	4,080	128	9,143	678	0	9,820	4,486	858	--	0	0	0	1,790	--
1996	4,427	103	9,273	603	0	9,877	5,324	1,169	--	0	0	0	1,591	--
1997	4,826	117	17,043	461	0	17,504	4,310	1,014	--	0	0	0	1,863	--
1998	4,312	102	22,432	559	0	22,991	5,698	1,018	--	0	0	0	1,759	--
1999	4,439	93	17,142	593	0	17,735	4,518	963	--	0	0	0	1,934	--
2000	4,485	88	13,627	376	0	14,003	5,512	1,053	--	0	0	0	1,779	--
2001	4,359	96	13,384	325	0	13,709	5,144	694	--	0	0	0	1,137	--
2002	4,603	129	10,154	441	0	10,595	5,769	853	--	0	0	0	497	--
2003	4,390	169	10,975	952	0	11,927	4,978	1,064	--	0	0	0	213	--
2004	4,357	157	10,658	607	0	11,265	5,939	993	--	0	0	0	480	--
Trillion Btu														
1960	64.5	11.2	62.8	1.6	0.0	64.4	0.4	9.3	0.0	0.0	0.0	0.0	0.0	149.8
1965	106.0	13.3	76.4	2.0	0.0	78.4	11.4	5.9	0.0	0.0	0.0	0.0	0.0	215.0
1970	13.4	5.7	265.9	6.8	0.0	272.8	13.3	7.2	0.0	0.0	0.0	0.0	0.0	312.3
1975	19.6	1.4	250.9	2.9	0.0	253.8	41.6	3.6	0.0	0.0	0.0	0.0	0.0	320.1
1980	18.1	5.1	287.5	3.6	0.0	291.1	35.3	1.0	0.0	0.0	0.0	0.0	0.0	350.5
1985	102.6	46.9	148.7	4.8	0.0	153.4	65.1	2.1	0.0	0.0	0.0	0.0	14.7	384.9
1990	110.6	63.8	147.8	3.6	0.0	151.4	53.6	12.9	ⁱ 24.4	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	6.6	ⁱ 423.2
1995	103.6	131.6	57.5	3.9	0.0	61.4	47.1	8.8	31.4	0.0	0.0	0.0	6.1	390.1
1996	111.9	105.7	58.3	3.5	0.0	61.8	55.9	12.1	33.0	0.0	0.0	0.0	5.4	385.8
1997	121.3	120.6	107.2	2.7	0.0	109.8	45.2	10.4	34.3	0.0	0.0	0.0	6.4	447.9
1998	108.3	106.0	141.0	3.3	0.0	144.3	59.8	10.4	33.6	0.0	0.0	0.0	6.0	468.4
1999	111.8	94.5	107.8	3.5	0.0	111.2	47.2	9.8	31.7	0.0	0.0	0.0	6.6	412.9
2000	112.7	91.2	85.7	2.2	0.0	87.9	57.5	10.7	34.1	0.0	0.0	0.0	6.1	400.2
2001	107.1	99.6	84.1	1.9	0.0	86.0	53.7	7.2	34.5	0.0	0.0	0.0	3.9	392.1
2002	115.0	131.0	63.8	2.6	0.0	66.4	60.2	8.7	32.5	0.0	0.0	0.0	1.7	415.5
2003	106.6	174.0	69.0	5.5	0.0	74.5	51.9	10.9	34.1	0.0	0.0	0.0	0.7	452.7
2004	102.7	163.6	67.0	3.5	0.0	70.5	61.9	10.0	34.6	0.0	0.0	0.0	1.6	444.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Michigan

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	25,930	370	2,936	1,312	30,235	3,369	4,072	2,827	2,497	65,782	11,840	4,051	128,920	0	2,030	--	--	11,379	--
1965	33,132	556	2,264	2,619	30,287	4,377	5,880	3,716	3,025	78,044	8,594	8,077	146,882	181	1,813	--	--	10,673	--
1970	34,065	809	3,881	718	38,141	7,365	3,124	6,202	3,157	96,831	10,056	9,775	179,250	375	1,704	--	--	11,627	--
1975	31,198	884	3,886	347	42,170	5,776	1,349	7,475	2,751	108,255	18,291	10,245	200,545	7,176	1,110	--	--	5,027	--
1980	31,110	865	3,507	488	27,643	6,646	1,233	6,736	3,274	97,025	13,289	17,512	177,353	15,891	1,200	--	--	-2,812	--
1985	32,793	709	2,779	201	26,024	6,570	507	14,225	2,979	93,447	3,109	8,260	158,101	13,452	997	--	--	19,942	--
1990	34,817	879	3,950	215	24,357	10,057	270	14,901	3,352	99,913	2,728	10,959	170,701	21,611	1,628	--	--	-8,164	--
1995	36,037	976	4,955	231	27,444	8,818	366	14,497	3,198	110,546	1,602	14,132	185,790	24,448	1,597	--	--	-11,978	--
1996	36,958	1,027	3,703	215	28,754	9,045	421	18,306	3,104	110,520	1,777	16,676	192,519	26,829	1,784	--	--	-19,793	--
1997	36,116	994	7,777	197	29,692	9,483	354	14,524	3,279	112,389	1,553	17,713	196,961	21,914	1,712	--	--	-968	--
1998	38,255	876	6,488	167	29,895	9,025	387	13,108	3,432	114,913	2,113	17,860	197,388	12,494	1,397	--	--	25,867	--
1999	38,510	951	6,669	286	31,573	9,116	694	15,339	3,468	121,027	2,491	17,312	207,974	14,591	1,458	--	--	33,872	--
2000	37,294	963	5,866	205	30,824	7,214	433	16,308	3,416	118,160	2,358	16,747	201,530	18,882	1,428	--	--	29,784	--
2001	^R 37,730	906	5,629	79	29,515	6,219	302	18,876	3,130	119,472	1,590	9,206	194,018	26,711	1,562	--	--	^R -3,305	--
2002	^R 36,413	966	5,313	167	28,994	6,016	208	21,039	3,093	121,745	1,992	9,544	198,111	31,087	1,669	--	--	-7,357	--
2003	^R 36,973	923	5,363	89	29,463	2,695	304	20,578	2,859	119,019	2,153	10,852	193,377	27,954	1,386	--	--	^R 25,916	--
2004	38,503	917	6,052	81	31,139	3,733	275	20,826	2,897	118,964	2,098	11,317	197,383	30,562	1,540	--	--	-6,641	--
Trillion Btu																			
1960	653.1	383.0	19.5	6.6	176.1	18.2	23.1	11.3	15.1	345.6	74.4	23.9	713.9	0.0	21.8	37.3	4.3	38.8	1,852.2
1965	830.2	563.6	15.0	13.2	176.4	24.0	33.3	14.9	18.3	410.0	54.0	45.4	804.7	2.1	19.0	36.9	-1.4	36.4	2,291.4
1970	828.9	821.3	25.8	3.6	222.2	41.0	17.7	23.4	19.1	508.7	63.2	54.4	979.1	4.1	17.9	36.4	-1.4	39.7	2,726.0
1975	751.0	894.8	25.8	1.7	245.6	32.1	7.6	27.8	16.7	568.7	115.0	57.8	1,098.9	79.0	11.6	35.9	1.1	17.2	2,889.4
1980	759.0	874.7	23.3	2.5	161.0	37.1	7.0	24.7	19.9	509.7	83.6	96.6	965.4	173.3	12.5	90.6	19.4	-9.6	2,885.2
1985	781.9	719.9	18.4	1.0	151.6	36.7	2.9	51.3	18.1	490.9	19.5	45.6	836.0	142.9	10.4	100.2	1.3	68.0	2,664.3
1990	788.0	898.8	26.2	1.1	141.9	56.6	1.5	54.0	20.3	524.8	17.2	60.9	904.5	228.7	16.9	^j 80.2	^j -36.4	-27.9	^j 2,857.3
1995	786.7	992.7	32.9	1.2	159.9	50.0	2.1	52.5	19.4	576.5	10.1	78.1	982.6	256.9	16.5	88.2	20.7	-40.9	3,103.4
1996	796.3	1,039.2	24.6	1.1	167.5	51.3	2.4	66.1	18.8	576.5	11.2	91.5	1,010.9	281.8	18.4	102.9	7.7	-67.5	3,189.6
1997	781.1	1,010.2	51.6	1.0	173.0	53.8	2.0	52.5	19.9	585.9	9.8	97.6	1,047.0	230.0	17.5	95.0	5.9	-3.3	3,183.4
1998	826.9	894.0	43.1	0.8	174.1	51.2	2.2	47.4	20.8	598.9	13.3	98.4	1,050.2	131.1	14.2	90.4	-3.9	88.3	3,091.1
1999	832.6	968.3	44.3	1.4	183.9	51.7	3.9	55.5	21.0	630.7	15.7	94.4	1,102.5	152.5	14.9	91.9	0.7	115.6	3,278.9
2000	799.8	984.3	38.9	1.0	179.5	40.9	2.5	58.8	20.7	615.6	14.8	91.2	1,064.0	196.9	14.6	94.8	0.3	101.6	3,256.4
2001	^R 789.7	928.7	37.4	0.4	171.9	35.3	1.7	68.2	19.0	622.4	10.0	50.5	1,016.8	279.1	16.1	^R 79.4	-5.7	^R -11.3	^R 3,092.7
2002	^R 739.9	966.4	35.3	0.8	168.9	34.1	1.2	76.0	18.8	634.0	12.5	52.3	1,033.9	324.5	17.0	^R 77.1	-6.0	-25.1	^R 3,127.7
2003	^R 747.9	923.2	35.6	0.5	171.6	15.3	1.7	74.7	17.3	619.7	13.5	60.2	1,010.2	291.3	14.2	^R 87.9	-10.2	88.4	^R 3,152.9
2004	773.8	918.4	40.2	0.4	181.4	21.2	1.6	75.3	17.6	620.4	13.2	62.8	1,033.9	318.7	15.4	90.6	-8.8	-22.7	3,119.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Michigan

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	1,414	202	17,380	765	1,940	20,084	1,103	--	--	8,728	--	21,584	--
1965	1,007	271	16,334	1,279	2,346	19,959	890	--	--	11,309	--	27,006	--
1970	481	340	18,839	545	4,493	23,877	829	--	--	17,103	--	41,396	--
1975	119	335	19,420	302	5,219	24,942	796	--	--	20,886	--	50,228	--
1980	65	387	9,195	83	3,375	12,653	2,115	--	--	22,260	--	53,672	--
1985	56	341	6,192	425	4,427	11,045	2,193	--	--	22,302	--	51,375	--
1990	54	327	4,842	217	6,538	11,597	1,373	--	--	25,319	--	58,569	--
1995	33	380	3,815	233	8,015	12,062	739	--	--	28,623	--	65,020	--
1996	32	400	3,859	230	10,758	14,847	768	--	--	28,901	--	65,740	--
1997	21	380	3,662	254	10,166	14,082	503	--	--	28,726	--	65,100	--
1998	16	320	2,653	272	9,500	12,426	447	--	--	29,808	--	67,619	--
1999	2	351	2,994	606	10,763	14,364	471	--	--	30,661	--	70,152	--
2000	2	368	2,902	356	11,080	14,338	506	--	--	30,707	--	69,864	--
2001	1	344	2,654	222	13,848	16,724	673	--	--	32,305	--	^R 72,656	--
2002	32	368	2,212	160	14,789	17,161	683	--	--	34,336	--	76,922	--
2003	4	386	2,216	264	14,776	17,255	719	--	--	33,669	--	74,792	--
2004	20	362	2,040	221	13,021	15,283	737	--	--	33,104	--	73,683	--
Trillion Btu													
1960	35.0	209.0	101.2	4.3	7.8	113.4	22.1	0.0	0.0	29.8	409.2	73.6	482.9
1965	24.8	274.8	95.1	7.3	9.4	111.8	17.8	0.0	0.0	38.6	467.8	92.1	559.9
1970	11.4	345.1	109.7	3.1	17.0	129.8	16.6	0.0	0.0	58.4	561.3	141.2	702.6
1975	2.8	343.0	113.1	1.7	19.4	134.2	15.9	0.0	0.0	71.3	567.2	171.4	738.6
1980	1.6	394.9	53.6	0.5	12.4	66.4	42.3	0.0	0.0	76.0	581.1	183.1	764.3
1985	1.4	348.9	36.1	2.4	16.0	54.4	43.9	0.0	0.0	76.1	524.6	175.3	699.9
1990	1.3	341.9	28.2	1.2	23.7	53.1	27.5	^f 0.6	^f 0.2	86.4	^f 511.0	199.8	^f 710.9
1995	0.8	395.4	22.2	1.3	29.0	52.6	14.8	0.7	0.3	97.7	562.2	221.8	784.1
1996	0.8	413.2	22.5	1.3	38.9	62.6	15.4	0.8	0.3	98.6	591.6	224.3	815.9
1997	0.5	395.1	21.3	1.4	36.8	59.5	10.1	0.8	0.3	98.0	564.3	222.1	786.5
1998	0.4	334.7	15.5	1.5	34.3	51.3	8.9	0.8	0.3	101.7	498.2	230.7	728.9
1999	0.1	365.3	17.4	3.4	38.9	59.8	9.4	0.9	0.3	104.6	540.4	239.4	779.8
2000	(s)	381.1	16.9	2.0	40.0	58.9	10.1	0.9	0.2	104.8	556.1	238.4	794.5
2001	(s)	354.5	15.5	1.3	50.0	66.8	13.5	1.0	0.2	110.2	546.2	^R 247.9	^R 794.1
2002	0.8	367.2	12.9	0.9	53.4	67.2	13.7	1.1	0.2	117.2	567.4	262.5	829.8
2003	0.1	385.0	12.9	1.5	53.6	68.0	14.4	1.4	0.2	114.9	584.0	255.2	839.2
2004	0.5	357.6	11.9	1.3	47.1	60.2	14.7	1.5	0.3	112.9	547.8	251.4	799.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Michigan

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	982	43	3,212	566	342	324	1,175	5,619	0	--	--	6,381	--	15,782	--
1965	760	85	3,019	946	414	536	839	5,754	0	--	--	9,124	--	21,788	--
1970	378	133	3,482	403	793	804	558	6,040	0	--	--	13,021	--	31,515	--
1975	279	182	3,589	224	921	954	390	6,078	0	--	--	14,596	--	35,101	--
1980	243	190	3,123	15	596	823	225	4,781	0	--	--	16,765	--	40,423	--
1985	197	158	2,449	11	781	699	274	4,216	0	--	--	18,421	--	42,436	--
1990	214	159	2,010	18	1,154	770	71	4,023	^g 0	--	--	21,986	--	50,859	--
1995	221	194	1,638	102	1,414	77	5	3,236	0	--	--	32,153	--	73,040	--
1996	238	201	1,766	149	1,899	77	5	3,896	0	--	--	32,896	--	74,825	--
1997	167	192	1,917	56	1,794	76	55	3,897	0	--	--	33,231	--	75,308	--
1998	129	163	1,506	66	1,676	208	2	3,458	0	--	--	34,710	--	78,740	--
1999	18	179	1,401	37	1,899	171	3	3,511	0	--	--	36,040	--	82,459	--
2000	12	187	1,577	33	1,955	159	5	3,728	0	--	--	36,793	--	83,709	--
2001	8	174	1,525	35	2,444	433	17	4,453	0	--	--	35,925	--	^R 80,798	--
2002	234	176	966	28	2,610	247	64	3,915	0	--	--	36,835	--	82,520	--
2003	28	186	1,149	19	2,607	203	90	4,069	0	--	--	35,391	--	78,617	--
2004	159	175	1,063	22	2,298	191	49	3,623	0	--	--	38,632	--	85,988	--
Trillion Btu															
1960	24.3	44.5	18.7	3.2	1.4	1.7	7.4	32.4	0.0	0.4	0.0	21.8	123.4	53.8	177.2
1965	18.7	86.0	17.6	5.4	1.7	2.8	5.3	32.7	0.0	0.3	0.0	31.1	168.9	74.3	243.2
1970	9.0	134.7	20.3	2.3	3.0	4.2	3.5	33.3	0.0	0.3	0.0	44.4	221.7	107.5	329.3
1975	6.5	186.4	20.9	1.3	3.4	5.0	2.4	33.1	0.0	0.3	0.0	49.8	276.0	119.8	395.8
1980	5.9	194.0	18.2	0.1	2.2	4.3	1.4	26.2	0.0	1.0	0.0	57.2	284.4	137.9	422.3
1985	4.8	161.4	14.3	0.1	2.8	3.7	1.7	22.5	0.0	1.0	0.0	62.9	252.7	144.8	397.5
1990	5.3	166.5	11.7	0.1	4.2	4.0	0.4	20.5	^g 0.0	^g 7.3	^g 0.0	75.0	^g 274.6	173.5	^g 448.1
1995	5.4	201.9	9.5	0.6	5.1	0.4	(s)	15.7	0.0	9.0	0.1	109.7	341.9	249.2	591.1
1996	5.9	208.3	10.3	0.8	6.9	0.4	(s)	18.4	0.0	10.8	0.1	112.2	355.8	255.3	611.1
1997	4.1	200.0	11.2	0.3	6.5	0.4	0.3	18.7	0.0	11.0	0.2	113.4	347.4	257.0	604.3
1998	3.2	171.1	8.8	0.4	6.1	1.1	(s)	16.3	0.0	9.4	0.2	118.4	318.6	268.7	587.3
1999	0.4	186.8	8.2	0.2	6.9	0.9	(s)	16.1	0.0	9.4	0.2	123.0	336.0	281.4	617.4
2000	0.3	193.6	9.2	0.2	7.1	0.8	(s)	17.3	0.0	8.6	0.2	125.5	345.6	285.6	631.2
2001	0.2	179.2	8.9	0.2	8.8	2.3	0.1	20.3	0.0	2.7	0.2	122.6	325.2	^R 275.7	^R 600.9
2002	5.5	175.8	5.6	0.2	9.4	1.3	0.4	16.9	0.0	9.7	0.3	125.7	333.8	281.6	615.3
2003	0.7	185.8	6.7	0.1	9.5	1.1	0.6	17.9	0.0	9.8	0.3	120.8	335.3	268.2	603.5
2004	3.9	173.0	6.2	0.1	8.3	1.0	0.3	15.9	0.0	10.5	0.4	131.8	335.6	293.4	628.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Michigan

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	13,011	117	2,936	7,091	2,741	524	1,221	3,151	9,574	4,051	31,288	212	--	--	12,482	--	30,868
1965	15,193	192	2,264	7,518	3,655	923	1,898	2,694	6,660	8,077	33,689	146	--	--	19,350	--	46,207
1970	13,061	262	3,881	8,502	2,175	854	1,834	2,758	4,557	9,775	34,336	123	--	--	25,169	--	60,918
1975	9,885	300	3,886	8,749	823	1,239	1,430	1,889	3,343	10,245	31,603	121	--	--	28,866	--	69,417
1980	8,652	249	3,507	4,804	1,135	2,637	1,796	967	3,213	17,512	35,572	117	--	--	30,656	--	73,916
1985	6,645	190	2,779	4,408	70	8,725	1,635	1,192	2,213	8,260	29,283	117	--	--	33,704	--	77,642
1990	4,719	290	3,950	3,957	34	6,926	1,839	976	1,416	10,959	30,058	⁹ 23	--	--	35,062	--	81,107
1995	4,383	254	4,955	3,457	32	4,826	1,755	1,310	402	14,132	30,869	27	--	--	33,921	--	77,055
1996	4,283	260	3,703	3,889	42	5,425	1,703	1,418	415	16,673	33,267	29	--	--	34,499	--	78,473
1997	3,770	255	7,777	3,986	44	2,361	1,799	1,271	415	17,713	35,366	26	--	--	35,430	--	80,291
1998	3,857	224	6,488	4,122	50	1,127	1,883	1,097	400	17,757	32,924	25	--	--	35,983	--	81,628
1999	4,636	248	6,669	4,909	51	2,323	1,903	1,017	332	17,247	34,452	26	--	--	37,276	--	85,286
2000	4,004	247	5,866	4,055	44	3,006	1,875	1,060	622	16,738	33,267	27	--	--	37,268	--	84,790
2001	^R 3,793	233	5,629	3,494	45	2,434	1,718	1,835	352	9,204	24,711	26	--	--	34,174	--	^R 76,860
2002	^R 2,781	250	5,313	2,767	19	3,457	1,697	1,931	344	9,470	24,998	29	--	--	33,537	--	75,133
2003	^R 2,840	222	5,363	3,134	21	2,999	1,569	2,018	713	10,792	26,610	75	--	--	39,813	--	88,439
2004	3,012	219	6,052	3,651	32	5,110	1,590	2,308	687	11,299	30,730	30	--	--	34,867	--	77,609

Trillion Btu																	
1960	332.0	121.3	19.5	41.3	15.5	2.1	7.4	16.5	60.2	23.9	186.5	2.3	14.8	0.0	42.6	699.4	804.7
1965	385.6	195.1	15.0	43.8	20.7	3.7	11.5	14.2	41.9	45.4	196.2	1.5	18.8	0.0	66.0	863.2	1,020.9
1970	320.9	265.7	25.8	49.5	12.3	3.2	11.1	14.5	28.7	54.4	199.5	1.3	19.5	0.0	85.9	892.8	1,100.7
1975	246.7	307.7	25.8	51.0	4.7	4.6	8.7	9.9	21.0	57.8	183.5	1.3	19.7	0.0	98.5	857.4	1,094.2
1980	219.4	253.7	23.3	28.0	6.4	9.7	10.9	5.1	20.2	96.6	200.2	1.2	47.2	0.0	104.6	826.3	1,078.5
1985	169.9	194.2	18.4	25.7	0.4	31.4	9.9	6.3	13.9	45.6	151.7	1.2	55.3	0.0	115.0	687.3	952.2
1990	117.9	302.6	26.2	23.1	0.2	25.1	11.2	5.1	8.9	60.9	160.7	⁹ 0.2	⁹ 36.5	⁹ 0.0	119.6	⁹ 737.5	⁹ 1,014.2
1995	109.2	264.4	32.9	20.1	0.2	17.5	10.6	6.8	2.5	78.1	168.8	0.3	44.7	0.0	115.7	703.1	966.0
1996	107.5	268.8	24.6	22.7	0.2	19.6	10.3	7.4	2.6	91.5	178.9	0.3	53.3	0.0	117.7	726.5	994.3
1997	95.1	265.7	51.6	23.2	0.3	8.5	10.9	6.6	2.6	97.6	201.3	0.3	51.4	0.0	120.9	734.7	1,008.7
1998	97.9	234.9	43.1	24.0	0.3	4.1	11.4	5.7	2.5	97.8	188.9	0.3	49.6	0.0	122.8	694.3	972.8
1999	120.0	258.6	44.3	28.6	0.3	8.4	11.5	5.3	2.1	94.0	194.5	0.3	51.4	0.0	127.2	751.9	1,042.9
2000	104.8	256.2	38.9	23.6	0.3	10.8	11.4	5.5	3.9	91.1	185.6	0.3	50.4	0.0	127.2	724.3	1,013.6
2001	^R 99.0	240.6	37.4	20.4	0.3	8.8	10.4	9.6	2.2	50.5	139.4	0.3	^R 35.6	0.0	116.6	^R 631.4	^R 893.7
2002	^R 72.8	249.1	35.3	16.1	0.1	12.5	10.3	10.1	2.2	51.9	138.4	0.3	^R 25.9	0.0	114.4	^R 600.9	^R 857.3
2003	^R 74.6	222.0	35.6	18.3	0.1	10.9	9.5	10.5	4.5	59.9	149.2	0.8	^R 35.6	0.0	135.8	^R 618.1	^R 919.8
2004	78.2	216.0	40.2	21.3	0.2	18.5	9.6	12.0	4.3	62.7	168.7	0.3	37.5	0.0	119.0	619.7	884.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Michigan

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	223	3	1,312	2,475	3,369	21	1,277	62,307	728	71,489	0	9	--	23	--
1965	50	5	2,619	3,348	4,377	34	1,126	74,814	779	87,097	0	0	--	0	--
1970	21	10	718	6,353	7,365	62	1,324	93,269	427	109,518	0	0	--	0	--
1975	2	10	347	8,949	5,700	95	1,321	105,412	423	122,248	0	0	--	0	--
1980	0	12	488	9,741	6,646	128	1,477	95,235	232	113,946	0	0	--	0	--
1985	0	11	201	12,328	6,570	291	1,344	91,556	99	112,389	^f 1,032	0	--	0	--
1990	0	18	215	13,207	10,057	283	1,513	98,167	92	123,533	1,205	0	--	0	--
1995	0	25	231	18,125	8,818	241	1,443	109,159	94	138,111	1,219	4	--	10	--
1996	0	26	215	18,940	9,045	224	1,401	109,025	123	138,970	514	5	--	11	--
1997	0	24	197	19,815	9,483	204	1,480	111,042	52	142,272	654	4	--	9	--
1998	0	21	167	21,145	9,025	804	1,549	113,608	82	146,379	845	5	--	11	--
1999	0	23	286	21,764	9,116	352	1,565	119,839	36	152,958	956	4	--	8	--
2000	0	27	205	21,915	7,214	266	1,542	116,941	48	148,131	2,267	4	--	10	--
2001	0	22	79	21,472	6,219	151	1,412	117,204	71	146,608	1,394	5	--	12	--
2002	0	27	167	22,514	6,016	183	1,396	119,567	47	149,891	2,953	5	--	11	--
2003	0	26	89	22,480	2,695	196	1,290	116,798	198	143,747	3,706	3	--	8	--
2004	0	27	81	23,993	3,733	397	1,307	116,465	251	146,227	3,838	3	--	7	--
Trillion Btu															
1960	5.5	2.7	6.6	14.4	18.2	0.1	7.7	327.3	4.6	378.9	0.0	(s)	387.2	0.1	387.3
1965	1.2	4.6	13.2	19.5	24.0	0.1	6.8	393.0	4.9	461.5	0.0	0.0	467.4	0.0	467.4
1970	0.5	10.5	3.6	37.0	41.0	0.2	8.0	489.9	2.7	582.5	0.0	0.0	593.5	0.0	593.5
1975	(s)	10.5	1.7	52.1	31.6	0.4	8.0	553.7	2.7	650.3	0.0	0.0	660.8	0.0	660.8
1980	0.0	12.6	2.5	56.7	37.1	0.5	9.0	500.3	1.5	607.5	0.0	0.0	620.1	0.0	620.1
1985	0.0	10.8	1.0	71.8	36.7	1.0	8.2	480.9	0.6	600.3	^f 3.7	0.0	^f 614.7	0.0	^f 614.7
1990	0.0	18.7	1.1	76.9	56.6	1.0	9.2	515.7	0.6	661.0	4.3	0.0	684.0	0.0	684.0
1995	0.0	25.9	1.2	105.6	50.0	0.9	8.8	569.3	0.6	736.2	4.3	(s)	762.2	(s)	762.2
1996	0.0	26.9	1.1	110.3	51.3	0.8	8.5	568.7	0.8	741.4	1.8	(s)	768.3	(s)	768.4
1997	0.0	24.8	1.0	115.4	53.8	0.7	9.0	578.9	0.3	759.1	2.3	(s)	783.9	(s)	783.9
1998	0.0	21.9	0.8	123.2	51.2	2.9	9.4	592.1	0.5	780.1	3.0	(s)	802.0	(s)	802.1
1999	0.0	23.5	1.4	126.8	51.7	1.3	9.5	624.5	0.2	815.4	3.4	(s)	838.9	(s)	838.9
2000	0.0	27.5	1.0	127.7	40.9	1.0	9.3	609.3	0.3	789.5	8.0	(s)	817.0	(s)	817.1
2001	0.0	23.0	0.4	125.1	35.3	0.5	8.6	610.6	0.4	780.9	4.9	(s)	803.9	(s)	804.0
2002	0.0	26.9	0.8	131.1	34.1	0.7	8.5	622.7	0.3	798.2	10.4	(s)	825.2	(s)	825.2
2003	0.0	25.8	0.5	130.9	15.3	0.7	7.8	608.2	1.2	764.6	13.1	(s)	790.4	(s)	790.4
2004	0.0	27.1	0.4	139.8	21.2	1.4	7.9	607.4	1.6	779.6	13.6	(s)	806.8	(s)	806.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Michigan

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	10,300	5	362	77	0	440	0	1,817	--	0	0	0	1,250	--
1965	16,123	3	316	68	0	384	181	1,667	--	0	0	0	-413	--
1970	20,124	64	4,514	965	0	5,479	375	1,581	--	0	0	0	-400	--
1975	20,914	57	14,136	1,538	0	15,674	7,176	989	--	0	0	0	320	--
1980	22,150	26	9,621	780	0	10,400	15,891	1,083	--	0	0	0	5,685	--
1985	25,896	10	522	646	0	1,168	13,452	881	--	0	0	0	391	--
1990	29,830	85	1,149	341	0	1,490	21,611	1,605	--	0	0	0	-10,918	--
1995	31,400	123	1,101	410	0	1,512	24,448	1,570	--	0	0	0	5,760	--
1996	32,405	140	1,235	300	3	1,539	26,829	1,755	--	0	0	0	1,907	--
1997	32,158	143	1,031	312	0	1,343	21,914	1,686	--	0	0	0	1,380	--
1998	34,253	148	1,630	468	103	2,201	12,494	1,372	--	0	0	0	-1,534	--
1999	33,854	150	2,120	505	65	2,690	14,591	1,432	--	0	0	0	-219	--
2000	33,277	135	1,683	374	9	2,066	18,882	1,401	--	0	0	0	-327	--
2001	33,928	133	1,150	369	2	1,522	26,711	1,536	--	0	0	(s)	-2,102	--
2002	33,367	146	1,537	535	73	2,145	31,087	1,640	--	0	0	(s)	-2,234	--
2003	34,101	103	1,152	484	60	1,697	27,954	1,310	--	0	0	3	-3,564	--
2004	35,312	133	1,112	393	17	1,522	30,562	1,509	--	0	0	2	-3,204	--
Trillion Btu														
1960	256.3	5.4	2.3	0.5	0.0	2.7	0.0	19.6	0.0	0.0	0.0	0.0	4.3	288.2
1965	399.9	3.0	2.0	0.4	0.0	2.4	2.1	17.4	0.0	0.0	0.0	0.0	-1.4	423.5
1970	487.0	65.2	28.4	5.6	0.0	34.0	4.1	16.6	0.0	0.0	0.0	0.0	-1.4	605.6
1975	494.9	47.3	88.9	8.9	0.0	97.8	79.0	10.3	0.0	0.0	0.0	0.0	1.1	730.4
1980	532.2	19.4	60.5	4.5	0.0	65.0	173.3	11.3	0.0	0.0	0.0	0.0	19.4	820.6
1985	605.8	4.7	3.3	3.8	0.0	7.0	142.9	9.2	0.0	0.0	0.0	0.0	1.3	770.9
1990	663.5	69.1	7.2	2.0	0.0	9.2	228.7	16.7	0.0	0.0	0.0	0.0	-37.3	959.0
1995	671.2	105.1	6.9	2.4	0.0	9.3	256.9	16.2	19.7	0.0	0.0	0.0	19.7	1,098.0
1996	682.1	122.1	7.8	1.7	(s)	9.5	281.8	18.1	23.4	0.0	0.0	0.0	6.5	1,143.5
1997	681.4	124.5	6.5	1.8	0.0	8.3	230.0	17.2	22.6	0.0	0.0	0.0	4.7	1,088.7
1998	725.3	131.4	10.2	2.7	0.6	13.6	131.1	14.0	22.5	0.0	0.0	0.0	-5.2	1,032.6
1999	712.2	134.1	13.3	2.9	0.4	16.7	152.5	14.6	21.7	0.0	0.0	0.0	-0.7	1,050.9
2000	694.7	126.0	10.6	2.2	0.1	12.8	196.9	14.3	25.6	0.0	0.0	0.0	-1.1	1,069.2
2001	^R 690.5	131.3	7.2	2.2	(s)	9.4	279.1	15.9	27.5	0.0	0.0	(s)	-7.2	^R 1,146.6
2002	660.8	147.3	9.7	3.1	0.4	13.2	324.5	16.7	27.9	0.0	0.0	(s)	-7.6	1,182.8
2003	672.6	104.6	7.2	2.8	0.4	10.4	291.3	13.4	28.1	0.0	0.0	(s)	-12.2	1,108.3
2004	691.2	144.7	7.0	2.3	0.1	9.4	318.7	15.1	27.9	0.0	0.0	(s)	-10.9	1,196.0

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Minnesota

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	5,976	180	3,004	1,199	16,151	472	2,570	4,525	960	32,583	6,658	1,314	69,435	0	887	--	--	-3,194	--
1965	7,259	249	3,791	803	18,960	2,624	2,313	5,781	759	35,278	4,980	2,219	77,507	143	1,093	--	--	-1,136	--
1970	8,787	342	4,413	277	22,356	3,491	1,685	8,887	924	44,122	5,159	3,122	94,435	0	894	--	--	11,584	--
1975	10,120	331	4,628	215	24,369	5,629	856	9,187	1,003	48,253	4,326	4,185	102,651	9,750	917	--	--	6,403	--
1980	13,810	286	3,565	193	21,382	5,142	212	7,697	1,120	46,211	3,183	3,540	92,244	10,027	786	--	--	9,405	--
1985	12,744	257	4,989	154	19,891	7,781	184	5,353	1,019	45,285	859	2,899	88,414	11,572	973	--	--	27,236	--
1990	18,377	291	6,039	214	19,576	5,099	42	5,966	1,146	47,760	961	5,471	92,275	12,139	857	--	--	23,051	--
1995	18,947	353	6,403	129	23,038	9,969	104	9,758	1,094	54,303	647	6,811	112,256	13,243	1,098	--	--	28,263	--
1996	19,703	368	6,674	124	24,016	10,625	123	12,018	1,061	54,866	783	7,712	118,003	12,095	1,187	--	--	33,194	--
1997	19,086	354	6,671	137	23,757	10,887	102	10,269	1,121	55,755	695	7,831	117,226	10,819	1,035	--	--	37,566	--
1998	19,958	331	6,884	92	24,606	10,699	130	7,410	1,174	58,106	515	6,894	116,510	11,644	955	--	--	36,985	--
1999	19,082	345	7,746	141	23,920	12,591	125	8,705	1,186	59,894	552	7,256	122,119	13,316	1,179	--	--	40,054	--
2000	20,735	362	7,420	136	24,846	13,301	154	9,844	1,168	61,120	930	6,693	125,610	12,960	931	--	--	38,535	--
2001	19,683	341	6,511	95	24,995	11,588	237	8,974	1,070	62,236	1,146	8,107	124,959	11,789	832	--	--	^R 44,278	--
2002	20,455	372	5,593	137	24,636	11,064	46	11,302	1,058	63,503	992	7,923	126,254	13,685	809	--	--	42,692	--
2003	21,998	371	6,241	93	24,601	11,977	45	10,862	978	64,638	1,063	8,669	129,168	13,414	815	--	--	^R 40,026	--
2004	21,382	360	6,630	93	26,456	12,505	52	11,662	991	64,802	1,461	8,369	133,020	13,296	738	--	--	43,540	--
Trillion Btu																			
1960	131.3	186.1	19.9	6.1	94.1	2.6	14.6	18.1	5.8	171.2	41.9	7.9	382.1	0.0	9.5	25.4	0.3	-10.9	723.9
1965	160.0	248.2	25.2	4.1	110.4	14.8	13.1	23.2	4.6	185.3	31.3	13.2	425.1	1.7	11.4	23.4	0.4	-3.9	866.4
1970	179.7	343.0	29.3	1.4	130.2	19.7	9.6	33.6	5.6	231.8	32.4	18.6	512.2	0.0	9.4	23.4	0.4	39.5	1,107.7
1975	191.5	331.5	30.7	1.1	141.9	31.9	4.9	34.1	6.1	253.5	27.2	24.9	556.2	107.4	9.5	27.4	0.6	21.8	1,246.0
1980	242.4	285.0	23.7	1.0	124.5	29.1	1.2	28.3	6.8	242.7	20.0	21.1	498.4	109.4	8.2	46.6	3.3	32.1	1,225.3
1985	226.1	258.5	33.1	0.8	115.9	44.1	1.0	19.3	6.2	237.9	5.4	17.8	481.4	122.9	10.2	56.3	9.1	92.9	1,259.8
1990	325.5	291.8	40.1	1.1	114.0	28.9	0.2	21.6	7.0	250.9	6.0	32.8	502.6	128.5	8.9	^J 48.8	^J 3.0	78.7	^J 1,389.8
1995	338.0	357.7	42.5	0.7	134.2	56.5	0.6	35.4	6.6	283.2	4.1	40.4	604.1	139.1	11.3	56.2	30.0	96.4	1,632.9
1996	354.6	375.0	44.3	0.6	139.9	60.2	0.7	43.4	6.4	286.2	4.9	46.1	632.8	127.0	12.3	57.1	31.2	113.3	1,703.3
1997	341.6	360.4	44.3	0.7	138.4	61.7	0.6	37.1	6.8	290.6	4.4	46.8	631.4	113.5	10.6	55.6	34.9	128.2	1,676.3
1998	357.0	337.1	45.7	0.5	143.3	60.7	0.7	26.8	7.1	302.8	3.2	41.3	632.2	122.2	9.7	50.9	29.1	126.2	1,664.4
1999	341.5	351.1	51.4	0.7	139.3	71.4	0.7	31.5	7.2	312.1	3.5	43.4	661.2	139.1	12.1	50.7	26.0	136.7	1,718.4
2000	^R 373.8	367.5	49.2	0.7	144.7	75.4	0.9	35.5	7.1	318.4	5.8	40.2	678.0	135.2	9.5	54.6	34.9	131.5	1,784.8
2001	^R 353.3	345.0	43.2	0.5	145.6	65.7	1.3	32.4	6.5	324.2	7.2	48.2	675.0	123.2	8.6	^R 58.2	38.0	^R 151.1	^R 1,752.3
2002	360.8	374.9	37.1	0.7	143.5	62.7	0.3	40.8	6.4	330.7	6.2	47.2	675.7	142.9	8.2	^R 51.9	24.0	145.7	^R 1,784.1
2003	390.7	375.0	41.4	0.5	143.3	67.9	0.3	39.4	5.9	336.6	6.7	51.6	693.6	139.8	8.3	^R 49.7	2.0	136.6	^R 1,795.7
2004	378.8	363.3	44.0	0.5	154.1	70.9	0.3	42.2	6.0	337.9	9.2	49.8	714.9	138.6	7.4	57.2	17.6	148.6	1,826.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Minnesota

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	557	61	5,414	1,748	3,108	10,270	878	--	--	4,186	--	10,352	--
1965	352	86	6,309	1,556	4,043	11,908	682	--	--	6,063	--	14,478	--
1970	320	102	7,197	1,195	6,390	14,782	560	--	--	9,031	--	21,859	--
1975	70	114	7,242	558	6,040	13,840	563	--	--	10,189	--	24,503	--
1980	30	103	5,946	114	2,929	8,989	745	--	--	11,749	--	28,329	--
1985	48	107	3,973	137	2,400	6,509	957	--	--	13,261	--	30,549	--
1990	36	107	3,743	30	2,933	6,707	562	--	--	14,858	--	34,369	--
1995	34	129	3,085	50	4,447	7,582	498	--	--	16,974	--	38,559	--
1996	19	142	3,451	61	5,969	9,481	517	--	--	17,157	--	39,026	--
1997	12	129	2,932	52	5,650	8,634	404	--	--	17,073	--	38,692	--
1998	5	110	2,542	73	3,927	6,542	359	--	--	17,378	--	39,423	--
1999	2	119	2,102	32	4,853	6,987	378	--	--	17,998	--	41,178	--
2000	1	130	2,294	33	5,436	7,763	406	--	--	18,629	--	42,385	--
2001	(s)	125	2,288	188	4,761	7,237	399	--	--	19,400	--	^R 43,631	--
2002	13	135	2,216	16	4,581	6,813	405	--	--	20,451	--	45,816	--
2003	(s)	138	2,342	18	5,823	8,183	427	--	--	20,638	--	45,844	--
2004	(s)	133	2,351	28	5,199	7,577	437	--	--	20,507	--	45,646	--
Trillion Btu													
1960	12.2	63.6	31.5	9.9	12.5	53.9	17.6	0.0	0.0	14.3	161.6	35.3	196.9
1965	7.7	86.3	36.7	8.8	16.2	61.8	13.6	0.0	0.0	20.7	190.1	49.4	239.5
1970	6.8	102.0	41.9	6.8	24.1	72.8	11.2	0.0	0.0	30.8	223.6	74.6	298.2
1975	1.3	114.7	42.2	3.2	22.4	67.8	11.3	0.0	0.0	34.8	229.8	83.6	313.4
1980	0.6	103.1	34.6	0.6	10.8	46.0	14.9	0.0	0.0	40.1	204.7	96.7	301.4
1985	0.9	107.1	23.1	0.8	8.6	32.6	19.1	0.0	0.0	45.2	204.9	104.2	309.2
1990	0.6	107.4	21.8	0.2	10.6	32.6	11.2	^f 0.1	^f 0.3	50.7	^f 203.0	117.3	^f 320.3
1995	0.7	130.4	18.0	0.3	16.1	34.4	10.0	0.2	0.4	57.9	233.9	131.6	365.5
1996	0.3	144.9	20.1	0.3	21.6	42.0	10.3	0.2	0.4	58.5	256.7	133.2	389.9
1997	0.2	131.2	17.1	0.3	20.4	37.8	8.1	0.2	0.4	58.3	236.1	132.0	368.1
1998	0.1	112.5	14.8	0.4	14.2	29.4	7.2	0.2	0.4	59.3	209.1	134.5	343.6
1999	(s)	121.2	12.2	0.2	17.5	30.0	7.6	0.2	0.3	61.4	220.7	140.5	361.2
2000	(s)	131.7	13.4	0.2	19.6	33.2	8.1	0.2	0.3	63.6	237.1	144.6	381.8
2001	(s)	126.8	13.3	1.1	17.2	31.6	8.0	0.3	0.3	66.2	233.1	^R 148.9	^R 382.0
2002	0.2	136.4	12.9	0.1	16.6	29.6	8.1	0.3	0.3	69.8	244.6	156.3	400.9
2003	(s)	139.4	13.6	0.1	21.1	34.9	8.5	0.3	0.2	70.4	253.8	156.4	410.2
2004	(s)	134.1	13.7	0.2	18.8	32.7	8.7	0.4	0.2	70.0	246.1	155.7	401.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Minnesota

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours	Million Kilowatthours				Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	387	20	1,323	378	548	142	634	3,026	0	--	--	1,540	--	3,809	--
1965	265	27	1,542	337	713	158	414	3,164	0	--	--	2,026	--	4,839	--
1970	252	77	1,759	259	1,128	235	393	3,774	0	--	--	3,178	--	7,692	--
1975	163	90	1,770	121	1,066	355	223	3,536	0	--	--	4,845	--	11,650	--
1980	113	64	1,443	0	517	340	32	2,331	0	--	--	5,724	--	13,801	--
1985	171	77	2,845	24	424	335	223	3,851	0	--	--	7,469	--	17,206	--
1990	143	78	1,091	5	518	1,568	259	3,441	^g 0	--	--	8,813	--	20,386	--
1995	229	91	862	23	785	50	111	1,831	0	--	--	10,407	--	23,641	--
1996	137	99	1,014	27	1,053	50	138	2,282	0	--	--	10,850	--	24,680	--
1997	94	92	873	26	997	1,010	160	3,066	0	--	--	10,888	--	24,674	--
1998	37	82	843	31	693	988	161	2,716	0	--	--	11,152	--	25,299	--
1999	13	88	889	20	856	50	155	1,970	0	--	--	11,637	--	26,625	--
2000	5	95	889	54	959	50	137	2,089	0	--	--	12,311	--	28,009	--
2001	1	94	1,134	35	840	52	218	2,279	0	--	--	20,520	--	^R 46,151	--
2002	93	104	821	22	808	52	195	1,899	0	--	--	20,197	--	45,246	--
2003	1	101	738	14	1,028	794	342	2,915	0	--	--	20,533	--	45,612	--
2004	(s)	97	804	10	917	52	449	2,234	0	--	--	20,407	--	45,422	--
Trillion Btu															
1960	8.5	21.0	7.7	2.1	2.2	0.7	4.0	16.8	0.0	0.3	0.0	5.3	51.9	13.0	64.9
1965	5.8	26.8	9.0	1.9	2.9	0.8	2.6	17.2	0.0	0.3	0.0	6.9	57.0	16.5	73.5
1970	5.3	76.7	10.2	1.5	4.3	1.2	2.5	19.7	0.0	0.2	0.0	10.8	112.8	26.2	139.0
1975	3.1	89.9	10.3	0.7	4.0	1.9	1.4	18.2	0.0	0.2	0.0	16.5	128.0	39.8	167.7
1980	2.4	63.6	8.4	0.0	1.9	1.8	0.2	12.3	0.0	0.4	0.0	19.5	98.1	47.1	145.2
1985	3.3	77.3	16.6	0.1	1.5	1.8	1.4	21.4	0.0	0.5	0.0	25.5	127.9	58.7	186.6
1990	2.6	78.3	6.4	(s)	1.9	8.2	1.6	18.1	^g 0.0	^g 1.9	^g 0.0	30.1	^g 130.9	69.6	^g 200.5
1995	4.6	91.8	5.0	0.1	2.8	0.3	0.7	9.0	0.0	2.0	0.0	35.5	143.0	80.7	223.6
1996	2.4	100.3	5.9	0.2	3.8	0.3	0.9	11.0	0.0	2.1	0.0	37.0	152.8	84.2	237.0
1997	1.7	93.9	5.1	0.1	3.6	5.3	1.0	15.1	0.0	2.0	0.0	37.1	149.9	84.2	234.1
1998	0.7	83.9	4.9	0.2	2.5	5.2	1.0	13.8	0.0	1.9	0.0	38.1	138.3	86.3	224.6
1999	0.2	89.7	5.2	0.1	3.1	0.3	1.0	9.6	0.0	1.9	0.0	39.7	141.2	90.8	232.1
2000	0.1	96.8	5.2	0.3	3.5	0.3	0.9	10.1	0.0	2.0	0.0	42.0	151.0	95.6	246.5
2001	(s)	95.3	6.6	0.2	3.0	0.3	1.4	11.5	0.0	2.1	0.0	70.0	179.0	^R 157.5	^R 336.4
2002	1.6	105.3	4.8	0.1	2.9	0.3	1.2	9.3	0.0	2.1	0.0	68.9	187.3	154.4	341.7
2003	(s)	102.5	4.3	0.1	3.7	4.1	2.1	14.4	0.0	2.2	0.0	70.1	189.1	155.6	344.8
2004	(s)	97.5	4.7	0.1	3.3	0.3	2.8	11.2	0.0	2.2	0.0	69.6	180.4	155.0	335.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Minnesota

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	2,555	49	3,004	6,062	444	841	263	4,266	5,690	1,314	21,884	156	--	--	3,095	--	7,655	--
1965	2,776	83	3,791	7,651	420	988	163	3,947	4,213	2,219	23,392	178	--	--	4,677	--	11,167	--
1970	2,020	98	4,413	7,784	231	1,275	296	3,608	3,894	2,979	24,480	168	--	--	8,506	--	20,588	--
1975	2,292	101	4,628	7,991	177	1,985	252	3,132	2,675	4,126	24,965	189	--	--	11,280	--	27,126	--
1980	1,057	101	3,565	5,708	98	4,183	324	1,336	1,818	3,540	20,573	145	--	--	15,525	--	37,433	--
1985	1,027	66	4,989	4,985	23	2,406	294	1,718	481	2,899	17,796	145	--	--	17,934	--	41,313	--
1990	1,283	88	6,039	5,483	7	2,459	331	1,117	700	4,744	20,880	^g 172	--	--	23,497	--	54,354	--
1995	1,401	106	6,403	6,031	31	4,392	316	1,192	536	6,041	24,942	224	--	--	26,577	--	60,373	--
1996	2,088	102	6,674	6,510	35	4,855	307	670	643	6,657	26,352	250	--	--	26,934	--	61,265	--
1997	1,490	107	6,671	6,404	25	3,485	324	1,846	519	6,590	25,864	227	--	--	27,713	--	62,804	--
1998	2,014	105	6,884	6,298	26	2,777	339	1,240	353	5,853	23,769	204	--	--	28,214	--	64,002	--
1999	1,954	104	7,746	5,291	74	2,989	343	1,026	394	5,995	23,858	272	--	--	27,764	--	63,524	--
2000	2,092	106	7,420	4,857	67	3,442	338	996	570	5,613	23,302	248	--	--	28,842	--	65,620	--
2001	1,254	92	6,511	5,154	15	3,359	309	1,465	698	7,127	24,638	186	--	--	20,767	--	^R 46,707	--
2002	1,261	96	5,593	5,010	8	5,899	306	1,412	530	6,868	25,626	45	--	--	21,515	--	48,199	--
2003	1,268	95	6,241	5,451	13	3,932	283	1,360	610	7,358	25,247	93	--	--	21,916	--	48,684	--
2004	1,312	97	6,630	5,854	14	5,448	286	1,400	654	7,164	27,449	132	--	--	22,415	--	49,893	--
Trillion Btu																		
1960	55.2	51.0	19.9	35.3	2.5	3.4	1.6	22.4	35.8	7.9	128.8	1.7	7.4	0.0	10.6	254.6	26.1	280.7
1965	60.8	82.6	25.2	44.6	2.4	4.0	1.0	20.7	26.5	13.2	137.4	1.9	9.3	0.0	16.0	308.0	38.1	346.1
1970	42.1	97.8	29.3	45.3	1.3	4.8	1.8	19.0	24.5	17.7	143.7	1.8	11.8	0.0	29.0	326.1	70.2	396.4
1975	50.8	100.8	30.7	46.5	1.0	7.4	1.5	16.5	16.8	24.5	145.0	2.0	15.9	0.0	38.5	352.8	92.6	445.4
1980	18.1	101.2	23.7	33.3	0.6	15.4	2.0	7.0	11.4	21.1	114.3	1.5	31.3	0.0	53.0	319.4	127.7	447.1
1985	21.3	66.6	33.1	29.0	0.1	8.7	1.8	9.0	3.0	17.8	102.6	1.5	36.7	0.0	61.2	289.9	141.0	430.8
1990	23.8	88.7	40.1	31.9	(s)	8.9	2.0	5.9	4.4	28.4	121.6	^g 1.8	^g 28.0	^g 0.0	80.2	^g 344.1	185.5	^g 529.6
1995	26.7	107.6	42.5	35.1	0.2	15.9	1.9	6.2	3.4	35.8	141.0	2.3	35.6	0.0	90.7	403.9	206.0	609.9
1996	40.0	104.3	44.3	37.9	0.2	17.5	1.9	3.5	4.0	39.7	149.1	2.6	35.9	0.0	91.9	423.7	209.0	632.8
1997	28.1	109.3	44.3	37.3	0.1	12.6	2.0	9.6	3.3	39.3	148.5	2.3	36.1	0.0	94.6	418.8	214.3	633.1
1998	37.5	106.6	45.7	36.7	0.1	10.0	2.1	6.5	2.2	35.0	138.3	2.1	33.3	0.0	96.3	414.0	218.4	632.4
1999	36.4	106.2	51.4	30.8	0.4	10.8	2.1	5.3	2.5	35.8	139.2	2.8	33.0	0.0	94.7	412.3	216.7	629.0
2000	40.4	107.5	49.2	28.3	0.4	12.4	2.0	5.2	3.6	33.7	134.8	2.5	35.7	0.0	98.4	419.2	223.9	643.1
2001	24.4	93.9	43.2	30.0	0.1	12.1	1.9	7.6	4.4	42.3	141.7	1.9	^R 39.5	0.0	70.9	^R 372.3	^R 159.4	^R 531.6
2002	24.4	96.5	37.1	29.2	(s)	21.3	1.9	7.4	3.3	40.8	141.0	0.5	^R 29.0	0.0	73.4	^R 364.8	164.5	^R 529.2
2003	24.0	95.7	41.4	31.7	0.1	14.3	1.7	7.1	3.8	43.7	143.8	1.0	^R 23.6	0.0	74.8	^R 363.0	166.1	^R 529.1
2004	24.9	98.0	44.0	34.1	0.1	19.7	1.7	7.3	4.1	42.5	153.5	1.3	34.8	0.0	76.5	389.1	170.2	559.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Minnesota

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	44	(s)	1,199	3,194	472	27	697	28,176	95	33,860	0	0	--	0	--
1965	9	1	803	3,276	2,624	37	596	31,173	75	38,584	0	0	--	0	--
1970	3	7	277	5,064	3,491	95	628	40,279	29	49,863	0	0	--	0	--
1975	(s)	4	215	6,691	5,629	97	752	44,766	577	58,726	0	0	--	0	--
1980	0	9	193	8,117	5,142	68	796	44,535	971	59,822	0	0	--	0	--
1985	0	6	154	8,038	7,781	123	724	43,232	155	60,209	^f 658	0	--	0	--
1990	0	12	214	9,168	5,099	57	815	45,075	0	60,427	577	0	--	0	--
1995	0	19	129	12,926	9,969	134	778	53,061	0	76,997	3,968	0	--	0	--
1996	0	20	124	12,901	10,625	140	755	54,146	0	78,692	3,023	0	--	0	--
1997	0	20	137	13,295	10,887	137	797	52,898	10	78,161	4,523	0	--	0	--
1998	0	20	92	14,740	10,699	13	835	55,878	0	82,258	5,063	0	--	0	--
1999	0	22	141	15,422	12,591	7	843	58,819	1	87,824	5,500	0	--	0	--
2000	0	21	136	16,559	13,301	7	831	60,074	222	91,129	5,589	0	--	0	--
2001	0	19	95	16,221	11,588	13	761	60,719	179	89,576	5,718	0	--	0	--
2002	0	23	137	16,495	11,064	14	752	62,039	262	90,762	6,190	0	--	0	--
2003	0	20	93	15,864	11,977	79	695	62,484	70	91,264	6,736	0	--	0	--
2004	0	20	93	17,319	12,505	98	704	63,350	296	94,365	6,403	11	--	24	--

Trillion Btu															
1960	0.9	0.3	6.1	18.6	2.6	0.1	4.2	148.0	0.6	180.2	0.0	0.0	181.4	0.0	181.4
1965	0.2	1.2	4.1	19.1	14.8	0.1	3.6	163.8	0.5	205.9	0.0	0.0	207.3	0.0	207.3
1970	0.1	7.5	1.4	29.5	19.7	0.4	3.8	211.6	0.2	266.6	0.0	0.0	274.1	0.0	274.1
1975	(s)	3.9	1.1	39.0	31.9	0.4	4.6	235.2	3.6	315.6	0.0	0.0	319.5	0.0	319.5
1980	0.0	9.1	1.0	47.3	29.1	0.2	4.8	233.9	6.1	322.5	0.0	0.0	331.6	0.0	331.6
1985	0.0	6.3	0.8	46.8	44.1	0.4	4.4	227.1	1.0	324.6	^f 2.3	0.0	^f 333.2	0.0	^f 333.2
1990	0.0	12.1	1.1	53.4	28.9	0.2	4.9	236.8	0.0	325.3	2.0	0.0	339.4	0.0	339.4
1995	0.0	19.4	0.7	75.3	56.5	0.5	4.7	276.7	0.0	414.4	14.0	0.0	433.8	0.0	433.8
1996	0.0	20.1	0.6	75.2	60.2	0.5	4.6	282.4	0.0	423.5	10.7	0.0	443.7	0.0	443.7
1997	0.0	19.9	0.7	77.4	61.7	0.5	4.8	275.8	0.1	421.0	16.0	0.0	440.9	0.0	440.9
1998	0.0	20.5	0.5	85.9	60.7	(s)	5.1	291.2	0.0	443.3	17.9	0.0	463.9	0.0	463.9
1999	0.0	22.5	0.7	89.8	71.4	(s)	5.1	306.5	(s)	473.6	19.5	0.0	496.1	0.0	496.1
2000	0.0	21.4	0.7	96.5	75.4	(s)	5.0	313.0	1.4	492.0	19.8	0.0	513.4	0.0	513.4
2001	0.0	19.4	0.5	94.5	65.7	(s)	4.6	316.3	1.1	482.8	20.2	0.0	502.2	0.0	502.2
2002	0.0	23.3	0.7	96.1	62.7	(s)	4.6	323.1	1.6	488.9	21.9	0.0	512.2	0.0	512.2
2003	0.0	20.5	0.5	92.4	67.9	0.3	4.2	325.4	0.4	491.1	23.8	0.0	511.6	0.0	511.6
2004	0.0	20.6	0.5	100.9	70.9	0.4	4.3	330.4	1.9	509.1	22.7	(s)	529.7	0.1	529.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Minnesota

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	2,433	49	239	156	0	395	0	731	--	0	0	0	90	--
1965	3,857	51	278	182	0	460	143	915	--	0	0	0	111	--
1970	6,192	59	842	551	143	1,537	0	726	--	0	0	0	127	--
1975	7,595	23	851	674	59	1,584	9,750	728	--	0	0	0	185	--
1980	12,610	8	361	167	0	529	10,027	642	--	0	0	0	953	--
1985	11,498	1	(s)	49	0	49	11,572	829	--	0	0	0	2,668	--
1990	16,916	5	1	91	727	820	12,139	685	--	ⁱ 0	ⁱ 0	ⁱ (s)	728	--
1995	17,282	8	0	134	770	904	13,243	874	--	0	0	57	8,441	--
1996	17,459	5	2	140	1,055	1,196	12,095	937	--	0	0	50	8,837	--
1997	17,490	6	7	253	1,241	1,501	10,819	807	--	0	0	54	9,889	--
1998	17,902	13	1	184	1,041	1,225	11,644	750	--	0	0	147	7,936	--
1999	17,114	11	2	217	1,261	1,480	13,316	906	--	0	0	486	5,998	--
2000	18,639	10	1	246	1,080	1,327	12,960	684	--	0	0	725	7,892	--
2001	18,427	11	50	199	980	1,229	11,789	645	--	0	0	897	8,270	--
2002	19,088	13	5	95	1,054	1,154	13,685	764	--	0	0	906	4,174	--
2003	20,729	17	41	206	1,311	1,558	13,414	721	--	0	0	978	-2,511	--
2004	20,070	13	62	129	1,205	1,395	13,296	607	--	0	0	812	2,610	--
Trillion Btu														
1960	54.5	50.2	1.5	0.9	0.0	2.4	0.0	7.9	0.2	0.0	0.0	0.0	0.3	115.4
1965	85.5	51.3	1.7	1.1	0.0	2.8	1.7	9.6	0.1	0.0	0.0	0.0	0.4	151.4
1970	125.5	59.1	5.3	3.2	0.9	9.4	0.0	7.6	0.2	0.0	0.0	0.0	0.4	202.2
1975	136.3	22.3	5.4	3.9	0.4	9.6	107.4	7.6	(s)	0.0	0.0	0.0	0.6	283.8
1980	221.4	8.0	2.3	1.0	0.0	3.2	109.4	6.7	(s)	0.0	0.0	0.0	3.3	352.0
1985	200.6	1.3	(s)	0.3	0.0	0.3	122.9	8.7	(s)	0.0	0.0	0.0	9.1	342.9
1990	298.5	5.4	(s)	0.5	4.4	4.9	128.5	7.1	ⁱ 7.7	ⁱ 0.0	ⁱ 0.0	ⁱ (s)	2.5	ⁱ 454.6
1995	305.9	8.4	0.0	0.8	4.6	5.4	139.1	9.0	8.6	0.0	0.0	0.6	28.8	505.9
1996	311.9	5.3	(s)	0.8	6.4	7.2	127.0	9.7	8.8	0.0	0.0	0.5	30.2	500.6
1997	311.6	6.2	(s)	1.5	7.5	9.0	113.5	8.2	9.4	0.0	0.0	0.6	33.7	492.3
1998	318.7	13.6	(s)	1.1	6.3	7.3	122.2	7.7	8.5	0.0	0.0	1.5	27.1	506.6
1999	304.8	11.5	(s)	1.3	7.6	8.9	139.1	9.3	8.2	0.0	0.0	5.0	20.5	507.3
2000	333.3	10.1	(s)	1.4	6.5	7.9	135.2	7.0	8.8	0.0	0.0	7.4	26.9	536.6
2001	^R 328.9	9.6	0.3	1.2	5.9	7.4	123.2	6.7	8.5	0.0	0.0	9.3	28.2	^R 521.7
2002	334.6	13.3	(s)	0.6	6.4	6.9	142.9	7.8	12.7	0.0	0.0	9.2	14.2	541.6
2003	366.7	16.8	0.3	1.2	7.9	9.4	139.8	7.4	15.4	0.0	0.0	10.0	-8.6	556.8
2004	353.8	13.1	0.4	0.7	7.3	8.4	138.6	6.1	11.5	0.0	0.0	8.1	8.9	548.6

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Mississippi

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	30	182	762	170	2,375	1,465	398	4,220	391	16,096	311	1,229	27,417	0	0	--	--	8,055	--
1965	40	244	1,144	463	2,796	1,460	346	4,720	469	18,539	489	2,810	33,237	0	0	--	--	14,064	--
1970	549	360	1,748	318	5,991	1,614	2,646	8,645	525	24,316	703	5,446	51,951	0	0	--	--	17,045	--
1975	1,440	230	2,589	203	9,852	1,475	1,434	8,180	681	27,811	12,063	4,906	69,194	0	0	--	--	27,771	--
1980	3,127	264	2,036	206	9,648	1,530	242	5,694	655	26,781	16,010	5,991	68,793	0	0	--	--	19,918	--
1985	4,519	227	2,054	108	13,461	4,111	86	4,672	596	27,586	1,319	4,096	58,088	4,332	0	--	--	24,555	--
1990	4,159	254	2,509	132	13,221	6,922	53	7,093	671	29,080	3,658	6,247	69,585	7,422	0	--	--	32,803	--
1995	4,606	288	2,430	100	14,065	7,573	47	6,810	640	34,017	2,607	6,207	74,494	8,013	0	--	--	37,012	--
1996	5,791	269	2,608	61	14,851	7,157	49	8,945	621	34,178	3,491	7,342	79,302	9,225	0	--	--	37,055	--
1997	6,273	256	3,041	66	16,654	7,912	65	3,091	656	35,393	5,317	7,400	79,594	10,813	0	--	--	31,002	--
1998	5,897	241	3,223	99	16,937	7,683	83	2,787	687	36,708	9,507	6,495	84,208	9,191	0	--	--	36,713	--
1999	6,206	307	3,308	80	17,510	9,658	104	5,312	694	38,422	5,843	6,600	87,531	8,428	0	--	--	38,658	--
2000	6,386	301	2,885	98	16,517	9,004	67	6,545	684	37,193	5,906	6,109	85,008	10,695	0	--	--	34,893	--
2001	8,488	333	1,930	106	16,995	8,411	69	7,526	626	36,481	9,883	7,080	89,106	9,924	0	--	--	R -3,926	--
2002	8,018	344	2,002	79	18,228	7,223	35	5,647	619	38,010	1,368	7,205	80,415	10,059	12	--	--	23,009	--
2003	9,691	266	2,940	69	19,610	9,193	79	6,672	572	38,676	3,592	7,744	89,147	10,902	0	--	--	28,060	--
2004	10,110	282	3,153	115	21,131	6,119	82	3,872	580	39,205	6,448	7,763	88,469	10,233	0	--	--	23,366	--

Trillion Btu																			
1960	0.8	187.9	5.1	0.9	13.8	7.8	2.3	16.9	2.4	84.6	2.0	7.4	143.0	0.0	0.0	46.6	0.0	27.5	405.7
1965	1.0	250.6	7.6	2.3	16.3	7.8	2.0	18.9	2.8	97.4	3.1	16.9	175.1	0.0	0.0	37.8	0.0	48.0	512.5
1970	13.2	369.4	11.6	1.6	34.9	8.7	15.0	32.7	3.2	127.7	4.4	32.7	272.6	0.0	0.0	33.5	0.0	58.2	746.9
1975	33.4	235.3	17.2	1.0	57.4	8.0	8.1	30.4	4.1	146.1	75.8	29.4	377.6	0.0	0.0	31.2	0.0	94.8	772.2
1980	75.0	270.9	13.5	1.0	56.2	8.3	1.4	20.9	4.0	140.7	100.7	35.9	382.6	0.0	0.0	38.1	0.0	68.0	834.6
1985	109.4	233.0	13.6	0.5	78.4	22.9	0.5	16.8	3.6	144.9	8.3	25.4	315.1	46.0	0.0	50.9	0.0	83.8	838.1
1990	103.9	261.9	16.7	0.7	77.0	39.0	0.3	25.7	4.1	152.8	23.0	37.3	376.4	78.5	0.0	i 84.8	i (s)	111.9	i 1,017.6
1995	103.8	295.4	16.1	0.5	81.9	42.9	0.3	24.7	3.9	177.4	16.4	36.7	400.8	84.2	0.0	94.1	0.1	126.3	1,104.6
1996	127.8	277.5	17.3	0.3	86.5	40.6	0.3	32.3	3.8	178.3	21.9	43.2	424.4	96.9	0.0	85.6	0.2	126.4	1,138.7
1997	132.2	264.2	20.2	0.3	97.0	44.9	0.4	11.2	4.0	184.5	33.4	43.5	439.3	113.5	0.0	84.1	0.2	105.8	1,139.2
1998	125.9	252.4	21.4	0.5	98.7	43.6	0.5	10.1	4.2	191.3	59.8	38.2	468.1	96.4	0.0	63.9	0.2	125.3	1,132.3
1999	137.6	317.8	21.9	0.4	102.0	54.8	0.6	19.2	4.2	200.2	36.7	38.7	478.7	88.1	0.0	64.9	0.3	131.9	1,219.3
2000	147.5	312.1	19.1	0.5	96.2	51.1	0.4	23.6	4.1	193.8	37.1	35.9	461.8	111.5	0.0	75.2	0.3	119.1	1,227.4
2001	R 198.3	340.9	12.8	0.5	99.0	47.7	0.4	27.2	3.8	190.1	62.1	41.7	485.3	103.7	0.0	R 55.8	0.3	R -13.4	R 1,170.9
2002	154.3	362.5	13.3	0.4	106.2	41.0	0.2	20.4	3.8	198.0	8.6	42.5	434.2	105.0	0.1	49.4	0.3	78.5	R 1,184.3
2003	178.9	R 265.8	19.5	0.3	114.2	52.1	0.5	24.2	3.5	201.4	22.6	45.7	484.0	113.6	0.0	45.0	0.4	95.7	R 1,183.5
2004	185.0	293.6	20.9	0.6	123.1	34.7	0.5	14.0	3.5	204.5	40.5	45.7	488.0	106.7	0.0	60.9	0.4	79.7	1,214.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Mississippi

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	0	24	23	13	2,450	2,486	1,375	--	--	2,089	--	5,167	--
1965	0	24	32	27	2,865	2,923	923	--	--	3,705	--	8,848	--
1970	0	37	89	75	5,129	5,293	515	--	--	6,880	--	16,653	--
1975	0	30	196	127	4,231	4,554	507	--	--	8,091	--	19,458	--
1980	(s)	29	7	44	2,201	2,252	507	--	--	9,964	--	24,025	--
1985	(s)	26	1	27	1,915	1,943	900	--	--	10,447	--	24,067	--
1990	(s)	25	1	12	2,158	2,171	458	--	--	12,266	--	28,373	--
1995	0	27	(s)	20	1,946	1,966	360	--	--	14,181	--	32,214	--
1996	0	30	1	22	2,397	2,420	374	--	--	14,965	--	34,039	--
1997	(s)	28	(s)	21	2,240	2,261	195	--	--	14,817	--	33,579	--
1998	0	25	1	24	2,124	2,150	174	--	--	16,392	--	37,186	--
1999	0	25	2	21	2,328	2,351	183	--	--	16,321	--	37,343	--
2000	0	27	1	35	3,998	4,035	196	--	--	17,193	--	39,116	--
2001	0	28	5	32	4,141	4,178	158	--	--	16,856	--	^R 37,910	--
2002	0	26	1	9	2,942	2,952	160	--	--	17,844	--	39,975	--
2003	0	27	1	11	2,368	2,380	168	--	--	17,670	--	39,251	--
2004	0	24	5	15	2,191	2,211	173	--	--	17,580	--	39,130	--
Trillion Btu													
1960	0.0	24.9	0.1	0.1	9.8	10.0	27.5	0.0	0.0	7.1	69.5	17.6	87.2
1965	0.0	24.8	0.2	0.2	11.5	11.8	18.5	0.0	0.0	12.6	67.7	30.2	97.9
1970	0.0	37.6	0.5	0.4	19.4	20.3	10.3	0.0	0.0	23.5	91.7	56.8	148.5
1975	0.0	30.2	1.1	0.7	15.7	17.6	10.1	0.0	0.0	27.6	85.5	66.4	151.9
1980	(s)	30.5	(s)	0.2	8.1	8.4	10.1	0.0	0.0	34.0	83.0	82.0	165.0
1985	(s)	26.3	(s)	0.2	6.9	7.1	18.0	0.0	0.0	35.6	87.0	82.1	169.2
1990	(s)	25.9	(s)	0.1	7.8	7.9	9.2	^f (s)	^f (s)	41.9	^f 84.8	96.8	^f 181.6
1995	0.0	27.5	(s)	0.1	7.0	7.2	7.2	(s)	(s)	48.4	90.3	109.9	200.2
1996	0.0	31.0	(s)	0.1	8.7	8.8	7.5	(s)	(s)	51.1	98.4	116.1	214.5
1997	(s)	28.6	(s)	0.1	8.1	8.2	3.9	(s)	(s)	50.6	91.3	114.6	205.9
1998	0.0	26.1	(s)	0.1	7.7	7.8	3.5	(s)	(s)	55.9	93.4	126.9	220.3
1999	0.0	25.6	(s)	0.1	8.4	8.5	3.7	(s)	(s)	55.7	93.5	127.4	220.9
2000	0.0	28.2	(s)	0.2	14.4	14.6	3.9	(s)	(s)	58.7	105.4	133.5	238.9
2001	0.0	28.6	(s)	0.2	15.0	15.2	3.2	(s)	(s)	57.5	104.4	^R 129.3	^R 233.8
2002	0.0	28.6	(s)	0.1	10.6	10.7	3.2	(s)	(s)	60.9	103.4	136.4	239.8
2003	0.0	26.1	(s)	0.1	8.6	8.7	3.4	(s)	(s)	60.3	98.4	133.9	232.4
2004	0.0	25.3	(s)	0.1	7.9	8.0	3.5	(s)	(s)	60.0	96.8	133.5	230.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Mississippi

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	0	15	28	0	432	79	18	557	0	--	--	1,278	--	3,161	--
1965	0	12	39	0	506	88	33	665	0	--	--	1,968	--	4,701	--
1970	0	24	108	0	905	91	45	1,149	0	--	--	3,019	--	7,308	--
1975	0	24	239	0	747	105	898	1,988	0	--	--	3,982	--	9,575	--
1980	2	21	24	0	388	122	3,405	3,940	0	--	--	5,110	--	12,321	--
1985	1	17	755	39	338	134	11	1,277	0	--	--	6,131	--	14,124	--
1990	(s)	18	400	6	381	165	0	952	^g 0	--	--	7,407	--	17,134	--
1995	0	20	318	7	343	49	0	717	0	--	--	8,210	--	18,650	--
1996	0	22	397	6	423	57	0	883	0	--	--	8,615	--	19,596	--
1997	(s)	22	330	13	395	47	0	785	0	--	--	10,649	--	24,134	--
1998	0	21	366	7	375	49	0	796	0	--	--	11,519	--	26,132	--
1999	0	20	260	44	411	44	0	758	0	--	--	11,923	--	27,280	--
2000	0	22	261	8	706	45	0	1,019	0	--	--	12,287	--	27,955	--
2001	0	22	332	10	731	40	50	1,162	0	--	--	12,163	--	^R 27,355	--
2002	0	21	262	8	519	33	0	822	0	--	--	12,588	--	28,200	--
2003	0	23	432	44	418	34	2	931	0	--	--	12,593	--	27,973	--
2004	0	22	207	9	387	38	9	649	0	--	--	12,750	--	28,380	--

Trillion Btu															
1960	0.0	15.7	0.2	0.0	1.7	0.4	0.1	2.4	0.0	0.5	0.0	4.4	23.0	10.8	33.8
1965	0.0	12.8	0.2	0.0	2.0	0.5	0.2	2.9	0.0	0.3	0.0	6.7	22.8	16.0	38.8
1970	0.0	24.4	0.6	0.0	3.4	0.5	0.3	4.8	0.0	0.2	0.0	10.3	39.7	24.9	64.7
1975	0.0	24.4	1.4	0.0	2.8	0.6	5.6	10.4	0.0	0.2	0.0	13.6	48.6	32.7	81.3
1980	(s)	21.6	0.1	0.0	1.4	0.6	21.4	23.6	0.0	0.2	0.0	17.4	62.9	42.0	105.0
1985	(s)	17.0	4.4	0.2	1.2	0.7	0.1	6.6	0.0	0.4	0.0	20.9	45.0	48.2	93.2
1990	(s)	18.1	2.3	(s)	1.4	0.9	0.0	4.6	^g 0.0	^g 1.0	^g (s)	25.3	^g 49.0	58.5	^g 107.5
1995	0.0	20.3	1.9	(s)	1.2	0.3	0.0	3.4	0.0	1.0	0.1	28.0	52.8	63.6	116.5
1996	0.0	22.9	2.3	(s)	1.5	0.3	0.0	4.2	0.0	1.0	0.1	29.4	57.6	66.9	124.5
1997	(s)	22.9	1.9	0.1	1.4	0.2	0.0	3.7	0.0	0.7	0.2	36.3	63.7	82.3	146.0
1998	0.0	22.5	2.1	(s)	1.4	0.3	0.0	3.8	0.0	0.6	0.2	39.3	66.3	89.2	155.5
1999	0.0	21.1	1.5	0.2	1.5	0.2	0.0	3.5	0.0	0.6	0.2	40.7	66.0	93.1	159.1
2000	0.0	22.6	1.5	(s)	2.5	0.2	0.0	4.3	0.0	0.6	0.2	41.9	69.7	95.4	165.1
2001	0.0	22.1	1.9	0.1	2.6	0.2	0.3	5.1	0.0	0.6	0.3	41.5	69.6	^R 93.3	^R 162.9
2002	0.0	22.9	1.5	(s)	1.9	0.2	0.0	3.6	0.0	0.6	0.3	42.9	70.3	96.2	166.5
2003	0.0	22.5	2.5	0.2	1.5	0.2	(s)	4.5	0.0	0.6	0.3	43.0	70.9	95.4	166.3
2004	0.0	23.2	1.2	0.1	1.4	0.2	0.1	2.9	0.0	0.6	0.4	43.5	70.5	96.8	167.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Mississippi

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	21	77	762	1,441	385	1,118	99	738	218	1,229	5,990	0	--	--	2,004	--	4,956
1965	31	105	1,144	1,590	319	1,117	157	610	149	2,810	7,896	0	--	--	3,517	--	8,399
1970	48	141	1,748	3,100	2,571	2,139	242	311	240	5,446	15,795	0	--	--	5,101	--	12,346
1975	24	107	2,589	4,455	1,307	2,739	374	218	778	4,906	17,366	0	--	--	6,814	--	16,388
1980	53	79	2,036	3,527	198	2,952	341	73	2,172	5,991	17,290	0	--	--	8,184	--	19,733
1985	251	105	2,054	3,814	20	2,187	310	751	89	4,096	13,321	0	--	--	9,147	--	21,072
1990	271	108	2,509	3,851	35	4,423	349	578	947	6,247	18,937	9	--	--	12,454	--	28,810
1995	287	88	2,430	3,881	19	4,448	333	427	81	6,207	17,826	0	--	--	15,477	--	35,158
1996	233	84	2,608	3,858	21	6,061	323	430	112	7,342	20,755	0	--	--	16,043	--	36,491
1997	238	88	3,041	4,643	31	397	341	488	31	7,400	16,371	0	--	--	14,622	--	33,137
1998	213	82	3,223	4,051	52	280	357	370	153	6,495	14,981	0	--	--	14,599	--	33,117
1999	184	124	3,308	3,926	40	2,232	361	733	11	6,600	17,211	0	--	--	15,735	--	36,002
2000	155	120	2,885	3,275	24	1,727	355	758	7	6,109	15,140	0	--	--	15,856	--	36,076
2001	154	103	1,930	3,700	27	2,631	326	1,086	195	7,080	16,974	0	--	--	15,268	--	^R 34,340
2002	149	106	2,002	3,497	18	2,113	322	1,176	121	7,205	16,454	0	--	--	15,021	--	33,650
2003	146	94	2,940	3,246	24	3,843	298	1,239	169	7,744	19,503	0	--	--	15,281	--	33,945
2004	160	106	3,153	4,175	58	1,251	301	1,415	310	7,763	18,426	0	--	--	15,702	--	34,950

Trillion Btu																	
1960	0.5	79.3	5.1	8.4	2.2	4.5	0.6	3.9	1.4	7.4	33.4	0.0	18.5	0.0	6.8	138.5	16.9
1965	0.8	108.5	7.6	9.3	1.8	4.5	1.0	3.2	0.9	16.9	45.1	0.0	19.0	0.0	12.0	185.3	28.7
1970	1.2	144.4	11.6	18.1	14.6	8.1	1.5	1.6	1.5	32.7	89.6	0.0	23.0	0.0	17.4	275.6	42.1
1975	0.6	109.1	17.2	26.0	7.4	10.2	2.3	1.1	4.9	29.4	98.4	0.0	20.8	0.0	23.3	252.1	55.9
1980	1.2	81.5	13.5	20.5	1.1	10.8	2.1	0.4	13.7	35.9	98.0	0.0	27.7	0.0	27.9	236.4	67.3
1985	5.9	108.1	13.6	22.2	0.1	7.9	1.9	3.9	0.6	25.4	75.6	0.0	32.5	0.0	31.2	253.2	71.9
1990	6.3	111.6	16.7	22.4	0.2	16.0	2.1	3.0	6.0	37.3	103.7	9	74.7	9	42.5	⁹ 338.8	98.3
1995	6.9	89.9	16.1	22.6	0.1	16.1	2.0	2.2	0.5	36.7	96.4	0.0	85.9	0.0	52.8	331.9	120.0
1996	5.6	87.0	17.3	22.5	0.1	21.9	2.0	2.2	0.7	43.2	109.9	0.0	77.1	0.0	54.7	334.2	124.5
1997	5.6	90.8	20.2	27.0	0.2	1.4	2.1	2.5	0.2	43.5	97.1	0.0	79.6	0.0	49.9	323.0	113.1
1998	5.1	86.6	21.4	23.6	0.3	1.0	2.2	1.9	1.0	38.2	89.5	0.0	59.9	0.0	49.8	291.0	113.0
1999	4.4	129.2	21.9	22.9	0.2	8.1	2.2	3.8	0.1	38.7	97.9	0.0	60.7	(s)	53.7	346.0	122.8
2000	3.7	125.6	19.1	19.1	0.1	6.2	2.2	3.9	(s)	35.9	86.6	0.0	70.6	(s)	54.1	340.7	123.1
2001	3.7	105.8	12.8	21.5	0.2	9.5	2.0	5.7	1.2	41.7	94.6	0.0	^R 52.1	(s)	52.1	^R 308.4	^R 117.2
2002	3.6	114.0	13.3	20.4	0.1	7.6	2.0	6.1	0.8	42.5	92.7	0.0	45.6	(s)	51.3	307.2	114.8
2003	3.5	^R 92.4	19.5	18.9	0.1	13.9	1.8	6.5	1.1	45.7	107.5	0.0	^R 41.0	(s)	52.1	^R 296.7	^R 115.8
2004	3.7	111.5	20.9	24.3	0.3	4.5	1.8	7.4	1.9	45.7	107.0	0.0	56.9	(s)	53.6	332.7	119.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Mississippi

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	(s)	31	170	882	1,465	220	292	15,279	11	18,320	0	0	--	0	--
1965	(s)	45	463	1,136	1,460	233	312	17,842	301	21,747	0	0	--	0	--
1970	(s)	59	318	2,690	1,614	472	283	23,914	3	29,293	0	0	--	0	--
1975	(s)	38	203	4,696	1,475	464	307	27,489	1,184	35,817	0	0	--	0	--
1980	0	39	206	6,020	1,530	152	315	26,585	5,355	40,163	0	0	--	0	--
1985	0	25	108	8,830	4,111	232	286	26,701	1,110	41,379	^f 0	0	--	0	--
1990	0	38	132	8,920	6,922	131	322	28,337	1,532	46,296	0	0	--	0	--
1995	0	42	100	9,825	7,573	72	307	33,540	2,519	53,937	55	0	--	0	--
1996	0	49	61	10,506	7,157	64	298	33,690	1,675	53,451	6	0	--	0	--
1997	0	45	66	11,629	7,912	58	315	34,858	1,251	56,090	0	0	--	0	--
1998	0	36	99	12,458	7,683	7	330	36,290	1,040	57,906	0	0	--	0	--
1999	0	32	80	13,260	9,658	341	333	37,644	916	62,232	0	0	--	0	--
2000	0	31	98	12,927	9,004	114	328	36,391	1,366	60,228	0	0	--	0	--
2001	0	30	106	12,909	8,411	24	301	35,355	1,291	58,397	0	0	--	0	--
2002	0	27	79	14,436	7,223	72	297	36,801	1,224	60,133	0	0	--	0	--
2003	0	26	69	15,896	9,193	43	275	37,402	821	63,699	0	(s)	--	(s)	--
2004	0	22	115	16,700	6,119	43	278	37,752	1,681	62,690	0	(s)	--	(s)	--
Trillion Btu															
1960	(s)	32.5	0.9	5.1	7.8	0.9	1.8	80.3	0.1	96.8	0.0	0.0	129.3	0.0	129.3
1965	(s)	46.6	2.3	6.6	7.8	0.9	1.9	93.7	1.9	115.2	0.0	0.0	161.8	0.0	161.8
1970	(s)	60.8	1.6	15.7	8.7	1.8	1.7	125.6	(s)	155.2	0.0	0.0	216.0	0.0	216.0
1975	(s)	39.2	1.0	27.4	8.0	1.7	1.9	144.4	7.4	191.8	0.0	0.0	231.0	0.0	231.0
1980	0.0	40.6	1.0	35.1	8.3	0.6	1.9	139.7	33.7	220.2	0.0	0.0	260.8	0.0	260.8
1985	0.0	25.9	0.5	51.4	22.9	0.8	1.7	140.3	7.0	224.7	^f 0.0	0.0	^f 250.7	0.0	^f 250.7
1990	0.0	39.0	0.7	52.0	39.0	0.5	2.0	148.9	9.6	252.5	0.0	0.0	291.5	0.0	291.5
1995	0.0	42.6	0.5	57.2	42.9	0.3	1.9	174.9	15.8	293.5	0.2	0.0	336.1	0.0	336.1
1996	0.0	50.6	0.3	61.2	40.6	0.2	1.8	175.7	10.5	290.4	(s)	0.0	341.0	0.0	341.0
1997	0.0	46.7	0.3	67.7	44.9	0.2	1.9	181.7	7.9	304.6	0.0	0.0	351.3	0.0	351.3
1998	0.0	38.2	0.5	72.6	43.6	(s)	2.0	189.1	6.5	314.3	0.0	0.0	352.6	0.0	352.6
1999	0.0	32.9	0.4	77.2	54.8	1.2	2.0	196.2	5.8	337.6	0.0	0.0	370.5	0.0	370.5
2000	0.0	32.2	0.5	75.3	51.1	0.4	2.0	189.6	8.6	327.4	0.0	0.0	359.7	0.0	359.7
2001	0.0	31.0	0.5	75.2	47.7	0.1	1.8	184.2	8.1	317.6	0.0	0.0	348.7	0.0	348.7
2002	0.0	29.2	0.4	84.1	41.0	0.3	1.8	191.7	7.7	326.9	0.0	0.0	356.0	0.0	356.0
2003	0.0	25.5	0.3	92.6	52.1	0.2	1.7	194.8	5.2	346.8	0.0	(s)	372.3	(s)	372.3
2004	0.0	22.9	0.6	97.3	34.7	0.2	1.7	196.9	10.6	341.8	0.0	(s)	364.8	(s)	364.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Mississippi

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	8	34	64	1	0	65	0	0	--	0	0	0	0	--
1965	9	56	6	(s)	0	7	0	0	--	0	0	0	0	--
1970	500	100	415	5	0	420	0	0	--	0	0	0	0	--
1975	1,416	32	9,203	266	0	9,469	0	0	--	0	0	0	0	--
1980	3,072	95	5,078	70	0	5,149	0	0	--	0	0	0	0	--
1985	4,267	54	108	61	0	169	4,332	0	--	0	0	0	0	--
1990	3,888	65	1,179	50	0	1,228	7,422	0	--	0	0	0	0	--
1995	4,319	111	7	41	0	48	8,013	0	--	0	0	0	0	--
1996	5,558	83	1,703	89	0	1,792	9,225	0	--	0	0	0	0	--
1997	6,035	73	4,035	51	0	4,086	10,813	0	--	0	0	0	0	--
1998	5,684	76	8,314	61	0	8,376	9,191	0	--	0	0	0	0	--
1999	6,022	106	4,916	62	0	4,978	8,428	0	--	0	0	0	0	--
2000	6,232	101	4,533	53	0	4,585	10,695	0	--	0	0	0	0	--
2001	8,334	149	8,348	49	0	8,396	9,924	0	--	0	0	0	0	--
2002	7,869	164	23	31	0	54	10,059	12	--	0	0	0	0	--
2003	9,545	96	2,600	35	0	2,635	10,902	0	--	0	0	0	0	--
2004	9,950	107	4,449	44	0	4,493	10,233	0	--	0	0	0	0	--
Trillion Btu														
1960	0.2	35.6	0.4	(s)	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2
1965	0.2	58.0	(s)	(s)	0.0	(s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.3
1970	12.1	102.2	2.6	(s)	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.9
1975	32.8	32.5	57.9	1.5	0.0	59.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	124.7
1980	73.7	96.7	31.9	0.4	0.0	32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202.7
1985	103.5	55.7	0.7	0.4	0.0	1.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	206.2
1990	97.6	67.4	7.4	0.3	0.0	7.7	78.5	0.0	0.0	0.0	0.0	0.0	0.0	251.3
1995	96.9	115.1	(s)	0.2	0.0	0.3	84.2	0.0	0.0	0.0	0.0	0.0	0.0	296.4
1996	122.2	85.9	10.7	0.5	0.0	11.2	96.9	0.0	0.0	0.0	0.0	0.0	0.0	316.3
1997	126.5	75.3	25.4	0.3	0.0	25.7	113.5	0.0	0.0	0.0	0.0	0.0	0.0	341.0
1998	120.8	79.0	52.3	0.4	0.0	52.6	96.4	0.0	0.0	0.0	0.0	0.0	0.0	348.8
1999	133.2	109.0	30.9	0.4	0.0	31.3	88.1	0.0	0.0	0.0	0.0	0.0	0.0	361.5
2000	143.8	103.5	28.5	0.3	0.0	28.8	111.5	0.0	0.0	0.0	0.0	0.0	0.0	387.6
2001	^R 194.6	153.3	52.5	0.3	0.0	52.8	103.7	0.0	0.0	0.0	0.0	0.0	0.0	^R 504.4
2002	150.7	167.8	0.1	0.2	0.0	0.3	105.0	0.1	0.0	0.0	0.0	0.0	0.0	424.0
2003	175.4	99.3	16.3	0.2	0.0	16.6	113.6	0.0	0.0	0.0	0.0	0.0	0.0	404.8
2004	181.2	110.8	28.0	0.3	0.0	28.2	106.7	0.0	0.0	0.0	0.0	0.0	0.0	426.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Missouri

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	7,509	261	3,725	1,844	12,817	1,249	2,087	5,994	953	40,807	3,179	2,207	74,860	0	726	--	--	4,064	--
1965	8,534	341	4,401	2,323	13,803	3,625	1,162	7,692	1,029	45,015	3,449	4,395	86,894	0	802	--	--	2,387	--
1970	12,863	430	5,657	179	16,235	8,074	643	11,771	1,150	56,041	3,570	5,467	108,789	0	927	--	--	-2,178	--
1975	19,955	370	5,401	184	17,819	8,311	282	12,995	1,284	62,342	2,521	4,801	115,940	0	1,280	--	--	-12,466	--
1980	24,845	318	4,002	162	18,390	6,268	315	9,121	1,603	58,966	1,427	11,384	111,638	0	558	--	--	-6,424	--
1985	24,733	260	4,295	135	19,987	5,889	149	5,583	1,459	60,036	732	7,660	105,926	8,030	2,993	--	--	-24,087	--
1990	25,836	239	4,468	126	21,188	6,647	45	6,874	1,641	63,994	620	9,349	114,952	7,998	2,192	--	--	-1,656	--
1995	31,753	279	5,296	109	24,122	11,425	53	11,085	1,566	68,930	354	5,363	128,304	8,242	1,919	--	--	1,040	--
1996	34,382	294	5,385	108	27,137	12,133	116	12,965	1,520	69,947	360	3,434	133,107	8,890	1,314	--	--	2,886	--
1997	36,860	283	4,141	160	28,760	12,320	77	11,200	1,605	70,581	253	3,088	132,186	8,955	1,593	--	--	-5,934	--
1998	38,549	259	3,906	136	36,172	12,747	83	8,134	1,680	71,675	233	4,509	139,276	8,517	2,347	--	--	-8,517	--
1999	37,975	266	4,977	75	36,225	12,760	84	12,671	1,698	71,189	140	5,314	145,135	8,587	1,853	--	--	-3,790	--
2000	38,300	285	4,167	98	28,818	4,906	105	10,820	1,673	73,852	109	4,009	128,556	9,992	600	--	--	902	--
2001	39,812	284	5,404	146	29,913	7,493	119	12,897	1,532	72,510	141	5,246	135,400	8,384	1,104	--	--	R -5,648	--
2002	40,885	276	4,740	119	29,381	9,535	76	12,722	1,514	73,737	112	4,996	136,932	8,390	1,357	--	--	-2,093	--
2003	45,028	263	4,832	104	31,143	8,048	101	12,360	1,400	76,754	118	4,081	138,941	9,700	652	--	--	R -24,864	--
2004	45,635	264	5,972	126	33,956	3,999	131	12,234	1,418	77,038	161	5,073	140,107	7,831	1,480	--	--	-25,895	--
Trillion Btu																			
1960	170.9	270.1	24.7	9.3	74.7	7.0	11.8	24.0	5.8	214.4	20.0	13.0	404.6	0.0	7.8	33.6	0.0	13.9	900.9
1965	189.6	348.0	29.2	11.7	80.4	20.4	6.6	30.9	6.2	236.5	21.7	24.8	468.4	0.0	8.4	27.0	0.0	8.1	1,049.5
1970	279.2	432.5	37.5	0.9	94.6	45.7	3.6	44.5	7.0	294.4	22.4	30.7	581.3	0.0	9.7	23.6	0.0	-7.4	1,319.0
1975	430.2	371.8	35.8	0.9	103.8	47.0	1.6	48.3	7.8	327.5	15.9	27.4	616.0	0.0	13.3	27.1	0.0	-42.5	1,416.0
1980	531.4	322.9	26.6	0.8	107.1	35.5	1.8	33.5	9.7	309.8	9.0	63.3	597.0	0.0	5.8	25.1	0.0	-21.9	1,460.3
1985	529.7	264.3	28.5	0.7	116.4	33.3	0.8	20.1	8.8	315.4	4.6	41.9	570.6	85.3	31.3	31.1	0.0	-82.2	1,430.2
1990	539.6	241.3	29.6	0.6	123.4	37.6	0.3	24.9	10.0	336.2	3.9	51.7	618.2	84.6	22.8	17.9	0.2	-5.6	1,521.3
1995	593.7	281.1	35.1	0.5	140.5	64.8	0.3	40.2	9.5	359.5	2.2	30.5	683.1	86.6	19.8	16.3	0.2	3.5	1,684.3
1996	631.1	297.2	35.7	0.5	158.1	68.8	0.7	46.8	9.2	364.8	2.3	19.4	706.3	93.4	13.6	17.0	0.2	9.8	1,768.6
1997	670.6	286.1	27.5	0.8	167.5	69.9	0.4	40.5	9.7	367.9	1.6	17.3	703.2	94.0	16.3	14.3	0.2	-20.2	1,764.3
1998	695.7	261.5	25.9	0.7	210.7	72.3	0.5	29.4	10.2	373.6	1.5	25.7	750.4	89.3	23.9	13.3	0.2	-29.1	1,805.3
1999	687.2	269.3	33.0	0.4	211.0	72.3	0.5	45.8	10.3	371.0	0.9	30.3	775.5	89.7	18.9	13.6	0.2	-12.9	1,841.5
2000	688.9	289.0	27.7	0.5	167.9	27.8	0.6	39.0	10.1	384.8	0.7	22.7	681.7	104.2	6.1	14.2	0.2	3.1	1,787.5
2001	R 716.4	288.6	35.9	0.7	174.2	42.5	0.7	46.6	9.3	377.8	0.9	30.4	719.0	87.6	11.4	18.6	0.2	R -19.3	R 1,822.5
2002	725.7	277.0	31.5	0.6	171.1	54.1	0.4	46.0	9.2	384.0	0.7	28.8	726.4	87.6	13.8	R 17.3	0.2	-7.1	R 1,840.8
2003	795.6	267.0	32.1	0.5	181.4	45.6	0.6	44.9	8.5	399.7	0.7	23.4	737.3	101.1	6.7	R 18.6	0.2	-84.8	R 1,841.7
2004	807.5	268.0	39.6	0.6	197.8	22.7	0.7	44.3	8.6	401.8	1.0	29.4	746.5	81.7	14.8	19.0	0.2	-88.4	1,849.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Missouri

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	699	111	1,330	240	4,687	6,257	1,293	--	--	4,223	--	10,445	--
1965	172	130	1,056	138	6,139	7,332	898	--	--	5,977	--	14,272	--
1970	52	157	1,312	69	8,934	10,315	674	--	--	9,672	--	23,410	--
1975	47	155	1,435	28	9,528	10,992	704	--	--	13,654	--	32,836	--
1980	17	143	1,246	57	4,991	6,294	911	--	--	18,648	--	44,963	--
1985	34	128	847	95	3,496	4,437	1,155	--	--	18,483	--	42,579	--
1990	57	116	412	29	4,193	4,634	669	--	--	21,652	--	50,087	--
1995	27	125	436	32	5,841	6,309	586	--	--	25,409	--	57,719	--
1996	25	137	330	56	7,840	8,227	609	--	--	26,448	--	60,158	--
1997	29	128	311	45	7,148	7,504	478	--	--	26,595	--	60,271	--
1998	18	111	294	49	5,105	5,449	424	--	--	28,265	--	64,118	--
1999	27	112	306	55	6,848	7,210	447	--	--	27,766	--	63,528	--
2000	19	115	308	69	5,986	6,363	480	--	--	29,581	--	67,302	--
2001	23	116	404	78	8,994	9,476	470	--	--	30,168	--	^R 67,851	--
2002	23	114	290	51	6,788	7,129	477	--	--	31,684	--	70,981	--
2003	25	115	200	72	6,550	6,822	502	--	--	31,422	--	^R 69,799	--
2004	21	110	192	87	5,591	5,871	515	--	--	31,351	--	69,781	--
Trillion Btu													
1960	16.0	115.0	7.7	1.4	18.8	27.9	25.9	0.0	0.0	14.4	199.2	35.6	234.9
1965	3.9	132.1	6.1	0.8	24.6	31.6	18.0	0.0	0.0	20.4	206.0	48.7	254.6
1970	1.1	157.7	7.6	0.4	33.8	41.8	13.5	0.0	0.0	33.0	247.1	79.9	327.0
1975	1.0	156.5	8.4	0.2	35.4	43.9	14.1	0.0	0.0	46.6	262.0	112.0	374.1
1980	0.4	145.7	7.3	0.3	18.3	25.9	18.2	0.0	0.0	63.6	253.8	153.4	407.2
1985	0.8	130.3	4.9	0.5	12.6	18.1	23.1	0.0	0.0	63.1	235.3	145.3	380.6
1990	1.2	117.2	2.4	0.2	15.2	17.8	13.4	^f (s)	^f 0.2	73.9	^f 223.7	170.9	^f 394.6
1995	0.6	126.0	2.5	0.2	21.2	23.9	11.7	0.1	0.2	86.7	249.1	196.9	446.1
1996	0.6	138.7	1.9	0.3	28.3	30.6	12.2	0.1	0.2	90.2	272.5	205.3	477.7
1997	0.7	128.9	1.8	0.3	25.8	27.9	9.6	0.1	0.2	90.7	258.0	205.6	463.6
1998	0.4	112.0	1.7	0.3	18.5	20.4	8.5	0.1	0.1	96.4	237.9	218.8	456.7
1999	0.6	113.5	1.8	0.3	24.8	26.9	8.9	0.1	0.1	94.7	244.8	216.8	461.6
2000	0.4	117.2	1.8	0.4	21.6	23.8	9.6	0.1	0.1	100.9	252.1	229.6	481.8
2001	0.5	117.0	2.4	0.4	32.5	35.3	9.4	0.1	0.1	102.9	265.4	^R 231.5	^R 496.9
2002	0.5	114.7	1.7	0.3	24.5	26.5	9.5	0.1	0.1	108.1	259.5	242.2	501.7
2003	0.6	116.5	1.2	0.4	23.8	25.3	10.0	0.1	0.1	107.2	259.9	238.2	498.0
2004	0.5	111.6	1.1	0.5	20.2	21.8	10.3	0.1	0.1	107.0	251.3	238.1	489.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Missouri

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	486	33	1,101	1,507	827	113	1,366	4,914	0	--	--	3,314	--	8,196	--
1965	129	41	873	865	1,083	133	1,508	4,463	0	--	--	4,473	--	10,682	--
1970	41	88	1,085	433	1,577	153	1,654	4,901	0	--	--	6,168	--	14,930	--
1975	109	91	1,187	179	1,681	159	764	3,971	0	--	--	7,639	--	18,370	--
1980	65	76	1,001	171	881	223	554	2,830	0	--	--	12,986	--	31,311	--
1985	122	60	1,521	33	617	262	121	2,554	0	--	--	15,205	--	35,028	--
1990	227	59	1,026	8	740	239	60	2,073	^g 0	--	--	19,335	--	44,726	--
1995	183	65	1,190	10	1,031	99	1	2,331	0	--	--	22,514	--	51,142	--
1996	180	73	1,309	27	1,383	116	6	2,841	0	--	--	23,462	--	53,367	--
1997	237	70	1,169	21	1,261	145	33	2,629	0	--	--	23,831	--	54,007	--
1998	148	62	1,160	18	901	122	34	2,235	0	--	--	24,925	--	56,543	--
1999	199	63	1,023	17	1,209	305	26	2,580	0	--	--	25,138	--	57,514	--
2000	157	63	1,118	22	1,056	263	31	2,490	0	--	--	26,962	--	61,344	--
2001	189	65	1,558	23	1,587	332	29	3,530	0	--	--	27,210	--	^R 61,198	--
2002	165	^R 62	994	18	1,198	290	30	2,530	0	--	--	27,946	--	62,607	--
2003	167	^R 62	816	21	1,156	286	22	2,301	0	--	--	27,987	--	62,170	--
2004	172	62	851	31	987	236	16	2,120	0	--	--	28,391	--	63,194	--
Trillion Btu															
1960	11.1	33.8	6.4	8.5	3.3	0.6	8.6	27.5	0.0	0.5	0.0	11.3	84.2	28.0	112.2
1965	3.0	41.8	5.1	4.9	4.3	0.7	9.5	24.5	0.0	0.3	0.0	15.3	84.9	36.4	121.3
1970	0.9	88.3	6.3	2.5	6.0	0.8	10.4	25.9	0.0	0.3	0.0	21.0	136.4	50.9	187.3
1975	2.3	91.5	6.9	1.0	6.2	0.8	4.8	19.8	0.0	0.3	0.0	26.1	139.9	62.7	202.6
1980	1.4	77.3	5.8	1.0	3.2	1.2	3.5	14.7	0.0	0.4	0.0	44.3	138.1	106.8	244.9
1985	2.8	61.4	8.9	0.2	2.2	1.4	0.8	13.4	0.0	0.5	0.0	51.9	130.0	119.5	249.5
1990	5.0	60.0	6.0	(s)	2.7	1.3	0.4	10.3	^g 0.0	^g 1.5	^g 0.0	66.0	^g 142.8	152.6	^g 295.4
1995	4.1	65.5	6.9	0.1	3.7	0.5	(s)	11.2	0.0	1.6	0.0	76.8	159.4	174.5	333.9
1996	4.1	73.6	7.6	0.2	5.0	0.6	(s)	13.4	0.0	1.7	0.0	80.1	172.8	182.1	354.9
1997	5.4	70.5	6.8	0.1	4.6	0.8	0.2	12.5	0.0	1.7	0.0	81.3	171.4	184.3	355.7
1998	3.3	62.7	6.8	0.1	3.3	0.6	0.2	11.0	0.0	1.5	0.0	85.0	163.4	192.9	356.3
1999	4.5	63.9	6.0	0.1	4.4	1.6	0.2	12.2	0.0	1.5	0.0	85.8	167.8	196.2	364.1
2000	3.5	63.6	6.5	0.1	3.8	1.4	0.2	12.0	0.0	1.6	0.0	92.0	172.7	209.3	382.0
2001	4.3	65.4	9.1	0.1	5.7	1.7	0.2	16.9	0.0	1.7	0.0	92.8	181.1	^R 208.8	^R 389.9
2002	3.8	62.2	5.8	0.1	4.3	1.5	0.2	11.9	0.0	1.8	0.0	95.4	175.0	213.6	388.6
2003	3.9	^R 62.6	4.8	0.1	4.2	1.5	0.1	10.7	0.0	1.8	0.0	95.5	^R 174.5	212.1	^R 386.6
2004	4.0	62.8	5.0	0.2	3.6	1.2	0.1	10.0	0.0	1.8	0.0	96.9	175.5	215.6	391.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Missouri

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh						
1960	2,605	79	3,725	5,722	340	437	284	3,074	1,630	2,207	17,419	0	--	--	3,890	--	9,620	--
1965	2,534	114	4,401	5,097	160	423	328	3,224	1,710	4,395	19,739	0	--	--	5,872	--	14,022	--
1970	1,921	110	5,657	5,689	141	1,175	415	2,767	1,620	5,467	22,932	0	--	--	9,939	--	24,055	--
1975	2,065	90	5,401	5,765	75	1,712	491	2,707	1,242	4,786	22,178	0	--	--	11,782	--	28,335	--
1980	1,595	78	4,002	4,782	87	3,182	671	1,866	703	11,283	26,575	0	--	--	11,018	--	26,566	--
1985	1,798	66	4,295	4,146	22	1,333	610	1,076	557	7,660	19,699	0	--	--	12,625	--	29,084	--
1990	1,321	55	4,468	3,494	8	1,823	687	663	519	9,349	21,011	⁹ 0	--	--	12,937	--	29,927	--
1995	1,102	69	5,296	3,018	11	4,102	655	1,676	319	4,249	19,326	0	--	--	14,321	--	32,531	--
1996	1,118	71	5,385	3,181	33	3,644	636	1,677	309	3,434	18,299	0	--	--	14,915	--	33,926	--
1997	1,401	71	4,141	3,550	12	2,733	672	1,688	180	3,088	16,064	0	--	--	15,267	--	34,599	--
1998	1,218	64	3,906	3,785	15	2,108	703	1,033	182	4,509	16,241	0	--	--	15,801	--	35,844	--
1999	1,203	64	4,977	4,869	12	4,555	710	915	109	5,314	21,463	0	--	--	16,122	--	36,886	--
2000	941	68	4,167	3,641	14	3,712	700	902	72	4,009	17,217	0	--	--	16,080	--	36,584	--
2001	1,015	68	5,404	4,128	17	2,053	641	1,745	108	4,326	18,423	0	--	--	15,815	--	^R 35,568	--
2002	994	^R 62	4,740	4,627	7	4,658	633	1,848	71	4,230	20,814	0	--	--	15,341	--	34,369	--
2003	1,001	^R 62	4,832	4,753	8	4,538	586	1,944	84	3,991	20,736	0	--	--	14,831	--	32,944	--
2004	1,063	64	5,972	5,774	13	5,545	593	2,254	126	4,852	25,129	0	--	--	14,303	--	31,835	--
Trillion Btu																		
1960	62.2	81.7	24.7	33.3	1.9	1.8	1.7	16.1	10.2	13.0	102.8	0.0	7.3	0.0	13.3	267.2	32.8	300.1
1965	59.9	116.4	29.2	29.7	0.9	1.7	2.0	16.9	10.8	24.8	116.0	0.0	8.7	0.0	20.0	321.1	47.8	368.9
1970	43.8	110.4	37.5	33.1	0.8	4.4	2.5	14.5	10.2	30.7	133.8	0.0	9.9	0.0	33.9	331.8	82.1	413.8
1975	45.7	90.7	35.8	33.6	0.4	6.4	3.0	14.2	7.8	27.3	128.5	0.0	12.7	0.0	40.2	317.9	96.7	414.5
1980	36.0	79.3	26.6	27.9	0.5	11.7	4.1	9.8	4.4	62.7	147.6	0.0	6.4	0.0	37.6	306.9	90.6	397.6
1985	41.2	66.8	28.5	24.2	0.1	4.8	3.7	5.7	3.5	41.9	112.3	0.0	7.5	0.0	43.1	270.9	99.2	370.1
1990	30.4	55.1	29.6	20.4	(s)	6.6	4.2	3.5	3.3	51.7	119.2	⁹ 0.0	⁹ 3.1	⁹ 0.0	44.1	⁹ 252.0	102.1	⁹ 354.1
1995	25.5	69.4	35.1	17.6	0.1	14.9	4.0	8.7	2.0	23.7	106.1	0.0	2.7	0.0	48.9	252.6	111.0	363.6
1996	25.9	72.0	35.7	18.5	0.2	13.2	3.9	8.7	1.9	19.4	101.5	0.0	2.8	0.0	50.9	253.1	115.8	368.9
1997	32.0	71.6	27.5	20.7	0.1	9.9	4.1	8.8	1.1	17.3	89.4	0.0	2.6	0.0	52.1	247.6	118.1	365.7
1998	27.9	65.0	25.9	22.0	0.1	7.6	4.3	5.4	1.1	25.7	92.2	0.0	2.5	0.0	53.9	241.5	122.3	363.8
1999	27.6	65.2	33.0	28.4	0.1	16.5	4.3	4.8	0.7	30.3	118.0	0.0	2.6	0.0	55.0	268.5	125.9	394.3
2000	21.8	69.5	27.7	21.2	0.1	13.4	4.2	4.7	0.5	22.7	94.4	0.0	2.2	0.0	54.9	242.8	124.8	367.6
2001	23.3	68.3	35.9	24.0	0.1	7.4	3.9	9.1	0.7	24.9	106.0	0.0	^R 6.9	0.0	54.0	^R 258.5	^R 121.4	^R 379.9
2002	23.0	67.3	31.5	27.0	(s)	16.8	3.8	9.6	0.4	24.2	113.4	0.0	5.5	0.0	52.3	^R 261.5	117.3	378.8
2003	23.1	^R 62.6	32.1	27.7	(s)	16.5	3.6	10.1	0.5	22.9	113.3	0.0	5.5	0.0	50.6	^R 255.1	112.4	^R 367.5
2004	24.4	65.1	39.6	33.6	0.1	20.1	3.6	11.8	0.8	28.1	137.6	0.0	5.8	0.0	48.8	281.8	108.6	390.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Missouri

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	45	8	1,844	4,485	1,249	43	669	37,620	34	45,943	0	2	--	5	--
1965	8	9	2,323	6,685	3,625	47	701	41,658	154	55,191	0	0	--	0	--
1970	3	13	179	7,990	8,074	85	735	53,122	163	70,349	0	0	--	0	--
1975	(s)	7	184	8,721	8,311	74	793	59,476	141	77,698	0	0	--	0	--
1980	0	6	162	10,824	6,268	68	932	56,877	142	75,272	0	0	--	0	--
1985	0	4	135	13,271	5,889	138	848	58,698	38	79,017	^f 35	0	--	0	--
1990	0	5	126	16,049	6,647	117	955	63,092	34	87,019	631	0	--	0	--
1995	0	7	109	19,195	11,425	112	911	67,155	21	98,928	576	16	--	36	--
1996	0	7	108	22,090	12,133	98	884	68,154	18	103,484	303	19	--	42	--
1997	0	7	160	23,455	12,320	57	934	68,748	15	105,689	167	18	--	40	--
1998	0	6	136	30,232	12,747	20	977	70,520	4	114,636	189	19	--	44	--
1999	0	7	75	29,324	12,760	59	988	69,969	5	113,179	406	20	--	45	--
2000	0	8	98	23,159	4,906	66	973	72,687	6	101,894	696	19	--	44	--
2001	0	2	146	23,509	7,493	263	891	70,433	4	102,738	632	20	--	45	--
2002	0	3	119	23,249	9,535	78	881	71,599	10	105,471	1,520	29	--	64	--
2003	0	3	104	25,134	8,048	116	814	74,523	13	108,752	2,160	30	--	68	--
2004	0	3	126	26,985	3,999	111	825	74,549	18	106,612	2,305	10	--	22	--

Trillion Btu															
1960	1.1	8.2	9.3	26.1	7.0	0.2	4.1	197.6	0.2	244.5	0.0	(s)	253.8	(s)	253.8
1965	0.2	9.1	11.7	38.9	20.4	0.2	4.3	218.8	1.0	295.3	0.0	0.0	304.6	0.0	304.6
1970	0.1	12.8	0.9	46.5	45.7	0.3	4.5	279.0	1.0	378.0	0.0	0.0	390.9	0.0	390.9
1975	(s)	7.6	0.9	50.8	47.0	0.3	4.8	312.4	0.9	417.2	0.0	0.0	424.7	0.0	424.7
1980	0.0	5.7	0.8	63.0	35.5	0.2	5.7	298.8	0.9	404.9	0.0	0.0	410.6	0.0	410.6
1985	0.0	4.3	0.7	77.3	33.3	0.5	5.1	308.3	0.2	425.5	^f 0.1	0.0	^f 430.0	0.0	^f 430.0
1990	0.0	5.4	0.6	93.5	37.6	0.4	5.8	331.4	0.2	469.6	2.2	0.0	477.2	0.0	477.2
1995	0.0	7.2	0.5	111.8	64.8	0.4	5.5	350.2	0.1	533.4	2.0	0.1	540.7	0.1	540.8
1996	0.0	7.6	0.5	128.7	68.8	0.4	5.4	355.5	0.1	559.3	1.1	0.1	567.0	0.1	567.1
1997	0.0	7.6	0.8	136.6	69.9	0.2	5.7	358.4	0.1	571.6	0.6	0.1	579.3	0.1	579.4
1998	0.0	5.6	0.7	176.1	72.3	0.1	5.9	367.6	(s)	622.6	0.7	0.1	628.3	0.2	628.5
1999	0.0	6.9	0.4	170.8	72.3	0.2	6.0	364.6	(s)	614.4	1.4	0.1	621.4	0.2	621.5
2000	0.0	7.8	0.5	134.9	27.8	0.2	5.9	378.7	(s)	548.1	2.5	0.1	555.9	0.1	556.1
2001	0.0	2.0	0.7	136.9	42.5	0.9	5.4	367.0	(s)	553.5	2.2	0.1	555.6	0.2	555.8
2002	0.0	2.7	0.6	135.4	54.1	0.3	5.3	372.9	0.1	568.7	5.4	0.1	571.4	0.2	571.7
2003	0.0	3.2	0.5	146.4	45.6	0.4	4.9	388.0	0.1	586.0	7.6	0.1	589.3	0.2	589.6
2004	0.0	3.5	0.6	157.2	22.7	0.4	5.0	388.8	0.1	574.8	8.2	(s)	578.3	0.1	578.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Missouri

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	3,674	30	150	178	0	328	0	726	--	0	0	0	0	--
1965	5,690	48	77	92	0	168	0	802	--	0	0	0	0	--
1970	10,846	63	133	159	0	291	0	927	--	0	0	0	0	--
1975	17,734	26	375	710	15	1,100	0	1,280	--	0	0	0	0	--
1980	23,168	15	29	538	101	668	0	558	--	0	0	0	0	--
1985	22,779	1	16	202	1	219	8,030	2,993	--	0	0	0	0	--
1990	24,231	4	8	207	0	215	7,998	2,192	--	0	0	0	0	--
1995	30,440	13	13	283	1,114	1,410	8,242	1,919	--	0	0	0	(s)	--
1996	33,059	5	28	228	0	256	8,890	1,314	--	0	0	0	0	--
1997	35,193	7	25	275	0	300	8,955	1,593	--	0	0	0	1	--
1998	37,165	16	13	701	0	714	8,517	2,347	--	0	0	0	(s)	--
1999	36,546	19	(s)	703	0	703	8,587	1,853	--	0	0	0	3	--
2000	37,183	30	(s)	592	0	592	9,992	600	--	0	0	0	0	--
2001	38,585	33	(s)	313	919	1,233	8,384	1,104	--	0	0	0	0	--
2002	39,703	30	1	220	766	987	8,390	1,357	--	0	0	0	0	--
2003	43,835	22	0	240	89	330	9,700	652	--	0	0	0	(s)	--
2004	44,379	25	0	154	221	375	7,831	1,480	--	0	0	0	-6	--
Trillion Btu														
1960	80.5	31.3	0.9	1.0	0.0	2.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0	121.6
1965	122.6	48.5	0.5	0.5	0.0	1.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	180.5
1970	233.4	63.4	0.8	0.9	0.0	1.8	0.0	9.7	0.0	0.0	0.0	0.0	0.0	308.3
1975	381.2	25.7	2.4	4.1	0.1	6.6	0.0	13.3	0.0	0.0	0.0	0.0	0.0	426.8
1980	493.6	15.0	0.2	3.1	0.6	3.9	0.0	5.8	0.0	0.0	0.0	0.0	0.0	518.3
1985	484.9	1.5	0.1	1.2	(s)	1.3	85.3	31.3	0.0	0.0	0.0	0.0	0.0	604.2
1990	503.0	3.6	(s)	1.2	0.0	1.3	84.6	22.8	0.0	0.0	0.0	0.0	0.0	615.3
1995	563.4	12.9	0.1	1.7	6.7	8.4	86.6	19.8	0.3	0.0	0.0	0.0	(s)	691.4
1996	600.6	5.3	0.2	1.3	0.0	1.5	93.4	13.6	0.3	0.0	0.0	0.0	0.0	714.6
1997	632.6	7.6	0.2	1.6	0.0	1.8	94.0	16.3	0.4	0.0	0.0	0.0	(s)	752.6
1998	664.1	16.3	0.1	4.1	0.0	4.2	89.3	23.9	0.8	0.0	0.0	0.0	(s)	798.7
1999	654.5	19.7	(s)	4.1	0.0	4.1	89.7	18.9	0.5	0.0	0.0	0.0	(s)	787.5
2000	663.3	30.9	(s)	3.4	0.0	3.4	104.2	6.1	0.7	0.0	0.0	0.0	0.0	808.7
2001	^R 688.2	35.8	(s)	1.8	5.5	7.4	87.6	11.4	0.5	0.0	0.0	0.0	0.0	^R 830.9
2002	698.3	30.2	(s)	1.3	4.6	5.9	87.6	13.8	0.6	0.0	0.0	0.0	0.0	836.3
2003	768.1	22.1	0.0	1.4	0.5	1.9	101.1	6.7	1.2	0.0	0.0	0.0	(s)	901.2
2004	778.5	25.1	0.0	0.9	1.3	2.2	81.7	14.8	1.1	0.0	0.0	0.0	(s)	903.4

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Montana

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	253	56	865	1,006	4,898	265	477	737	161	6,922	2,063	1,725	19,118	0	5,801	--	--	-3,247	--
1965	370	71	1,003	312	4,962	384	248	926	189	7,709	1,241	2,835	19,809	0	8,389	--	--	-6,938	--
1970	763	88	1,347	43	4,827	649	376	1,326	200	9,262	1,268	3,372	22,670	0	8,745	--	--	-1,279	--
1975	1,149	80	924	79	7,586	818	122	1,370	208	10,630	2,178	3,772	27,687	0	10,166	--	--	-6,125	--
1980	3,520	61	1,020	159	7,509	920	0	1,806	247	10,416	4,025	3,159	29,262	0	9,966	--	--	-11,554	--
1985	5,713	47	1,463	91	10,444	678	10	1,576	225	10,188	133	2,512	27,320	0	10,175	--	--	-14,175	--
1990	9,850	43	1,487	111	7,280	708	8	1,740	253	10,328	218	3,659	25,792	0	10,717	--	--	-37,702	--
1995	10,272	58	1,293	78	8,049	1,052	1	918	242	11,328	236	4,713	27,909	0	10,746	--	--	-38,967	--
1996	8,210	61	1,702	99	8,070	999	1	1,618	235	11,753	181	5,200	29,857	0	13,795	--	--	-38,771	--
1997	9,653	60	1,448	71	9,037	792	2	277	248	11,480	162	4,897	28,413	0	13,406	--	--	-50,114	--
1998	11,046	60	1,594	102	7,863	797	3	271	259	11,596	106	5,545	28,137	0	11,118	--	--	-43,071	--
1999	11,074	62	2,625	121	7,921	836	2	527	262	11,768	20	6,344	30,428	0	13,822	--	--	-54,070	--
2000	10,554	68	2,151	134	8,069	747	1	1,324	258	11,559	1	5,375	29,617	0	9,623	--	--	-34,556	--
2001	11,000	65	903	109	8,476	756	12	1,400	237	11,640	2	6,815	30,351	0	6,613	--	--	R -38,674	--
2002	9,841	70	1,040	115	8,145	768	10	1,502	234	11,871	39	6,255	29,980	0	9,567	--	--	-37,610	--
2003	11,127	68	319	101	7,721	832	8	2,151	216	11,846	6	6,302	29,502	0	8,702	--	--	-42,007	--
2004	11,522	67	929	43	9,988	1,008	6	2,384	219	11,923	42	7,168	33,710	0	8,856	--	--	-43,005	--
Trillion Btu																			
1960	4.0	57.6	5.7	5.1	28.5	1.4	2.7	3.0	1.0	36.4	13.0	10.4	107.1	0.0	62.4	7.5	(s)	-11.1	227.6
1965	5.5	70.8	6.7	1.6	28.9	2.1	1.4	3.7	1.1	40.5	7.8	17.0	110.8	0.0	87.7	7.8	(s)	-23.7	259.0
1970	12.0	90.6	8.9	0.2	28.1	3.6	2.1	5.0	1.2	48.7	8.0	20.3	126.1	0.0	91.8	6.6	(s)	-4.4	322.8
1975	18.6	81.2	6.1	0.4	44.2	4.6	0.7	5.1	1.3	55.8	13.7	22.7	154.6	0.0	105.8	6.2	(s)	-20.9	345.5
1980	60.2	61.5	6.8	0.8	43.7	5.2	0.0	6.6	1.5	54.7	25.3	19.0	163.6	0.0	103.5	11.1	(s)	-39.4	360.5
1985	99.1	47.3	9.7	0.5	60.8	3.8	0.1	5.7	1.4	53.5	0.8	15.5	151.7	0.0	106.3	14.4	0.2	-48.4	370.7
1990	168.8	44.4	9.9	0.6	42.4	4.0	(s)	6.3	1.5	54.3	1.4	22.0	142.3	0.0	111.5	11.7	0.3	-128.6	350.4
1995	175.3	59.6	8.6	0.4	46.9	5.9	(s)	3.3	1.5	59.1	1.5	28.4	155.5	0.0	110.8	16.4	0.1	-133.0	384.8
1996	138.8	63.3	11.3	0.5	47.0	5.7	(s)	5.8	1.4	61.3	1.1	31.3	165.5	0.0	142.6	15.7	0.3	-132.3	393.8
1997	162.6	61.7	9.6	0.4	52.6	4.5	(s)	1.0	1.5	59.8	1.0	29.5	159.9	0.0	136.9	16.2	0.2	-171.0	366.5
1998	186.1	61.4	10.6	0.5	45.8	4.5	(s)	1.0	1.6	60.4	0.7	33.4	158.5	0.0	113.4	14.7	0.2	-147.0	387.4
1999	186.8	63.6	17.4	0.6	46.1	4.7	(s)	1.9	1.6	61.3	0.1	38.2	172.1	0.0	141.3	15.4	0.2	-184.5	395.0
2000	176.8	69.6	14.3	0.7	47.0	4.2	(s)	4.8	1.6	60.2	(s)	32.4	165.2	0.0	98.2	15.3	0.3	-117.9	407.4
2001	184.4	66.5	6.0	0.5	49.4	4.3	0.1	5.1	1.4	60.6	(s)	41.0	168.4	0.0	68.3	11.9	0.3	R -132.0	R 367.9
2002	166.3	68.9	6.9	0.6	47.4	4.4	0.1	5.4	1.4	61.8	0.2	37.7	165.9	0.0	97.3	11.0	0.5	-128.3	381.6
2003	189.0	67.7	2.1	0.5	45.0	4.7	(s)	7.8	1.3	61.7	(s)	37.9	161.1	0.0	89.1	12.0	0.4	-143.3	375.9
2004	195.6	66.7	6.2	0.2	58.2	5.7	(s)	8.6	1.3	62.2	0.3	43.1	185.8	0.0	88.8	12.6	0.2	-146.7	402.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Montana

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	18	17	262	0	506	768	237	--	--	935	--	2,313	--
1965	13	20	277	0	636	914	182	--	--	1,216	--	2,904	--
1970	7	25	249	0	887	1,137	139	--	--	1,534	--	3,713	--
1975	3	24	589	0	973	1,562	153	--	--	2,143	--	5,153	--
1980	3	19	421	0	829	1,250	125	--	--	2,916	--	7,031	--
1985	2	19	309	9	604	923	195	--	--	3,614	--	8,325	--
1990	11	17	291	1	813	1,106	89	--	--	3,358	--	7,769	--
1995	1	20	218	1	473	691	86	--	--	3,640	--	8,268	--
1996	1	22	325	1	519	845	90	--	--	3,911	--	8,895	--
1997	9	21	685	2	152	838	95	--	--	3,804	--	8,621	--
1998	(s)	19	404	3	86	492	84	--	--	3,722	--	8,444	--
1999	(s)	20	225	1	342	569	89	--	--	3,664	--	8,384	--
2000	(s)	20	170	(s)	922	1,092	95	--	--	3,908	--	8,891	--
2001	(s)	20	170	1	940	1,110	52	--	--	3,886	--	^R 8,740	--
2002	(s)	22	122	1	963	1,086	53	--	--	4,031	--	9,030	--
2003	(s)	20	190	4	1,637	1,831	56	--	--	4,120	--	9,152	--
2004	12	20	187	1	1,865	2,052	57	--	--	4,053	--	9,021	--
Trillion Btu													
1960	0.4	17.5	1.5	0.0	2.0	3.6	4.7	0.0	0.0	3.2	29.4	7.9	37.3
1965	0.3	19.9	1.6	0.0	2.6	4.2	3.6	0.0	0.0	4.1	32.2	9.9	42.1
1970	0.1	25.6	1.5	0.0	3.4	4.8	2.8	0.0	0.0	5.2	38.6	12.7	51.2
1975	0.1	24.6	3.4	0.0	3.6	7.0	3.1	0.0	0.0	7.3	42.0	17.6	59.6
1980	0.1	19.5	2.5	0.0	3.0	5.5	2.5	0.0	0.0	9.9	37.5	24.0	61.5
1985	(s)	19.4	1.8	0.1	2.2	4.0	3.9	0.0	0.0	12.3	39.6	28.4	68.0
1990	0.2	17.3	1.7	(s)	2.9	4.7	1.8	^f (s)	^f (s)	11.5	^f 35.5	26.5	^f 62.0
1995	(s)	20.2	1.3	(s)	1.7	3.0	1.7	(s)	(s)	12.4	37.4	28.2	65.6
1996	(s)	22.8	1.9	(s)	1.9	3.8	1.8	(s)	(s)	13.3	41.8	30.3	72.1
1997	0.2	21.7	4.0	(s)	0.5	4.5	1.9	(s)	(s)	13.0	41.3	29.4	70.7
1998	(s)	19.7	2.4	(s)	0.3	2.7	1.7	(s)	(s)	12.7	36.8	28.8	65.6
1999	(s)	20.1	1.3	(s)	1.2	2.6	1.8	0.1	(s)	12.5	37.1	28.6	65.7
2000	(s)	20.6	1.0	(s)	3.3	4.3	1.9	0.1	(s)	13.3	40.2	30.3	70.6
2001	(s)	20.6	1.0	(s)	3.4	4.4	1.0	0.1	(s)	13.3	39.4	29.8	^R 69.2
2002	(s)	21.5	0.7	(s)	3.5	4.2	1.1	0.1	(s)	13.8	40.6	30.8	71.4
2003	(s)	20.2	1.1	(s)	5.9	7.1	1.1	0.1	(s)	14.1	42.5	31.2	73.8
2004	0.2	19.9	1.1	(s)	6.7	7.8	1.1	0.1	(s)	13.8	43.0	30.8	73.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Montana

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours						
1960	12	12	297	466	89	135	2	989	0	--	--	688	--	1,701	--
1965	10	14	315	227	112	144	1	800	0	--	--	925	--	2,208	--
1970	5	19	283	94	157	220	1	755	0	--	--	1,187	--	2,874	--
1975	7	19	668	54	172	174	2	1,071	0	--	--	1,645	--	3,956	--
1980	11	14	346	0	146	92	7	591	0	--	--	2,094	--	5,049	--
1985	6	15	772	(s)	107	72	126	1,077	0	--	--	4,245	--	9,779	--
1990	46	12	154	(s)	143	84	11	392	^g 0	--	--	3,237	--	7,488	--
1995	9	13	102	(s)	83	13	3	202	0	--	--	3,411	--	7,748	--
1996	4	15	229	(s)	92	19	2	343	0	--	--	3,603	--	8,196	--
1997	74	14	162	(s)	27	12	1	201	0	--	--	3,577	--	8,106	--
1998	4	13	114	(s)	15	14	1	144	0	--	--	3,649	--	8,277	--
1999	3	12	142	(s)	60	14	2	219	0	--	--	3,359	--	7,686	--
2000	3	14	143	(s)	163	14	1	320	0	--	--	4,104	--	9,338	--
2001	3	13	197	(s)	166	14	0	377	0	--	--	4,190	--	^R 9,424	--
2002	3	15	137	1	170	15	0	323	0	--	--	4,338	--	9,718	--
2003	2	15	167	2	289	15	1	474	0	--	--	4,438	--	9,857	--
2004	96	13	294	3	329	15	0	641	0	--	--	4,330	--	9,638	--
Trillion Btu															
1960	0.3	12.3	1.7	2.6	0.4	0.7	(s)	5.5	0.0	0.1	0.0	2.3	20.5	5.8	26.3
1965	0.2	14.1	1.8	1.3	0.5	0.8	(s)	4.3	0.0	0.1	0.0	3.2	21.9	7.5	29.4
1970	0.1	19.2	1.6	0.5	0.6	1.2	(s)	3.9	0.0	0.1	0.0	4.1	27.3	9.8	37.1
1975	0.2	19.0	3.9	0.3	0.6	0.9	(s)	5.8	0.0	0.1	0.0	5.6	30.6	13.5	44.1
1980	0.2	14.4	2.0	0.0	0.5	0.5	(s)	3.1	0.0	0.1	0.0	7.1	24.9	17.2	42.2
1985	0.1	14.8	4.5	(s)	0.4	0.4	0.8	6.1	0.0	0.1	0.0	14.5	35.5	33.4	68.9
1990	0.9	12.5	0.9	(s)	0.5	0.4	0.1	1.9	^g 0.0	^g 0.2	^g 0.1	11.0	^g 26.6	25.5	^g 52.1
1995	0.2	13.9	0.6	(s)	0.3	0.1	(s)	1.0	0.0	0.2	0.1	11.6	27.0	26.4	53.4
1996	0.1	15.3	1.3	(s)	0.3	0.1	(s)	1.8	0.0	0.2	0.1	12.3	29.7	28.0	57.7
1997	1.3	14.3	0.9	(s)	0.1	0.1	(s)	1.1	0.0	0.3	0.1	12.2	29.3	27.7	57.0
1998	0.1	13.3	0.7	(s)	0.1	0.1	(s)	0.8	0.0	0.3	0.1	12.4	27.0	28.2	55.2
1999	(s)	12.4	0.8	(s)	0.2	0.1	(s)	1.1	0.0	0.3	0.1	11.5	25.5	26.2	51.7
2000	(s)	13.9	0.8	(s)	0.6	0.1	(s)	1.5	0.0	0.3	0.2	14.0	29.9	31.9	61.7
2001	(s)	13.5	1.1	(s)	0.6	0.1	0.0	1.8	0.0	0.2	0.2	14.3	30.0	^R 32.2	^R 62.2
2002	(s)	14.6	0.8	(s)	0.6	0.1	0.0	1.5	0.0	0.2	0.2	14.8	31.3	33.2	64.4
2003	(s)	15.0	1.0	(s)	1.0	0.1	(s)	2.1	0.0	0.2	0.2	15.1	32.6	33.6	66.3
2004	1.7	13.4	1.7	(s)	1.2	0.1	0.0	3.0	0.0	0.2	0.2	14.8	33.3	32.9	66.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Montana

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	36	26	865	1,500	11	112	23	816	1,684	1,725	6,737	0	--	--	2,951	--	7,299
1965	52	34	1,003	1,693	21	164	41	887	914	2,835	7,559	0	--	--	3,939	--	9,407
1970	28	41	1,347	1,274	282	246	46	635	1,123	3,372	8,324	0	--	--	6,029	--	14,592
1975	50	34	924	2,494	68	174	46	774	1,963	3,772	10,215	0	--	--	5,160	--	12,410
1980	154	20	1,020	1,925	0	786	51	619	4,018	3,159	11,577	0	--	--	5,815	--	14,021
1985	225	10	1,463	5,192	(s)	814	46	677	7	2,512	10,712	0	--	--	5,841	--	13,455
1990	220	12	1,487	2,778	7	717	52	615	207	3,659	9,522	9	--	--	6,529	--	15,104
1995	622	20	1,293	2,283	(s)	333	50	646	233	3,491	8,330	0	--	--	6,368	--	14,465
1996	130	21	1,702	2,569	(s)	991	48	663	178	4,074	10,225	0	--	--	6,306	--	14,343
1997	105	21	1,448	2,422	(s)	90	51	686	161	3,742	8,600	0	--	--	4,537	--	10,281
1998	145	23	1,594	1,955	(s)	108	54	437	106	4,370	8,623	0	--	--	6,774	--	15,366
1999	168	24	2,625	1,982	(s)	112	54	420	18	5,018	10,230	0	--	--	6,258	--	14,318
2000	166	26	2,151	1,904	1	227	53	406	0	4,019	8,760	0	--	--	6,568	--	14,943
2001	159	24	903	1,907	12	275	49	546	2	5,386	9,080	0	--	--	3,370	--	R 7,580
2002	92	25	1,040	1,842	9	358	48	566	39	5,011	8,913	0	--	--	4,463	--	9,998
2003	93	24	319	2,433	2	213	45	585	6	5,115	8,717	0	--	--	4,267	--	R 9,478
2004	92	25	929	3,237	2	164	45	681	42	5,834	10,935	0	--	--	4,574	--	10,181

Trillion Btu																	
1960	0.8	27.0	5.7	8.7	0.1	0.5	0.1	4.3	10.6	10.4	40.4	0.0	2.7	0.0	10.1	80.9	24.9
1965	1.2	34.3	6.7	9.9	0.1	0.7	0.3	4.7	5.7	17.0	45.0	0.0	3.7	0.0	13.4	97.6	32.1
1970	0.6	42.5	8.9	7.4	1.6	0.9	0.3	3.3	7.1	20.3	49.8	0.0	3.0	0.0	20.6	116.5	49.8
1975	1.0	34.6	6.1	14.5	0.4	0.6	0.3	4.1	12.3	22.7	61.1	0.0	3.0	0.0	17.6	117.3	42.3
1980	2.9	20.3	6.8	11.2	0.0	2.9	0.3	3.3	25.3	19.0	68.7	0.0	8.3	0.0	19.8	120.1	47.8
1985	4.1	10.3	9.7	30.2	(s)	2.9	0.3	3.6	(s)	15.5	62.2	0.0	9.8	0.0	19.9	106.3	45.9
1990	4.0	12.0	9.9	16.2	(s)	2.6	0.3	3.2	1.3	22.0	55.6	9	8.9	9	22.3	102.8	51.5
1995	11.2	21.0	8.6	13.3	(s)	1.2	0.3	3.4	1.5	21.1	49.3	0.0	14.4	(s)	21.7	117.7	49.4
1996	2.4	21.1	11.3	15.0	(s)	3.6	0.3	3.5	1.1	24.5	59.2	0.0	13.7	(s)	21.5	118.0	48.9
1997	1.9	21.7	9.6	14.1	(s)	0.3	0.3	3.6	1.0	22.5	51.4	0.0	14.0	(s)	15.5	104.5	35.1
1998	2.6	24.0	10.6	11.4	(s)	0.4	0.3	2.3	0.7	26.4	52.0	0.0	12.7	(s)	23.1	114.5	52.4
1999	3.0	24.6	17.4	11.5	(s)	0.4	0.3	2.2	0.1	30.3	62.3	0.0	13.3	0.1	21.4	124.7	48.9
2000	2.7	27.1	14.3	11.1	(s)	0.8	0.3	2.1	0.0	24.3	52.9	0.0	13.1	0.1	22.4	118.2	51.0
2001	2.6	24.5	6.0	11.1	0.1	1.0	0.3	2.8	(s)	32.4	53.7	0.0	R 10.7	0.1	11.5	R 103.1	R 25.9
2002	1.3	25.0	6.9	10.7	0.1	1.3	0.3	2.9	0.2	30.2	52.6	0.0	9.7	0.1	15.2	104.0	34.1
2003	1.4	24.0	2.1	14.2	(s)	0.8	0.3	3.0	(s)	30.7	51.2	0.0	R 10.7	(s)	14.6	101.8	32.3
2004	1.4	25.0	6.2	18.9	(s)	0.6	0.3	3.6	0.3	35.1	64.8	0.0	11.2	0.1	15.6	118.0	34.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Montana

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	1	(s)	1,006	2,839	265	29	137	5,972	377	10,624	0	0	--	0	--
1965	(s)	(s)	312	2,676	384	13	148	6,678	325	10,536	0	0	--	0	--
1970	(s)	1	43	3,020	649	36	154	8,407	119	12,428	0	0	--	0	--
1975	(s)	2	79	3,835	818	50	162	9,682	160	14,786	0	0	--	0	--
1980	0	3	159	4,759	920	45	196	9,705	0	15,786	0	0	--	0	--
1985	0	2	91	4,132	678	51	179	9,439	(s)	14,569	^f 15	0	--	0	--
1990	0	2	111	3,993	708	67	201	9,630	0	14,709	3	0	--	0	--
1995	0	4	78	5,390	1,052	28	192	10,669	0	17,409	17	0	--	0	--
1996	0	3	99	4,886	999	16	186	11,070	0	17,256	0	0	--	0	--
1997	0	3	71	5,718	792	8	197	10,782	0	17,568	0	0	--	0	--
1998	0	4	102	5,350	797	62	206	11,145	0	17,663	10	0	--	0	--
1999	0	6	121	5,536	836	12	208	11,334	0	18,047	11	0	--	0	--
2000	0	8	134	5,812	747	11	205	11,139	0	18,047	13	0	--	0	--
2001	0	8	109	6,200	756	20	188	11,079	0	18,353	35	0	--	0	--
2002	0	8	115	6,018	768	11	185	11,290	0	18,388	35	0	--	0	--
2003	0	8	101	4,903	832	12	171	11,246	0	17,264	30	0	--	0	--
2004	0	8	43	6,237	1,008	26	174	11,227	0	18,715	38	0	--	0	--

Trillion Btu															
1960	(s)	0.5	5.1	16.5	1.4	0.1	0.8	31.4	2.4	57.7	0.0	0.0	58.2	0.0	58.2
1965	(s)	0.4	1.6	15.6	2.1	0.1	0.9	35.1	2.0	57.3	0.0	0.0	57.8	0.0	57.8
1970	(s)	0.7	0.2	17.6	3.6	0.1	0.9	44.2	0.7	67.4	0.0	0.0	68.1	0.0	68.1
1975	(s)	1.8	0.4	22.3	4.6	0.2	1.0	50.9	1.0	80.4	0.0	0.0	82.1	0.0	82.1
1980	0.0	2.9	0.8	27.7	5.2	0.2	1.2	51.0	0.0	86.0	0.0	0.0	88.9	0.0	88.9
1985	0.0	2.2	0.5	24.1	3.8	0.2	1.1	49.6	(s)	79.2	^f 0.1	0.0	^f 81.5	0.0	^f 81.5
1990	0.0	2.1	0.6	23.3	4.0	0.2	1.2	50.6	0.0	79.8	(s)	0.0	82.0	0.0	82.0
1995	0.0	4.1	0.4	31.4	5.9	0.1	1.2	55.6	0.0	94.6	0.1	0.0	98.6	0.0	98.6
1996	0.0	3.5	0.5	28.5	5.7	0.1	1.1	57.7	0.0	93.5	0.0	0.0	97.1	0.0	97.1
1997	0.0	3.6	0.4	33.3	4.5	(s)	1.2	56.2	0.0	95.6	0.0	0.0	99.2	0.0	99.2
1998	0.0	3.9	0.5	31.2	4.5	0.2	1.2	58.1	0.0	95.8	(s)	0.0	99.6	0.0	99.6
1999	0.0	6.2	0.6	32.2	4.7	(s)	1.3	59.1	0.0	98.0	(s)	0.0	104.1	0.0	104.1
2000	0.0	7.9	0.7	33.9	4.2	(s)	1.2	58.0	0.0	98.1	(s)	0.0	106.0	0.0	106.0
2001	0.0	7.7	0.5	36.1	4.3	0.1	1.1	57.7	0.0	99.9	0.1	0.0	107.6	0.0	107.6
2002	0.0	7.7	0.6	35.1	4.4	(s)	1.1	58.8	0.0	100.0	0.1	0.0	107.7	0.0	107.7
2003	0.0	8.3	0.5	28.6	4.7	(s)	1.0	58.6	0.0	93.4	0.1	0.0	101.7	0.0	101.7
2004	0.0	8.3	0.2	36.3	5.7	0.1	1.1	58.5	0.0	102.0	0.1	0.0	110.2	0.0	110.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Montana

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	187	(s)	(s)	(s)	0	(s)	0	5,801	--	0	0	0	-1	--
1965	296	2	1	(s)	0	1	0	8,389	--	0	0	0	-1	--
1970	723	3	26	(s)	0	26	0	8,745	--	0	0	0	-1	--
1975	1,089	1	53	1	0	54	0	10,166	--	0	0	0	-2	--
1980	3,352	4	0	59	0	59	0	9,966	--	0	0	0	-2	--
1985	5,480	(s)	0	38	0	38	0	10,175	--	0	0	(s)	70	--
1990	9,573	(s)	0	63	0	63	0	10,717	--	ⁱ 0	ⁱ 0	ⁱ 0	47	--
1995	9,641	(s)	0	57	1,222	1,278	0	10,746	--	0	0	0	(s)	--
1996	8,075	(s)	0	62	1,126	1,187	0	13,795	--	0	0	0	38	--
1997	9,465	(s)	0	50	1,155	1,205	0	13,406	--	0	0	0	11	--
1998	10,896	1	0	40	1,175	1,215	0	11,118	--	0	0	0	23	--
1999	10,903	(s)	0	37	1,327	1,363	0	13,822	--	0	0	0	-17	--
2000	10,385	(s)	0	41	1,356	1,397	0	9,623	--	0	0	0	-3	--
2001	10,838	(s)	0	2	1,429	1,431	0	6,613	--	0	0	0	(s)	--
2002	9,746	(s)	0	26	1,245	1,270	0	9,567	--	0	0	0	52	--
2003	11,032	(s)	0	28	1,187	1,215	0	8,702	--	0	0	0	10	--
2004	11,322	(s)	0	32	1,334	1,366	0	8,856	--	0	0	0	-36	--
Trillion Btu														
1960	2.5	0.4	(s)	(s)	0.0	(s)	0.0	62.4	0.0	0.0	0.0	0.0	(s)	65.3
1965	3.9	2.0	(s)	(s)	0.0	(s)	0.0	87.7	0.4	0.0	0.0	0.0	(s)	94.0
1970	11.2	2.6	0.2	(s)	0.0	0.2	0.0	91.8	0.8	0.0	0.0	0.0	(s)	106.5
1975	17.4	1.2	0.3	(s)	0.0	0.3	0.0	105.8	0.1	0.0	0.0	0.0	(s)	124.9
1980	57.0	4.4	0.0	0.3	0.0	0.3	0.0	103.5	0.2	0.0	0.0	0.0	(s)	165.4
1985	94.8	0.6	0.0	0.2	0.0	0.2	0.0	106.3	0.6	0.0	0.0	(s)	0.2	202.8
1990	163.7	0.5	0.0	0.4	0.0	0.4	0.0	111.5	ⁱ 0.8	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.2	ⁱ 277.0
1995	163.8	0.4	0.0	0.3	7.4	7.7	0.0	110.8	0.0	0.0	0.0	0.0	(s)	282.7
1996	136.3	0.5	0.0	0.4	6.8	7.1	0.0	142.6	0.0	0.0	0.0	0.0	0.1	286.7
1997	159.2	0.4	0.0	0.3	7.0	7.2	0.0	136.9	0.0	0.0	0.0	0.0	(s)	303.8
1998	183.4	0.5	0.0	0.2	7.1	7.3	0.0	113.4	0.0	0.0	0.0	0.0	0.1	304.7
1999	183.7	0.3	0.0	0.2	8.0	8.2	0.0	141.3	0.0	0.0	0.0	0.0	-0.1	333.5
2000	174.1	0.2	0.0	0.2	8.2	8.4	0.0	98.2	0.0	0.0	0.0	0.0	(s)	280.8
2001	181.7	0.2	0.0	(s)	8.6	8.6	0.0	68.3	0.0	0.0	0.0	0.0	(s)	258.9
2002	164.9	0.1	0.0	0.1	7.5	7.6	0.0	97.3	0.0	0.0	0.0	0.0	0.2	270.2
2003	187.6	0.2	0.0	0.2	7.1	7.3	0.0	89.1	0.0	0.0	0.0	0.0	(s)	284.3
2004	192.3	0.2	0.0	0.2	8.0	8.2	0.0	88.8	0.0	0.0	0.0	0.0	-0.1	289.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Nebraska

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	888	136	780	371	4,151	1,202	677	2,650	424	14,998	415	62	25,731	0	959	--	--	-594	--
1965	896	166	655	410	3,689	1,371	790	3,407	425	15,745	332	50	26,875	-5	1,116	--	--	2,654	--
1970	1,283	222	1,137	199	7,449	1,783	582	5,616	479	18,525	793	102	36,665	0	1,371	--	--	7,474	--
1975	1,595	219	754	141	8,507	1,679	554	5,740	492	20,636	1,092	150	39,745	5,916	1,213	--	--	-3,906	--
1980	4,990	163	719	213	9,149	1,588	62	4,499	389	19,100	228	130	36,076	5,783	1,336	--	--	-5,361	--
1985	6,653	126	473	96	12,411	1,357	74	2,590	354	17,737	62	75	35,229	4,134	1,441	--	--	1,784	--
1990	8,266	111	1,388	83	12,848	1,501	41	2,912	398	18,451	257	316	38,196	7,511	1,140	--	--	-8,969	--
1995	10,396	136	929	77	14,599	1,001	17	3,020	380	19,302	121	31	39,475	7,485	1,426	--	--	-10,692	--
1996	10,379	133	1,771	75	16,644	1,007	19	3,831	369	19,474	167	28	43,386	9,457	1,602	--	--	-15,209	--
1997	11,210	132	1,450	90	16,848	1,075	23	3,130	390	19,825	110	25	42,966	9,269	1,672	--	--	-15,121	--
1998	11,889	131	1,400	63	18,646	1,080	23	3,300	408	20,305	116	24	45,365	8,259	1,683	--	--	-14,289	--
1999	11,625	121	1,867	71	17,754	1,564	11	3,665	412	20,487	77	22	45,930	10,091	1,719	--	--	-18,435	--
2000	11,910	127	937	64	14,937	1,231	15	3,830	406	20,457	142	19	42,038	8,629	1,501	--	--	-11,196	--
2001	13,130	122	856	86	14,207	1,113	21	3,615	372	20,392	127	256	41,046	8,726	1,124	--	--	-14,542	--
2002	12,605	120	803	93	13,936	1,527	7	4,943	368	20,846	124	257	42,903	10,122	1,097	--	--	-14,132	--
2003	13,115	119	1,336	81	14,954	1,205	16	4,328	340	20,673	142	268	43,344	7,997	980	--	--	-10,126	--
2004	13,023	116	1,301	57	16,435	918	22	4,039	344	20,840	231	298	44,485	10,241	913	--	--	-15,097	--
Trillion Btu																			
1960	20.0	140.4	5.2	1.9	24.2	6.4	3.8	10.6	2.6	78.8	2.6	0.4	136.5	0.0	10.3	3.1	0.0	-2.0	308.3
1965	20.8	164.7	4.3	2.1	21.5	7.4	4.5	13.7	2.6	82.7	2.1	0.3	141.1	-0.1	11.7	1.9	0.0	9.1	349.2
1970	29.7	224.1	7.5	1.0	43.4	9.8	3.3	21.2	2.9	97.3	5.0	0.6	192.1	0.0	14.4	1.6	0.0	25.5	487.3
1975	32.9	217.5	5.0	0.7	49.6	9.2	3.1	21.3	3.0	108.4	6.9	0.9	208.1	65.2	12.6	2.8	0.0	-13.3	525.7
1980	93.9	159.5	4.8	1.1	53.3	8.7	0.4	16.5	2.4	100.3	1.4	0.8	189.6	63.1	13.9	5.9	0.0	-18.3	507.6
1985	115.5	123.9	3.1	0.5	72.3	7.4	0.4	9.3	2.1	93.2	0.4	0.4	189.2	43.9	15.1	7.4	0.0	6.1	502.6
1990	142.0	109.2	9.2	0.4	74.8	8.3	0.2	10.6	2.4	96.9	1.6	1.7	206.2	79.5	11.9	^j 4.5	^j 0.1	-30.6	^j 525.2
1995	179.5	133.7	6.2	0.4	85.0	5.7	0.1	10.9	2.3	100.7	0.8	0.2	212.2	78.6	14.7	4.2	0.2	-36.5	586.6
1996	178.9	133.8	11.8	0.4	97.0	5.7	0.1	13.8	2.2	101.6	1.1	0.2	233.8	99.3	16.6	7.8	0.2	-51.9	618.5
1997	193.3	132.1	9.6	0.5	98.1	6.1	0.1	11.3	2.4	103.3	0.7	0.1	232.3	97.3	17.1	6.3	0.3	-51.6	627.1
1998	204.8	131.1	9.3	0.3	108.6	6.1	0.1	11.9	2.5	105.8	0.7	0.1	245.6	86.6	17.2	5.8	0.2	-48.8	642.5
1999	198.5	121.4	12.4	0.4	103.4	8.9	0.1	13.3	2.5	106.8	0.5	0.1	248.2	105.5	17.6	6.0	0.2	-62.9	634.4
2000	206.9	127.6	6.2	0.3	87.0	7.0	0.1	13.8	2.5	106.6	0.9	0.1	224.5	90.0	15.3	5.7	0.3	-38.2	632.2
2001	^R 226.7	124.1	5.7	0.4	82.8	6.3	0.1	13.1	2.3	106.2	0.8	1.4	219.1	91.2	11.6	^R 8.2	0.4	^R -49.6	^R 631.6
2002	217.9	120.3	5.3	0.5	81.2	8.7	(s)	17.9	2.2	108.6	0.8	1.4	226.5	105.7	11.2	^R 8.8	0.5	-48.2	^R 642.7
2003	227.3	118.9	8.9	0.4	87.1	6.8	0.1	15.7	2.1	107.6	0.9	1.5	231.1	83.3	10.0	^R 9.4	0.9	^R -34.6	^R 646.4
2004	223.6	115.1	8.6	0.3	95.7	5.2	0.1	14.6	2.1	108.7	1.5	1.6	238.4	106.8	9.2	9.4	0.9	-51.5	651.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nebraska

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	129	39	140	337	1,790	2,267	108	--	--	1,907	--	4,717	--
1965	35	48	111	453	2,545	3,110	69	--	--	2,816	--	6,724	--
1970	20	58	196	379	3,889	4,464	52	--	--	4,107	--	9,941	--
1975	3	54	173	372	3,143	3,688	60	--	--	4,693	--	11,287	--
1980	4	49	360	10	1,406	1,775	287	--	--	5,521	--	13,312	--
1985	3	47	353	40	998	1,392	361	--	--	6,195	--	14,270	--
1990	1	41	196	4	978	1,178	201	--	--	6,800	--	15,729	--
1995	1	45	88	4	1,173	1,265	176	--	--	7,597	--	17,257	--
1996	(s)	49	113	4	1,575	1,691	183	--	--	7,741	--	17,608	--
1997	13	47	90	7	1,265	1,362	142	--	--	7,989	--	18,104	--
1998	0	41	65	10	1,674	1,748	126	--	--	8,160	--	18,511	--
1999	0	41	77	6	1,713	1,796	133	--	--	7,929	--	18,142	--
2000	0	43	110	8	1,744	1,862	143	--	--	8,346	--	18,989	--
2001	1	47	81	10	1,629	1,720	139	--	--	8,638	--	^R 19,428	--
2002	1	44	68	3	1,974	2,045	141	--	--	8,956	--	20,064	--
2003	1	42	87	4	1,878	1,969	149	--	--	8,852	--	19,664	--
2004	(s)	39	96	5	1,575	1,676	152	--	--	8,757	--	19,491	--
Trillion Btu													
1960	2.7	40.9	0.8	1.9	7.2	9.9	2.2	0.0	0.0	6.5	62.1	16.1	78.2
1965	0.7	47.2	0.6	2.6	10.2	13.4	1.4	0.0	0.0	9.6	72.3	22.9	95.3
1970	0.4	58.8	1.1	2.1	14.7	18.0	1.0	0.0	0.0	14.0	92.2	33.9	126.1
1975	(s)	53.6	1.0	2.1	11.7	14.8	1.2	0.0	0.0	16.0	85.7	38.5	124.2
1980	0.1	47.9	2.1	0.1	5.2	7.3	5.7	0.0	0.0	18.8	79.9	45.4	125.3
1985	0.1	45.8	2.1	0.2	3.6	5.9	7.2	0.0	0.0	21.1	80.1	48.7	128.8
1990	(s)	40.8	1.1	(s)	3.5	4.7	4.0	^f (s)	^f (s)	23.2	^f 72.8	53.7	^f 126.5
1995	(s)	44.1	0.5	(s)	4.2	4.8	3.5	0.1	(s)	25.9	78.4	58.9	137.3
1996	(s)	49.3	0.7	(s)	5.7	6.4	3.7	0.1	(s)	26.4	85.8	60.1	145.9
1997	0.2	47.0	0.5	(s)	4.6	5.1	2.8	0.1	(s)	27.3	82.5	61.8	144.3
1998	0.0	40.9	0.4	0.1	6.1	6.5	2.5	0.1	(s)	27.8	77.8	63.2	141.0
1999	0.0	40.5	0.4	(s)	6.2	6.7	2.7	0.1	(s)	27.1	77.0	61.9	138.9
2000	0.0	42.7	0.6	(s)	6.3	7.0	2.9	0.1	(s)	28.5	81.1	64.8	145.9
2001	(s)	47.6	0.5	0.1	5.9	6.4	2.8	0.1	(s)	29.5	86.4	^R 66.3	^R 152.7
2002	(s)	43.9	0.4	(s)	7.1	7.5	2.8	0.1	(s)	30.6	84.9	68.5	153.4
2003	(s)	42.2	0.5	(s)	6.8	7.3	3.0	0.1	(s)	30.2	82.8	67.1	149.9
2004	(s)	38.5	0.6	(s)	5.7	6.3	3.0	0.1	(s)	29.9	77.8	66.5	144.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nebraska

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	89	22	140	65	316	84	43	649	0	--	--	1,269	--	3,139	--
1965	26	26	112	87	449	95	84	827	0	--	--	2,025	--	4,836	--
1970	16	47	197	73	686	110	241	1,307	0	--	--	3,505	--	8,483	--
1975	6	43	174	71	555	120	159	1,079	0	--	--	3,660	--	8,802	--
1980	15	43	181	21	248	149	23	622	0	--	--	4,068	--	9,809	--
1985	9	39	831	12	176	158	0	1,177	0	--	--	5,714	--	13,163	--
1990	3	36	287	23	173	155	20	658	^g 0	--	--	6,451	--	14,922	--
1995	8	40	162	4	207	21	1	395	0	--	--	7,494	--	17,024	--
1996	1	41	230	4	278	21	0	533	0	--	--	7,563	--	17,204	--
1997	105	34	165	3	223	21	9	421	0	--	--	8,014	--	18,162	--
1998	0	29	222	3	295	21	7	548	0	--	--	8,069	--	18,305	--
1999	0	28	219	1	302	21	3	546	0	--	--	7,997	--	18,297	--
2000	0	29	198	1	308	279	8	794	0	--	--	8,727	--	19,855	--
2001	5	28	243	3	287	209	21	763	0	--	--	8,757	--	^R 19,695	--
2002	6	28	92	2	348	126	0	569	0	--	--	9,142	--	20,480	--
2003	5	28	205	3	331	96	14	650	0	--	--	8,583	--	19,066	--
2004	3	30	182	7	278	203	49	718	0	--	--	8,501	--	18,922	--
Trillion Btu															
1960	1.9	22.7	0.8	0.4	1.3	0.4	0.3	3.2	0.0	(s)	0.0	4.3	32.1	10.7	42.8
1965	0.5	25.3	0.7	0.5	1.8	0.5	0.5	4.0	0.0	(s)	0.0	6.9	36.7	16.5	53.2
1970	0.3	47.2	1.1	0.4	2.6	0.6	1.5	6.2	0.0	(s)	0.0	12.0	65.7	28.9	94.7
1975	0.1	43.0	1.0	0.4	2.1	0.6	1.0	5.1	0.0	(s)	0.0	12.5	60.7	30.0	90.7
1980	0.3	42.5	1.1	0.1	0.9	0.8	0.1	3.0	0.0	0.1	0.0	13.9	59.8	33.5	93.3
1985	0.2	38.7	4.8	0.1	0.6	0.8	0.0	6.4	0.0	0.2	0.0	19.5	64.9	44.9	109.9
1990	0.1	35.9	1.7	0.1	0.6	0.8	0.1	3.4	^g 0.0	^g 0.4	^g (s)	22.0	^g 61.8	50.9	^g 112.7
1995	0.2	39.2	0.9	(s)	0.7	0.1	(s)	1.8	0.0	0.5	0.1	25.6	67.4	58.1	125.5
1996	(s)	41.1	1.3	(s)	1.0	0.1	0.0	2.5	0.0	0.5	0.2	25.8	70.1	58.7	128.8
1997	1.8	33.8	1.0	(s)	0.8	0.1	0.1	2.0	0.0	0.6	0.2	27.3	65.7	62.0	127.6
1998	0.0	29.0	1.3	(s)	1.1	0.1	(s)	2.5	0.0	0.5	0.2	27.5	59.8	62.5	122.3
1999	0.0	27.5	1.3	(s)	1.1	0.1	(s)	2.5	0.0	0.6	0.2	27.3	58.1	62.4	120.6
2000	0.0	29.0	1.2	(s)	1.1	1.5	0.1	3.8	0.0	0.6	0.2	29.8	63.5	67.7	131.2
2001	0.1	28.4	1.4	(s)	1.0	1.1	0.1	3.7	0.0	0.6	0.3	29.9	62.9	^R 67.2	^R 130.1
2002	0.1	28.2	0.5	(s)	1.3	0.7	0.0	2.5	0.0	0.6	0.3	31.2	62.9	69.9	132.8
2003	0.1	28.4	1.2	(s)	1.2	0.5	0.1	3.0	0.0	0.7	0.4	29.3	61.8	65.1	126.8
2004	0.1	29.7	1.1	(s)	1.0	1.1	0.3	3.5	0.0	0.7	0.4	29.0	63.4	64.6	127.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nebraska

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh						
1960	408	37	780	2,405	275	441	97	2,146	18	62	6,224	(s)	--	--	889	--	2,198	--
1965	349	48	655	1,956	250	314	130	1,790	32	50	5,177	(s)	--	--	1,182	--	2,822	--
1970	240	56	1,137	3,271	130	823	160	1,319	139	102	7,082	(s)	--	--	2,145	--	5,192	--
1975	308	74	754	3,234	111	1,811	193	1,644	137	150	8,035	0	--	--	3,200	--	7,695	--
1980	269	52	719	3,411	31	2,675	41	1,471	29	130	8,506	0	--	--	4,155	--	10,018	--
1985	261	33	473	4,457	22	1,359	38	1,392	62	75	7,877	0	--	--	3,794	--	8,739	--
1990	235	26	1,388	4,810	14	1,700	42	950	236	316	9,457	⁹ 0	--	--	4,618	--	10,683	--
1995	339	45	929	4,748	9	1,617	40	759	120	31	8,253	0	--	--	5,802	--	13,179	--
1996	286	36	1,771	4,604	12	1,957	39	773	167	28	9,351	0	--	--	6,193	--	14,087	--
1997	296	44	1,450	4,696	14	1,571	41	810	101	25	8,708	0	--	--	6,580	--	14,911	--
1998	384	53	1,400	5,025	11	1,308	43	1,047	98	24	8,956	0	--	--	6,916	--	15,688	--
1999	405	46	1,867	4,198	4	1,636	44	686	69	22	8,524	0	--	--	6,883	--	15,749	--
2000	407	47	937	4,545	6	1,753	43	634	115	19	8,052	0	--	--	7,276	--	16,554	--
2001	518	40	856	5,170	8	1,668	39	953	106	256	9,056	0	--	--	7,328	--	^R 16,480	--
2002	388	41	803	5,014	2	2,579	39	1,031	124	257	9,849	0	--	--	7,563	--	16,944	--
2003	385	38	1,336	5,146	8	2,077	36	1,086	127	268	10,084	0	--	--	8,421	--	18,707	--
2004	371	40	1,301	5,523	10	2,133	36	1,304	180	298	10,786	0	--	--	8,618	--	19,182	--
Trillion Btu																		
1960	9.0	38.3	5.2	14.0	1.6	1.8	0.6	11.3	0.1	0.4	34.9	(s)	0.4	0.0	3.0	85.5	7.5	93.0
1965	7.6	47.7	4.3	11.4	1.4	1.3	0.8	9.4	0.2	0.3	29.1	(s)	0.5	0.0	4.0	88.9	9.6	98.6
1970	4.9	56.9	7.5	19.1	0.7	3.1	1.0	6.9	0.9	0.6	39.8	(s)	0.5	0.0	7.3	109.5	17.7	127.2
1975	5.9	73.5	5.0	18.8	0.6	6.7	1.2	8.6	0.9	0.9	42.8	0.0	1.5	0.0	10.9	134.7	26.3	160.9
1980	5.2	50.9	4.8	19.9	0.2	9.8	0.3	7.7	0.2	0.8	43.6	0.0	(s)	0.0	14.2	113.8	34.2	148.0
1985	4.9	32.6	3.1	26.0	0.1	4.9	0.2	7.3	0.4	0.4	42.5	0.0	(s)	0.0	12.9	92.9	29.8	122.7
1990	4.5	25.4	9.2	28.0	0.1	6.2	0.3	5.0	1.5	1.7	51.9	⁹ 0.0	⁹ 0.0	⁹ 0.0	15.8	⁹ 97.5	36.4	⁹ 134.0
1995	6.6	43.9	6.2	27.7	0.1	5.9	0.2	4.0	0.8	0.2	44.9	0.0	(s)	0.0	19.8	115.1	45.0	160.1
1996	5.4	36.4	11.8	26.8	0.1	7.1	0.2	4.0	1.1	0.2	51.2	0.0	3.5	0.0	21.1	117.6	48.1	165.7
1997	5.7	44.4	9.6	27.4	0.1	5.7	0.3	4.2	0.6	0.1	48.0	0.0	2.7	0.0	22.4	123.2	50.9	174.1
1998	7.3	53.2	9.3	29.3	0.1	4.7	0.3	5.5	0.6	0.1	49.8	0.0	2.7	0.0	23.6	136.6	53.5	190.2
1999	7.7	45.7	12.4	24.5	(s)	5.9	0.3	3.6	0.4	0.1	47.2	0.0	2.7	0.0	23.5	126.8	53.7	180.5
2000	8.4	47.1	6.2	26.5	(s)	6.3	0.3	3.3	0.7	0.1	43.4	0.0	2.1	0.0	24.8	125.8	56.5	182.3
2001	10.1	41.0	5.7	30.1	(s)	6.0	0.2	5.0	0.7	1.4	49.1	0.0	^R 4.8	0.0	25.0	^R 130.0	^R 56.2	^R 186.2
2002	8.0	40.8	5.3	29.2	(s)	9.3	0.2	5.4	0.8	1.4	51.6	0.0	^R 5.3	0.0	25.8	^R 131.5	57.8	^R 189.3
2003	7.8	38.4	8.9	30.0	(s)	7.5	0.2	5.7	0.8	1.5	54.6	0.0	^R 5.3	0.0	28.7	^R 134.8	63.8	^R 198.6
2004	7.5	39.6	8.6	32.2	0.1	7.7	0.2	6.8	1.1	1.6	58.4	0.0	5.3	0.0	29.4	140.1	65.4	205.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nebraska

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	7	6	371	1,402	1,202	103	328	12,768	258	16,432	0	0	--	0	--
1965	1	9	410	1,439	1,371	99	295	13,861	109	17,583	0	0	--	0	--
1970	(s)	13	199	3,658	1,783	217	319	17,096	225	23,497	0	0	--	0	--
1975	(s)	10	141	4,618	1,679	231	299	18,871	138	25,976	0	0	--	0	--
1980	0	7	213	5,112	1,588	171	348	17,480	0	24,911	0	0	--	0	--
1985	0	6	96	6,709	1,357	57	317	16,187	0	24,722	^f 456	0	--	0	--
1990	0	4	83	7,524	1,501	61	356	17,346	0	26,871	710	0	--	0	--
1995	0	3	77	9,540	1,001	23	340	18,521	0	29,501	647	0	--	0	--
1996	0	5	75	11,649	1,007	21	330	18,679	0	31,763	419	0	--	0	--
1997	0	4	90	11,825	1,075	71	348	18,994	0	32,404	478	0	--	0	--
1998	0	3	63	13,252	1,080	23	365	19,237	0	34,020	504	0	--	0	--
1999	0	3	71	13,195	1,564	14	368	19,781	0	34,994	589	0	--	0	--
2000	0	3	64	9,983	1,231	26	363	19,543	0	31,210	793	0	--	0	--
2001	0	3	86	8,651	1,113	31	333	19,231	0	29,445	661	0	--	0	--
2002	0	3	93	8,719	1,527	41	329	19,689	0	30,397	834	0	--	0	--
2003	0	5	81	9,415	1,205	41	304	19,492	0	30,538	909	0	--	0	--
2004	0	4	57	10,589	918	53	308	19,332	0	31,257	861	0	--	0	--
Trillion Btu															
1960	0.2	6.5	1.9	8.2	6.4	0.4	2.0	67.1	1.6	87.6	0.0	0.0	94.2	0.0	94.2
1965	(s)	8.6	2.1	8.4	7.4	0.4	1.8	72.8	0.7	93.5	0.0	0.0	102.2	0.0	102.2
1970	(s)	13.2	1.0	21.3	9.8	0.8	1.9	89.8	1.4	126.1	0.0	0.0	139.3	0.0	139.3
1975	(s)	10.4	0.7	26.9	9.2	0.9	1.8	99.1	0.9	139.5	0.0	0.0	149.9	0.0	149.9
1980	0.0	6.9	1.1	29.8	8.7	0.6	2.1	91.8	0.0	134.1	0.0	0.0	141.0	0.0	141.0
1985	0.0	5.5	0.5	39.1	7.4	0.2	1.9	85.0	0.0	134.1	^f 1.6	0.0	^f 141.2	0.0	^f 141.2
1990	0.0	3.5	0.4	43.8	8.3	0.2	2.2	91.1	0.0	146.0	2.5	0.0	152.0	0.0	152.0
1995	0.0	3.4	0.4	55.6	5.7	0.1	2.1	96.6	0.0	160.4	2.3	0.0	163.7	0.0	163.7
1996	0.0	4.6	0.4	67.9	5.7	0.1	2.0	97.4	0.0	173.5	1.5	0.0	178.1	0.0	178.1
1997	0.0	4.3	0.5	68.9	6.1	0.3	2.1	99.0	0.0	176.8	1.7	0.0	181.1	0.0	181.1
1998	0.0	2.9	0.3	77.2	6.1	0.1	2.2	100.3	0.0	186.2	1.8	0.0	189.1	0.0	189.1
1999	0.0	3.0	0.4	76.9	8.9	0.1	2.2	103.1	0.0	191.5	2.1	0.0	194.4	0.0	194.4
2000	0.0	3.2	0.3	58.2	7.0	0.1	2.2	101.8	0.0	169.6	2.8	0.0	172.8	0.0	172.8
2001	0.0	3.1	0.4	50.4	6.3	0.1	2.0	100.2	0.0	159.5	2.3	0.0	162.6	0.0	162.6
2002	0.0	2.7	0.5	50.8	8.7	0.1	2.0	102.5	0.0	164.6	3.0	0.0	167.3	0.0	167.3
2003	0.0	5.4	0.4	54.8	6.8	0.1	1.8	101.5	0.0	165.6	3.2	0.0	170.9	0.0	170.9
2004	0.0	4.0	0.3	61.7	5.2	0.2	1.9	100.8	0.0	170.0	3.0	0.0	174.1	0.0	174.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Nebraska

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	256	31	96	64	0	160	0	959	--	0	0	0	0	--
1965	486	36	107	71	0	178	-5	1,115	--	0	0	0	0	--
1970	1,006	48	188	126	0	314	0	1,370	--	0	0	0	0	--
1975	1,278	38	658	308	0	967	5,916	1,213	--	0	0	0	0	--
1980	4,702	12	176	86	0	262	5,783	1,336	--	0	0	0	0	--
1985	6,380	1	0	62	0	62	4,134	1,441	--	0	0	0	0	--
1990	8,027	4	1	31	0	31	7,511	1,140	--	0	0	0	0	--
1995	10,048	3	0	61	0	61	7,485	1,426	--	0	0	0	0	--
1996	10,091	2	0	47	0	47	9,457	1,602	--	0	0	0	0	--
1997	10,796	3	(s)	71	0	72	9,269	1,672	--	0	0	0	1	--
1998	11,505	5	11	83	0	93	8,259	1,683	--	0	0	0	-48	--
1999	11,219	5	4	65	0	70	10,091	1,719	--	0	0	0	-42	--
2000	11,503	6	19	100	0	119	8,629	1,501	--	0	0	0	0	--
2001	12,606	4	(s)	62	0	62	8,726	1,124	--	0	0	3	0	--
2002	12,210	5	(s)	43	0	43	10,122	1,097	--	0	0	8	0	--
2003	12,725	5	1	101	0	102	7,997	980	--	0	0	38	2	--
2004	12,650	3	2	45	0	47	10,241	913	--	0	0	38	-3	--
Trillion Btu														
1960	6.3	32.1	0.6	0.4	0.0	1.0	0.0	10.3	0.5	0.0	0.0	0.0	0.0	50.2
1965	11.9	35.9	0.7	0.4	0.0	1.1	-0.1	11.7	0.0	0.0	0.0	0.0	0.0	60.6
1970	24.1	48.0	1.2	0.7	0.0	1.9	0.0	14.4	0.0	0.0	0.0	0.0	0.0	88.4
1975	26.8	37.0	4.1	1.8	0.0	5.9	65.2	12.6	0.0	0.0	0.0	0.0	0.0	147.5
1980	88.4	11.3	1.1	0.5	0.0	1.6	63.1	13.9	0.0	0.0	0.0	0.0	0.0	178.3
1985	110.4	1.2	0.0	0.4	0.0	0.4	43.9	15.1	0.0	0.0	0.0	0.0	0.0	170.9
1990	137.5	3.6	(s)	0.2	0.0	0.2	79.5	11.9	0.0	0.0	0.0	0.0	0.0	232.6
1995	172.7	3.1	0.0	0.4	0.0	0.4	78.6	14.7	0.2	0.0	0.0	0.0	0.0	269.7
1996	173.5	2.3	0.0	0.3	0.0	0.3	99.3	16.6	0.1	0.0	0.0	0.0	0.0	292.1
1997	185.6	2.7	(s)	0.4	0.0	0.4	97.3	17.1	0.2	0.0	0.0	0.0	(s)	303.3
1998	197.5	5.1	0.1	0.5	0.0	0.5	86.6	17.2	0.1	0.0	0.0	0.0	-0.2	306.9
1999	190.8	4.6	(s)	0.4	0.0	0.4	105.5	17.6	0.1	0.0	0.0	0.0	-0.1	318.8
2000	198.6	5.6	0.1	0.6	0.0	0.7	90.0	15.3	0.1	0.0	0.0	0.0	0.0	310.3
2001	^R 216.4	4.0	(s)	0.4	0.0	0.4	91.2	11.6	0.1	0.0	0.0	(s)	0.0	^R 323.7
2002	209.8	4.8	(s)	0.2	0.0	0.3	105.7	11.2	0.1	0.0	0.0	0.1	0.0	331.9
2003	219.4	4.6	(s)	0.6	0.0	0.6	83.3	10.0	0.4	0.0	0.0	0.4	(s)	318.7
2004	216.1	3.3	(s)	0.3	0.0	0.3	106.8	9.2	0.3	0.0	0.0	0.4	(s)	336.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Nevada

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	151	12	247	281	2,409	2,462	3	773	92	3,621	246	0	10,134	0	1,967	--	--	-686	--
1965	309	28	367	335	2,775	2,999	5	720	121	5,504	137	0	12,963	0	1,595	--	--	1,604	--
1970	680	53	609	186	2,834	4,584	16	839	105	7,374	143	11	16,700	0	1,646	--	--	2,118	--
1975	4,521	61	837	197	2,565	5,859	29	493	120	9,633	1,339	0	21,070	0	1,690	--	--	-18,506	--
1980	4,215	58	614	206	3,966	7,223	0	880	108	11,224	2,439	53	26,715	0	2,372	--	--	-11,178	--
1985	5,539	39	844	105	5,289	5,715	53	1,043	99	11,627	165	36	24,975	0	4,344	--	--	-14,787	--
1990	7,442	65	1,083	111	6,815	6,114	19	1,430	111	14,942	454	0	31,079	0	1,735	--	--	-11,430	--
1995	7,340	109	1,486	63	8,774	7,374	9	815	106	18,017	1,109	85	37,837	0	1,942	--	--	-12,481	--
1996	7,604	122	1,432	93	11,031	7,843	9	970	103	18,962	276	122	40,842	0	2,164	--	--	-12,535	--
1997	7,447	132	445	76	9,987	7,556	8	852	109	19,952	230	121	39,336	0	2,587	--	--	-8,934	--
1998	8,216	149	1,388	65	9,207	6,715	13	911	114	22,070	145	110	40,738	0	3,166	--	--	-15,075	--
1999	8,067	155	808	78	9,426	8,354	26	1,378	115	21,583	64	98	41,930	0	2,828	--	--	-9,687	--
2000	8,865	189	795	81	9,750	9,163	11	1,313	113	22,063	80	79	43,448	0	2,429	--	--	-18,067	--
2001	8,399	177	1,017	88	9,646	8,414	10	1,529	104	22,877	2,090	115	45,888	0	2,514	--	--	^R -13,862	--
2002	8,071	177	958	84	9,672	8,154	8	1,111	102	23,582	19	123	43,814	0	2,268	--	--	956	--
2003	8,095	186	1,831	74	8,960	7,651	13	790	95	24,863	8	73	44,357	0	1,757	--	--	-1,834	--
2004	8,715	215	1,912	85	11,388	7,915	20	614	96	26,049	149	53	48,281	0	1,615	--	--	-9,759	--
Trillion Btu																			
1960	4.0	12.9	1.6	1.4	14.0	13.2	(s)	3.1	0.6	19.0	1.5	0.0	54.5	0.0	21.2	0.9	0.0	-2.3	91.2
1965	7.9	29.4	2.4	1.7	16.2	16.3	(s)	2.9	0.7	28.9	0.9	0.0	70.0	0.0	16.7	0.9	0.0	5.5	130.3
1970	17.3	56.9	4.0	0.9	16.5	25.3	0.1	3.2	0.6	38.7	0.9	0.1	90.4	0.0	17.3	1.1	0.0	7.2	190.1
1975	101.3	65.4	5.6	1.0	14.9	32.7	0.2	1.8	0.7	50.6	8.4	0.0	115.9	0.0	17.6	1.2	0.0	-63.1	238.2
1980	93.2	62.0	4.1	1.0	23.1	40.4	0.0	3.2	0.7	59.0	15.3	0.3	147.1	0.0	24.6	2.8	0.0	-38.1	291.6
1985	126.2	41.6	5.6	0.5	30.8	31.7	0.3	3.8	0.6	61.1	1.0	0.2	135.6	0.0	45.4	4.6	0.1	-50.5	303.1
1990	165.3	66.9	7.2	0.6	39.7	34.0	0.1	5.2	0.7	78.5	2.9	0.0	168.8	0.0	18.0	^j 2.9	^j 16.9	-39.0	^j 400.2
1995	162.5	112.5	9.9	0.3	51.1	41.8	(s)	3.0	0.6	94.0	7.0	0.5	208.2	0.0	20.0	3.2	33.6	-42.6	497.4
1996	169.5	126.9	9.5	0.5	64.3	44.5	0.1	3.5	0.6	98.9	1.7	0.7	224.2	0.0	22.4	3.6	33.7	-42.8	537.5
1997	166.7	135.5	3.0	0.4	58.2	42.8	(s)	3.1	0.7	104.0	1.4	0.7	214.3	0.0	26.4	4.5	34.5	-30.5	551.4
1998	184.2	154.7	9.2	0.3	53.6	38.1	0.1	3.3	0.7	115.0	0.9	0.6	221.9	0.0	32.3	4.0	33.5	-51.4	579.1
1999	181.6	160.0	5.4	0.4	54.9	47.4	0.1	5.0	0.7	112.5	0.4	0.6	227.3	0.0	28.9	4.2	31.3	-33.1	600.2
2000	199.3	194.1	5.3	0.4	56.8	52.0	0.1	4.7	0.7	114.9	0.5	0.5	235.8	0.0	24.8	4.5	30.4	-61.6	627.3
2001	188.6	181.3	6.7	0.4	56.2	47.7	0.1	5.5	0.6	119.2	13.1	0.7	250.3	0.0	26.0	3.3	27.0	^R -47.3	^R 629.1
2002	164.8	183.3	6.4	0.4	56.3	46.2	(s)	4.0	0.6	122.8	0.1	0.7	237.7	0.0	23.1	3.1	25.8	3.3	641.0
2003	182.6	189.9	12.2	0.4	52.2	43.4	0.1	2.9	0.6	129.5	(s)	0.4	241.5	0.0	18.0	3.3	25.2	-6.3	654.2
2004	193.6	219.5	12.7	0.4	66.3	44.9	0.1	2.2	0.6	135.8	0.9	0.3	264.3	0.0	16.2	3.4	30.0	-33.3	693.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nevada

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	18	2	219	0	275	493	46	--	--	719	--	1,778	--
1965	39	4	286	0	519	805	43	--	--	1,268	--	3,029	--
1970	37	7	328	0	621	949	52	--	--	1,990	--	4,816	--
1975	3	11	265	0	316	581	61	--	--	2,803	--	6,741	--
1980	1	13	187	0	427	614	135	--	--	3,697	--	8,914	--
1985	(s)	13	276	47	650	974	224	--	--	4,126	--	9,504	--
1990	1	17	213	8	817	1,039	128	--	--	5,540	--	12,814	--
1995	(s)	21	176	6	509	691	141	--	--	6,655	--	15,118	--
1996	(s)	23	198	6	549	754	146	--	--	7,526	--	17,119	--
1997	(s)	25	260	5	584	849	182	--	--	7,801	--	17,680	--
1998	(s)	30	273	10	615	897	161	--	--	7,975	--	18,091	--
1999	(s)	29	208	8	894	1,110	170	--	--	8,386	--	19,186	--
2000	0	30	212	8	544	764	183	--	--	9,406	--	21,401	--
2001	(s)	33	218	7	519	744	109	--	--	9,607	--	^R 21,607	--
2002	(s)	32	208	7	756	970	111	--	--	9,702	--	21,735	--
2003	(s)	33	165	11	416	592	116	--	--	10,340	--	22,969	--
2004	(s)	37	171	18	372	560	119	--	--	10,673	--	23,755	--
Trillion Btu													
1960	0.4	2.0	1.3	0.0	1.1	2.4	0.9	0.0	0.0	2.5	8.2	6.1	14.3
1965	1.0	4.4	1.7	0.0	2.1	3.7	0.9	0.0	0.0	4.3	14.3	10.3	24.6
1970	0.9	7.9	1.9	0.0	2.3	4.3	1.0	0.0	0.0	6.8	20.8	16.4	37.3
1975	0.1	11.8	1.5	0.0	1.2	2.7	1.2	0.0	0.0	9.6	25.4	23.0	48.4
1980	(s)	13.9	1.1	0.0	1.6	2.7	2.7	0.0	0.0	12.6	31.9	30.4	62.3
1985	(s)	13.4	1.6	0.3	2.3	4.2	4.5	0.0	0.0	14.1	36.2	32.4	68.6
1990	(s)	17.7	1.2	(s)	3.0	4.3	2.6	^f 0.1	^f 0.1	18.9	^f 43.6	43.7	^f 87.3
1995	(s)	21.4	1.0	(s)	1.8	2.9	2.8	0.1	0.2	22.7	50.1	51.6	101.7
1996	(s)	23.5	1.2	(s)	2.0	3.2	2.9	0.1	0.2	25.7	55.7	58.4	114.1
1997	(s)	25.9	1.5	(s)	2.1	3.7	3.6	0.1	0.3	26.6	60.2	60.3	120.6
1998	(s)	31.5	1.6	0.1	2.2	3.9	3.2	0.1	0.3	27.2	66.3	61.7	128.0
1999	(s)	29.4	1.2	(s)	3.2	4.5	3.4	0.2	0.4	28.6	66.5	65.5	131.9
2000	0.0	30.8	1.2	(s)	2.0	3.2	3.7	0.2	0.5	32.1	70.5	73.0	143.5
2001	(s)	33.4	1.3	(s)	1.9	3.2	2.2	0.2	0.6	32.8	72.3	^R 73.7	^R 146.0
2002	(s)	34.1	1.2	(s)	2.7	4.0	2.2	0.2	0.6	33.1	74.3	74.2	148.4
2003	(s)	33.5	1.0	0.1	1.5	2.5	2.3	0.3	0.6	35.3	74.5	78.4	152.9
2004	(s)	35.3	1.0	0.1	1.3	2.4	2.4	0.3	0.7	36.4	77.5	81.1	158.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nevada

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	12	1	107	0	48	29	86	271	0	--	--	655	--	1,620	--
1965	29	2	140	1	92	44	38	316	0	--	--	1,235	--	2,950	--
1970	29	10	161	10	110	49	29	358	0	--	--	2,069	--	5,007	--
1975	6	15	130	12	56	69	34	301	0	--	--	2,876	--	6,917	--
1980	3	10	353	0	75	61	7	496	0	--	--	1,775	--	4,280	--
1985	2	12	315	5	115	82	25	542	0	--	--	3,408	--	7,850	--
1990	2	15	311	4	144	84	2	545	^g 0	--	--	4,550	--	10,524	--
1995	1	19	832	1	90	13	0	935	0	--	--	5,509	--	12,513	--
1996	1	20	987	2	97	13	0	1,098	0	--	--	5,973	--	13,586	--
1997	1	22	282	1	103	13	1	399	0	--	--	6,383	--	14,466	--
1998	1	23	309	2	108	13	4	436	0	--	--	6,544	--	14,845	--
1999	(s)	23	364	3	158	13	7	544	0	--	--	7,007	--	16,032	--
2000	0	26	401	2	96	13	8	521	0	--	--	7,147	--	16,260	--
2001	1	23	336	2	92	16	0	445	0	--	--	7,321	--	^R 16,467	--
2002	1	23	357	1	133	18	0	509	0	--	--	8,130	--	18,213	--
2003	1	24	272	2	73	16	0	363	0	--	--	8,168	--	18,144	--
2004	1	27	372	2	66	16	0	455	0	--	--	8,275	--	18,419	--
Trillion Btu															
1960	0.3	0.9	0.6	0.0	0.2	0.2	0.5	1.5	0.0	(s)	0.0	2.2	5.0	5.5	10.5
1965	0.7	2.5	0.8	(s)	0.4	0.2	0.2	1.7	0.0	(s)	0.0	4.2	9.2	10.1	19.2
1970	0.7	10.4	0.9	0.1	0.4	0.3	0.2	1.8	0.0	(s)	0.0	7.1	20.0	17.1	37.1
1975	0.1	16.0	0.8	0.1	0.2	0.4	0.2	1.6	0.0	(s)	0.0	9.8	27.6	23.6	51.2
1980	0.1	10.7	2.1	0.0	0.3	0.3	(s)	2.7	0.0	0.1	0.0	6.1	19.6	14.6	34.2
1985	(s)	13.0	1.8	(s)	0.4	0.4	0.2	2.9	0.0	0.1	0.0	11.6	27.6	26.8	54.4
1990	0.1	15.5	1.8	(s)	0.5	0.4	(s)	2.8	^g 0.0	^g 0.3	^g 0.4	15.5	^g 34.6	35.9	^g 70.5
1995	(s)	19.3	4.8	(s)	0.3	0.1	0.0	5.2	0.0	0.4	0.4	18.8	44.2	42.7	86.9
1996	(s)	21.2	5.8	(s)	0.4	0.1	0.0	6.2	0.0	0.4	0.4	20.4	48.6	46.4	95.0
1997	(s)	22.5	1.6	(s)	0.4	0.1	(s)	2.1	0.0	0.6	0.4	21.8	47.4	49.4	96.8
1998	(s)	24.4	1.8	(s)	0.4	0.1	(s)	2.3	0.0	0.5	0.5	22.3	50.1	50.7	100.7
1999	(s)	23.2	2.1	(s)	0.6	0.1	(s)	2.8	0.0	0.6	0.5	23.9	51.0	54.7	105.7
2000	0.0	26.4	2.3	(s)	0.3	0.1	0.1	2.8	0.0	0.6	0.5	24.4	54.7	55.5	110.1
2001	(s)	23.4	2.0	(s)	0.3	0.1	0.0	2.4	0.0	0.4	0.5	25.0	51.7	^R 56.2	^R 107.9
2002	(s)	24.2	2.1	(s)	0.5	0.1	0.0	2.7	0.0	0.4	0.5	27.7	55.6	62.1	117.7
2003	(s)	24.6	1.6	(s)	0.3	0.1	0.0	1.9	0.0	0.4	0.7	27.9	55.5	61.9	117.4
2004	(s)	26.0	2.2	(s)	0.2	0.1	0.0	2.5	0.0	0.4	0.7	28.2	57.9	62.8	120.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nevada

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	119	3	247	575	3	445	18	120	118	0	1,527	(s)	--	--	793	--	1,962	--
1965	61	8	367	740	4	101	36	131	40	0	1,419	(s)	--	--	1,059	--	2,529	--
1970	70	10	609	840	6	99	23	166	34	11	1,788	(s)	--	--	1,635	--	3,958	--
1975	77	10	837	705	17	107	26	115	44	0	1,852	0	--	--	1,964	--	4,722	--
1980	147	7	614	651	0	374	25	111	1	53	1,830	0	--	--	4,936	--	11,901	--
1985	110	6	844	1,497	1	247	23	131	88	36	2,867	0	--	--	3,808	--	8,772	--
1990	169	8	1,083	2,906	7	446	26	170	8	0	4,646	^g 0	--	--	6,263	--	14,487	--
1995	255	7	1,486	3,452	2	197	25	201	1,082	85	6,529	0	--	--	8,496	--	19,299	--
1996	179	7	1,432	3,959	2	302	24	206	129	122	6,176	0	--	--	9,075	--	20,641	--
1997	185	8	445	4,058	2	147	25	299	206	121	5,303	0	--	--	10,034	--	22,740	--
1998	254	10	1,388	3,233	1	180	26	434	77	110	5,451	0	--	--	10,518	--	23,861	--
1999	304	12	808	2,740	15	326	27	134	19	98	4,166	0	--	--	10,861	--	24,849	--
2000	231	11	795	2,824	1	672	26	111	0	79	4,508	0	--	--	11,239	--	25,570	--
2001	208	11	1,017	2,530	1	775	24	456	0	115	4,916	0	--	--	11,239	--	^R 25,277	--
2002	185	11	958	2,211	(s)	220	24	473	6	123	4,015	0	--	--	11,373	--	25,478	--
2003	225	11	1,831	1,610	(s)	244	22	503	1	73	4,284	0	--	--	11,624	--	25,821	--
2004	212	12	1,912	2,780	(s)	133	22	568	(s)	53	5,468	0	--	--	12,364	--	27,521	--
Trillion Btu																		
1960	3.2	3.4	1.6	3.3	(s)	1.8	0.1	0.6	0.7	0.0	8.3	(s)	0.0	0.0	2.7	17.6	6.7	24.2
1965	1.6	8.4	2.4	4.3	(s)	0.4	0.2	0.7	0.3	0.0	8.3	(s)	0.0	0.0	3.6	21.9	8.6	30.5
1970	1.7	11.2	4.0	4.9	(s)	0.4	0.1	0.9	0.2	0.1	10.6	(s)	0.0	0.0	5.6	29.1	13.5	42.6
1975	1.8	10.7	5.6	4.1	0.1	0.4	0.2	0.6	0.3	0.0	11.2	0.0	0.0	0.0	6.7	30.4	16.1	46.5
1980	3.4	7.7	4.1	3.8	0.0	1.4	0.2	0.6	(s)	0.3	10.3	0.0	0.0	0.0	16.8	38.3	40.6	78.9
1985	2.6	6.6	5.6	8.7	(s)	0.9	0.1	0.7	0.6	0.2	16.8	0.0	0.0	0.0	13.0	39.0	29.9	68.9
1990	3.9	7.7	7.2	16.9	(s)	1.6	0.2	0.9	(s)	0.0	26.9	^g 0.0	^g 0.0	^g 0.2	21.4	^g 60.1	49.4	^g 109.6
1995	5.8	7.3	9.9	20.1	(s)	0.7	0.1	1.1	6.8	0.5	39.2	0.0	0.0	0.4	29.0	81.6	65.8	147.4
1996	4.0	7.7	9.5	23.1	(s)	1.1	0.1	1.1	0.8	0.7	36.4	0.0	0.2	0.3	31.0	79.7	70.4	150.1
1997	4.3	8.6	3.0	23.6	(s)	0.5	0.2	1.6	1.3	0.7	30.9	0.0	0.2	0.3	34.2	78.5	77.6	156.1
1998	5.9	10.5	9.2	18.8	(s)	0.7	0.2	2.3	0.5	0.6	32.3	0.0	0.2	0.2	35.9	85.0	81.4	166.4
1999	7.0	12.4	5.4	16.0	0.1	1.2	0.2	0.7	0.1	0.6	24.1	0.0	0.2	0.4	37.1	81.2	84.8	166.0
2000	5.4	11.7	5.3	16.4	(s)	2.4	0.2	0.6	0.0	0.5	25.3	0.0	0.2	0.4	38.3	81.4	87.2	168.6
2001	4.9	11.7	6.7	14.7	(s)	2.8	0.1	2.4	0.0	0.7	27.5	0.0	0.8	0.4	38.3	83.6	^R 86.2	^R 169.9
2002	4.3	11.8	6.4	12.9	(s)	0.8	0.1	2.5	(s)	0.7	23.4	0.0	0.5	0.4	38.8	79.2	86.9	166.1
2003	5.2	10.9	12.2	9.4	(s)	0.9	0.1	2.6	(s)	0.4	25.6	0.0	^R 0.5	0.3	39.7	82.2	88.1	170.3
2004	4.9	11.4	12.7	16.2	(s)	0.5	0.1	3.0	(s)	0.3	32.8	0.0	0.6	0.3	42.2	92.1	93.9	186.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Nevada

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	2	0	281	1,501	2,462	5	73	3,472	0	7,795	0	0	--	0	--
1965	(s)	0	335	1,599	2,999	9	86	5,329	7	10,364	0	0	--	0	--
1970	(s)	0	186	1,492	4,584	9	83	7,158	1	13,512	0	0	--	0	--
1975	(s)	0	197	1,407	5,859	13	94	9,449	5	17,023	0	0	--	0	--
1980	0	(s)	206	2,754	7,223	3	83	11,052	0	21,322	0	0	--	0	--
1985	0	(s)	105	3,146	5,715	31	76	11,414	0	20,487	^f 2	0	--	0	--
1990	0	1	111	3,294	6,114	22	85	14,688	0	24,314	116	0	--	0	--
1995	0	1	63	4,287	7,374	19	81	17,803	0	29,628	304	0	--	0	--
1996	0	1	93	5,852	7,843	22	79	18,743	0	32,632	0	0	--	0	--
1997	0	1	76	5,339	7,556	19	83	19,640	0	32,714	0	0	--	0	--
1998	0	1	65	5,354	6,715	7	87	21,623	0	33,852	352	0	--	0	--
1999	0	1	78	6,079	8,354	(s)	88	21,437	0	36,036	636	0	--	0	--
2000	0	1	81	6,266	9,163	1	87	21,938	0	37,537	689	0	--	0	--
2001	0	1	88	6,528	8,414	144	80	22,406	0	37,659	747	0	--	0	--
2002	0	1	84	6,860	8,154	2	79	23,091	0	38,270	881	0	--	0	--
2003	0	2	74	6,885	7,651	57	73	24,344	0	39,085	1,031	0	--	0	--
2004	0	3	85	8,044	7,915	44	74	25,465	0	41,626	1,058	0	--	0	--

Trillion Btu															
1960	0.1	0.0	1.4	8.7	13.2	(s)	0.4	18.2	0.0	42.1	0.0	0.0	42.1	0.0	42.1
1965	(s)	0.0	1.7	9.3	16.3	(s)	0.5	28.0	(s)	55.9	0.0	0.0	55.9	0.0	55.9
1970	(s)	0.0	0.9	8.7	25.3	(s)	0.5	37.6	(s)	73.1	0.0	0.0	73.1	0.0	73.1
1975	(s)	0.0	1.0	8.2	32.7	(s)	0.6	49.6	(s)	92.1	0.0	0.0	92.1	0.0	92.1
1980	0.0	0.2	1.0	16.0	40.4	(s)	0.5	58.1	0.0	116.0	0.0	0.0	116.2	0.0	116.2
1985	0.0	0.1	0.5	18.3	31.7	0.1	0.5	60.0	0.0	111.0	^f (s)	0.0	^f 111.2	0.0	^f 111.2
1990	0.0	0.8	0.6	19.2	34.0	0.1	0.5	77.2	0.0	131.5	0.4	0.0	132.7	0.0	132.7
1995	0.0	0.9	0.3	25.0	41.8	0.1	0.5	92.8	0.0	160.5	1.1	0.0	161.4	0.0	161.4
1996	0.0	0.9	0.5	34.1	44.5	0.1	0.5	97.8	0.0	177.3	0.0	0.0	178.3	0.0	178.3
1997	0.0	0.7	0.4	31.1	42.8	0.1	0.5	102.4	0.0	177.3	0.0	0.0	178.0	0.0	178.0
1998	0.0	1.1	0.3	31.2	38.1	(s)	0.5	112.7	0.0	182.8	1.2	0.0	184.0	0.0	184.0
1999	0.0	1.2	0.4	35.4	47.4	(s)	0.5	111.7	0.0	195.4	2.3	0.0	196.6	0.0	196.6
2000	0.0	1.3	0.4	36.5	52.0	(s)	0.5	114.3	0.0	203.7	2.4	0.0	205.0	0.0	205.0
2001	0.0	1.4	0.4	38.0	47.7	0.5	0.5	116.7	0.0	203.9	2.6	0.0	205.3	0.0	205.3
2002	0.0	1.4	0.4	40.0	46.2	(s)	0.5	120.3	0.0	207.4	3.1	0.0	208.8	0.0	208.8
2003	0.0	2.3	0.4	40.1	43.4	0.2	0.4	126.8	0.0	211.3	3.6	0.0	213.6	0.0	213.6
2004	0.0	2.8	0.4	46.9	44.9	0.2	0.4	132.8	0.0	225.6	3.7	0.0	228.4	0.0	228.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Nevada

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	6	41	7	0	48	0	1,967	--	0	0	0	0	--
1965	180	13	51	8	0	60	0	1,594	--	0	0	0	0	--
1970	544	25	80	13	0	93	0	1,645	--	0	0	0	0	--
1975	4,435	25	1,256	58	0	1,314	0	1,690	--	0	0	0	0	--
1980	4,064	28	2,431	22	0	2,453	0	2,372	--	0	0	0	0	--
1985	5,427	8	51	54	0	104	0	4,344	--	0	0	0	29	--
1990	7,270	24	444	91	0	535	0	1,735	--	ⁱ 761	ⁱ 0	ⁱ 0	2	--
1995	7,084	62	26	27	0	54	0	1,942	--	1,554	0	0	0	--
1996	7,424	71	147	35	0	182	0	2,164	--	1,555	0	0	0	--
1997	7,261	76	23	47	0	71	0	2,587	--	1,596	0	0	0	--
1998	7,961	84	64	38	0	103	0	3,166	--	1,537	0	0	0	--
1999	7,763	90	38	35	0	73	0	2,828	--	1,415	0	0	0	--
2000	8,634	121	72	48	0	119	0	2,429	--	1,371	0	0	0	--
2001	8,190	109	2,090	34	0	2,125	0	2,514	--	1,200	0	0	0	--
2002	7,885	110	13	36	0	49	0	2,268	--	1,127	0	0	85	--
2003	7,869	116	7	27	0	34	0	1,757	--	1,066	0	0	250	--
2004	8,502	137	148	22	0	170	0	1,615	--	1,298	0	0	188	--
Trillion Btu														
1960	0.0	6.6	0.3	(s)	0.0	0.3	0.0	21.2	0.0	0.0	0.0	0.0	0.0	28.0
1965	4.6	14.1	0.3	(s)	0.0	0.4	0.0	16.7	0.0	0.0	0.0	0.0	0.0	35.7
1970	14.0	27.4	0.5	0.1	0.0	0.6	0.0	17.3	0.0	0.0	0.0	0.0	0.0	59.2
1975	99.3	26.8	7.9	0.3	0.0	8.2	0.0	17.6	0.0	0.0	0.0	0.0	0.0	151.9
1980	89.7	29.5	15.3	0.1	0.0	15.4	0.0	24.6	0.0	0.0	0.0	0.0	0.0	159.3
1985	123.6	8.6	0.3	0.3	0.0	0.6	0.0	45.4	0.0	0.0	0.0	0.0	0.1	178.3
1990	161.3	25.1	2.8	0.5	0.0	3.3	0.0	18.0	ⁱ 0.0	ⁱ 16.1	ⁱ 0.0	ⁱ 0.0	(s)	ⁱ 223.9
1995	156.7	63.7	0.2	0.2	0.0	0.3	0.0	20.0	0.0	32.5	0.0	0.0	0.0	273.2
1996	165.4	73.5	0.9	0.2	0.0	1.1	0.0	22.4	0.0	32.6	0.0	0.0	0.0	295.0
1997	162.4	77.7	0.1	0.3	0.0	0.4	0.0	26.4	0.0	33.5	0.0	0.0	0.0	300.4
1998	178.3	87.1	0.4	0.2	0.0	0.6	0.0	32.3	0.0	32.3	0.0	0.0	0.0	330.7
1999	174.6	93.9	0.2	0.2	0.0	0.4	0.0	28.9	0.0	29.7	0.0	0.0	0.0	327.6
2000	194.0	123.9	0.5	0.3	0.0	0.7	0.0	24.8	0.0	28.8	0.0	0.0	0.0	372.2
2001	183.7	111.3	13.1	0.2	0.0	13.3	0.0	26.0	0.0	25.2	0.0	0.0	0.0	359.6
2002	160.5	111.8	0.1	0.2	0.0	0.3	0.0	23.1	0.0	23.7	0.0	0.0	0.3	319.6
2003	177.3	118.7	(s)	0.2	0.0	0.2	0.0	18.0	0.0	22.4	0.0	0.0	0.9	337.4
2004	188.7	144.0	0.9	0.1	0.0	1.1	0.0	16.2	0.0	27.3	0.0	0.0	0.6	377.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, New Hampshire

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	216	3	470	18	4,590	1,151	843	532	97	4,940	2,195	22	14,856	0	1,373	--	--	-1,522	--
1965	407	4	424	46	5,912	1,097	758	657	84	5,773	2,416	29	17,195	0	1,053	--	--	-691	--
1970	992	7	541	38	7,681	1,053	777	829	72	8,122	5,520	170	24,802	0	1,239	--	--	-3,670	--
1975	982	8	431	33	7,194	916	463	1,436	70	9,373	4,611	181	24,707	0	1,251	--	--	1,406	--
1980	1,093	9	253	40	5,820	777	340	1,280	83	9,382	5,692	434	24,103	0	1,027	--	--	1,260	--
1985	1,481	11	854	24	5,754	521	902	1,586	76	10,340	3,442	153	23,652	0	1,131	--	--	4,943	--
1990	1,186	14	1,198	21	7,236	647	266	2,122	85	11,778	5,235	145	28,733	4,081	1,881	--	--	-8,990	--
1995	1,355	20	365	22	7,534	333	394	2,285	81	13,495	3,295	127	27,932	8,379	1,370	--	--	-19,636	--
1996	1,377	19	627	20	7,808	360	451	2,466	79	13,939	2,891	2,404	31,045	9,845	1,919	--	--	-24,302	--
1997	1,705	21	412	23	7,802	408	560	2,183	83	14,666	3,115	2,630	31,881	7,979	1,622	--	--	-21,299	--
1998	1,469	19	269	20	8,335	609	697	2,447	87	15,086	3,339	2,613	33,503	8,387	1,597	--	--	-21,301	--
1999	1,344	20	288	28	8,835	820	437	2,407	88	15,659	3,347	2,591	34,498	8,676	1,411	--	--	-19,369	--
2000	1,677	25	333	24	9,403	977	454	2,773	87	15,952	1,425	2,609	34,037	7,922	1,427	--	--	-15,114	--
2001	1,537	23	233	64	9,340	880	425	2,449	80	16,102	1,496	44	31,112	8,693	991	--	--	^R -14,318	--
2002	1,531	25	407	50	10,257	839	312	2,344	79	16,737	1,713	54	32,791	9,295	1,141	--	--	-16,572	--
2003	1,597	54	891	44	10,100	942	481	3,136	73	16,893	3,993	44	36,597	9,276	1,331	--	--	-27,909	--
2004	1,662	61	852	65	10,915	904	588	2,875	74	17,074	4,341	30	37,718	10,178	1,316	--	--	-34,130	--
Trillion Btu																			
1960	5.4	3.0	3.1	0.1	26.7	6.2	4.8	2.1	0.6	25.9	13.8	0.1	83.5	0.0	14.8	10.9	0.0	-5.2	112.3
1965	11.2	4.1	2.8	0.2	34.4	5.9	4.3	2.6	0.5	30.3	15.2	0.2	96.5	0.0	11.0	11.0	0.0	-2.4	131.4
1970	27.1	6.8	3.6	0.2	44.7	5.7	4.4	3.1	0.4	42.7	34.7	0.9	140.5	0.0	13.0	12.3	0.0	-12.5	187.2
1975	26.2	7.7	2.9	0.2	41.9	4.9	2.6	5.3	0.4	49.2	29.0	1.1	137.5	0.0	13.0	12.8	0.0	4.8	202.1
1980	29.3	9.7	1.7	0.2	33.9	4.2	1.9	4.7	0.5	49.3	35.8	2.5	134.6	0.0	10.7	21.7	0.0	4.3	210.3
1985	39.7	10.9	5.7	0.1	33.5	2.8	5.1	5.7	0.5	54.3	21.6	0.8	130.2	0.0	11.8	22.0	3.0	16.9	234.6
1990	31.5	14.5	8.0	0.1	42.2	3.6	1.5	7.7	0.5	61.9	32.9	0.8	159.1	43.2	19.6	^j 27.2	^j 0.2	-30.7	^j 264.5
1995	35.6	20.1	2.4	0.1	43.9	1.9	2.2	8.3	0.5	70.4	20.7	0.7	151.1	88.0	14.1	25.3	4.4	-67.0	271.7
1996	36.1	19.4	4.2	0.1	45.5	2.0	2.6	8.9	0.5	72.7	18.2	12.9	167.5	103.4	19.8	27.7	4.6	-82.9	295.7
1997	44.5	21.2	2.7	0.1	45.4	2.3	3.2	7.9	0.5	76.5	19.6	14.2	172.4	83.7	16.6	25.7	5.8	-72.7	297.3
1998	38.6	19.3	1.8	0.1	48.6	3.5	4.0	8.8	0.5	78.6	21.0	14.1	181.0	88.0	16.3	24.3	6.0	-72.7	300.8
1999	35.4	20.5	1.9	0.1	51.5	4.6	2.5	8.7	0.5	81.6	21.0	13.9	186.4	90.7	14.4	24.5	6.6	-66.1	312.5
2000	44.0	26.4	2.2	0.1	54.8	5.5	2.6	10.0	0.5	83.1	9.0	14.0	181.8	82.6	14.6	24.1	5.4	-51.6	327.4
2001	40.1	24.8	1.5	0.3	54.4	5.0	2.4	8.9	0.5	83.9	9.4	0.2	166.5	90.8	10.2	21.2	2.7	^R -48.9	^R 307.5
2002	39.8	26.4	2.7	0.3	59.7	4.8	1.8	8.5	0.5	87.2	10.8	0.3	176.4	97.0	11.6	18.4	1.1	-56.5	^R 314.4
2003	41.6	^R 54.1	5.9	0.2	58.8	5.3	2.7	11.4	0.4	88.0	25.1	0.2	198.2	96.7	13.6	17.6	0.5	-95.2	^R 327.2
2004	43.4	64.5	5.7	0.3	63.6	5.1	3.3	10.4	0.4	89.0	27.3	0.2	205.4	106.1	13.2	23.0	1.5	-116.5	340.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Hampshire

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	12	2	3,622	803	412	4,837	186	--	--	619	--	1,532	--
1965	7	3	4,724	710	460	5,894	156	--	--	868	--	2,072	--
1970	4	4	6,039	705	474	7,218	136	--	--	1,476	--	3,573	--
1975	1	4	5,709	406	692	6,807	159	--	--	2,148	--	5,165	--
1980	1	4	3,519	322	588	4,430	372	--	--	2,478	--	5,975	--
1985	2	5	3,619	855	856	5,329	268	--	--	2,851	--	6,567	--
1990	2	6	4,034	233	1,449	5,717	184	--	--	3,444	--	7,967	--
1995	1	7	4,448	331	1,662	6,441	201	--	--	3,364	--	7,643	--
1996	1	7	4,643	393	1,834	6,870	209	--	--	3,429	--	7,800	--
1997	1	7	4,635	476	1,607	6,718	152	--	--	3,389	--	7,679	--
1998	(s)	6	4,319	620	1,803	6,742	135	--	--	3,401	--	7,715	--
1999	(s)	7	4,530	377	1,880	6,788	142	--	--	3,640	--	8,329	--
2000	(s)	7	4,577	393	1,799	6,768	153	--	--	3,656	--	8,318	--
2001	(s)	7	4,523	353	1,769	6,645	121	--	--	3,789	--	^R 8,522	--
2002	(s)	7	4,164	262	1,773	6,199	123	--	--	4,003	--	8,967	--
2003	(s)	8	4,962	415	2,456	7,833	129	--	--	4,252	--	9,445	--
2004	(s)	7	5,336	523	2,254	8,113	132	--	--	4,282	--	9,530	--
Trillion Btu													
1960	0.3	1.8	21.1	4.6	1.7	27.3	3.7	0.0	0.0	2.1	35.2	5.2	40.4
1965	0.2	2.7	27.5	4.0	1.8	33.4	3.1	0.0	0.0	3.0	42.3	7.1	49.4
1970	0.1	3.7	35.2	4.0	1.8	41.0	2.7	0.0	0.0	5.0	52.5	12.2	64.7
1975	(s)	3.8	33.3	2.3	2.6	38.1	3.2	0.0	0.0	7.3	52.4	17.6	70.1
1980	(s)	4.4	20.5	1.8	2.2	24.5	7.4	0.0	0.0	8.5	44.8	20.4	65.2
1985	(s)	4.8	21.1	4.8	3.1	29.0	5.4	0.0	0.0	9.7	49.0	22.4	71.4
1990	0.1	6.0	23.5	1.3	5.3	30.1	3.7	^f 0.0	^f (s)	11.8	^f 51.6	27.2	^f 78.8
1995	(s)	6.6	25.9	1.9	6.0	33.8	4.0	0.0	(s)	11.5	56.0	26.1	82.0
1996	(s)	7.1	27.0	2.2	6.6	35.9	4.2	0.0	(s)	11.7	59.0	26.6	85.6
1997	(s)	7.0	27.0	2.7	5.8	35.5	3.0	0.0	(s)	11.6	57.2	26.2	83.4
1998	(s)	6.3	25.2	3.5	6.5	35.2	2.7	0.0	(s)	11.6	55.9	26.3	82.2
1999	(s)	6.7	26.4	2.1	6.8	35.3	2.8	(s)	(s)	12.4	57.3	28.4	85.7
2000	(s)	7.7	26.7	2.2	6.5	35.4	3.1	(s)	(s)	12.5	58.6	28.4	87.0
2001	(s)	7.2	26.3	2.0	6.4	34.7	2.4	(s)	(s)	12.9	57.4	^R 29.1	86.4
2002	(s)	7.4	24.3	1.5	6.4	32.1	2.5	(s)	(s)	13.7	55.7	30.6	86.3
2003	(s)	7.5	28.9	2.4	8.9	40.2	2.6	(s)	(s)	14.5	^R 64.8	32.2	97.1
2004	(s)	7.6	31.1	3.0	8.2	42.2	2.6	(s)	(s)	14.6	67.1	32.5	99.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Hampshire

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	8	1	376	30	73	37	18	534	0	--	--	371	--	917	--
1965	6	1	491	26	81	43	26	667	0	--	--	468	--	1,118	--
1970	3	2	628	26	84	46	71	854	0	--	--	699	--	1,692	--
1975	3	3	593	15	122	52	56	839	0	--	--	883	--	2,125	--
1980	2	4	1,044	9	104	116	372	1,645	0	--	--	1,110	--	2,676	--
1985	6	5	615	41	151	126	87	1,020	0	--	--	1,582	--	3,645	--
1990	10	5	1,415	25	256	74	648	2,417	^g 0	--	--	2,117	--	4,897	--
1995	7	7	1,129	44	293	11	436	1,912	0	--	--	3,357	--	7,625	--
1996	7	7	1,320	42	324	11	447	2,144	0	--	--	3,373	--	7,672	--
1997	5	7	1,325	58	284	11	474	2,151	0	--	--	3,407	--	7,721	--
1998	4	7	1,235	57	318	11	277	1,898	0	--	--	3,478	--	7,889	--
1999	3	7	1,435	42	332	11	126	1,945	0	--	--	3,732	--	8,538	--
2000	4	8	1,903	47	317	14	125	2,407	0	--	--	3,905	--	8,885	--
2001	4	7	1,746	53	312	20	82	2,213	0	--	--	4,044	--	^R 9,095	--
2002	4	9	1,547	35	313	11	123	2,029	0	--	--	4,159	--	9,316	--
2003	2	10	1,949	43	433	11	153	2,590	0	--	--	4,318	--	9,591	--
2004	2	9	1,835	46	398	12	810	3,101	0	--	--	4,363	--	9,711	--

Trillion Btu															
1960	0.2	0.5	2.2	0.2	0.3	0.2	0.1	3.0	0.0	0.1	0.0	1.3	5.0	3.1	8.2
1965	0.1	0.8	2.9	0.1	0.3	0.2	0.2	3.7	0.0	0.1	0.0	1.6	6.3	3.8	10.1
1970	0.1	2.3	3.7	0.1	0.3	0.2	0.4	4.8	0.0	0.1	0.0	2.4	9.6	5.8	15.4
1975	0.1	2.6	3.5	0.1	0.5	0.3	0.4	4.6	0.0	0.1	0.0	3.0	10.4	7.2	17.7
1980	0.1	4.2	6.1	0.1	0.4	0.6	2.3	9.5	0.0	0.2	0.0	3.8	17.7	9.1	26.8
1985	0.1	5.1	3.6	0.2	0.5	0.7	0.5	5.6	0.0	0.1	0.0	5.4	16.3	12.4	28.8
1990	0.2	5.1	8.2	0.1	0.9	0.4	4.1	13.8	^g 0.0	^g 0.4	^g 0.0	7.2	^g 26.8	16.7	^g 43.5
1995	0.2	6.6	6.6	0.2	1.1	0.1	2.7	10.7	0.0	0.6	0.0	11.5	29.4	26.0	55.5
1996	0.2	7.2	7.7	0.2	1.2	0.1	2.8	12.0	0.0	0.6	0.0	11.5	31.5	26.2	57.6
1997	0.1	7.6	7.7	0.3	1.0	0.1	3.0	12.1	0.0	0.5	0.0	11.6	31.9	26.3	58.3
1998	0.1	6.9	7.2	0.3	1.2	0.1	1.7	10.5	0.0	0.4	0.0	11.9	29.8	26.9	56.7
1999	0.1	7.3	8.4	0.2	1.2	0.1	0.8	10.6	0.0	0.5	0.0	12.7	31.2	29.1	60.3
2000	0.1	8.8	11.1	0.3	1.1	0.1	0.8	13.4	0.0	0.5	0.0	13.3	36.1	30.3	66.4
2001	0.1	7.8	10.2	0.3	1.1	0.1	0.5	12.2	0.0	0.4	0.0	13.8	34.3	31.0	^R 65.4
2002	0.1	9.3	9.0	0.2	1.1	0.1	0.8	11.2	0.0	0.4	0.0	14.2	35.2	31.8	67.0
2003	(s)	^R 9.2	11.4	0.2	1.6	0.1	1.0	14.2	0.0	0.5	0.0	14.7	^R 38.6	32.7	^R 71.3
2004	(s)	9.6	10.7	0.3	1.4	0.1	5.1	17.5	0.0	0.4	0.0	14.9	42.5	33.1	75.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Hampshire

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	100	1	470	280	10	47	22	66	727	22	1,644	239	--	--	596	--	1,474	--
1965	36	1	424	421	22	114	24	53	1,046	29	2,132	170	--	--	902	--	2,153	--
1970	9	1	541	511	46	267	17	38	2,842	170	4,432	184	--	--	1,452	--	3,515	--
1975	6	1	431	460	42	617	22	31	2,266	181	4,048	178	--	--	1,839	--	4,423	--
1980	10	1	253	558	9	514	23	27	923	434	2,741	155	--	--	2,406	--	5,801	--
1985	40	1	854	428	6	556	21	61	1,024	153	3,104	155	--	--	2,974	--	6,851	--
1990	28	3	1,198	517	8	402	24	55	522	145	2,871	^g 175	--	--	3,418	--	7,908	--
1995	1	5	365	433	19	312	23	109	1,092	127	2,479	169	--	--	2,286	--	5,194	--
1996	0	5	627	393	17	294	22	108	957	2,404	4,821	206	--	--	2,344	--	5,331	--
1997	0	6	412	311	26	282	23	116	829	2,630	4,629	197	--	--	2,372	--	5,375	--
1998	0	6	269	374	20	323	24	74	715	2,613	4,413	199	--	--	2,425	--	5,501	--
1999	0	6	288	469	19	194	25	151	592	2,591	4,328	200	--	--	2,516	--	5,757	--
2000	0	9	333	580	14	656	24	161	546	2,609	4,924	183	--	--	2,597	--	5,910	--
2001	0	9	233	635	19	368	22	298	619	44	2,238	93	--	--	2,483	--	^R 5,583	--
2002	0	8	407	619	15	216	22	318	493	54	2,145	53	--	--	2,222	--	4,979	--
2003	0	8	891	724	23	240	20	344	384	44	2,670	162	--	--	2,403	--	5,338	--
2004	0	7	852	775	19	215	21	364	433	30	2,708	6	--	--	2,328	--	5,183	--

Trillion Btu																	
1960	2.5	0.7	3.1	1.6	0.1	0.2	0.1	0.3	4.6	0.1	10.2	2.6	7.1	0.0	2.0	25.0	5.0
1965	0.9	0.7	2.8	2.5	0.1	0.5	0.1	0.3	6.6	0.2	13.0	1.8	7.8	0.0	3.1	27.2	7.3
1970	0.2	0.8	3.6	3.0	0.3	1.0	0.1	0.2	17.9	0.9	26.9	1.9	9.5	0.0	5.0	44.4	12.0
1975	0.1	1.1	2.9	2.7	0.2	2.3	0.1	0.2	14.2	1.1	23.7	1.9	9.6	0.0	6.3	42.6	15.1
1980	0.2	1.0	1.7	3.2	0.1	1.9	0.1	0.1	5.8	2.5	15.4	1.6	14.1	0.0	8.2	40.6	19.8
1985	1.0	0.9	5.7	2.5	(s)	2.0	0.1	0.3	6.4	0.8	17.9	1.6	16.5	0.0	10.1	48.1	23.4
1990	0.7	3.3	8.0	3.0	(s)	1.5	0.1	0.3	3.3	0.8	17.0	^g 1.8	^g 7.8	^g 0.0	11.7	^g 42.3	^g 27.0
1995	(s)	4.7	2.4	2.5	0.1	1.1	0.1	0.6	6.9	0.7	14.4	1.7	7.0	0.0	7.8	35.7	17.7
1996	0.0	5.0	4.2	2.3	0.1	1.1	0.1	0.6	6.0	12.9	27.2	2.1	9.0	0.0	8.0	51.3	18.2
1997	0.0	5.9	2.7	1.8	0.1	1.0	0.1	0.6	5.2	14.2	25.9	2.0	7.9	0.0	8.1	49.8	18.3
1998	0.0	5.9	1.8	2.2	0.1	1.2	0.1	0.4	4.5	14.1	24.4	2.0	6.5	0.0	8.3	47.1	18.8
1999	0.0	6.0	1.9	2.7	0.1	0.7	0.1	0.8	3.7	13.9	24.0	2.0	6.5	0.0	8.6	47.1	19.6
2000	0.0	9.0	2.2	3.4	0.1	2.4	0.1	0.8	3.4	14.0	26.4	1.9	5.8	0.0	8.9	52.0	20.2
2001	0.0	9.2	1.5	3.7	0.1	1.3	0.1	1.6	3.9	0.2	12.5	1.0	3.6	0.0	8.5	34.8	^R 19.1
2002	0.0	^R 8.6	2.7	3.6	0.1	0.8	0.1	1.7	3.1	0.3	12.3	0.5	1.5	0.0	7.6	30.6	17.0
2003	0.0	^R 7.5	5.9	4.2	0.1	0.9	0.1	1.8	2.4	0.2	15.7	1.7	1.5	0.0	8.2	^R 34.5	18.2
2004	0.0	7.9	5.7	4.5	0.1	0.8	0.1	1.9	2.7	0.2	16.0	0.1	6.7	0.0	7.9	38.6	17.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Hampshire

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	2	0	18	209	1,151	(s)	74	4,837	49	6,338	0	0	--	0	--
1965	(s)	0	46	178	1,097	1	60	5,677	1	7,061	0	0	--	0	--
1970	(s)	0	38	319	1,053	5	55	8,038	69	9,577	0	0	--	0	--
1975	(s)	0	33	418	903	5	48	9,290	9	10,706	0	0	--	0	--
1980	0	(s)	40	687	771	74	60	9,240	49	10,921	0	0	--	0	--
1985	0	(s)	24	1,061	521	24	55	10,152	0	11,837	^f 0	0	--	0	--
1990	0	(s)	21	1,232	647	15	61	11,649	82	13,706	0	0	--	0	--
1995	0	(s)	22	1,473	333	18	59	13,376	0	15,280	0	0	--	0	--
1996	0	(s)	20	1,424	360	15	57	13,820	5	15,700	0	0	--	0	--
1997	0	(s)	23	1,494	408	10	60	14,540	3	16,537	0	0	--	0	--
1998	0	(s)	20	2,376	609	2	63	15,001	6	18,077	0	0	--	0	--
1999	0	(s)	28	2,365	820	(s)	64	15,496	1	18,773	0	0	--	0	--
2000	0	(s)	24	2,313	977	0	63	15,777	0	19,154	0	0	--	0	--
2001	0	(s)	64	2,399	880	0	57	15,783	0	19,184	0	0	--	0	--
2002	0	(s)	50	3,870	839	41	57	16,408	0	21,265	0	0	--	0	--
2003	0	(s)	44	2,399	942	7	52	16,537	0	19,982	0	0	--	0	--
2004	0	(s)	65	2,797	904	8	53	16,698	0	20,525	0	0	--	0	--

Trillion Btu															
1960	(s)	0.0	0.1	1.2	6.2	(s)	0.5	25.4	0.3	33.6	0.0	0.0	33.7	0.0	33.7
1965	(s)	0.0	0.2	1.0	5.9	(s)	0.4	29.8	(s)	37.3	0.0	0.0	37.3	0.0	37.3
1970	(s)	0.0	0.2	1.9	5.7	(s)	0.3	42.2	0.4	50.7	0.0	0.0	50.7	0.0	50.7
1975	(s)	0.0	0.2	2.4	4.8	(s)	0.3	48.8	0.1	56.6	0.0	0.0	56.6	0.0	56.6
1980	0.0	(s)	0.2	4.0	4.1	0.3	0.4	48.5	0.3	57.8	0.0	0.0	57.9	0.0	57.9
1985	0.0	0.1	0.1	6.2	2.8	0.1	0.3	53.3	0.0	62.9	^f 0.0	0.0	^f 62.9	0.0	^f 62.9
1990	0.0	(s)	0.1	7.2	3.6	0.1	0.4	61.2	0.5	73.0	0.0	0.0	73.0	0.0	73.0
1995	0.0	(s)	0.1	8.6	1.9	0.1	0.4	69.8	0.0	80.8	0.0	0.0	80.8	0.0	80.8
1996	0.0	0.1	0.1	8.3	2.0	0.1	0.3	72.1	(s)	83.0	0.0	0.0	83.0	0.0	83.0
1997	0.0	0.2	0.1	8.7	2.3	(s)	0.4	75.8	(s)	87.3	0.0	0.0	87.5	0.0	87.5
1998	0.0	(s)	0.1	13.8	3.5	(s)	0.4	78.2	(s)	96.0	0.0	0.0	96.0	0.0	96.0
1999	0.0	(s)	0.1	13.8	4.6	(s)	0.4	80.8	(s)	99.7	0.0	0.0	99.7	0.0	99.7
2000	0.0	(s)	0.1	13.5	5.5	0.0	0.4	82.2	0.0	101.7	0.0	0.0	101.7	0.0	101.7
2001	0.0	(s)	0.3	14.0	5.0	0.0	0.3	82.2	0.0	101.9	0.0	0.0	101.9	0.0	101.9
2002	0.0	0.1	0.3	22.5	4.8	0.1	0.3	85.5	0.0	113.5	0.0	0.0	113.6	0.0	113.6
2003	0.0	(s)	0.2	14.0	5.3	(s)	0.3	86.1	0.0	106.0	0.0	0.0	106.0	0.0	106.0
2004	0.0	(s)	0.3	16.3	5.1	(s)	0.3	87.1	0.0	109.2	0.0	0.0	109.2	0.0	109.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, New Hampshire

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	94	0	1,401	102	0	1,504	0	1,134	--	0	0	0	0	--
1965	358	0	1,343	98	0	1,441	0	882	--	0	0	0	0	--
1970	975	0	2,537	184	0	2,721	0	1,056	--	0	0	0	0	--
1975	972	(s)	2,279	27	0	2,306	0	1,073	--	0	0	0	0	--
1980	1,080	0	4,348	18	0	4,366	0	872	--	0	0	0	0	--
1985	1,433	0	2,332	31	0	2,363	0	975	--	0	0	0	893	--
1990	1,146	0	3,983	39	0	4,022	4,081	1,706	--	ⁱ 0	ⁱ 0	ⁱ 0	37	--
1995	1,346	2	1,768	51	0	1,819	8,379	1,201	--	0	0	0	1,276	--
1996	1,369	(s)	1,482	28	0	1,510	9,845	1,713	--	0	0	0	1,325	--
1997	1,699	1	1,809	37	0	1,845	7,979	1,425	--	0	0	0	1,699	--
1998	1,465	(s)	2,341	32	0	2,372	8,387	1,398	--	0	0	0	1,759	--
1999	1,341	1	2,628	36	0	2,664	8,676	1,212	--	0	0	0	1,934	--
2000	1,673	1	754	30	0	784	7,922	1,244	--	0	0	0	1,585	--
2001	1,533	1	795	38	0	832	8,693	898	--	0	0	0	766	--
2002	1,527	1	1,096	57	0	1,153	9,295	1,088	--	0	0	0	326	--
2003	1,595	29	3,456	66	0	3,522	9,276	1,170	--	0	0	0	147	--
2004	1,660	38	3,098	172	0	3,270	10,178	1,310	--	0	0	0	424	--
Trillion Btu														
1960	2.4	0.0	8.8	0.6	0.0	9.4	0.0	12.2	0.0	0.0	0.0	0.0	0.0	24.0
1965	10.0	0.0	8.4	0.6	0.0	9.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	28.2
1970	26.7	0.0	16.0	1.1	0.0	17.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	54.9
1975	26.0	0.2	14.3	0.2	0.0	14.5	0.0	11.2	0.0	0.0	0.0	0.0	0.0	51.8
1980	29.0	0.0	27.3	0.1	0.0	27.4	0.0	9.1	0.0	0.0	0.0	0.0	0.0	65.5
1985	38.6	0.0	14.7	0.2	0.0	14.8	0.0	10.2	0.0	0.0	0.0	0.0	3.0	66.6
1990	30.5	0.0	25.0	0.2	0.0	25.3	43.2	17.7	ⁱ 15.3	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.1	ⁱ 132.2
1995	35.4	2.3	11.1	0.3	0.0	11.4	88.0	12.4	13.7	0.0	0.0	0.0	4.4	167.5
1996	35.9	(s)	9.3	0.2	0.0	9.5	103.4	17.7	14.0	0.0	0.0	0.0	4.5	185.1
1997	44.4	0.6	11.4	0.2	0.0	11.6	83.7	14.6	14.2	0.0	0.0	0.0	5.8	174.8
1998	38.5	0.2	14.7	0.2	0.0	14.9	88.0	14.3	14.6	0.0	0.0	0.0	6.0	176.4
1999	35.3	0.6	16.5	0.2	0.0	16.7	90.7	12.4	14.7	0.0	0.0	0.0	6.6	177.0
2000	43.9	0.8	4.7	0.2	0.0	4.9	82.6	12.7	14.7	0.0	0.0	0.0	5.4	165.1
2001	40.0	0.6	5.0	0.2	0.0	5.2	90.8	9.3	14.7	0.0	0.0	0.0	2.6	163.2
2002	39.7	1.1	6.9	0.3	0.0	7.2	97.0	11.1	14.0	0.0	0.0	0.0	1.1	171.3
2003	41.6	29.9	21.7	0.4	0.0	22.1	96.7	12.0	13.1	0.0	0.0	0.0	0.5	215.8
2004	43.4	39.4	19.5	1.0	0.0	20.5	106.1	13.1	13.2	0.0	0.0	0.0	1.4	237.2

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, New Jersey

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	6,424	139	4,657	1,147	46,051	2,125	2,468	3,213	1,879	48,706	42,854	12,834	165,934	0	45	--	--	3,785	--
1965	9,034	210	5,340	1,153	53,611	5,280	2,096	4,268	2,052	55,149	42,900	20,232	192,082	0	-31	--	--	5,290	--
1970	4,946	323	5,828	160	63,391	6,705	1,829	6,748	1,952	66,231	80,770	24,746	258,360	3,454	-403	--	--	5,822	--
1975	2,397	244	5,012	92	59,630	6,267	1,211	7,328	1,741	77,617	49,463	25,281	233,642	3,146	-272	--	--	69,688	--
1980	2,634	340	4,369	83	52,854	8,781	1,694	7,383	2,371	72,740	53,617	29,901	233,792	7,627	-282	--	--	73,410	--
1985	3,943	379	4,733	184	43,747	43,910	1,404	7,184	2,158	75,405	23,986	22,893	225,604	17,770	-244	--	--	67,143	--
1990	3,029	446	3,586	119	38,999	46,377	729	4,295	2,428	78,343	15,194	31,916	221,986	23,770	31	--	--	85,153	--
1995	3,015	697	6,151	145	34,080	50,059	1,216	4,062	2,316	82,325	12,526	32,076	224,956	16,806	11	--	--	86,415	--
1996	3,323	701	5,373	114	35,370	43,002	841	3,813	2,248	86,044	9,709	26,011	212,526	11,028	19	--	--	113,511	--
1997	3,841	717	8,214	133	35,271	38,738	1,701	4,268	2,375	88,850	9,165	27,284	215,999	13,908	18	--	--	94,600	--
1998	3,299	680	7,620	132	34,192	37,069	1,839	3,717	2,486	91,734	8,669	25,018	212,477	27,132	21	--	--	64,064	--
1999	3,405	716	10,741	106	36,449	36,343	1,725	7,569	2,512	91,783	8,393	25,874	221,494	28,971	17	--	--	65,427	--
2000	4,395	605	8,814	90	37,034	36,781	1,918	6,801	2,474	94,729	14,032	23,940	226,613	28,578	14	--	--	57,002	--
2001	4,315	565	9,984	61	38,612	33,952	2,126	7,632	2,267	94,145	12,642	30,751	232,172	30,469	18	--	--	^R 61,149	--
2002	4,079	599	11,010	214	35,937	28,933	881	7,526	2,240	96,329	15,862	30,569	229,503	30,866	12	--	--	58,794	--
2003	4,191	613	5,922	215	38,408	25,901	824	3,539	2,071	98,327	14,100	33,631	222,939	29,709	39	--	--	^R 74,917	--
2004	4,440	623	5,167	114	40,318	25,038	1,113	3,045	2,098	103,779	14,054	35,106	229,832	27,082	38	--	--	83,039	--
Trillion Btu																			
1960	168.8	144.1	30.9	5.8	268.2	11.5	14.0	12.9	11.4	255.9	269.4	76.3	956.3	0.0	0.5	20.0	0.0	12.9	1,302.6
1965	236.6	219.2	35.4	5.8	312.3	29.4	11.9	17.1	12.4	289.7	269.7	115.9	1,099.7	0.0	-0.3	24.0	0.0	18.1	1,597.3
1970	123.3	331.2	38.7	0.8	369.3	37.5	10.4	25.5	11.8	347.9	507.8	140.1	1,489.8	37.9	-4.2	30.1	0.0	19.9	2,028.0
1975	60.5	251.7	33.3	0.5	347.3	35.1	6.9	27.2	10.6	407.7	311.0	144.1	1,323.6	34.6	-2.8	33.8	0.0	237.8	1,939.1
1980	68.7	351.0	29.0	0.4	307.9	49.3	9.6	27.1	14.4	382.1	337.1	168.6	1,325.5	83.2	-2.9	51.3	0.0	250.5	2,127.3
1985	103.3	389.1	31.4	0.9	254.8	248.6	8.0	25.9	13.1	396.1	150.8	128.5	1,258.1	188.8	-2.6	52.2	0.0	229.1	2,218.0
1990	80.8	458.1	23.8	0.6	227.2	262.6	4.1	15.6	14.7	411.5	95.5	178.8	1,234.5	251.5	0.3	^j 25.4	^j 0.4	290.5	^j 2,341.5
1995	79.9	720.7	40.8	0.7	198.5	283.8	6.9	14.7	14.0	429.3	78.8	180.3	1,247.9	176.6	0.1	42.5	0.6	294.8	2,563.1
1996	86.6	725.7	35.7	0.6	206.0	243.8	4.8	13.8	13.6	448.8	61.0	148.6	1,176.7	115.8	0.2	40.4	0.6	387.3	2,533.4
1997	99.9	742.0	54.5	0.7	205.5	219.6	9.6	15.4	14.4	463.2	57.6	156.1	1,196.6	146.0	0.2	38.5	0.6	322.8	2,546.5
1998	86.2	705.5	50.6	0.7	199.2	210.2	10.4	13.4	15.1	478.1	54.5	142.6	1,174.7	284.6	0.2	37.9	0.7	218.6	2,508.5
1999	89.0	743.6	71.3	0.5	212.3	206.1	9.8	27.4	15.2	478.3	52.8	147.1	1,220.7	302.7	0.2	39.2	0.7	223.2	2,619.3
2000	114.7	626.5	58.5	0.5	215.7	208.5	10.9	24.5	15.0	493.5	88.2	135.7	1,251.1	298.0	0.1	39.6	0.7	194.5	2,525.3
2001	^R 112.2	585.8	66.3	0.3	224.9	192.5	12.1	27.6	13.7	490.5	79.5	173.9	1,281.3	318.3	0.2	36.9	0.7	^R 208.6	^R 2,544.1
2002	104.8	622.5	73.1	1.1	209.3	164.1	5.0	27.2	13.6	501.7	99.7	172.7	1,267.4	322.2	0.1	36.9	1.0	200.6	2,555.7
2003	106.9	639.2	39.3	1.1	223.7	146.9	4.7	12.8	12.6	512.0	88.6	190.9	1,232.6	309.6	0.4	32.8	1.3	255.6	2,578.3
2004	112.7	647.1	34.3	0.6	234.9	142.0	6.3	11.0	12.7	541.2	88.4	198.7	1,270.0	282.4	0.4	32.8	1.5	283.3	2,630.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Jersey

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	266	75	25,587	1,200	737	27,524	353	--	--	5,080	--	12,563	--
1965	159	114	29,038	969	672	30,679	338	--	--	7,410	--	17,695	--
1970	84	140	32,933	769	834	34,536	503	--	--	12,131	--	29,362	--
1975	24	129	30,655	431	964	32,050	550	--	--	14,495	--	34,859	--
1980	12	136	23,976	262	777	25,015	1,609	--	--	16,329	--	39,372	--
1985	24	151	20,180	907	918	22,005	1,502	--	--	17,177	--	39,570	--
1990	3	172	13,661	295	899	14,855	809	--	--	20,498	--	47,417	--
1995	1	194	12,030	236	1,548	13,814	726	--	--	22,470	--	51,043	--
1996	1	223	12,169	284	1,685	14,137	754	--	--	22,632	--	51,479	--
1997	1	217	11,361	292	1,394	13,046	427	--	--	22,286	--	50,506	--
1998	1	197	9,127	308	1,755	11,191	380	--	--	23,191	--	52,608	--
1999	1	209	9,771	270	1,876	11,916	400	--	--	24,551	--	56,172	--
2000	1	220	10,228	299	1,973	12,500	430	--	--	24,547	--	55,849	--
2001	(s)	215	9,469	410	1,993	11,872	395	--	--	25,491	--	^R 57,332	--
2002	(s)	210	9,050	143	1,583	10,775	401	--	--	27,171	--	60,871	--
2003	1	244	10,302	138	2,094	12,534	422	--	--	27,367	--	^R 60,792	--
2004	1	233	9,909	155	1,690	11,754	433	--	--	28,020	--	62,368	--
Trillion Btu													
1960	6.6	77.7	149.0	6.8	3.0	158.8	7.1	0.0	0.0	17.3	267.5	42.9	310.4
1965	3.9	119.6	169.1	5.5	2.7	177.3	6.8	0.0	0.0	25.3	332.8	60.4	393.2
1970	2.0	143.9	191.8	4.4	3.2	199.3	10.1	0.0	0.0	41.4	396.6	100.2	496.8
1975	0.5	133.4	178.6	2.4	3.6	184.6	11.0	0.0	0.0	49.5	379.0	118.9	498.0
1980	0.3	140.9	139.7	1.5	2.9	144.0	32.2	0.0	0.0	55.7	373.1	134.3	507.4
1985	0.6	154.3	117.5	5.1	3.3	126.0	30.0	0.0	0.0	58.6	369.4	135.0	504.5
1990	0.1	175.8	79.6	1.7	3.3	84.5	16.2	^f 0.1	^f 0.4	69.9	^f 347.0	161.8	^f 508.8
1995	(s)	201.2	70.1	1.3	5.6	77.0	14.5	0.1	0.5	76.7	370.0	174.2	544.1
1996	(s)	230.9	70.9	1.6	6.1	78.6	15.1	0.1	0.5	77.2	402.4	175.6	578.1
1997	(s)	224.5	66.2	1.7	5.0	72.9	8.5	0.1	0.5	76.0	382.6	172.3	554.9
1998	(s)	204.0	53.2	1.7	6.3	61.3	7.6	0.1	0.6	79.1	352.6	179.5	532.1
1999	(s)	217.8	56.9	1.5	6.8	65.2	8.0	0.1	0.6	83.8	375.4	191.7	567.1
2000	(s)	227.8	59.6	1.7	7.1	68.4	8.6	0.1	0.6	83.8	389.2	190.6	579.8
2001	(s)	223.3	55.2	2.3	7.2	64.7	7.9	0.1	0.6	87.0	383.5	^R 195.6	^R 579.1
2002	(s)	218.9	52.7	0.8	5.7	59.2	8.0	0.1	0.9	92.7	379.9	207.7	587.6
2003	(s)	254.7	60.0	0.8	7.6	68.4	8.4	0.2	1.1	93.4	426.3	207.4	633.7
2004	(s)	242.4	57.7	0.9	6.1	64.7	8.7	0.2	1.4	95.6	412.9	212.8	625.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Jersey

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	185	10	8,640	466	130	308	7,117	16,661	0	--	--	4,391	--	10,859	--
1965	120	20	9,805	377	119	420	7,473	18,194	0	--	--	6,945	--	16,584	--
1970	66	56	11,121	299	147	613	11,415	23,595	0	--	--	10,799	--	26,138	--
1975	56	53	10,351	168	170	634	6,484	17,807	0	--	--	13,849	--	33,304	--
1980	44	60	9,167	39	137	297	10,950	20,590	0	--	--	16,878	--	40,695	--
1985	84	83	6,296	77	162	660	3,128	10,323	0	--	--	20,903	--	48,152	--
1990	10	116	8,217	178	159	754	1,460	10,768	^g 0	--	--	27,201	--	62,922	--
1995	6	139	3,467	566	273	78	1,238	5,622	0	--	--	30,170	--	68,535	--
1996	7	150	4,944	243	297	77	1,281	6,843	0	--	--	30,520	--	69,420	--
1997	5	169	3,406	750	246	79	794	5,274	0	--	--	30,127	--	68,276	--
1998	4	147	3,061	1,084	310	76	489	5,021	0	--	--	31,489	--	71,432	--
1999	4	164	4,121	1,244	331	75	591	6,362	0	--	--	32,897	--	75,267	--
2000	4	159	3,340	1,189	348	74	479	5,430	0	--	--	33,474	--	76,159	--
2001	4	131	3,394	1,248	352	77	385	5,455	0	--	--	34,743	--	^R 78,138	--
2002	4	146	2,414	452	279	73	279	3,497	0	--	--	35,727	--	80,039	--
2003	3	160	3,052	247	370	74	442	4,184	0	--	--	36,616	--	81,338	--
2004	4	169	2,680	276	298	72	347	3,673	0	--	--	38,074	--	84,745	--
Trillion Btu															
1960	4.6	10.7	50.3	2.6	0.5	1.6	44.7	99.9	0.0	0.1	0.0	15.0	130.2	37.1	167.3
1965	2.9	21.1	57.1	2.1	0.5	2.2	47.0	108.9	0.0	0.1	0.0	23.7	156.8	56.6	213.4
1970	1.6	57.4	64.8	1.7	0.6	3.2	71.8	142.0	0.0	0.2	0.0	36.8	238.0	89.2	327.2
1975	1.2	55.0	60.3	1.0	0.6	3.3	40.8	106.0	0.0	0.2	0.0	47.3	209.7	113.6	323.3
1980	1.0	62.5	53.4	0.2	0.5	1.6	68.8	124.5	0.0	0.8	0.0	57.6	246.4	138.9	385.2
1985	2.0	85.3	36.7	0.4	0.6	3.5	19.7	60.8	0.0	0.7	0.0	71.3	220.1	164.3	384.4
1990	0.3	118.4	47.9	1.0	0.6	4.0	9.2	62.6	^g 0.0	^g 1.8	^g 0.0	92.8	^g 275.9	214.7	^g 490.6
1995	0.2	143.8	20.2	3.2	1.0	0.4	7.8	32.6	0.0	2.0	0.0	102.9	281.5	233.8	515.3
1996	0.2	156.0	28.8	1.4	1.1	0.4	8.1	39.7	0.0	2.1	0.0	104.1	302.2	236.9	539.0
1997	0.1	174.7	19.8	4.3	0.9	0.4	5.0	30.4	0.0	1.6	0.0	102.8	309.5	233.0	542.5
1998	0.1	152.1	17.8	6.1	1.1	0.4	3.1	28.6	0.0	1.3	0.0	107.4	289.5	243.7	533.2
1999	0.1	170.3	24.0	7.1	1.2	0.4	3.7	36.4	0.0	1.4	0.0	112.2	320.4	256.8	577.2
2000	0.1	164.3	19.5	6.7	1.3	0.4	3.0	30.8	0.0	1.4	0.0	114.2	310.9	259.9	570.7
2001	0.1	136.5	19.8	7.1	1.3	0.4	2.4	30.9	0.0	1.4	0.0	118.5	287.5	^R 266.6	^R 554.1
2002	0.1	152.5	14.1	2.6	1.0	0.4	1.8	19.8	0.0	1.5	0.0	121.9	295.7	273.1	568.8
2003	0.1	166.8	17.8	1.4	1.3	0.4	2.8	23.7	0.0	1.5	0.0	124.9	317.1	277.5	594.6
2004	0.1	175.8	15.6	1.6	1.1	0.4	2.2	20.8	0.0	1.5	0.0	129.9	328.1	289.2	617.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Jersey

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	2,368	28	4,657	6,719	802	2,340	1,194	612	18,822	12,834	47,980	10	--	--	8,021	--	19,838	--
1965	1,921	52	5,340	8,423	750	3,438	1,433	532	17,049	20,232	57,196	4	--	--	11,519	--	27,507	--
1970	740	80	5,828	9,560	761	5,665	1,379	401	22,609	24,746	70,948	4	--	--	15,215	--	36,827	--
1975	67	52	5,012	7,963	612	6,096	1,136	233	14,809	25,281	61,142	4	--	--	14,562	--	35,020	--
1980	33	63	4,369	7,339	1,393	6,429	1,658	147	17,694	29,901	68,931	3	--	--	16,345	--	39,410	--
1985	359	81	4,733	2,835	420	5,994	1,509	462	4,851	22,893	43,697	3	--	--	15,657	--	36,068	--
1990	276	90	3,586	3,453	256	3,163	1,698	460	3,622	31,916	48,154	^g 0	--	--	15,041	--	34,793	--
1995	13	209	6,151	1,994	414	2,172	1,620	602	1,901	32,076	46,931	0	--	--	13,989	--	31,777	--
1996	7	196	5,373	1,927	314	1,773	1,572	597	1,660	26,011	39,228	0	--	--	13,603	--	30,940	--
1997	10	193	8,214	1,789	658	2,523	1,661	628	1,356	27,284	44,113	0	--	--	13,369	--	30,297	--
1998	10	199	7,620	2,002	447	1,599	1,739	509	855	25,018	39,789	0	--	--	13,339	--	30,260	--
1999	8	197	10,741	2,076	211	5,352	1,757	242	633	25,874	46,887	0	--	--	13,121	--	30,022	--
2000	8	88	8,814	1,795	430	4,457	1,731	259	590	23,940	42,016	0	--	--	11,812	--	26,873	--
2001	6	86	9,984	2,434	468	5,250	1,586	962	600	30,751	52,035	0	--	--	12,707	-- ^R	28,578	--
2002	5	80	11,010	2,149	286	5,479	1,567	992	292	30,569	52,344	0	--	--	11,476	--	25,709	--
2003	7	77	5,922	2,088	439	940	1,448	1,074	506	33,631	46,050	0	--	--	12,215	--	27,133	--
2004	6	78	5,167	3,135	682	984	1,467	1,211	539	35,106	48,291	1	--	--	11,210	--	24,951	--
Trillion Btu																		
1960	61.2	28.7	30.9	39.1	4.5	9.4	7.2	3.2	118.3	76.3	289.1	0.1	12.8	0.0	27.4	419.3	67.7	487.0
1965	49.0	54.6	35.4	49.1	4.3	13.8	8.7	2.8	107.2	115.9	337.1	(s)	17.1	0.0	39.3	497.2	93.9	591.1
1970	18.6	81.9	38.7	55.7	4.3	21.4	8.4	2.1	142.1	140.1	412.8	(s)	19.9	0.0	51.9	585.2	125.7	710.8
1975	1.6	54.0	33.3	46.4	3.5	22.6	6.9	1.2	93.1	144.1	351.1	(s)	22.6	0.0	49.7	478.9	119.5	598.4
1980	0.8	64.9	29.0	42.7	7.9	23.6	10.1	0.8	111.2	168.6	394.0	(s)	18.3	0.0	55.8	533.8	134.5	668.3
1985	8.8	83.0	31.4	16.5	2.4	21.6	9.2	2.4	30.5	128.5	242.5	(s)	21.5	0.0	53.4	409.2	123.1	532.3
1990	7.0	92.6	23.8	20.1	1.5	11.5	10.3	2.4	22.8	178.8	271.1	^g 0.0	^g 3.1	^g 0.0	51.3	^g 425.1	118.7	^g 543.8
1995	0.3	216.2	40.8	11.6	2.3	7.9	9.8	3.1	12.0	180.3	267.8	0.0	4.5	0.0	47.7	536.5	108.4	644.9
1996	0.2	202.8	35.7	11.2	1.8	6.4	9.5	3.1	10.4	148.6	226.7	0.0	6.4	0.0	46.4	482.6	105.6	588.2
1997	0.3	199.7	54.5	10.4	3.7	9.1	10.1	3.3	8.5	156.1	255.7	0.0	6.7	0.0	45.6	508.0	103.4	611.4
1998	0.2	206.3	50.6	11.7	2.5	5.8	10.5	2.7	5.4	142.6	231.7	0.0	5.6	0.0	45.5	489.3	103.2	592.5
1999	0.2	205.1	71.3	12.1	1.2	19.4	10.7	1.3	4.0	147.1	266.9	0.0	5.9	0.0	44.8	522.8	102.4	625.3
2000	0.2	91.6	58.5	10.5	2.4	16.1	10.5	1.4	3.7	135.7	238.8	0.0	5.6	0.0	40.3	376.4	91.7	468.1
2001	0.1	89.4	66.3	14.2	2.7	19.0	9.6	5.0	3.8	173.9	294.4	0.0	3.7	0.0	43.4	431.0	^R 97.5	^R 528.5
2002	0.1	84.0	73.1	12.5	1.6	19.8	9.5	5.2	1.8	172.7	296.2	0.0	2.6	0.0	39.2	422.1	87.7	509.8
2003	0.2	80.9	39.3	12.2	2.5	3.4	8.8	5.6	3.2	190.9	265.8	0.0	2.3	0.0	41.7	390.9	92.6	483.5
2004	0.2	80.6	34.3	18.3	3.9	3.6	8.9	6.3	3.4	198.7	277.2	(s)	2.8	0.0	38.2	399.1	85.1	484.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Jersey

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	Total ^e
1960	41	1	1,147	4,748	2,125	6	685	47,786	5,754	62,252	0	4	--	9	--
1965	6	(s)	1,153	5,964	5,280	40	619	54,198	6,431	73,684	0	4	--	10	--
1970	1	1	160	8,558	6,705	102	574	65,217	9,081	90,396	0	39	--	95	--
1975	(s)	(s)	92	8,907	5,777	98	605	76,750	4,246	96,475	0	43	--	104	--
1980	0	(s)	83	10,243	8,088	40	713	72,296	12,053	103,516	0	33	--	80	--
1985	0	2	184	13,766	43,910	111	649	74,283	11,010	143,911	^f 0	95	--	220	--
1990	0	3	119	12,982	46,377	75	730	77,129	7,273	144,684	0	117	--	271	--
1995	0	3	145	15,309	50,059	69	696	81,644	8,049	155,972	292	125	--	284	--
1996	0	3	114	15,705	43,002	58	676	85,370	6,009	150,933	246	135	--	307	--
1997	0	3	133	18,239	38,738	106	714	88,143	6,663	152,736	279	132	--	299	--
1998	0	3	132	19,482	37,069	53	747	91,149	6,658	155,290	219	143	--	324	--
1999	0	4	106	19,768	36,343	10	755	91,466	6,478	154,925	187	134	--	307	--
2000	0	3	90	20,536	36,781	22	744	94,396	12,226	164,795	221	144	--	328	--
2001	0	4	61	21,971	33,952	37	681	93,107	10,397	160,206	297	237	--	^R 533	--
2002	0	2	214	22,039	28,933	185	673	95,265	14,440	161,750	25	228	--	511	--
2003	0	2	215	22,189	25,901	135	622	97,179	11,941	158,183	26	184	--	410	--
2004	0	2	114	23,903	25,038	74	631	102,497	12,328	164,584	144	290	--	645	--
Trillion Btu															
1960	1.0	0.6	5.8	27.7	11.5	(s)	4.2	251.0	36.2	336.3	0.0	(s)	337.9	(s)	338.0
1965	0.2	0.5	5.8	34.7	29.4	0.2	3.8	284.7	40.4	399.0	0.0	(s)	399.6	(s)	399.7
1970	(s)	1.0	0.8	49.8	37.5	0.4	3.5	342.6	57.1	491.7	0.0	0.1	492.8	0.3	493.1
1975	(s)	0.4	0.5	51.9	32.3	0.4	3.7	403.2	26.7	518.6	0.0	0.1	519.1	0.4	519.5
1980	0.0	0.5	0.4	59.7	45.4	0.1	4.3	379.8	75.8	565.5	0.0	0.1	566.1	0.3	566.3
1985	0.0	2.3	0.9	80.2	248.6	0.4	3.9	390.2	69.2	793.4	^f 0.0	0.3	^f 796.1	0.8	^f 796.8
1990	0.0	2.7	0.6	75.6	262.6	0.3	4.4	405.2	45.7	794.4	0.0	0.4	797.5	0.9	798.4
1995	0.0	2.7	0.7	89.2	283.8	0.2	4.2	425.8	50.6	854.6	1.0	0.4	857.7	1.0	858.6
1996	0.0	3.3	0.6	91.5	243.8	0.2	4.1	445.3	37.8	823.3	0.9	0.5	827.0	1.0	828.1
1997	0.0	3.6	0.7	106.2	219.6	0.4	4.3	459.5	41.9	832.6	1.0	0.5	836.7	1.0	837.7
1998	0.0	3.0	0.7	113.5	210.2	0.2	4.5	475.1	41.9	846.0	0.8	0.5	849.5	1.1	850.6
1999	0.0	4.5	0.5	115.1	206.1	(s)	4.6	476.6	40.7	843.7	0.7	0.5	848.7	1.0	849.7
2000	0.0	3.3	0.5	119.6	208.5	0.1	4.5	491.8	76.9	901.9	0.8	0.5	905.6	1.1	906.8
2001	0.0	4.2	0.3	128.0	192.5	0.1	4.1	485.1	65.4	875.5	1.1	0.8	880.5	1.8	882.3
2002	0.0	1.8	1.1	128.4	164.1	0.7	4.1	496.1	90.8	885.2	0.1	0.8	887.8	1.7	889.5
2003	0.0	2.0	1.1	129.3	146.9	0.5	3.8	506.0	75.1	862.5	0.1	0.6	865.2	1.4	866.6
2004	0.0	2.0	0.6	139.2	142.0	0.3	3.8	534.5	77.5	897.9	0.5	1.0	900.8	2.2	903.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, New Jersey

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	3,565	25	11,160	357	0	11,518	0	35	--	0	0	0	0	--
1965	6,829	22	11,947	382	0	12,329	0	-35	--	0	0	0	0	--
1970	4,054	46	37,665	1,220	0	38,885	3,454	-407	--	0	0	0	0	--
1975	2,250	9	23,924	2,244	0	26,168	3,146	-276	--	0	0	0	0	--
1980	2,545	80	12,919	2,821	0	15,740	7,627	-286	--	0	0	0	0	--
1985	3,476	61	4,997	671	0	5,668	17,770	-247	--	0	0	0	0	--
1990	2,740	66	2,839	686	0	3,525	23,770	31	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	2,996	152	1,339	1,279	0	2,618	16,806	11	--	0	0	0	0	--
1996	3,308	129	759	626	0	1,385	11,028	19	--	0	0	0	0	--
1997	3,824	135	352	477	0	829	13,908	18	--	0	0	0	0	--
1998	3,284	135	668	519	0	1,187	27,132	21	--	0	0	0	0	--
1999	3,392	141	691	712	0	1,404	28,971	17	--	0	0	0	0	--
2000	4,382	135	737	1,135	0	1,872	28,578	14	--	0	0	0	0	--
2001	4,305	128	1,261	1,343	0	2,604	30,469	18	--	0	0	0	0	--
2002	4,070	160	852	286	0	1,138	30,866	12	--	0	0	0	0	--
2003	4,180	130	1,212	776	0	1,988	29,709	39	--	0	0	0	0	--
2004	4,429	141	840	691	0	1,531	27,082	36	--	0	0	0	(s)	--
Trillion Btu														
1960	95.4	26.4	70.2	2.1	0.0	72.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	194.4
1965	180.7	23.4	75.1	2.2	0.0	77.3	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	281.1
1970	101.1	47.1	236.8	7.1	0.0	243.9	37.9	-4.3	0.0	0.0	0.0	0.0	0.0	425.8
1975	57.2	8.8	150.4	13.0	0.0	163.4	34.6	-2.9	0.0	0.0	0.0	0.0	0.0	261.2
1980	66.6	82.2	81.2	16.3	0.0	97.5	83.2	-3.0	0.0	0.0	0.0	0.0	0.0	326.6
1985	92.0	64.2	31.4	3.9	0.0	35.3	188.8	-2.6	0.0	0.0	0.0	0.0	0.0	377.7
1990	73.5	68.5	17.8	4.0	0.0	21.8	251.5	0.3	ⁱ 4.3	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 420.0
1995	79.4	156.9	8.4	7.4	0.0	15.9	176.6	0.1	21.4	0.0	0.0	0.0	0.0	450.3
1996	86.2	132.6	4.8	3.6	0.0	8.4	115.8	0.2	16.8	0.0	0.0	0.0	0.0	360.1
1997	99.5	139.5	2.2	2.8	0.0	5.0	146.0	0.2	21.7	0.0	0.0	0.0	0.0	411.8
1998	85.9	140.1	4.2	3.0	0.0	7.2	284.6	0.2	23.5	0.0	0.0	0.0	0.0	541.6
1999	88.7	145.9	4.3	4.1	0.0	8.5	302.7	0.2	23.9	0.0	0.0	0.0	0.0	570.0
2000	114.4	139.6	4.6	6.6	0.0	11.2	298.0	0.1	24.0	0.0	0.0	0.0	0.0	587.5
2001	^R 112.0	132.5	7.9	7.8	0.0	15.8	318.3	0.2	23.8	0.0	0.0	0.0	0.0	^R 602.6
2002	104.6	165.4	5.4	1.7	0.0	7.0	322.2	0.1	24.8	0.0	0.0	0.0	0.0	624.2
2003	106.6	134.7	7.6	4.5	0.0	12.1	309.6	0.4	20.5	0.0	0.0	0.0	0.0	583.9
2004	112.4	146.4	5.3	4.0	0.0	9.3	282.4	0.4	19.8	0.0	0.0	0.0	(s)	570.7

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, New Mexico

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	174	200	964	201	3,067	2,186	485	3,014	226	9,555	191	437	20,325	0	69	--	--	902	--
1965	2,450	202	1,388	239	3,895	2,530	376	3,334	237	10,806	699	624	24,127	0	43	--	--	-14,476	--
1970	5,529	270	1,208	111	5,410	3,110	994	4,413	270	13,146	220	717	29,601	0	66	--	--	-27,689	--
1975	7,425	240	1,632	81	6,717	2,667	654	3,865	317	16,493	3,046	1,482	36,955	0	63	--	--	-39,307	--
1980	11,458	222	1,138	167	7,967	2,673	1,339	4,710	332	16,913	1,033	1,664	37,937	0	94	--	--	-47,160	--
1985	14,589	151	1,501	95	7,381	2,873	191	3,002	302	17,905	825	987	35,061	0	128	--	--	-47,755	--
1990	15,111	239	1,451	86	7,973	2,912	56	7,943	340	18,647	148	1,574	41,129	0	205	--	--	-43,228	--
1995	15,221	215	1,859	53	5,067	2,222	16	8,191	324	21,014	179	2,003	40,928	0	264	--	--	-36,888	--
1996	15,297	227	1,648	101	10,049	1,615	17	2,015	314	20,247	195	4,490	40,691	0	211	--	--	-36,099	--
1997	15,886	257	1,233	102	10,797	1,751	14	2,667	332	21,505	158	4,723	43,283	0	259	--	--	-39,451	--
1998	15,963	246	2,048	61	11,377	2,196	17	2,801	348	21,918	136	4,420	45,322	0	236	--	--	-39,279	--
1999	16,303	236	1,902	70	11,605	2,723	47	4,115	351	22,189	141	4,418	47,562	0	243	--	--	-40,975	--
2000	16,585	266	1,775	73	11,937	3,017	29	2,856	346	21,247	136	4,339	45,755	0	221	--	--	-41,795	--
2001	16,031	266	791	79	12,419	3,065	28	4,411	317	21,655	96	2,461	45,322	0	237	--	--	R -40,062	--
2002	15,275	235	1,994	74	12,396	2,510	17	3,587	313	22,357	131	2,376	45,756	0	265	--	--	-32,407	--
2003	16,625	R 234	1,978	64	13,009	2,438	12	2,842	290	22,669	157	2,612	46,071	0	171	--	--	-39,035	--
2004	16,745	223	1,990	90	14,151	2,274	10	2,769	293	23,248	105	2,911	47,841	0	139	--	--	-37,351	--
Trillion Btu																			
1960	4.1	207.3	6.4	1.0	17.9	11.7	2.7	12.1	1.4	50.2	1.2	2.6	107.2	0.0	0.7	6.6	0.0	3.1	329.0
1965	44.3	224.3	9.2	1.2	22.7	13.7	2.1	13.4	1.4	56.8	4.4	3.7	128.6	0.0	0.4	5.6	0.0	-49.4	353.8
1970	99.4	292.5	8.0	0.6	31.5	17.0	5.6	16.7	1.6	69.1	1.4	4.3	155.8	0.0	0.7	4.9	0.0	-94.5	458.8
1975	132.5	255.6	10.8	0.4	39.1	14.6	3.7	14.4	1.9	86.6	19.1	8.9	199.7	0.0	0.7	5.3	0.0	-134.1	459.7
1980	202.9	231.3	7.6	0.8	46.4	14.6	7.6	17.3	2.0	88.8	6.5	10.0	201.6	0.0	1.0	5.2	0.0	-160.9	481.1
1985	268.4	162.3	10.0	0.5	43.0	15.7	1.1	10.8	1.8	94.1	5.2	6.1	188.2	0.0	1.3	7.9	0.0	-162.9	465.7
1990	275.7	251.5	9.6	0.4	46.4	16.0	0.3	28.8	2.1	98.0	0.9	9.4	212.0	0.0	2.1	3.9	0.7	-147.5	599.6
1995	275.2	219.5	12.3	0.3	29.5	12.6	0.1	29.7	2.0	109.6	1.1	11.9	209.0	0.0	2.7	4.0	0.8	-125.9	585.3
1996	279.1	233.6	10.9	0.5	58.5	9.2	0.1	7.3	1.9	105.6	1.2	25.3	220.6	0.0	2.2	4.0	0.8	-123.2	617.1
1997	288.5	261.9	8.2	0.5	62.9	9.9	0.1	9.6	2.0	112.1	1.0	26.7	233.0	0.0	2.6	4.5	0.7	-134.6	656.7
1998	290.4	241.4	13.6	0.3	66.3	12.5	0.1	10.1	2.1	114.2	0.9	24.9	245.0	0.0	2.4	4.0	0.7	-134.0	649.9
1999	298.1	231.3	12.6	0.4	67.6	15.4	0.3	14.9	2.1	115.6	0.9	24.8	254.6	0.0	2.5	4.3	1.2	-139.8	652.1
2000	305.5	259.0	11.8	0.4	69.5	17.1	0.2	10.3	2.1	110.7	0.9	24.3	247.2	0.0	2.3	4.5	1.1	-142.6	677.1
2001	R 297.1	259.6	5.3	0.4	72.3	17.4	0.2	15.9	1.9	112.8	0.6	14.4	241.3	0.0	2.5	3.0	1.1	R -136.7	R 667.8
2002	284.1	237.4	13.2	0.4	72.2	14.2	0.1	13.0	1.9	116.4	0.8	13.9	246.2	0.0	2.7	2.9	1.2	-110.6	664.0
2003	305.6	R 236.2	13.1	0.3	75.8	13.8	0.1	10.3	1.8	118.0	1.0	15.3	249.5	0.0	1.7	2.8	2.9	-133.2	R 665.6
2004	309.4	230.0	13.2	0.5	82.4	12.9	0.1	10.0	1.8	121.2	0.7	17.1	259.8	0.0	1.4	2.9	6.3	-127.4	682.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Mexico

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	25	20	3	17	1,441	1,461	287	--	--	872	--	2,156	--
1965	6	24	2	14	1,518	1,534	234	--	--	988	--	2,360	--
1970	(s)	31	3	29	2,004	2,036	202	--	--	1,475	--	3,570	--
1975	0	28	5	27	1,270	1,301	210	--	--	1,957	--	4,705	--
1980	9	29	11	132	1,209	1,352	196	--	--	2,453	--	5,915	--
1985	2	22	15	41	2,091	2,147	315	--	--	3,098	--	7,138	--
1990	1	28	8	4	1,705	1,718	157	--	--	3,566	--	8,248	--
1995	1	29	3	6	860	869	155	--	--	4,124	--	9,368	--
1996	1	34	3	7	853	862	161	--	--	4,328	--	9,846	--
1997	1	37	3	5	1,085	1,093	182	--	--	4,502	--	10,202	--
1998	1	36	2	6	1,593	1,600	161	--	--	4,642	--	10,530	--
1999	1	36	20	23	2,045	2,088	170	--	--	4,649	--	10,637	--
2000	1	36	6	6	2,040	2,052	183	--	--	4,937	--	11,233	--
2001	1	35	5	5	3,446	3,455	100	--	--	4,999	--	^R 11,244	--
2002	1	33	7	3	2,744	2,754	101	--	--	5,238	--	11,735	--
2003	1	32	3	4	2,086	2,092	107	--	--	5,418	--	12,035	--
2004	(s)	34	4	5	1,941	1,950	109	--	--	5,635	--	12,542	--
Trillion Btu													
1960	0.6	21.1	(s)	0.1	5.8	5.9	5.7	0.0	0.0	3.0	36.2	7.4	43.6
1965	0.1	26.9	(s)	0.1	6.1	6.2	4.7	0.0	0.0	3.4	41.2	8.1	49.3
1970	(s)	33.3	(s)	0.2	7.6	7.8	4.0	0.0	0.0	5.0	50.2	12.2	62.3
1975	0.0	29.9	(s)	0.2	4.7	4.9	4.2	0.0	0.0	6.7	45.7	16.1	61.8
1980	0.2	29.9	0.1	0.7	4.4	5.3	3.9	0.0	0.0	8.4	47.7	20.2	67.8
1985	(s)	23.9	0.1	0.2	7.5	7.9	6.3	0.0	0.0	10.6	48.6	24.4	73.0
1990	(s)	29.7	(s)	(s)	6.2	6.3	3.1	^f (s)	^f 0.6	12.2	^f 51.9	28.1	^f 80.0
1995	(s)	29.4	(s)	(s)	3.1	3.2	3.1	(s)	0.6	14.1	50.3	32.0	82.3
1996	(s)	34.9	(s)	(s)	3.1	3.1	3.2	(s)	0.6	14.8	56.6	33.6	90.2
1997	(s)	37.4	(s)	(s)	3.9	4.0	3.6	(s)	0.6	15.4	61.0	34.8	95.8
1998	(s)	35.1	(s)	(s)	5.8	5.8	3.2	(s)	0.5	15.8	60.6	35.9	96.5
1999	(s)	34.7	0.1	0.1	7.4	7.6	3.4	(s)	0.5	15.9	62.1	36.3	98.4
2000	(s)	34.8	(s)	(s)	7.4	7.4	3.7	(s)	0.5	16.8	63.2	38.3	101.5
2001	(s)	34.2	(s)	(s)	12.5	12.5	2.0	(s)	0.4	17.1	66.1	^R 38.4	^R 104.5
2002	(s)	33.9	(s)	(s)	9.9	10.0	2.0	(s)	0.4	17.9	64.1	40.0	104.2
2003	(s)	32.0	(s)	(s)	7.6	7.6	2.1	(s)	0.3	18.5	60.6	41.1	101.6
2004	(s)	35.2	(s)	(s)	7.0	7.1	2.2	(s)	0.3	19.2	64.0	42.8	106.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Mexico

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowattsales	Million System Energy Losses ^e							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	17	9	107	4	254	46	0	412	0	--	--	963	--	2,381	--
1965	5	13	65	4	268	54	0	391	0	--	--	1,485	--	3,547	--
1970	(s)	33	114	8	354	70	0	545	0	--	--	2,216	--	5,364	--
1975	0	23	179	7	224	91	0	501	0	--	--	2,743	--	6,598	--
1980	35	25	133	659	213	108	0	1,113	0	--	--	3,380	--	8,150	--
1985	6	17	320	61	369	113	4	866	0	--	--	4,664	--	10,744	--
1990	4	24	426	15	301	127	0	868	^g 0	--	--	5,842	--	13,515	--
1995	7	24	242	4	152	18	0	416	0	--	--	6,641	--	15,086	--
1996	7	26	176	1	150	18	(s)	345	0	--	--	6,924	--	15,750	--
1997	7	27	169	3	192	18	0	381	0	--	--	6,839	--	15,499	--
1998	8	27	138	3	281	18	0	440	0	--	--	7,346	--	16,664	--
1999	5	27	316	6	361	18	0	701	0	--	--	7,435	--	17,011	--
2000	5	27	266	8	360	19	0	652	0	--	--	8,371	--	19,046	--
2001	4	27	350	16	608	39	0	1,013	0	--	--	8,455	--	^R 19,016	--
2002	4	25	329	8	484	337	0	1,159	0	--	--	8,653	--	19,385	--
2003	3	24	389	6	368	551	0	1,314	0	--	--	8,063	--	17,911	--
2004	4	25	403	3	343	77	0	826	0	--	--	8,239	--	18,338	--
Trillion Btu															
1960	0.4	9.3	0.6	(s)	1.0	0.2	0.0	1.9	0.0	0.1	0.0	3.3	15.0	8.1	23.2
1965	0.1	13.9	0.4	(s)	1.1	0.3	0.0	1.8	0.0	0.1	0.0	5.1	21.0	12.1	33.1
1970	(s)	35.8	0.7	(s)	1.3	0.4	0.0	2.4	0.0	0.1	0.0	7.6	45.8	18.3	64.1
1975	0.0	24.5	1.0	(s)	0.8	0.5	0.0	2.4	0.0	0.1	0.0	9.4	36.4	22.5	58.9
1980	0.7	25.7	0.8	3.7	0.8	0.6	0.0	5.9	0.0	0.1	0.0	11.5	43.9	27.8	71.7
1985	0.1	18.2	1.9	0.3	1.3	0.6	(s)	4.2	0.0	0.1	0.0	15.9	38.5	36.7	75.2
1990	0.1	25.0	2.5	0.1	1.1	0.7	0.0	4.3	^g 0.0	^g 0.3	^g (s)	19.9	^g 49.7	46.1	^g 95.9
1995	0.1	24.4	1.4	(s)	0.6	0.1	0.0	2.1	0.0	0.4	(s)	22.7	49.8	51.5	101.2
1996	0.1	27.4	1.0	(s)	0.5	0.1	(s)	1.7	0.0	0.4	(s)	23.6	53.3	53.7	107.0
1997	0.1	28.0	1.0	(s)	0.7	0.1	0.0	1.8	0.0	0.6	(s)	23.3	53.9	52.9	106.8
1998	0.2	26.6	0.8	(s)	1.0	0.1	0.0	1.9	0.0	0.5	(s)	25.1	54.4	56.9	111.3
1999	0.1	26.4	1.8	(s)	1.3	0.1	0.0	3.3	0.0	0.6	0.1	25.4	55.8	58.0	113.9
2000	0.1	26.1	1.5	(s)	1.3	0.1	0.0	3.0	0.0	0.6	0.1	28.6	58.5	65.0	123.5
2001	0.1	26.7	2.0	0.1	2.2	0.2	0.0	4.5	0.0	0.4	0.1	28.8	60.6	^R 64.9	^R 125.5
2002	0.1	25.8	1.9	(s)	1.7	1.8	0.0	5.5	0.0	0.4	0.1	29.5	61.3	66.1	127.4
2003	0.1	24.0	2.3	(s)	1.3	2.9	0.0	6.5	0.0	0.4	0.1	27.5	58.6	61.1	119.7
2004	0.1	26.1	2.3	(s)	1.2	0.4	0.0	4.0	0.0	0.4	0.1	28.1	58.8	62.6	121.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
^b Includes supplemental gaseous fuels.
^c Liquefied petroleum gases.
^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.
^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.
^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R = Revised data.
-- = Not applicable.
(s) = Btu value less than 0.05 or physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Mexico

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	105	120	964	1,028	463	1,194	67	295	59	437	4,508	0	--	--	1,548	--	3,829
1965	22	97	1,388	1,206	358	1,345	72	241	621	624	5,855	0	--	--	1,299	--	3,103
1970	11	121	1,208	2,127	957	1,813	104	192	123	717	7,242	0	--	--	1,911	--	4,627
1975	0	95	1,632	2,299	620	2,160	120	145	1,342	1,482	9,800	0	--	--	1,960	--	4,713
1980	8	74	1,138	2,196	548	3,260	118	84	858	1,664	9,866	0	--	--	2,945	--	7,101
1985	83	58	1,501	2,595	89	447	108	361	781	987	6,868	0	--	--	4,111	--	9,470
1990	41	85	1,451	1,486	37	5,819	121	330	115	1,574	10,934	⁹ 0	--	--	4,413	--	10,208
1995	76	74	1,859	1,907	7	7,085	116	653	179	2,003	13,809	0	--	--	5,651	--	12,836
1996	74	105	1,648	2,024	10	926	112	658	194	4,490	10,063	0	--	--	5,921	--	13,468
1997	76	90	1,233	2,080	6	1,316	119	693	158	4,723	10,327	0	--	--	6,187	--	14,021
1998	72	85	2,048	1,896	9	927	124	497	136	4,420	10,056	0	--	--	6,186	--	14,032
1999	73	82	1,902	2,175	18	1,692	125	342	141	4,418	10,814	0	--	--	5,957	--	13,630
2000	76	111	1,775	2,271	15	438	123	346	136	4,339	9,442	0	--	--	5,492	--	12,496
2001	71	110	791	2,180	7	320	113	630	86	2,461	6,588	0	--	--	5,272	--	^R 11,857
2002	73	97	1,994	2,078	6	340	112	622	131	2,376	7,659	0	--	--	5,316	--	11,909
2003	79	^R 98	1,978	2,322	2	338	103	666	157	2,612	8,179	0	--	--	5,849	--	12,993
2004	80	106	1,990	2,280	1	405	105	755	105	2,911	8,552	0	--	--	5,972	--	13,293

Trillion Btu																	
1960	2.4	124.5	6.4	6.0	2.6	4.8	0.4	1.6	0.4	2.6	24.8	0.0	0.8	0.0	5.3	157.7	170.7
1965	0.5	107.1	9.2	7.0	2.0	5.4	0.4	1.3	3.9	3.7	33.0	0.0	0.9	0.0	4.4	145.9	156.5
1970	0.2	131.2	8.0	12.4	5.4	6.8	0.6	1.0	0.8	4.3	39.4	0.0	0.7	0.0	6.5	178.1	193.9
1975	0.0	102.6	10.8	13.4	3.5	8.0	0.7	0.8	8.4	8.9	54.6	0.0	1.1	0.0	6.7	164.9	181.0
1980	0.2	77.6	7.6	12.8	3.1	12.0	0.7	0.4	5.4	10.0	52.0	0.0	1.2	0.0	10.0	141.0	165.3
1985	1.8	63.5	10.0	15.1	0.5	1.6	0.7	1.9	4.9	6.1	40.8	0.0	1.4	0.0	14.0	121.5	153.8
1990	0.9	90.0	9.6	8.7	0.2	21.1	0.7	1.7	0.7	9.4	52.2	⁹ 0.0	⁹ 0.3	⁹ 0.1	15.1	⁹ 158.4	⁹ 193.3
1995	1.7	75.1	12.3	11.1	(s)	25.7	0.7	3.4	1.1	11.9	66.3	0.0	0.3	0.1	19.3	162.7	206.5
1996	1.6	108.2	10.9	11.8	0.1	3.3	0.7	3.4	1.2	25.3	56.8	0.0	0.2	0.1	20.2	187.1	233.1
1997	1.7	92.4	8.2	12.1	(s)	4.8	0.7	3.6	1.0	26.7	57.1	0.0	0.2	0.1	21.1	172.6	220.4
1998	1.6	82.9	13.6	11.0	0.1	3.3	0.8	2.6	0.9	24.9	57.2	0.0	0.2	0.1	21.1	163.1	210.9
1999	1.6	79.9	12.6	12.7	0.1	6.1	0.8	1.8	0.9	24.8	59.8	0.0	0.2	0.6	20.3	162.4	208.9
2000	1.9	107.1	11.8	13.2	0.1	1.6	0.7	1.8	0.9	24.3	54.4	0.0	0.2	0.6	18.7	182.9	225.6
2001	1.8	107.9	5.3	12.7	(s)	1.2	0.7	3.3	0.5	14.4	38.1	0.0	0.4	0.7	18.0	166.8	^R 207.3
2002	1.8	98.1	13.2	12.1	(s)	1.2	0.7	3.2	0.8	13.9	45.3	0.0	0.3	0.7	18.1	164.3	205.0
2003	2.0	^R 99.5	13.1	13.5	(s)	1.2	0.6	3.5	1.0	15.3	48.3	0.0	0.3	0.5	20.0	^R 170.6	^R 214.9
2004	2.0	108.9	13.2	13.3	(s)	1.5	0.6	3.9	0.7	17.1	50.3	0.0	0.3	0.5	20.4	182.4	227.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, New Mexico

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	2	17	201	1,919	2,186	124	159	9,213	25	13,826	0	0	--	0	--
1965	(s)	25	239	2,618	2,530	203	165	10,511	36	16,301	0	0	--	0	--
1970	(s)	30	111	3,158	3,110	243	166	12,884	11	19,684	0	0	--	0	--
1975	0	29	81	4,200	2,667	211	197	16,257	0	23,615	0	0	--	0	--
1980	0	38	167	5,411	2,673	29	213	16,721	0	25,214	0	0	--	0	--
1985	0	26	95	4,406	2,873	95	194	17,431	0	25,094	^f 142	0	--	0	--
1990	0	76	86	6,016	2,912	118	218	18,190	0	27,539	371	0	--	0	--
1995	0	57	53	2,871	2,222	94	208	20,342	0	25,790	472	0	--	0	--
1996	0	27	101	7,804	1,615	85	202	19,570	0	29,377	398	0	--	0	--
1997	0	62	102	8,504	1,751	75	214	20,794	0	31,439	399	0	--	0	--
1998	0	53	61	9,296	2,196	1	224	21,403	0	33,180	671	0	--	0	--
1999	0	49	70	9,022	2,723	17	226	21,828	0	33,887	560	0	--	0	--
2000	0	46	73	9,327	3,017	18	223	20,883	0	33,541	638	0	--	0	--
2001	0	46	79	9,824	3,065	37	204	20,986	0	34,195	212	0	--	0	--
2002	0	42	74	9,928	2,510	19	202	21,398	0	34,129	183	0	--	0	--
2003	0	42	64	10,207	2,438	51	186	21,451	0	34,398	148	0	--	0	--
2004	0	27	90	11,411	2,274	81	189	22,416	0	36,460	160	0	--	0	--
Trillion Btu															
1960	(s)	17.6	1.0	11.2	11.7	0.5	1.0	48.4	0.2	73.9	0.0	0.0	91.5	0.0	91.5
1965	(s)	27.6	1.2	15.3	13.7	0.8	1.0	55.2	0.2	87.4	0.0	0.0	115.0	0.0	115.0
1970	(s)	32.8	0.6	18.4	17.0	0.9	1.0	67.7	0.1	105.7	0.0	0.0	138.5	0.0	138.5
1975	0.0	31.2	0.4	24.5	14.6	0.8	1.2	85.4	0.0	126.9	0.0	0.0	158.1	0.0	158.1
1980	0.0	40.2	0.8	31.5	14.6	0.1	1.3	87.8	0.0	136.2	0.0	0.0	176.3	0.0	176.3
1985	0.0	28.2	0.5	25.7	15.7	0.3	1.2	91.6	0.0	134.9	^f 0.5	0.0	^f 163.6	0.0	^f 163.6
1990	0.0	80.4	0.4	35.0	16.0	0.4	1.3	95.6	0.0	148.8	1.3	0.0	230.5	0.0	230.5
1995	0.0	58.0	0.3	16.7	12.6	0.3	1.3	106.1	0.0	137.3	1.7	0.0	195.3	0.0	195.3
1996	0.0	28.0	0.5	45.5	9.2	0.3	1.2	102.1	0.0	158.7	1.4	0.0	186.7	0.0	186.7
1997	0.0	63.8	0.5	49.5	9.9	0.3	1.3	108.4	0.0	169.9	1.4	0.0	233.7	0.0	233.7
1998	0.0	51.4	0.3	54.1	12.5	(s)	1.4	111.6	0.0	179.8	2.4	0.0	231.2	0.0	231.2
1999	0.0	47.5	0.4	52.6	15.4	0.1	1.4	113.7	0.0	183.5	2.0	0.0	231.0	0.0	231.0
2000	0.0	44.5	0.4	54.3	17.1	0.1	1.4	108.8	0.0	182.0	2.3	0.0	226.5	0.0	226.5
2001	0.0	44.9	0.4	57.2	17.4	0.1	1.2	109.3	0.0	185.7	0.8	0.0	230.6	0.0	230.6
2002	0.0	42.3	0.4	57.8	14.2	0.1	1.2	111.4	0.0	185.2	0.6	0.0	227.4	0.0	227.4
2003	0.0	42.8	0.3	59.5	13.8	0.2	1.1	111.7	0.0	186.6	0.5	0.0	229.4	0.0	229.4
2004	0.0	28.2	0.5	66.5	12.9	0.3	1.1	116.9	0.0	198.2	0.6	0.0	226.3	0.0	226.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, New Mexico

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	26	34	107	10	0	117	0	69	--	0	0	0	0	--
1965	2,418	44	42	4	0	46	0	43	--	0	0	0	0	--
1970	5,518	55	86	8	0	94	0	66	--	0	0	0	0	--
1975	7,425	65	1,704	34	0	1,738	0	63	--	0	0	0	0	--
1980	11,406	56	175	216	0	391	0	94	--	0	0	0	0	--
1985	14,498	28	41	45	0	86	0	128	--	0	0	0	0	--
1990	15,065	25	32	37	0	69	0	205	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	15,137	32	1	44	0	44	0	264	--	0	0	0	0	--
1996	15,215	35	(s)	43	0	43	0	211	--	0	0	0	0	--
1997	15,802	40	(s)	41	0	42	0	259	--	0	0	0	0	--
1998	15,883	46	0	45	0	45	0	236	--	0	0	0	0	--
1999	16,224	43	0	72	0	72	0	243	--	0	0	0	0	--
2000	16,503	47	0	67	0	67	0	221	--	0	0	0	(s)	--
2001	15,955	49	9	61	0	70	0	237	--	0	0	0	0	--
2002	15,197	37	0	54	0	54	0	265	--	0	0	0	15	--
2003	16,542	38	0	88	0	88	0	171	--	0	0	183	29	--
2004	16,661	31	0	53	0	53	0	139	--	0	0	513	57	--
Trillion Btu														
1960	0.6	34.9	0.7	0.1	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	37.0
1965	43.5	48.7	0.3	(s)	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0	93.0
1970	99.1	59.5	0.5	(s)	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.0	0.0	159.9
1975	132.5	67.4	10.7	0.2	0.0	10.9	0.0	0.7	0.0	0.0	0.0	0.0	0.0	211.5
1980	201.8	57.9	1.1	1.3	0.0	2.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	263.1
1985	266.4	28.5	0.3	0.3	0.0	0.5	0.0	1.3	0.0	0.0	0.0	0.0	0.0	296.8
1990	274.7	26.3	0.2	0.2	0.0	0.4	0.0	2.1	ⁱ 0.2	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 303.7
1995	273.4	32.6	(s)	0.3	0.0	0.3	0.0	2.7	0.1	0.0	0.0	0.0	0.0	309.1
1996	277.4	35.1	(s)	0.3	0.0	0.3	0.0	2.2	0.2	0.0	0.0	0.0	0.0	315.0
1997	286.7	40.3	(s)	0.2	0.0	0.2	0.0	2.6	0.1	0.0	0.0	0.0	0.0	329.9
1998	288.6	45.3	0.0	0.3	0.0	0.3	0.0	2.4	0.1	0.0	0.0	0.0	0.0	336.7
1999	296.3	42.8	0.0	0.4	0.0	0.4	0.0	2.5	0.1	0.0	0.0	0.0	0.0	342.2
2000	303.5	46.5	0.0	0.4	0.0	0.4	0.0	2.3	0.1	0.0	0.0	0.0	(s)	352.7
2001	^R 295.2	46.0	0.1	0.4	0.0	0.4	0.0	2.5	0.2	0.0	0.0	0.0	0.0	^R 344.3
2002	282.2	37.4	0.0	0.3	0.0	0.3	0.0	2.7	0.2	0.0	0.0	0.0	0.1	322.9
2003	303.6	37.9	0.0	0.5	0.0	0.5	0.0	1.7	0.0	0.0	0.0	1.9	0.1	345.7
2004	307.4	31.5	0.0	0.3	0.0	0.3	0.0	1.4	0.0	0.0	0.0	5.1	0.2	345.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, New York

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Interstate Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	26,418	419	5,424	13,729	82,380	9,411	5,302	2,849	2,312	95,706	77,563	2,861	297,538	0	12,087	--	--	-11,289	--
1965	28,736	545	6,234	2,427	104,033	23,620	5,623	3,174	2,221	109,226	104,296	6,523	367,377	727	19,576	--	--	-9,243	--
1970	23,936	711	5,612	249	111,107	38,338	6,994	4,506	2,199	130,737	152,252	8,360	460,354	4,273	25,051	--	--	-12,774	--
1975	12,678	577	5,733	274	105,118	38,634	5,206	5,188	1,948	133,461	144,721	9,326	449,609	13,111	28,323	--	--	-15,107	--
1980	12,503	737	4,983	320	72,559	35,936	2,309	5,631	2,091	127,422	115,488	11,826	378,566	19,276	26,474	--	--	7,176	--
1985	11,944	763	7,208	221	67,766	3,856	5,319	4,923	1,903	136,330	66,334	6,862	300,723	24,092	27,189	--	--	6,495	--
1990	13,597	869	5,524	78	73,802	5,447	2,283	5,606	2,141	139,180	77,242	9,843	321,146	23,623	28,188	--	--	13,954	--
1995	11,785	1,260	7,073	76	70,349	7,697	2,364	6,332	2,043	132,627	30,126	9,090	267,776	26,336	25,993	--	--	26,163	--
1996	12,074	1,200	6,184	66	71,914	11,532	2,884	7,073	1,983	130,979	36,628	21,508	290,751	35,226	28,951	--	--	22,132	--
1997	12,522	1,324	6,327	68	71,033	12,133	2,906	6,686	2,094	130,923	29,992	22,564	284,727	29,570	30,618	--	--	12,661	--
1998	12,952	1,233	6,624	238	64,516	14,787	3,359	7,306	2,193	131,469	35,732	24,572	290,795	31,314	29,316	--	--	8,362	--
1999	12,187	1,274	6,274	84	71,969	9,122	3,086	7,316	2,216	133,621	35,353	25,790	294,830	37,019	24,752	--	--	15,370	--
2000	12,612	1,245	5,887	75	79,039	9,516	3,443	9,850	2,182	132,831	42,349	23,910	309,082	31,508	24,910	--	--	41,274	--
2001	^R 11,783	1,172	5,919	249	82,878	14,655	3,445	7,111	1,999	133,724	37,090	9,907	296,976	40,395	23,084	--	--	^R 26,611	--
2002	^R 10,908	1,200	5,148	175	76,684	15,428	2,374	7,613	1,976	136,664	31,110	9,917	287,088	39,617	25,048	--	--	45,523	--
2003	^R 11,314	1,134	5,395	18	88,919	17,268	3,194	7,771	1,827	138,010	46,578	9,804	318,783	40,679	24,269	--	--	^R 41,736	--
2004	11,335	1,098	7,668	229	95,300	19,300	3,183	8,639	1,851	137,387	51,469	12,032	337,058	40,640	23,990	--	--	45,171	--
Trillion Btu																			
1960	691.7	434.1	36.0	69.3	479.9	52.6	30.1	11.4	14.0	502.7	487.6	16.9	1,700.6	0.0	130.1	59.3	12.4	-38.5	2,989.6
1965	755.2	558.7	41.4	12.3	606.0	133.2	31.9	12.7	13.5	573.8	655.7	37.1	2,117.5	8.6	204.6	58.1	1.7	-31.5	3,672.9
1970	598.9	725.8	37.2	1.3	647.2	216.7	39.7	17.0	13.3	686.8	957.2	47.0	2,663.4	46.9	262.9	62.6	3.2	-43.6	4,320.2
1975	312.5	585.5	38.0	1.4	612.3	218.5	29.5	19.3	11.8	701.1	909.9	52.8	2,594.6	144.4	294.7	60.2	5.6	-51.5	3,946.0
1980	313.7	755.9	33.1	1.6	422.7	203.3	13.1	20.7	12.7	669.3	726.1	66.1	2,168.7	210.3	275.0	129.6	24.5	24.5	3,902.1
1985	301.4	784.7	47.8	1.1	394.7	21.4	30.2	17.7	11.5	716.1	417.0	38.0	1,695.6	255.9	284.0	131.5	59.0	22.2	3,534.3
1990	349.8	895.4	36.7	0.4	429.9	30.4	12.9	20.3	13.0	731.1	485.6	55.1	1,815.5	250.0	293.2	ⁱ 97.4	ⁱ 2.8	47.6	ⁱ 3,751.6
1995	305.3	1,295.4	46.9	0.4	409.8	43.6	13.4	22.9	12.4	691.7	189.4	50.3	1,480.8	276.7	268.0	122.6	31.0	89.3	3,869.1
1996	311.8	1,230.8	41.0	0.3	418.9	65.4	16.4	25.6	12.0	683.2	230.3	116.7	1,609.8	370.0	299.4	139.2	24.8	75.5	4,061.2
1997	325.2	1,358.1	42.0	0.3	413.8	68.8	16.5	24.2	12.7	682.5	188.6	122.8	1,572.1	310.3	312.7	177.7	6.1	43.2	4,105.4
1998	337.4	1,267.1	44.0	1.2	375.8	83.8	19.0	26.4	13.3	685.2	224.6	135.1	1,608.5	328.5	298.9	159.0	3.7	28.5	4,031.7
1999	318.0	1,308.7	41.6	0.4	419.2	51.7	17.5	26.5	13.4	696.3	222.3	141.8	1,630.8	386.8	253.1	167.1	4.2	52.4	4,121.1
2000	330.8	1,279.7	39.1	0.4	460.4	54.0	19.5	35.5	13.2	692.0	266.2	130.1	1,710.5	328.6	254.1	176.1	30.5	140.8	4,251.2
2001	^R 307.0	1,205.9	39.3	1.3	482.8	83.1	19.5	25.7	12.1	696.7	233.2	55.9	1,649.5	422.0	238.5	^R 127.0	27.6	^R 90.8	^R 4,068.4
2002	^R 280.6	1,191.2	34.2	0.9	446.7	87.5	13.5	27.5	12.0	711.7	195.6	55.8	1,585.3	413.6	254.8	^R 123.6	39.2	155.3	^R 4,043.6
2003	^R 286.2	1,179.0	35.8	0.1	518.0	97.9	18.1	28.2	11.1	718.6	292.8	55.1	1,775.7	423.9	248.5	126.9	20.2	142.4	^R 4,202.9
2004	276.5	1,119.9	50.9	1.2	555.1	109.4	18.0	31.3	11.2	716.5	323.6	68.3	1,885.4	423.8	240.4	133.8	20.1	154.1	4,254.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, New York

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	1,158	225	44,927	4,174	2,130	51,232	1,295	--	--	12,496	--	30,904	--
1965	735	288	57,623	4,161	2,254	64,037	1,070	--	--	17,027	--	40,660	--
1970	373	347	60,128	5,581	2,782	68,491	1,096	--	--	25,492	--	61,702	--
1975	128	327	55,966	3,746	3,078	62,790	1,103	--	--	28,710	--	69,044	--
1980	75	334	37,690	1,723	2,511	41,923	3,960	--	--	30,583	--	73,740	--
1985	95	320	34,608	3,219	3,227	41,054	3,655	--	--	32,757	--	75,462	--
1990	55	338	31,520	1,765	4,079	37,364	1,902	--	--	38,574	--	89,232	--
1995	29	375	28,624	1,240	4,516	34,381	2,618	--	--	39,887	--	90,609	--
1996	34	403	30,240	1,450	4,937	36,627	2,719	--	--	40,285	--	91,632	--
1997	28	376	29,367	1,744	4,379	35,490	4,202	--	--	40,059	--	90,783	--
1998	16	340	26,637	1,866	4,323	32,827	3,734	--	--	40,563	--	92,018	--
1999	22	371	28,347	2,327	4,691	35,365	3,931	--	--	42,919	--	98,198	--
2000	11	400	35,229	2,344	6,211	43,785	4,225	--	--	43,018	--	97,872	--
2001	13	376	36,502	2,390	4,698	43,591	2,755	--	--	44,236	--	^R 99,489	--
2002	5	370	32,893	1,642	5,441	39,977	2,796	--	--	46,457	--	104,076	--
2003	11	^R 410	33,847	1,639	5,390	40,876	2,943	--	--	47,116	--	^R 104,661	--
2004	18	393	34,263	2,065	5,961	42,289	3,017	--	--	47,379	--	105,457	--
Trillion Btu													
1960	28.6	232.5	261.7	23.7	8.5	293.9	25.9	0.0	0.0	42.6	623.5	105.4	729.0
1965	17.9	295.0	335.7	23.6	9.0	368.3	21.4	0.0	0.0	58.1	760.7	138.7	899.5
1970	8.8	353.8	350.2	31.6	10.5	392.4	21.9	0.0	0.0	87.0	863.9	210.5	1,074.4
1975	2.9	332.2	326.0	21.2	11.4	358.7	22.1	0.0	0.0	98.0	813.8	235.6	1,049.4
1980	1.8	341.5	219.5	9.8	9.2	238.5	79.2	0.0	0.0	104.3	765.3	251.6	1,016.9
1985	2.3	328.8	201.6	18.3	11.6	231.5	73.1	0.0	0.0	111.8	747.4	257.5	1,004.9
1990	1.4	347.9	183.6	10.0	14.8	208.4	38.0	^f (s)	^f 0.3	131.6	^f 727.6	304.5	^f 1,032.1
1995	0.7	386.7	166.7	7.0	16.4	190.1	52.4	0.1	0.4	136.1	766.5	309.2	1,075.6
1996	0.8	414.1	176.1	8.2	17.8	202.2	54.4	0.1	0.5	137.5	809.6	312.6	1,122.2
1997	0.7	385.8	171.1	9.9	15.8	196.8	84.0	0.1	0.5	136.7	804.6	309.8	1,114.3
1998	0.4	349.5	155.2	10.6	15.6	181.4	74.7	0.1	0.6	138.4	745.0	314.0	1,059.0
1999	0.6	381.3	165.1	13.2	17.0	195.3	78.6	0.1	0.6	146.4	802.8	335.1	1,137.8
2000	0.3	413.1	205.2	13.3	22.4	240.9	84.5	0.1	0.6	146.8	886.2	333.9	1,220.2
2001	0.3	388.8	212.6	13.6	17.0	243.2	55.1	0.1	0.6	150.9	838.9	^R 339.5	^R 1,178.4
2002	0.1	362.9	191.6	9.3	19.7	220.6	55.9	0.1	0.6	158.5	798.7	355.1	1,153.8
2003	0.3	^R 427.9	197.2	9.3	19.6	226.0	58.9	0.1	0.6	160.8	^R 874.5	357.1	^R 1,231.6
2004	0.4	399.3	199.6	11.7	21.6	232.9	60.3	0.1	0.7	161.7	855.4	359.8	1,215.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New York

Year			Petroleum						Hydro- electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Coal ^a	Natural Gas ^b	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	805	63	15,225	468	376	636	28,208	44,913	0	--	--	17,546	--	43,395	--
1965	555	87	19,527	467	398	828	37,514	58,733	0	--	--	23,528	--	56,183	--
1970	293	139	20,376	626	491	1,052	43,318	65,863	0	--	--	32,790	--	79,364	--
1975	300	128	18,965	420	543	1,162	28,482	49,573	0	--	--	37,827	--	90,968	--
1980	283	162	14,492	169	443	1,035	25,431	41,569	0	--	--	40,471	--	97,582	--
1985	339	165	13,215	862	569	1,911	16,677	33,235	0	--	--	48,816	--	112,454	--
1990	218	195	15,415	269	720	1,201	17,400	35,004	^g 7	--	--	56,025	--	129,600	--
1995	191	231	15,711	714	797	208	13,555	30,985	4	--	--	62,509	--	141,997	--
1996	249	253	15,531	751	871	200	12,791	30,145	7	--	--	62,663	--	142,534	--
1997	226	321	14,337	801	773	195	10,105	26,210	5	--	--	64,033	--	145,112	--
1998	131	335	11,914	981	763	212	6,765	20,636	4	--	--	65,834	--	149,345	--
1999	158	360	13,946	682	828	200	7,439	23,095	3	--	--	67,969	--	155,511	--
2000	90	366	15,128	948	1,096	202	9,429	26,803	4	--	--	70,417	--	160,211	--
2001	102	347	16,865	874	829	218	7,193	25,979	0	--	--	71,850	--	^R 161,595	--
2002	40	362	15,032	493	960	855	8,678	26,018	(s)	--	--	73,198	--	163,983	--
2003	73	^R 339	19,198	665	951	293	10,784	31,892	(s)	--	--	72,495	--	^R 161,038	--
2004	143	359	19,907	745	1,052	197	11,441	33,341	5	--	--	74,378	--	165,553	--
Trillion Btu															
1960	19.9	65.2	88.7	2.7	1.5	3.3	177.3	273.5	0.0	0.5	0.0	59.9	419.0	148.1	567.0
1965	13.5	88.8	113.7	2.6	1.6	4.3	235.9	358.2	0.0	0.4	0.0	80.3	541.2	191.7	732.9
1970	6.9	142.4	118.7	3.5	1.9	5.5	272.3	402.0	0.0	0.4	0.0	111.9	663.6	270.8	934.4
1975	6.8	130.2	110.5	2.4	2.0	6.1	179.1	300.0	0.0	0.4	0.0	129.1	566.5	310.4	876.8
1980	6.6	165.5	84.4	1.0	1.6	5.4	159.9	252.3	0.0	1.9	0.0	138.1	564.4	332.9	897.4
1985	8.1	170.0	77.0	4.9	2.1	10.0	104.8	198.8	0.0	1.7	0.0	166.6	545.2	383.7	928.9
1990	5.4	200.7	89.8	1.5	2.6	6.3	109.4	209.6	^g 0.1	^g 4.4	^g (s)	191.2	^g 611.4	442.2	^g 1,053.6
1995	4.8	238.5	91.5	4.1	2.9	1.1	85.2	184.8	(s)	10.6	0.1	213.3	652.1	484.5	1,136.6
1996	6.2	259.9	90.5	4.3	3.1	1.0	80.4	179.3	0.1	11.0	0.2	213.8	670.5	486.3	1,156.8
1997	5.6	329.5	83.5	4.5	2.8	1.0	63.5	155.4	0.1	17.7	0.2	218.5	727.0	495.1	1,222.1
1998	3.3	345.3	69.4	5.6	2.8	1.1	42.5	121.4	(s)	15.9	0.2	224.6	710.7	509.6	1,220.3
1999	4.0	370.4	81.2	3.9	3.0	1.0	46.8	135.9	(s)	16.8	0.2	231.9	759.3	530.6	1,289.9
2000	2.3	377.7	88.1	5.4	4.0	1.1	59.3	157.8	(s)	18.1	0.2	240.3	796.4	546.6	1,343.0
2001	2.5	358.9	98.2	5.0	3.0	1.1	45.2	152.6	0.0	14.1	0.3	245.2	773.5	^R 551.4	^R 1,324.8
2002	1.0	355.6	87.6	2.8	3.5	4.5	54.6	152.8	(s)	14.4	0.3	249.8	773.9	559.5	1,333.4
2003	1.8	^R 354.5	111.8	3.8	3.5	1.5	67.8	188.4	(s)	14.8	0.4	247.4	^R 807.2	549.5	^R 1,356.7
2004	3.6	365.1	116.0	4.2	3.8	1.0	71.9	196.9	(s)	14.7	0.4	253.8	834.6	564.9	1,399.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, New York

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total	
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}								Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Net Energy		Million kWh
1960	11,947	72	5,424	12,930	660	325	944	3,369	22,444	2,861	48,956	341	--	--	14,428	--	35,683	--
1965	13,811	93	6,234	16,909	996	485	1,099	3,708	29,213	6,523	65,167	275	--	--	23,101	--	55,163	--
1970	12,125	116	5,612	16,810	787	1,125	1,003	3,281	33,696	8,360	70,676	269	--	--	27,152	--	65,719	--
1975	6,125	105	5,733	15,761	1,039	1,442	998	1,351	23,039	9,326	58,689	188	--	--	27,247	--	65,525	--
1980	5,699	114	4,983	9,339	417	2,598	1,027	1,535	14,815	11,826	46,541	233	--	--	32,110	--	77,422	--
1985	3,723	101	7,208	5,378	1,238	980	935	1,224	5,553	6,862	29,378	233	--	--	28,659	--	66,020	--
1990	3,199	102	5,524	4,073	249	657	1,052	1,145	4,684	9,843	27,227	^g 129	--	--	31,929	--	73,860	--
1995	2,791	215	7,073	3,071	409	881	1,004	1,126	1,990	9,090	24,642	94	--	--	25,317	--	57,511	--
1996	2,799	216	6,184	3,053	682	1,142	974	1,114	2,456	21,485	37,090	115	--	--	25,947	--	59,020	--
1997	2,804	207	6,327	2,922	361	1,445	1,029	1,173	1,965	22,564	37,786	115	--	--	25,285	--	57,301	--
1998	2,878	173	6,624	3,016	511	1,687	1,077	1,030	1,868	24,353	40,166	109	--	--	25,218	--	57,207	--
1999	2,742	102	6,274	3,441	77	1,772	1,088	899	1,623	25,146	40,320	101	--	--	25,835	--	59,111	--
2000	2,747	97	5,887	3,285	151	2,308	1,072	931	2,005	23,642	39,281	87	--	--	25,838	--	58,786	--
2001	^R 2,411	85	5,919	2,981	180	1,559	982	1,741	1,544	9,869	24,776	70	--	--	25,450	--	^R 57,238	--
2002	^R 1,708	93	5,148	2,889	238	1,145	971	1,984	1,362	9,688	23,425	67	--	--	25,148	--	56,338	--
2003	^R 1,583	84	5,395	2,960	891	1,379	897	2,112	1,584	9,609	24,827	80	--	--	21,745	--	^R 48,302	--
2004	1,472	79	7,668	3,481	372	1,561	909	2,145	1,483	11,518	29,137	78	--	--	20,675	--	46,019	--
Trillion Btu																		
1960	311.9	74.2	36.0	75.3	3.7	1.3	5.7	17.7	141.1	16.9	297.7	3.7	32.9	0.0	49.2	769.6	121.8	891.4
1965	360.1	95.3	41.4	98.5	5.6	1.9	6.7	19.5	183.7	37.1	394.4	2.9	36.3	0.0	78.8	967.8	188.2	1,156.0
1970	308.4	118.0	37.2	97.9	4.5	4.3	6.1	17.2	211.8	47.0	426.0	2.8	40.3	0.0	92.6	988.2	224.2	1,212.4
1975	155.5	106.2	38.0	91.8	5.9	5.4	6.1	7.1	144.8	52.8	351.9	2.0	37.7	0.0	93.0	746.3	223.6	969.9
1980	146.5	116.4	33.1	54.4	2.4	9.5	6.2	8.1	93.1	66.1	272.9	2.4	48.4	0.0	109.6	696.2	264.2	960.4
1985	94.8	103.6	47.8	31.3	7.0	3.5	5.7	6.4	34.9	38.0	174.7	2.4	56.7	0.0	97.8	530.0	225.3	755.3
1990	82.6	105.1	36.7	23.7	1.4	2.4	6.4	6.0	29.5	55.1	161.1	^g 1.3	^g 26.6	^g 0.0	108.9	^g 485.7	252.0	^g 737.7
1995	72.4	221.2	46.9	17.9	2.3	3.2	6.1	5.9	12.5	50.3	145.1	1.0	20.9	0.0	86.4	547.0	196.2	743.2
1996	72.5	221.4	41.0	17.8	3.9	4.1	5.9	5.8	15.4	116.6	210.5	1.2	32.6	0.0	88.5	626.7	201.4	828.1
1997	72.7	212.1	42.0	17.0	2.0	5.2	6.2	6.1	12.4	122.8	213.8	1.2	34.5	0.0	86.3	620.6	195.5	816.1
1998	75.1	177.8	44.0	17.6	2.9	6.1	6.5	5.4	11.7	133.7	227.9	1.1	28.9	0.0	86.0	596.9	195.2	792.1
1999	71.6	105.2	41.6	20.0	0.4	6.4	6.6	4.7	10.2	137.9	227.9	1.0	30.4	0.0	88.2	524.3	201.7	726.0
2000	73.5	100.2	39.1	19.1	0.9	8.3	6.5	4.8	12.6	128.5	219.9	0.9	32.1	0.0	88.2	514.8	200.6	715.3
2001	^R 63.1	87.9	39.3	17.4	1.0	5.6	6.0	9.1	9.7	55.6	143.7	0.7	^R 17.8	0.0	86.8	^R 400.0	^R 195.3	^R 595.3
2002	^R 45.2	91.4	34.2	16.8	1.4	4.1	5.9	10.3	8.6	54.5	135.7	0.7	^R 14.1	0.0	85.8	^R 372.9	192.2	^R 565.1
2003	^R 41.9	87.3	35.8	17.2	5.0	5.0	5.4	11.0	10.0	54.0	143.5	0.8	13.9	0.0	74.2	^R 361.6	164.8	^R 526.4
2004	38.9	80.2	50.9	20.3	2.1	5.6	5.5	11.2	9.3	65.2	170.1	0.8	17.3	0.0	70.5	377.8	157.0	534.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, New York

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	205	2	13,729	8,758	9,411	18	1,368	91,701	17,060	142,046	0	2,045	--	5,058	--
1965	45	3	2,427	8,800	23,620	38	1,122	104,690	16,158	156,856	0	2,144	--	5,120	--
1970	19	3	249	10,653	38,338	107	1,196	126,403	18,450	195,396	0	2,366	--	5,727	--
1975	1	3	274	10,488	37,252	125	950	130,948	8,862	188,899	0	2,057	--	4,946	--
1980	0	4	320	10,309	35,916	79	1,064	124,853	11,344	183,885	0	2,146	--	5,174	--
1985	0	4	221	13,744	3,856	147	968	133,195	884	153,015	^f 0	2,442	--	5,626	--
1990	0	5	78	21,700	5,447	150	1,089	136,834	1,358	166,656	0	2,795	--	6,466	--
1995	0	8	76	21,316	7,697	138	1,039	131,294	2,318	163,878	654	2,757	--	6,263	--
1996	0	8	66	21,822	11,532	123	1,009	129,665	6,441	170,658	552	2,632	--	5,987	--
1997	0	8	68	22,839	12,133	90	1,066	129,555	5,109	170,859	532	2,567	--	5,817	--
1998	0	8	238	21,558	14,787	533	1,116	130,227	4,024	172,481	394	2,580	--	5,853	--
1999	0	9	84	24,028	9,122	25	1,127	132,521	6,237	173,145	341	2,654	--	6,072	--
2000	0	8	75	23,044	9,516	234	1,110	131,698	8,126	173,804	377	2,753	--	6,264	--
2001	0	6	249	23,520	14,655	25	1,017	131,764	3,207	174,437	107	2,646	--	^R 5,951	--
2002	0	9	175	23,641	15,428	66	1,005	133,825	3,826	177,966	95	2,637	--	5,908	--
2003	0	40	18	30,504	17,268	51	929	135,605	4,583	188,959	549	2,689	--	5,974	--
2004	0	9	229	35,910	19,300	66	942	135,045	5,823	197,315	7,024	2,650	--	5,898	--

Trillion Btu															
1960	5.3	2.4	69.3	51.0	52.6	0.1	8.3	481.7	107.3	770.3	0.0	7.0	784.9	17.3	802.2
1965	1.2	3.4	12.3	51.3	133.2	0.2	6.8	549.9	101.6	855.2	0.0	7.3	867.1	17.5	884.6
1970	0.5	3.2	1.3	62.1	216.7	0.4	7.3	664.0	116.0	1,067.7	0.0	8.1	1,079.5	19.5	1,099.0
1975	(s)	3.0	1.4	61.1	210.7	0.5	5.8	687.9	55.7	1,023.0	0.0	7.0	1,033.0	16.9	1,049.8
1980	0.0	3.6	1.6	60.1	203.2	0.3	6.5	655.9	71.3	998.8	0.0	7.3	1,009.7	17.7	1,027.4
1985	0.0	3.6	1.1	80.1	21.4	0.5	5.9	699.7	5.6	814.2	^f 0.0	8.3	^f 826.1	19.2	^f 845.3
1990	0.0	4.9	0.4	126.4	30.4	0.5	6.6	718.8	8.5	891.7	0.0	9.5	906.1	22.1	928.2
1995	0.0	8.6	0.4	124.2	43.6	0.5	6.3	684.7	14.6	874.3	2.3	9.4	892.3	21.4	913.6
1996	0.0	8.4	0.3	127.1	65.4	0.4	6.1	676.3	40.5	916.2	2.0	9.0	933.6	20.4	954.0
1997	0.0	7.7	0.3	133.0	68.8	0.3	6.5	675.4	32.1	916.5	1.9	8.8	933.0	19.8	952.8
1998	0.0	8.2	1.2	125.6	83.8	1.9	6.8	678.7	25.3	923.3	1.4	8.8	940.3	20.0	960.3
1999	0.0	8.8	0.4	140.0	51.7	0.1	6.8	690.6	39.2	928.8	1.2	9.1	946.7	20.7	967.4
2000	0.0	8.5	0.4	134.2	54.0	0.8	6.7	686.1	51.1	933.4	1.3	9.4	951.3	21.4	972.7
2001	0.0	6.2	1.3	137.0	83.1	0.1	6.2	686.5	20.2	934.3	0.4	9.0	949.5	20.3	969.8
2002	0.0	8.8	0.9	137.7	87.5	0.2	6.1	697.0	24.1	953.4	0.3	9.0	971.2	20.2	991.4
2003	0.0	42.2	0.1	177.7	97.9	0.2	5.6	706.1	28.8	1,016.4	1.9	9.2	1,067.8	20.4	1,088.2
2004	0.0	8.7	1.2	209.2	109.4	0.2	5.7	704.3	36.6	1,066.6	24.9	9.0	1,084.4	20.1	1,104.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, New York

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	12,302	58	9,851	540	0	10,391	0	11,746	--	0	0	0	3,623	--
1965	13,591	74	21,410	1,174	0	22,584	727	19,301	--	0	0	0	495	--
1970	11,125	106	56,787	3,139	0	59,927	4,273	24,781	--	0	0	0	944	--
1975	6,124	14	84,338	5,319	0	89,658	13,111	28,135	--	0	0	0	1,632	--
1980	6,446	124	63,898	749	0	64,647	19,276	26,241	--	0	0	0	7,167	--
1985	7,787	173	43,220	821	0	44,041	24,092	26,956	--	0	0	0	17,287	--
1990	10,125	229	53,800	1,095	0	54,895	23,623	28,052	--	i 0	i 0	i 0	712	--
1995	8,774	431	12,264	1,627	0	13,891	26,336	25,895	--	0	0	0	8,899	--
1996	8,992	320	14,940	1,268	23	16,231	35,226	28,830	--	0	0	0	7,049	--
1997	9,464	413	12,813	1,568	0	14,381	29,570	30,498	--	0	0	0	1,550	--
1998	9,928	377	23,075	1,390	220	24,685	31,314	29,203	--	0	0	0	826	--
1999	9,265	433	20,053	2,207	644	22,905	37,019	24,648	--	0	0	0	977	--
2000	9,763	373	22,789	2,352	267	25,409	31,508	24,819	--	0	0	10	8,664	--
2001	9,258	357	25,146	3,010	38	28,194	40,395	23,014	--	0	0	21	7,762	--
2002	9,154	366	17,244	2,229	229	19,702	39,617	24,981	--	0	0	82	10,964	--
2003	9,646	261	29,627	2,410	194	32,230	40,679	24,189	--	0	0	41	5,484	--
2004	9,702	259	32,722	1,740	514	34,977	40,640	23,907	--	0	0	116	5,194	--
Trillion Btu														
1960	326.1	59.8	61.9	3.1	0.0	65.1	0.0	126.4	0.0	0.0	0.0	0.0	12.4	589.7
1965	362.6	76.1	134.6	6.8	0.0	141.4	8.6	201.8	0.0	0.0	0.0	0.0	1.7	792.2
1970	274.4	108.4	357.0	18.3	0.0	375.3	46.9	260.1	0.0	0.0	0.0	0.0	3.2	1,068.3
1975	147.3	14.0	530.2	30.8	0.0	561.0	144.4	292.8	0.0	0.0	0.0	0.0	5.6	1,165.0
1980	158.8	128.9	401.7	4.4	0.0	406.1	210.3	272.6	0.1	0.0	0.0	0.0	24.5	1,201.2
1985	196.2	178.7	271.7	4.8	0.0	276.5	255.9	281.6	(s)	0.0	0.0	0.0	59.0	1,247.9
1990	260.4	236.8	338.2	6.4	0.0	344.6	250.0	291.8	i 28.4	i 0.0	i 0.0	i 0.0	2.4	i 1,414.4
1995	227.4	440.4	77.1	9.5	0.0	86.6	276.7	267.0	38.7	0.0	0.0	0.0	30.4	1,367.1
1996	232.3	326.9	93.9	7.4	0.1	101.5	370.0	298.1	41.2	0.0	0.0	0.0	24.1	1,394.0
1997	246.2	422.9	80.6	9.1	0.0	89.7	310.3	311.5	41.4	0.0	0.0	0.0	5.3	1,427.2
1998	258.6	386.3	145.1	8.1	1.3	154.5	328.5	297.8	39.6	0.0	0.0	0.0	2.8	1,468.0
1999	241.8	443.0	126.1	12.9	3.9	142.8	386.8	252.0	41.4	0.0	0.0	0.0	3.3	1,511.2
2000	254.8	380.1	143.3	13.7	1.6	158.6	328.6	253.2	41.4	0.0	0.0	0.1	29.6	1,446.3
2001	^R 241.1	364.0	158.1	17.5	0.2	175.9	422.0	237.8	40.1	0.0	0.0	0.2	26.5	^R 1,507.6
2002	234.3	372.5	108.4	13.0	1.4	122.8	413.6	254.1	39.2	0.0	0.0	0.8	37.4	1,474.7
2003	242.1	267.1	186.3	14.0	1.2	201.5	423.9	247.7	39.4	0.0	0.0	0.4	18.7	1,440.8
2004	233.6	266.5	205.7	10.1	3.1	219.0	423.8	239.6	41.5	0.0	0.0	1.2	17.7	1,442.7

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, North Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum										Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels										Million kWh				Million kWh	
1960	8,947	45	2,617	692	13,445	3,401	12091	2,635	724	35,875	4,603	186	76,268	0	4,998	--	489	--
1965	12,707	76	2,699	714	17,182	3,649	12717	4,188	835	43,144	4,723	835	90,687	0	5,385	--	-6,400	--
1970	20,417	151	3,621	151	22,612	4,702	11612	5,489	851	56,348	6,778	1,416	113,580	0	4,374	--	-9,808	--
1975	20,055	115	3,049	219	21,259	3,809	5,832	6,445	944	66,935	7,779	1,815	118,083	1,405	7,055	--	21,932	--
1980	25,466	153	3,089	215	24,116	5,209	3,259	7,979	1,206	66,222	9,058	3,112	123,465	5,775	5,486	--	9,281	--
1985	22,052	134	3,450	174	26,290	6,668	4,775	7,546	1,097	70,856	6,233	2,493	129,582	19,303	4,094	--	21,718	--
1990	22,590	162	4,207	213	26,189	5,567	1,625	8,892	1,235	77,525	5,857	4,912	136,222	25,905	6,819	--	51,302	--
1995	26,434	205	6,426	139	31,396	4,947	2,360	12,137	1,178	86,421	6,263	4,995	156,262	35,910	5,521	--	41,078	--
1996	29,813	214	4,046	148	32,589	9,127	2,890	13,917	1,143	88,147	6,832	11,138	169,977	33,718	5,952	--	34,848	--
1997	30,859	216	4,163	159	32,724	7,153	2,968	15,789	1,207	90,933	5,999	11,770	172,865	32,453	5,626	--	32,927	--
1998	30,319	214	4,422	138	33,296	6,755	3,394	13,100	1,264	94,177	4,884	12,628	174,057	38,778	5,738	--	26,813	--
1999	29,738	217	4,587	187	31,371	6,802	2,216	11,858	1,277	97,421	4,364	12,936	173,019	37,524	3,684	--	45,405	--
2000	31,371	234	4,924	140	36,210	7,277	2,282	14,101	1,258	97,833	4,969	12,181	181,175	39,127	3,138	--	42,770	--
2001	30,481	207	5,262	151	36,595	6,051	2,250	13,847	1,153	98,717	3,623	9,273	176,922	37,775	2,596	--	R 49,651	--
2002	31,208	235	5,076	91	34,084	4,825	1,392	12,562	1,139	100,642	3,972	9,389	173,171	39,627	3,492	--	43,578	--
2003	31,124	219	5,252	141	34,755	5,246	2,067	11,945	1,053	102,618	4,904	9,520	177,501	40,907	7,201	--	R 25,789	--
2004	31,723	225	6,049	110	36,644	5,397	2,100	12,122	1,067	105,411	5,910	10,724	185,534	40,091	5,435	--	43,429	--
Trillion Btu																		
1960	231.3	47.0	17.4	3.5	78.3	18.2	68.6	10.6	4.4	188.4	28.9	1.1	419.4	0.0	53.8	73.7	1.7	827.0
1965	325.9	78.2	17.9	3.6	100.1	19.7	72.1	16.8	5.1	226.6	29.7	4.7	496.3	0.0	56.3	67.3	-21.8	1,002.2
1970	491.4	154.9	24.0	0.8	131.7	25.7	65.8	20.7	5.2	296.0	42.6	8.0	620.6	0.0	45.9	65.9	-33.5	1,345.2
1975	476.5	116.9	20.2	1.1	123.8	20.8	33.1	23.9	5.7	351.6	48.9	10.2	639.5	15.5	73.4	66.4	74.8	1,463.0
1980	624.7	155.2	20.5	1.1	140.5	28.7	18.5	29.3	7.3	347.9	56.9	17.2	667.9	63.0	57.0	78.9	31.7	1,678.3
1985	550.5	138.4	22.9	0.9	153.1	37.0	27.1	27.2	6.7	372.2	39.2	13.7	700.0	205.0	42.8	94.0	74.1	1,805.6
1990	568.3	166.7	27.9	1.1	152.6	30.8	9.2	32.2	7.5	407.2	36.8	27.1	732.5	274.1	70.9	197.5	175.0	2,085.4
1995	662.9	212.0	42.6	0.7	182.9	28.0	13.4	44.0	7.1	450.7	39.4	27.4	836.2	377.3	56.9	111.5	140.2	2,397.3
1996	744.3	222.1	26.8	0.7	189.8	51.7	16.4	50.3	6.9	459.8	43.0	60.2	905.7	354.1	61.5	109.5	118.9	2,516.5
1997	765.9	223.4	27.6	0.8	190.6	40.6	16.8	57.1	7.3	474.0	37.7	63.8	916.4	340.6	57.5	107.0	112.3	2,523.5
1998	754.3	222.7	29.3	0.7	193.9	38.3	19.2	47.3	7.7	490.9	30.7	69.0	927.1	406.8	58.5	100.8	91.5	2,562.0
1999	742.4	224.8	30.4	0.9	182.7	38.6	12.6	42.9	7.7	507.7	27.4	70.4	921.4	392.1	37.7	102.1	154.9	2,575.7
2000	786.1	240.7	32.7	0.7	210.9	41.3	12.9	50.9	7.6	509.7	31.2	65.9	963.8	408.1	32.0	104.2	145.9	2,681.2
2001	756.3	215.6	34.9	0.8	213.2	34.3	12.8	50.0	7.0	514.3	22.8	50.8	940.9	394.7	26.8	R 101.3	R 169.4	R 2,605.4
2002	770.9	244.8	33.7	0.5	198.5	27.4	7.9	45.4	6.9	524.1	25.0	51.4	920.8	413.7	35.5	90.1	148.7	R 2,624.9
2003	771.6	227.8	34.9	0.7	202.4	29.7	11.7	43.3	6.4	534.3	30.8	52.2	946.6	426.3	73.7	R 109.3	88.0	R 2,643.8
2004	782.7	232.7	40.1	0.6	213.5	30.6	11.9	43.9	6.5	549.7	37.2	59.0	992.9	418.0	54.5	86.3	148.2	2,715.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	587	9	5,887	10,429	1,615	17,931	2,196	--	--	5,796	--	14,334	--
1965	309	15	6,654	10,547	2,563	19,765	1,527	--	--	8,601	--	20,540	--
1970	244	27	8,663	10,045	3,003	21,711	1,024	--	--	14,660	--	35,484	--
1975	111	27	7,261	4,901	2,245	14,408	1,047	--	--	18,999	--	45,689	--
1980	36	34	7,044	2,747	2,846	12,637	1,154	--	--	24,377	--	58,777	--
1985	43	29	5,449	3,994	3,194	12,636	1,428	--	--	26,852	--	61,857	--
1990	31	35	4,225	1,408	4,277	9,910	585	--	--	33,144	--	76,670	--
1995	29	49	4,023	2,098	5,850	11,970	885	--	--	39,506	--	89,743	--
1996	25	59	4,257	2,546	6,696	13,499	919	--	--	41,592	--	94,605	--
1997	21	53	3,426	2,603	6,664	12,694	725	--	--	40,611	--	92,034	--
1998	22	51	2,993	2,988	6,358	12,339	645	--	--	42,890	--	97,297	--
1999	18	53	2,968	1,985	6,430	11,383	679	--	--	43,648	--	99,866	--
2000	12	64	3,238	1,979	6,956	12,172	729	--	--	46,537	--	105,878	--
2001	14	57	3,118	2,022	7,158	12,297	484	--	--	46,201	--	^R 103,909	--
2002	16	59	2,808	1,223	6,670	10,700	492	--	--	49,854	--	111,687	--
2003	17	65	2,967	1,786	7,415	12,168	518	--	--	49,349	--	^R 109,621	--
2004	39	63	2,868	1,892	7,781	12,541	530	--	--	51,717	--	115,114	--
Trillion Btu													
1960	14.5	8.9	34.3	59.1	6.5	99.9	43.9	0.0	0.0	19.8	187.0	48.9	235.9
1965	7.6	15.1	38.8	59.8	10.3	108.8	30.5	0.0	0.0	29.3	191.4	70.1	261.5
1970	5.8	28.0	50.5	57.0	11.3	118.8	20.5	0.0	0.0	50.0	223.1	121.1	344.2
1975	2.6	28.0	42.3	27.8	8.3	78.4	20.9	0.0	0.0	64.8	194.8	155.9	350.6
1980	0.9	34.4	41.0	15.6	10.5	67.1	23.1	0.0	0.0	83.2	208.6	200.5	409.1
1985	1.1	29.6	31.7	22.6	11.5	65.9	28.6	0.0	0.0	91.6	216.8	211.1	427.8
1990	0.8	36.1	24.6	8.0	15.5	48.1	11.7	^f 0.1	^f 0.2	113.1	^f 210.1	261.6	^f 471.7
1995	0.7	51.0	23.4	11.9	21.2	56.5	17.7	0.2	0.2	134.8	261.1	306.2	567.3
1996	0.6	60.9	24.8	14.4	24.2	63.4	18.4	0.2	0.2	141.9	285.6	322.8	608.4
1997	0.5	54.8	20.0	14.8	24.1	58.8	14.5	0.2	0.2	138.6	267.6	314.0	581.6
1998	0.6	52.9	17.4	16.9	23.0	57.4	12.9	0.2	0.2	146.3	270.4	332.0	602.4
1999	0.5	54.7	17.3	11.3	23.3	51.8	13.6	0.2	0.1	148.9	269.9	340.7	610.6
2000	0.3	65.9	18.9	11.2	25.1	55.2	14.6	0.2	0.1	158.8	295.1	361.3	656.3
2001	0.4	59.2	18.2	11.5	25.9	55.5	9.7	0.2	0.1	157.6	282.7	^R 354.5	^R 637.3
2002	0.4	61.5	16.4	6.9	24.1	47.4	9.8	0.2	0.1	170.1	289.6	381.1	670.7
2003	0.4	68.3	17.3	10.1	26.9	54.3	10.4	0.3	0.1	168.4	302.2	374.0	676.2
2004	1.0	65.1	16.7	10.7	28.2	55.6	10.6	0.3	0.1	176.5	309.1	392.8	701.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	408	4	1,156	248	285	206	122	2,018	0	--	--	2,667	--	6,596	--
1965	233	7	1,307	251	452	278	120	2,409	0	--	--	5,360	--	12,798	--
1970	192	22	1,701	239	530	355	179	3,004	0	--	--	9,697	--	23,471	--
1975	259	22	1,426	117	396	414	233	2,586	0	--	--	11,679	--	28,085	--
1980	135	26	1,673	118	502	790	491	3,574	0	--	--	14,258	--	34,378	--
1985	152	25	2,958	245	564	633	322	4,721	0	--	--	19,163	--	44,145	--
1990	125	31	2,302	78	755	782	223	4,140	^g 24	--	--	25,516	--	59,024	--
1995	195	37	2,345	147	1,032	61	185	3,770	15	--	--	31,104	--	70,656	--
1996	181	40	2,824	178	1,182	312	220	4,716	13	--	--	32,563	--	74,068	--
1997	171	38	2,861	205	1,176	176	169	4,587	16	--	--	33,344	--	75,564	--
1998	178	36	2,584	261	1,122	347	114	4,427	13	--	--	35,720	--	81,031	--
1999	132	38	2,162	185	1,135	311	100	3,892	10	--	--	37,202	--	85,117	--
2000	101	43	2,679	234	1,227	330	113	4,583	10	--	--	39,067	--	88,884	--
2001	114	39	3,096	192	1,263	263	128	4,941	2	--	--	39,895	--	^R 89,727	--
2002	116	40	1,992	95	1,177	275	74	3,613	8	--	--	41,451	--	92,861	--
2003	113	44	2,125	269	1,308	1,163	208	5,075	6	--	--	41,672	--	92,569	--
2004	314	45	1,680	168	1,373	1,461	276	4,958	17	--	--	42,864	--	95,409	--
Trillion Btu															
1960	10.1	3.8	6.7	1.4	1.1	1.1	0.8	11.1	0.0	0.8	0.0	9.1	35.0	22.5	57.5
1965	5.7	7.5	7.6	1.4	1.8	1.5	0.8	13.1	0.0	0.6	0.0	18.3	45.2	43.7	88.8
1970	4.6	22.0	9.9	1.4	2.0	1.9	1.1	16.3	0.0	0.4	0.0	33.1	76.3	80.1	156.4
1975	6.1	22.0	8.3	0.7	1.5	2.2	1.5	14.1	0.0	0.4	0.0	39.8	82.4	95.8	178.2
1980	3.3	26.5	9.7	0.7	1.8	4.1	3.1	19.5	0.0	0.6	0.0	48.6	98.5	117.3	215.8
1985	3.8	25.9	17.2	1.4	2.0	3.3	2.0	26.0	0.0	0.7	0.0	65.4	121.7	150.6	272.3
1990	3.2	32.3	13.4	0.4	2.7	4.1	1.4	22.1	^g 0.3	^g 1.3	^g 0.0	87.1	^g 146.1	201.4	^g 347.5
1995	4.9	38.6	13.7	0.8	3.7	0.3	1.2	19.7	0.2	2.4	0.0	106.1	171.9	241.1	413.0
1996	4.5	41.9	16.4	1.0	4.3	1.6	1.4	24.7	0.1	2.5	0.0	111.1	184.9	252.7	437.6
1997	4.3	39.4	16.7	1.2	4.3	0.9	1.1	24.1	0.2	2.4	0.0	113.8	184.1	257.8	441.9
1998	4.8	37.9	15.1	1.5	4.1	1.8	0.7	23.1	0.1	2.1	0.0	121.9	189.9	276.5	466.4
1999	3.6	39.4	12.6	1.0	4.1	1.6	0.6	20.0	0.1	2.2	0.0	126.9	192.2	290.4	482.6
2000	2.7	44.4	15.6	1.3	4.4	1.7	0.7	23.8	0.1	2.4	0.0	133.3	206.7	303.3	510.0
2001	2.8	40.2	18.0	1.1	4.6	1.4	0.8	25.9	(s)	1.7	0.0	136.1	206.8	^R 306.1	^R 512.9
2002	2.9	42.0	11.6	0.5	4.3	1.4	0.5	18.3	0.1	1.7	0.0	141.4	206.4	316.8	523.3
2003	2.9	46.2	12.4	1.5	4.7	6.1	1.3	26.0	0.1	1.8	0.0	142.2	219.2	315.8	535.0
2004	7.8	47.0	9.8	1.0	5.0	7.6	1.7	25.1	0.2	1.8	0.0	146.3	228.0	325.5	553.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	2,421	26	2,617	3,155	1,413	730	179	1,089	3,967	186	13,336	48	--	--	8,773	--	21,697
1965	2,563	47	2,699	4,710	1,919	1,156	258	1,315	4,005	835	16,896	37	--	--	10,707	--	25,568
1970	2,267	75	3,621	4,514	1,328	1,891	328	1,004	5,809	1,416	19,911	10	--	--	16,099	--	38,966
1975	1,479	62	3,049	4,271	814	3,695	446	782	7,045	1,815	21,915	5	--	--	20,875	--	50,201
1980	1,375	86	3,089	4,131	394	4,581	571	514	8,468	3,112	24,859	3	--	--	25,254	--	60,891
1985	2,247	75	3,450	3,613	537	3,606	520	832	5,814	2,493	20,864	3	--	--	26,272	--	60,522
1990	2,989	86	4,207	3,467	139	3,700	585	807	5,121	4,912	22,938	9	--	--	31,265	--	72,323
1995	2,437	107	6,426	4,640	115	5,115	558	977	5,779	4,995	28,604	1,636	--	--	34,063	--	77,378
1996	2,336	104	4,046	4,372	165	5,908	541	1,003	6,280	11,138	33,453	1,741	--	--	34,142	--	77,659
1997	2,158	112	4,163	4,019	160	7,827	572	1,041	5,554	11,764	35,099	1,697	--	--	35,095	--	79,533
1998	1,883	106	4,422	4,822	145	5,409	599	923	4,622	12,529	33,470	1,663	--	--	34,986	--	79,366
1999	1,751	107	4,587	3,935	46	4,221	605	657	4,132	12,936	31,119	1,174	--	--	34,165	--	78,168
2000	1,762	107	4,924	4,207	69	5,820	596	804	4,729	12,181	33,329	936	--	--	34,252	--	77,928
2001	1,704	89	5,262	4,676	36	5,368	546	2,019	3,391	9,273	30,570	733	--	--	32,931	--	74,064
2002	1,597	98	5,076	3,411	75	4,581	539	1,957	3,099	9,389	28,127	1,062	--	--	31,381	--	70,302
2003	1,590	88	5,252	3,433	12	3,094	499	1,666	3,914	9,520	27,391	866	--	--	30,314	--	67,339
2004	1,448	90	6,049	3,483	40	2,830	505	1,966	5,233	10,724	30,830	688	--	--	31,075	--	69,168

Trillion Btu																	
1960	61.6	27.0	17.4	18.4	8.0	2.9	1.1	5.7	24.9	1.1	79.5	0.5	29.0	0.0	29.9	227.6	301.6
1965	64.6	48.3	17.9	27.4	10.9	4.6	1.6	6.9	25.2	4.7	99.2	0.4	36.2	0.0	36.5	285.3	372.5
1970	53.9	76.9	24.0	26.3	7.5	7.1	2.0	5.3	36.5	8.0	116.8	0.1	45.0	0.0	54.9	347.6	480.5
1975	34.7	63.2	20.2	24.9	4.6	13.7	2.7	4.1	44.3	10.2	124.8	0.1	45.1	0.0	71.2	339.1	510.4
1980	33.6	86.6	20.5	24.1	2.2	16.8	3.5	2.7	53.2	17.2	140.2	(s)	55.3	0.0	86.2	401.9	609.7
1985	55.9	77.4	22.9	21.0	3.0	13.0	3.2	4.4	36.6	13.7	117.8	(s)	64.8	0.0	89.6	405.5	612.0
1990	74.5	88.9	27.9	20.2	0.8	13.4	3.5	4.2	32.2	27.1	129.4	⁹ (s)	⁹ 82.8	⁹ 0.0	106.7	⁹ 482.4	729.1
1995	61.6	110.3	42.6	27.0	0.7	18.5	3.4	5.1	36.3	27.4	161.0	16.9	84.9	0.0	116.2	550.8	814.8
1996	58.7	107.9	26.8	25.5	0.9	21.3	3.3	5.2	39.5	60.2	182.8	18.0	82.7	0.0	116.5	566.6	831.5
1997	54.1	115.6	27.6	23.4	0.9	28.3	3.5	5.4	34.9	63.8	187.9	17.3	83.8	0.0	119.7	578.4	849.8
1998	47.2	110.9	29.3	28.1	0.8	19.5	3.6	4.8	29.1	68.4	183.7	17.0	78.9	0.0	119.4	557.0	827.8
1999	43.9	111.1	30.4	22.9	0.3	15.3	3.7	3.4	26.0	70.4	172.4	12.0	79.6	0.0	116.6	535.6	802.3
2000	46.7	109.8	32.7	24.5	0.4	21.0	3.6	4.2	29.7	65.9	182.0	9.5	80.6	0.0	116.9	545.5	811.4
2001	45.6	92.6	34.9	27.2	0.2	19.4	3.3	10.5	21.3	50.8	167.7	7.6	^R 83.0	0.0	112.4	^R 508.9	761.6
2002	42.2	102.7	33.7	19.9	0.4	16.5	3.3	10.2	19.5	51.4	154.9	10.8	^R 71.6	0.0	107.1	^R 489.2	729.1
2003	42.1	92.4	34.9	20.0	0.1	11.2	3.0	8.7	24.6	52.2	154.6	8.9	^R 90.1	0.0	103.4	^R 491.5	721.2
2004	38.1	93.4	40.1	20.3	0.2	10.2	3.1	10.3	32.9	59.0	176.1	6.9	66.1	0.0	106.0	486.6	722.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	42	2	692	3,187	3,401	5	545	34,580	494	42,905	0	0	--	0	--
1965	8	4	714	4,458	3,649	17	578	41,551	581	51,548	0	0	--	0	--
1970	4	6	151	6,301	4,702	65	523	54,989	345	67,077	0	0	--	0	--
1975	(s)	4	219	8,207	3,809	108	498	65,739	263	78,844	0	0	--	0	--
1980	0	6	215	10,707	5,209	50	635	64,918	99	81,834	0	0	--	0	--
1985	0	5	174	13,827	6,668	183	578	69,392	97	90,917	^f 228	0	--	0	--
1990	0	6	213	15,804	5,567	160	650	75,937	513	98,844	0	0	--	0	--
1995	0	6	139	19,855	4,947	141	620	85,383	299	111,384	28	0	--	0	--
1996	0	7	148	20,539	9,127	131	602	86,832	328	117,707	790	0	--	0	--
1997	0	7	159	21,909	7,153	122	636	89,716	277	119,970	798	0	--	0	--
1998	0	7	138	22,240	6,755	211	665	92,908	148	123,065	975	0	--	0	--
1999	0	7	187	21,635	6,802	72	672	96,454	132	125,953	836	0	--	0	--
2000	0	7	140	24,918	7,277	98	662	96,699	128	129,923	945	0	--	0	--
2001	0	7	151	24,827	6,051	58	607	96,436	104	128,234	1,303	0	--	0	--
2002	0	6	91	25,061	4,825	134	600	98,410	798	129,919	1,602	0	--	0	--
2003	0	6	141	25,071	5,246	128	554	99,788	782	131,710	2,103	0	--	0	--
2004	0	5	110	27,964	5,397	138	562	101,984	401	136,556	2,253	0	--	0	--

Trillion Btu															
1960	1.1	2.5	3.5	18.6	18.2	(s)	3.3	181.6	3.1	228.4	0.0	0.0	232.0	0.0	232.0
1965	0.2	4.4	3.6	26.0	19.7	0.1	3.5	218.3	3.7	274.8	0.0	0.0	279.4	0.0	279.4
1970	0.1	6.3	0.8	36.7	25.7	0.2	3.2	288.9	2.2	357.7	0.0	0.0	364.0	0.0	364.0
1975	(s)	3.6	1.1	47.8	20.8	0.4	3.0	345.3	1.7	420.1	0.0	0.0	423.8	0.0	423.8
1980	0.0	5.9	1.1	62.4	28.7	0.2	3.8	341.0	0.6	437.8	0.0	0.0	443.7	0.0	443.7
1985	0.0	4.9	0.9	80.5	37.0	0.7	3.5	364.5	0.6	487.7	^f 0.8	0.0	^f 493.4	0.0	^f 493.4
1990	0.0	6.5	1.1	92.1	30.8	0.6	3.9	398.9	3.2	530.6	0.0	0.0	537.1	0.0	537.1
1995	0.0	6.3	0.7	115.7	28.0	0.5	3.8	445.3	1.9	595.8	0.1	0.0	602.1	0.0	602.1
1996	0.0	7.7	0.7	119.6	51.7	0.5	3.6	452.9	2.1	631.2	2.8	0.0	638.9	0.0	638.9
1997	0.0	7.6	0.8	127.6	40.6	0.4	3.9	467.7	1.7	642.7	2.8	0.0	650.3	0.0	650.3
1998	0.0	7.0	0.7	129.5	38.3	0.8	4.0	484.2	0.9	658.5	3.5	0.0	665.5	0.0	665.5
1999	0.0	6.8	0.9	126.0	38.6	0.3	4.1	502.6	0.8	673.3	3.0	0.0	680.1	0.0	680.1
2000	0.0	7.4	0.7	145.1	41.3	0.4	4.0	503.8	0.8	696.1	3.3	0.0	703.5	0.0	703.5
2001	0.0	6.9	0.8	144.6	34.3	0.2	3.7	502.4	0.7	686.7	4.6	0.0	693.6	0.0	693.6
2002	0.0	6.4	0.5	146.0	27.4	0.5	3.6	512.5	5.0	695.5	5.7	0.0	701.8	0.0	701.8
2003	0.0	6.4	0.7	146.0	29.7	0.5	3.4	519.6	4.9	704.8	7.4	0.0	711.3	0.0	711.3
2004	0.0	5.2	0.6	162.9	30.6	0.5	3.4	531.8	2.5	732.3	8.0	0.0	737.6	0.0	737.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, North Carolina

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	5,488	5	19	60	0	79	0	4,951	--	0	0	0	0	--
1965	9,595	3	16	53	0	70	0	5,349	--	0	0	0	0	--
1970	17,709	21	445	1,432	0	1,877	0	4,363	--	0	0	0	0	--
1975	18,206	(s)	237	93	0	330	1,405	7,050	--	0	0	0	0	--
1980	23,920	2	(s)	561	0	561	5,775	5,483	--	0	0	0	0	--
1985	19,610	1	0	443	0	443	19,303	4,091	--	0	0	0	0	--
1990	19,444	3	0	390	0	390	25,905	6,792	--	0	0	0	0	--
1995	23,774	6	0	533	0	533	35,910	3,871	--	0	0	0	0	--
1996	27,272	4	4	597	0	601	33,718	4,198	--	0	0	0	0	--
1997	28,509	6	(s)	509	6	515	32,453	3,914	--	0	0	0	0	--
1998	28,235	14	0	657	99	755	38,778	4,062	--	0	0	0	0	--
1999	27,838	12	0	672	0	672	37,524	2,500	--	0	0	0	0	--
2000	29,496	13	0	1,169	0	1,169	39,127	2,192	--	0	0	0	0	--
2001	28,649	16	0	879	0	879	37,775	1,861	--	0	0	0	0	--
2002	29,478	32	0	813	0	813	39,627	2,421	--	0	0	0	0	--
2003	29,403	14	0	1,158	0	1,158	40,907	6,329	--	0	0	0	0	--
2004	29,922	21	0	649	0	649	40,091	4,731	--	0	0	0	0	--
Trillion Btu														
1960	144.0	4.8	0.1	0.4	0.0	0.5	0.0	53.3	0.0	0.0	0.0	0.0	0.0	202.6
1965	247.7	3.0	0.1	0.3	0.0	0.4	0.0	55.9	0.0	0.0	0.0	0.0	0.0	307.0
1970	427.0	21.6	2.8	8.3	0.0	11.1	0.0	45.8	0.0	0.0	0.0	0.0	0.0	505.6
1975	433.1	0.1	1.5	0.5	0.0	2.0	15.5	73.4	0.0	0.0	0.0	0.0	0.0	524.1
1980	586.9	1.8	(s)	3.3	0.0	3.3	63.0	57.0	0.0	0.0	0.0	0.0	0.0	711.9
1985	489.8	0.6	0.0	2.6	0.0	2.6	205.0	42.7	0.0	0.0	0.0	0.0	0.0	740.7
1990	489.8	2.9	0.0	2.3	0.0	2.3	274.1	70.7	1.8	0.0	0.0	0.0	0.0	841.5
1995	595.7	5.8	0.0	3.1	0.0	3.1	377.3	39.9	6.5	0.0	0.0	0.0	0.0	1,028.3
1996	680.4	3.7	(s)	3.5	0.0	3.5	354.1	43.4	5.9	0.0	0.0	0.0	0.0	1,091.1
1997	707.0	6.1	(s)	3.0	(s)	3.0	340.6	40.0	6.3	0.0	0.0	0.0	0.0	1,102.9
1998	701.8	14.0	0.0	3.8	0.6	4.4	406.8	41.4	6.9	0.0	0.0	0.0	0.0	1,175.4
1999	694.5	12.7	0.0	3.9	0.0	3.9	392.1	25.6	6.6	0.0	0.0	0.0	0.0	1,135.4
2000	736.4	13.2	0.0	6.8	0.0	6.8	408.1	22.4	6.7	0.0	0.0	0.0	0.0	1,193.4
2001	707.5	16.6	0.0	5.1	0.0	5.1	394.7	19.2	6.9	0.0	0.0	0.0	0.0	1,150.1
2002	725.5	32.2	0.0	4.7	0.0	4.7	413.7	24.6	7.0	0.0	0.0	0.0	0.0	1,207.7
2003	726.2	14.4	0.0	6.7	0.0	6.7	426.3	64.8	7.1	0.0	0.0	0.0	0.0	1,245.6
2004	735.8	22.0	0.0	3.8	0.0	3.8	418.0	47.4	7.8	0.0	0.0	0.0	0.0	1,234.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, North Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	2,100	26	1,123	66	3,773	2,103	904	1,212	202	7,719	687	794	18,583	0	1,060	--	--	-3,517	--
1965	1,719	32	795	165	5,170	2,069	52	1,154	167	8,212	868	875	19,526	0	2,497	--	--	-6,186	--
1970	4,186	33	1,402	95	4,975	2,074	245	1,719	166	8,766	728	972	21,141	0	2,815	--	--	-13,584	--
1975	5,100	37	1,054	85	4,446	1,855	70	1,580	158	10,044	1,089	1,095	21,477	0	3,345	--	--	-15,932	--
1980	12,346	23	753	64	8,139	1,702	15	1,302	177	9,167	716	1,048	23,083	0	2,513	--	--	-38,026	--
1985	22,958	28	1,047	4	7,637	1,682	15	549	162	8,822	505	824	21,246	0	2,173	--	--	-53,098	--
1990	28,114	32	814	28	7,219	1,178	6	1,426	182	8,151	326	1,138	20,468	0	1,711	--	--	-66,009	--
1995	30,237	45	791	65	8,005	333	5	1,754	173	8,650	164	1,106	21,047	0	2,457	--	--	-70,056	--
1996	30,511	49	911	50	8,334	246	8	2,226	168	8,683	135	1,254	22,015	0	3,151	--	--	-74,832	--
1997	29,360	56	1,241	33	8,034	189	7	2,534	178	8,628	187	1,239	22,270	0	3,320	--	--	-70,602	--
1998	31,060	50	1,440	43	7,181	211	8	1,976	186	8,681	44	1,074	20,844	0	2,296	--	--	-73,330	--
1999	31,276	56	2,097	39	7,548	405	19	2,675	188	8,711	61	1,107	22,850	0	2,609	--	--	-72,015	--
2000	31,902	57	1,108	34	7,805	413	11	3,354	185	8,512	78	1,037	22,538	0	2,123	--	--	-72,179	--
2001	31,524	61	1,331	86	8,869	751	8	5,426	170	8,478	69	1,243	26,430	0	1,332	--	--	^R -67,904	--
2002	31,984	67	1,111	58	8,202	528	4	3,406	168	8,554	101	1,197	23,330	0	1,593	--	--	-68,139	--
2003	31,970	61	665	70	8,298	558	5	2,775	155	8,675	143	1,277	22,621	0	1,724	--	--	-66,130	--
2004	30,079	60	1,025	65	9,405	1,093	9	3,311	157	8,602	63	1,235	24,966	0	1,546	--	--	-62,126	--
Trillion Btu																			
1960	30.5	27.4	7.5	0.3	22.0	11.3	5.1	4.9	1.2	40.5	4.3	4.8	101.9	0.0	11.4	0.5	0.0	-12.0	159.6
1965	24.7	32.4	5.3	0.8	30.1	11.1	0.3	4.6	1.0	43.1	5.5	5.3	107.1	0.0	26.1	0.3	(s)	-21.1	169.6
1970	57.5	33.7	9.3	0.5	29.0	11.2	1.4	6.5	1.0	46.0	4.6	5.8	115.3	0.0	29.5	0.4	1.0	-46.3	191.1
1975	67.9	36.9	7.0	0.4	25.9	10.0	0.4	5.9	1.0	52.8	6.8	6.6	116.8	0.0	34.8	0.5	4.0	-54.4	206.5
1980	163.3	24.0	5.0	0.3	47.4	9.2	0.1	4.8	1.1	48.2	4.5	6.3	126.8	0.0	26.1	2.4	9.7	-129.7	222.7
1985	302.0	29.8	6.9	(s)	44.5	9.1	0.1	2.0	1.0	46.3	3.2	5.1	118.2	0.0	22.7	3.1	9.0	-181.2	303.9
1990	374.5	33.5	5.4	0.1	42.1	6.4	(s)	5.2	1.1	42.8	2.1	6.8	112.0	0.0	17.8	ⁱ 1.9	ⁱ 0.2	-225.2	ⁱ 315.0
1995	399.8	47.7	5.2	0.3	46.6	1.9	(s)	6.4	1.1	45.1	1.0	6.7	114.3	0.0	25.3	2.6	2.6	-239.0	353.3
1996	404.0	51.6	6.0	0.3	48.5	1.4	(s)	8.0	1.0	45.3	0.9	7.5	119.0	0.0	32.6	2.4	3.1	-255.3	357.4
1997	386.0	59.3	8.2	0.2	46.8	1.1	(s)	9.2	1.1	45.0	1.2	7.5	120.2	0.0	33.9	2.3	0.6	-240.9	361.3
1998	409.2	51.4	9.6	0.2	41.8	1.2	(s)	7.1	1.1	45.2	0.3	6.5	113.1	0.0	23.4	2.2	-0.5	-250.2	348.7
1999	411.3	59.0	13.9	0.2	44.0	2.3	0.1	9.7	1.1	45.4	0.4	6.7	123.8	0.0	26.7	2.4	-0.3	-245.7	377.1
2000	424.6	58.5	7.4	0.2	45.5	2.3	0.1	12.1	1.1	44.3	0.5	6.3	119.7	0.0	21.7	2.6	2.4	-246.3	383.2
2001	420.0	62.6	8.8	0.4	51.7	4.3	(s)	19.6	1.0	44.2	0.4	7.5	137.9	0.0	13.8	3.5	2.2	^R -231.7	^R 408.3
2002	422.8	64.9	7.4	0.3	47.8	3.0	(s)	12.3	1.0	44.5	0.6	7.2	124.2	0.0	16.2	2.7	0.9	-232.5	399.1
2003	420.8	^R 59.1	4.4	0.4	48.3	3.2	(s)	10.1	0.9	45.2	0.9	7.7	121.0	0.0	17.7	^R 2.8	-0.5	-225.6	^R 395.3
2004	398.4	60.3	6.8	0.3	54.8	6.2	(s)	12.0	1.0	44.9	0.4	7.4	133.8	0.0	15.5	3.4	2.9	-212.0	402.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	328	4	874	860	787	2,521	23	--	--	728	--	1,800	--
1965	177	7	1,269	40	758	2,067	16	--	--	911	--	2,177	--
1970	80	8	1,103	190	1,283	2,576	19	--	--	1,399	--	3,387	--
1975	46	10	776	21	1,181	1,978	22	--	--	1,901	--	4,571	--
1980	30	10	1,173	5	511	1,689	119	--	--	2,456	--	5,922	--
1985	43	10	1,162	14	169	1,345	153	--	--	3,012	--	6,938	--
1990	27	9	981	5	653	1,639	84	--	--	2,954	--	6,833	--
1995	14	11	717	4	775	1,495	73	--	--	3,384	--	7,686	--
1996	18	13	818	5	945	1,768	76	--	--	3,602	--	8,192	--
1997	15	11	602	5	1,519	2,127	59	--	--	3,437	--	7,789	--
1998	13	10	532	6	1,088	1,626	52	--	--	3,272	--	7,423	--
1999	15	11	485	17	1,439	1,941	55	--	--	3,307	--	7,566	--
2000	15	11	564	3	1,756	2,322	59	--	--	3,390	--	7,713	--
2001	15	11	492	4	2,006	2,502	55	--	--	3,480	--	^R 7,826	--
2002	17	12	424	2	1,800	2,226	56	--	--	3,664	--	8,208	--
2003	22	12	502	3	1,727	2,232	59	--	--	3,707	--	8,236	--
2004	28	11	582	5	1,693	2,280	61	--	--	3,663	--	8,153	--
Trillion Btu													
1960	5.1	4.0	5.1	4.9	3.2	13.1	0.5	0.0	0.0	2.5	25.1	6.1	31.3
1965	2.7	6.6	7.4	0.2	3.0	10.7	0.3	0.0	0.0	3.1	23.4	7.4	30.8
1970	1.2	8.4	6.4	1.1	4.8	12.4	0.4	0.0	0.0	4.8	27.1	11.6	38.7
1975	0.6	10.2	4.5	0.1	4.4	9.0	0.4	0.0	0.0	6.5	26.8	15.6	42.4
1980	0.4	10.1	6.8	(s)	1.9	8.7	2.4	0.0	0.0	8.4	30.1	20.2	50.3
1985	0.6	11.0	6.8	0.1	0.6	7.5	3.1	0.0	0.0	10.3	32.3	23.7	56.0
1990	0.4	9.5	5.7	(s)	2.4	8.1	1.7	^f 0.1	^f (s)	10.1	^f 29.8	23.3	^f 53.1
1995	0.2	11.8	4.2	(s)	2.8	7.0	1.5	0.1	(s)	11.5	32.1	26.2	58.3
1996	0.3	13.2	4.8	(s)	3.4	8.2	1.5	0.1	(s)	12.3	35.6	28.0	63.6
1997	0.2	11.9	3.5	(s)	5.5	9.0	1.2	0.1	(s)	11.7	34.2	26.6	60.8
1998	0.2	10.5	3.1	(s)	3.9	7.1	1.0	0.1	(s)	11.2	30.0	25.3	55.4
1999	0.2	11.0	2.8	0.1	5.2	8.1	1.1	0.1	(s)	11.3	31.9	25.8	57.7
2000	0.2	11.3	3.3	(s)	6.3	9.6	1.2	0.1	(s)	11.6	34.0	26.3	60.4
2001	0.2	10.9	2.9	(s)	7.3	10.1	1.1	0.1	(s)	11.9	34.4	^R 26.7	^R 61.1
2002	0.3	11.4	2.5	(s)	6.5	9.0	1.1	0.1	(s)	12.5	34.4	28.0	62.4
2003	0.4	11.5	2.9	(s)	6.3	9.2	1.2	0.2	(s)	12.6	35.1	28.1	63.2
2004	0.5	11.2	3.4	(s)	6.1	9.5	1.2	0.2	(s)	12.5	35.1	27.8	62.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	228	3	198	0	139	32	73	442	0	--	--	304	--	753	--
1965	133	5	288	0	134	179	209	809	0	--	--	443	--	1,058	--
1970	63	8	250	0	226	151	104	731	0	--	--	696	--	1,684	--
1975	107	12	176	0	208	95	493	972	0	--	--	805	--	1,936	--
1980	113	11	642	0	90	73	400	1,206	0	--	--	1,145	--	2,761	--
1985	154	10	502	(s)	30	69	64	665	0	--	--	2,026	--	4,667	--
1990	108	10	175	(s)	115	70	22	383	^g 0	--	--	2,300	--	5,321	--
1995	96	12	148	1	137	10	19	315	0	--	--	2,728	--	6,196	--
1996	129	12	208	2	167	10	6	393	0	--	--	2,877	--	6,545	--
1997	125	11	257	1	268	10	9	545	0	--	--	2,769	--	6,276	--
1998	105	10	269	1	192	21	16	499	0	--	--	2,761	--	6,264	--
1999	113	10	234	1	254	22	15	525	0	--	--	2,793	--	6,390	--
2000	119	11	232	1	310	10	12	565	0	--	--	2,992	--	6,807	--
2001	119	10	262	2	354	10	36	664	0	--	--	3,577	--	^R 8,044	--
2002	128	12	142	1	318	10	94	565	0	--	--	3,920	--	8,781	--
2003	147	11	178	1	305	19	100	603	0	--	--	3,800	--	8,441	--
2004	223	10	180	2	299	10	18	509	0	--	--	3,843	--	8,554	--
Trillion Btu															
1960	3.5	2.9	1.2	0.0	0.6	0.2	0.5	2.3	0.0	(s)	0.0	1.0	9.9	2.6	12.5
1965	2.1	5.0	1.7	0.0	0.5	0.9	1.3	4.5	0.0	(s)	0.0	1.5	13.0	3.6	16.6
1970	0.9	8.6	1.5	0.0	0.9	0.8	0.7	3.8	0.0	(s)	0.0	2.4	15.6	5.7	21.4
1975	1.5	12.4	1.0	0.0	0.8	0.5	3.1	5.4	0.0	(s)	0.0	2.7	22.1	6.6	28.7
1980	1.5	11.6	3.7	0.0	0.3	0.4	2.5	7.0	0.0	0.1	0.0	3.9	24.0	9.4	33.5
1985	2.0	10.7	2.9	(s)	0.1	0.4	0.4	3.8	0.0	0.1	0.0	6.9	23.5	15.9	39.5
1990	1.5	10.6	1.0	(s)	0.4	0.4	0.1	1.9	^g 0.0	^g 0.2	^g (s)	7.8	^g 22.1	18.2	^g 40.2
1995	1.5	12.2	0.9	(s)	0.5	0.1	0.1	1.5	0.0	0.2	0.1	9.3	24.8	21.1	46.0
1996	1.9	12.8	1.2	(s)	0.6	0.1	(s)	1.9	0.0	0.2	0.1	9.8	26.7	22.3	49.0
1997	1.9	11.4	1.5	(s)	1.0	0.1	0.1	2.6	0.0	0.2	0.1	9.4	25.6	21.4	47.0
1998	1.5	10.5	1.6	(s)	0.7	0.1	0.1	2.5	0.0	0.2	0.1	9.4	24.1	21.4	45.5
1999	1.6	10.5	1.4	(s)	0.9	0.1	0.1	2.5	0.0	0.2	0.1	9.5	24.4	21.8	46.2
2000	1.7	11.4	1.3	(s)	1.1	0.1	0.1	2.6	0.0	0.2	0.1	10.2	26.3	23.2	49.5
2001	1.9	10.8	1.5	(s)	1.3	0.1	0.2	3.1	0.0	0.2	0.1	12.2	28.3	27.4	55.7
2002	2.1	11.3	0.8	(s)	1.1	0.1	0.6	2.6	0.0	0.2	0.1	13.4	29.8	30.0	59.7
2003	2.4	10.6	1.0	(s)	1.1	0.1	0.6	2.9	0.0	0.2	0.2	13.0	29.3	28.8	58.1
2004	3.8	10.5	1.0	(s)	1.1	0.1	0.1	2.3	0.0	0.2	0.2	13.1	30.1	29.2	59.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	521	20	1,123	2,104	44	257	44	2,927	530	794	7,823	0	--	--	121	--	298
1965	444	21	795	2,696	12	240	20	2,533	632	875	7,804	0	--	--	241	--	576
1970	523	16	1,402	2,174	55	206	28	2,315	558	972	7,710	0	--	--	720	--	1,743
1975	570	14	1,054	1,613	49	189	21	2,193	577	1,095	6,792	0	--	--	1,007	--	2,421
1980	585	2	753	2,460	10	690	26	1,540	315	1,048	6,842	0	--	--	1,576	--	3,800
1985	5,407	7	1,047	2,890	1	340	24	1,080	440	824	6,646	0	--	--	1,988	--	4,581
1990	6,400	11	814	3,016	1	644	27	799	304	1,138	6,742	90	--	--	1,760	--	4,071
1995	7,447	18	791	3,027	(s)	830	25	685	145	1,106	6,610	0	--	--	1,771	--	4,024
1996	6,724	20	911	2,912	1	1,093	25	575	129	1,254	6,899	0	--	--	1,835	--	4,175
1997	6,465	29	1,241	2,613	1	734	26	450	178	1,239	6,482	0	--	--	2,076	--	4,705
1998	6,664	29	1,440	2,563	1	691	27	562	27	1,074	6,386	0	--	--	2,187	--	4,961
1999	6,608	26	2,097	2,362	1	972	28	434	46	1,107	7,048	0	--	--	3,013	--	6,893
2000	6,719	24	1,108	2,756	7	1,283	27	443	66	1,037	6,726	0	--	--	3,031	--	6,897
2001	6,595	26	1,331	3,420	2	3,057	25	527	33	1,243	9,637	0	--	--	2,753	--	6,192
2002	6,592	29	1,111	2,839	1	1,279	25	550	4	1,197	7,005	0	--	--	2,636	--	5,905
2003	6,628	24	665	2,796	2	721	23	573	43	1,277	6,098	0	--	--	2,954	--	6,561
2004	5,913	24	1,025	3,532	2	1,286	23	717	45	1,235	7,865	0	--	--	3,010	--	6,701

Trillion Btu																	
1960	7.7	20.3	7.5	12.3	0.2	1.0	0.3	15.4	3.3	4.8	44.7	0.0	0.0	0.0	0.4	73.2	1.0
1965	6.5	20.9	5.3	15.7	0.1	1.0	0.1	13.3	4.0	5.3	44.7	0.0	0.0	0.0	0.8	72.9	2.0
1970	7.2	16.3	9.3	12.7	0.3	0.8	0.2	12.2	3.5	5.8	44.7	0.0	0.0	0.0	2.5	70.8	5.9
1975	7.4	14.0	7.0	9.4	0.3	0.7	0.1	11.5	3.6	6.6	39.2	0.0	0.0	0.0	3.4	64.1	8.3
1980	7.7	2.1	5.0	14.3	0.1	2.5	0.2	8.1	2.0	6.3	38.4	0.0	0.0	0.0	5.4	53.6	13.0
1985	71.2	7.3	6.9	16.8	(s)	1.2	0.1	5.7	2.8	5.1	38.7	0.0	0.0	0.0	6.8	124.0	15.6
1990	86.3	11.7	5.4	17.6	(s)	2.3	0.2	4.2	1.9	6.8	38.4	90.0	90.1	90.0	6.0	142.5	13.9
1995	99.4	18.7	5.2	17.6	(s)	3.0	0.2	3.6	0.9	6.7	37.2	0.0	0.9	0.0	6.0	162.4	13.7
1996	90.0	20.5	6.0	17.0	(s)	3.9	0.1	3.0	0.8	7.5	38.5	0.0	0.7	0.0	6.3	155.9	14.2
1997	85.9	30.6	8.2	15.2	(s)	2.7	0.2	2.3	1.1	7.5	37.2	0.0	0.9	0.0	7.1	161.7	16.1
1998	88.9	30.0	9.6	14.9	(s)	2.5	0.2	2.9	0.2	6.5	36.7	0.0	1.0	0.0	7.5	164.1	16.9
1999	88.2	27.4	13.9	13.8	(s)	3.5	0.2	2.3	0.3	6.7	40.6	0.0	1.1	0.0	10.3	167.6	23.5
2000	95.6	24.7	7.4	16.1	(s)	4.6	0.2	2.3	0.4	6.3	37.2	0.0	1.2	0.0	10.3	169.1	23.5
2001	93.5	26.9	8.8	19.9	(s)	11.0	0.2	2.7	0.2	7.5	50.4	0.0	2.2	0.0	9.4	182.4	21.1
2002	92.2	28.2	7.4	16.5	(s)	4.6	0.1	2.9	(s)	7.2	38.8	0.0	R 1.4	0.0	9.0	R 169.6	R 20.1
2003	94.8	R 23.2	4.4	16.3	(s)	2.6	0.1	3.0	0.3	7.7	34.4	0.0	1.4	0.0	10.1	R 163.9	R 22.4
2004	84.8	24.4	6.8	20.6	(s)	4.7	0.1	3.7	0.3	7.4	43.6	0.0	2.0	0.0	10.3	165.1	22.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, North Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	9	(s)	66	592	2,103	29	158	4,760	69	7,778	0	0	--	0	--
1965	1	(s)	165	916	2,069	22	147	5,499	25	8,843	0	0	--	0	--
1970	1	(s)	95	1,441	2,074	3	138	6,300	41	10,092	0	0	--	0	--
1975	(s)	(s)	85	1,880	1,855	2	137	7,756	0	11,715	0	0	--	0	--
1980	0	(s)	64	3,795	1,702	12	151	7,553	0	13,278	0	0	--	0	--
1985	0	1	4	3,009	1,682	11	138	7,673	0	12,517	^f 69	0	--	0	--
1990	0	2	28	2,990	1,178	14	155	7,282	0	11,647	85	0	--	0	--
1995	0	5	65	4,014	333	13	148	7,955	0	12,528	164	0	--	0	--
1996	0	5	50	4,241	246	21	144	8,098	0	12,800	122	0	--	0	--
1997	0	5	33	4,409	189	12	152	8,168	0	12,963	119	0	--	0	--
1998	0	(s)	43	3,728	211	4	159	8,098	0	12,243	116	0	--	0	--
1999	0	10	39	4,386	405	9	160	8,255	0	13,255	123	0	--	0	--
2000	0	11	34	4,158	413	5	158	8,060	0	12,829	149	0	--	0	--
2001	0	14	86	4,632	751	8	145	7,941	0	13,562	179	0	--	0	--
2002	0	14	58	4,733	528	10	143	7,993	0	13,465	228	0	--	0	--
2003	0	14	70	4,727	558	23	132	8,083	0	13,592	273	0	--	0	--
2004	0	14	65	5,037	1,093	33	134	7,875	0	14,238	243	0	--	0	--

Trillion Btu															
1960	0.1	(s)	0.3	3.5	11.3	0.1	1.0	25.0	0.4	41.6	0.0	0.0	41.7	0.0	41.7
1965	(s)	(s)	0.8	5.3	11.1	0.1	0.9	28.9	0.2	47.3	0.0	0.0	47.3	0.0	47.3
1970	(s)	(s)	0.5	8.4	11.2	(s)	0.8	33.1	0.3	54.2	0.0	0.0	54.3	0.0	54.3
1975	(s)	0.1	0.4	11.0	10.0	(s)	0.8	40.7	0.0	63.0	0.0	0.0	63.1	0.0	63.1
1980	0.0	0.2	0.3	22.1	9.2	(s)	0.9	39.7	0.0	72.3	0.0	0.0	72.5	0.0	72.5
1985	0.0	0.7	(s)	17.5	9.1	(s)	0.8	40.3	0.0	67.8	^f 0.2	0.0	^f 68.8	0.0	^f 68.8
1990	0.0	1.8	0.1	17.4	6.4	0.1	0.9	38.3	0.0	63.2	0.3	0.0	65.3	0.0	65.3
1995	0.0	5.0	0.3	23.4	1.9	(s)	0.9	41.5	0.0	68.0	0.6	0.0	73.0	0.0	73.0
1996	0.0	5.1	0.3	24.7	1.4	0.1	0.9	42.2	0.0	69.5	0.4	0.0	74.6	0.0	74.6
1997	0.0	5.3	0.2	25.7	1.1	(s)	0.9	42.6	0.0	70.5	0.4	0.0	75.8	0.0	75.8
1998	0.0	0.5	0.2	21.7	1.2	(s)	1.0	42.2	0.0	66.3	0.4	0.0	66.8	0.0	66.8
1999	0.0	10.0	0.2	25.5	2.3	(s)	1.0	43.0	0.0	72.1	0.4	0.0	82.1	0.0	82.1
2000	0.0	11.0	0.2	24.2	2.3	(s)	1.0	42.0	0.0	69.7	0.5	0.0	80.7	0.0	80.7
2001	0.0	14.0	0.4	27.0	4.3	(s)	0.9	41.4	0.0	74.0	0.6	0.0	88.0	0.0	88.0
2002	0.0	13.9	0.3	27.6	3.0	(s)	0.9	41.6	0.0	73.4	0.8	0.0	87.3	0.0	87.3
2003	0.0	13.8	0.4	27.5	3.2	0.1	0.8	42.1	0.0	74.0	1.0	0.0	87.8	0.0	87.8
2004	0.0	14.2	0.3	29.3	6.2	0.1	0.8	41.1	0.0	77.9	0.9	0.0	92.1	0.0	92.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, North Dakota

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	1,014	(s)	15	4	0	20	0	1,060	--	0	0	0	0	--
1965	964	(s)	2	1	0	3	0	2,497	--	0	0	0	-1	--
1970	3,519	(s)	25	7	0	32	0	2,815	--	0	0	0	293	--
1975	4,377	(s)	18	2	0	20	0	3,345	--	0	0	0	1,166	--
1980	11,618	(s)	0	68	0	68	0	2,513	--	0	0	0	2,850	--
1985	17,354	(s)	0	74	0	74	0	2,173	--	0	0	(s)	2,645	--
1990	21,579	(s)	0	57	0	57	0	1,711	--	ⁱ 0	ⁱ 0	ⁱ 0	20	--
1995	22,680	(s)	0	99	0	99	0	2,457	--	0	0	0	731	--
1996	23,640	(s)	0	155	0	155	0	3,151	--	0	0	0	868	--
1997	22,754	(s)	0	153	0	153	0	3,320	--	0	0	0	118	--
1998	24,278	0	0	89	0	89	0	2,296	--	0	0	0	-200	--
1999	24,540	0	0	81	0	81	0	2,609	--	0	0	0	-160	--
2000	25,048	0	0	95	0	95	0	2,123	--	0	0	0	647	--
2001	24,795	(s)	0	64	0	64	0	1,332	--	0	0	0	570	--
2002	25,247	(s)	3	65	0	68	0	1,593	--	0	0	0	175	--
2003	25,173	(s)	0	95	0	95	0	1,724	--	0	0	59	-414	--
2004	23,915	(s)	0	74	0	74	0	1,546	--	0	0	215	104	--
Trillion Btu														
1960	14.0	0.1	0.1	(s)	0.0	0.1	0.0	11.4	0.0	0.0	0.0	0.0	0.0	25.7
1965	13.4	(s)	(s)	(s)	0.0	(s)	0.0	26.1	0.0	0.0	0.0	0.0	(s)	39.6
1970	48.1	0.4	0.2	(s)	0.0	0.2	0.0	29.5	0.0	0.0	0.0	0.0	1.0	79.2
1975	58.4	0.2	0.1	(s)	0.0	0.1	0.0	34.8	0.0	0.0	0.0	0.0	4.0	97.5
1980	153.8	(s)	0.0	0.4	0.0	0.4	0.0	26.1	0.0	0.0	0.0	0.0	9.7	190.0
1985	228.2	(s)	0.0	0.4	0.0	0.4	0.0	22.7	0.0	0.0	0.0	(s)	9.0	260.4
1990	286.3	(s)	0.0	0.3	0.0	0.3	0.0	17.8	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.1	ⁱ 304.5
1995	298.6	(s)	0.0	0.6	0.0	0.6	0.0	25.3	0.0	0.0	0.0	0.0	2.5	327.0
1996	311.8	(s)	0.0	0.9	0.0	0.9	0.0	32.6	0.0	0.0	0.0	0.0	3.0	348.2
1997	298.0	(s)	0.0	0.9	0.0	0.9	0.0	33.9	0.0	0.0	0.0	0.0	0.4	333.2
1998	318.6	0.0	0.0	0.5	0.0	0.5	0.0	23.4	0.0	0.0	0.0	0.0	-0.7	341.9
1999	321.3	0.0	0.0	0.5	0.0	0.5	0.0	26.7	0.0	0.0	0.0	0.0	-0.5	347.9
2000	327.1	0.0	0.0	0.6	0.0	0.6	0.0	21.7	0.0	0.0	0.0	0.0	2.2	351.5
2001	324.4	(s)	0.0	0.4	0.0	0.4	0.0	13.8	0.0	0.0	0.0	0.0	1.9	340.4
2002	328.3	(s)	(s)	0.4	0.0	0.4	0.0	16.2	0.0	0.0	0.0	0.0	0.6	345.5
2003	323.2	(s)	0.0	0.6	0.0	0.6	0.0	17.7	0.0	0.0	0.0	0.6	-1.4	340.6
2004	309.3	(s)	0.0	0.4	0.0	0.4	0.0	15.5	0.0	0.0	0.0	2.1	0.4	327.7

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Ohio

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	51,250	700	6,862	1,395	23,919	1,808	3,955	3,680	3,064	78,170	11,605	9,400	143,859	0	20	--	--	48,958	--
1965	54,022	880	7,344	2,125	27,663	3,075	6,328	5,441	3,312	86,271	10,963	14,683	167,205	22	11	--	--	52,444	--
1970	66,863	1,053	9,017	712	34,458	5,857	6,494	8,712	3,631	106,296	6,445	16,418	198,040	0	7	--	--	49,486	--
1975	70,764	957	8,749	491	42,168	6,039	3,600	9,910	3,609	118,808	10,399	17,782	221,554	0	7	--	--	40,299	--
1980	64,914	897	7,324	473	48,833	7,219	2,452	44,263	3,821	113,232	6,918	23,356	257,892	2,119	6	--	--	44,845	--
1985	57,979	733	6,339	330	36,629	7,204	1,709	27,919	3,477	108,763	2,322	15,667	210,359	1,943	175	--	--	78,471	--
1990	59,205	747	9,880	239	37,580	10,602	901	10,994	3,912	110,487	1,656	20,461	206,713	10,664	181	--	--	95,562	--
1995	56,580	890	8,973	235	40,203	11,236	1,024	14,273	3,732	116,222	1,422	19,884	217,205	16,768	232	--	--	109,389	--
1996	59,835	933	11,258	345	44,036	11,960	1,194	16,019	3,622	115,361	1,684	23,386	228,865	13,919	397	--	--	95,266	--
1997	58,821	898	14,376	379	47,075	12,604	1,144	11,105	3,826	118,336	1,246	23,362	233,452	15,331	507	--	--	98,059	--
1998	60,514	811	12,638	365	45,775	13,825	1,255	8,687	4,006	119,932	916	24,101	231,500	16,476	406	--	--	85,572	--
1999	57,600	842	14,091	244	47,989	16,457	1,526	12,929	4,047	120,902	1,221	25,610	245,017	16,422	423	--	--	118,060	--
2000	60,246	891	13,171	218	48,814	18,655	647	11,961	3,987	121,297	1,510	21,930	242,189	16,781	583	--	--	98,642	--
2001	^R 58,424	804	11,809	147	49,465	18,579	792	9,779	3,653	121,450	1,034	21,706	238,414	15,464	511	--	--	^R 88,158	--
2002	^R 59,610	831	10,765	141	50,706	17,489	573	13,392	3,610	123,465	966	21,691	242,797	10,865	488	--	--	72,622	--
2003	^R 61,064	848	9,857	129	50,801	17,685	726	20,632	3,337	124,282	571	22,175	250,195	8,475	511	--	--	^R 61,612	--
2004	59,023	824	10,468	120	55,757	18,635	934	10,965	3,381	124,864	750	25,322	251,195	15,950	730	--	--	58,778	--
Trillion Btu																			
1960	1,269.2	724.8	45.5	7.0	139.3	9.8	22.4	14.8	18.6	410.6	73.0	56.4	797.4	0.0	0.2	36.8	0.0	167.0	2,995.5
1965	1,324.4	909.4	48.7	10.7	161.1	17.0	35.9	21.8	20.1	453.2	68.9	85.7	923.2	0.3	0.1	38.6	0.0	178.9	3,374.9
1970	1,571.4	1,077.2	59.8	3.6	200.7	32.8	36.8	32.9	22.0	558.4	40.5	94.9	1,082.5	0.0	0.1	44.1	0.0	168.8	3,944.1
1975	1,619.0	978.9	58.1	2.5	245.6	33.9	20.4	36.8	21.9	624.1	65.4	103.5	1,212.2	0.0	0.1	46.2	0.0	137.5	3,993.9
1980	1,528.1	911.3	48.6	2.4	284.5	40.6	13.9	162.6	23.2	594.8	43.5	133.1	1,347.2	23.1	0.1	107.3	0.0	153.0	4,070.1
1985	1,389.5	765.4	42.1	1.7	213.4	40.6	9.7	100.6	21.1	571.3	14.6	90.4	1,105.4	20.6	1.8	121.9	0.0	267.7	3,676.9
1990	1,425.3	776.6	65.6	1.2	218.9	59.9	5.1	39.9	23.7	580.4	10.4	117.2	1,122.2	112.8	1.9	ⁱ 66.1	ⁱ 0.4	326.1	ⁱ 3,840.4
1995	1,379.8	923.9	59.5	1.2	234.2	63.7	5.8	51.7	22.6	606.1	8.9	114.0	1,167.8	176.2	2.4	65.3	0.6	373.2	4,089.2
1996	1,447.1	968.6	74.7	1.7	256.5	67.8	6.8	57.9	22.0	601.7	10.6	133.6	1,233.3	146.2	4.1	74.2	0.6	325.0	4,199.2
1997	1,407.2	938.2	95.4	1.9	274.2	71.5	6.5	40.2	23.2	616.9	7.8	133.4	1,270.9	160.9	5.2	68.3	0.7	334.6	4,186.1
1998	1,450.2	843.9	83.9	1.8	266.6	78.4	7.1	31.4	24.3	625.1	5.8	137.6	1,262.0	172.8	4.1	62.3	0.8	292.0	4,088.1
1999	1,382.2	873.2	93.5	1.2	279.5	93.3	8.7	46.8	24.5	630.0	7.7	145.8	1,331.0	171.6	4.3	69.4	0.9	402.8	4,235.4
2000	1,428.5	928.4	87.4	1.1	284.3	105.8	3.7	43.1	24.2	632.0	9.5	124.4	1,315.5	175.0	5.9	72.8	0.9	336.6	4,263.5
2001	^R 1,362.8	838.0	78.4	0.7	288.1	105.3	4.5	35.3	22.2	632.8	6.5	124.9	1,298.8	161.6	5.3	^R 45.1	0.9	^R 300.8	^R 4,013.3
2002	^R 1,396.9	852.6	71.4	0.7	295.4	99.2	3.2	48.4	21.9	643.0	6.1	124.6	1,313.8	113.4	5.0	^R 32.4	1.0	247.8	^R 3,962.9
2003	^R 1,443.5	872.1	65.4	0.7	295.9	100.3	4.1	74.9	20.2	647.1	3.6	127.6	1,339.8	88.3	5.2	^R 41.7	1.3	210.2	^R 4,002.2
2004	1,391.3	845.0	69.5	0.6	324.8	105.7	5.3	39.7	20.5	651.2	4.7	146.4	1,368.3	166.3	7.3	42.9	1.2	200.5	4,022.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Ohio

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	2,013	362	7,270	1,837	1,750	10,857	990	--	--	10,786	--	26,676	--
1965	1,285	412	7,795	3,626	2,293	13,715	805	--	--	14,504	--	34,634	--
1970	906	460	9,320	2,979	3,892	16,191	925	--	--	22,266	--	53,893	--
1975	340	428	10,776	2,060	4,876	17,713	963	--	--	27,890	--	67,071	--
1980	117	394	7,430	1,016	2,556	11,003	2,421	--	--	33,459	--	80,675	--
1985	189	328	4,645	941	3,339	8,925	2,516	--	--	33,945	--	78,197	--
1990	131	308	4,740	625	4,205	9,570	1,560	--	--	37,889	--	87,647	--
1995	53	358	3,998	748	4,979	9,725	838	--	--	44,010	--	99,975	--
1996	79	375	3,777	818	6,683	11,278	871	--	--	44,573	--	101,387	--
1997	36	355	3,325	774	6,467	10,567	567	--	--	43,635	--	98,886	--
1998	43	297	2,893	774	5,593	9,261	504	--	--	44,516	--	100,985	--
1999	26	318	3,432	1,295	7,483	12,210	530	--	--	46,629	--	106,685	--
2000	24	344	2,999	419	6,468	9,887	570	--	--	46,488	--	105,768	--
2001	25	309	2,764	442	4,311	7,517	758	--	--	47,346	--	^R 106,485	--
2002	43	321	3,175	329	5,263	8,767	770	--	--	50,864	--	113,948	--
2003	26	343	3,242	369	6,291	9,902	810	--	--	49,621	--	^R 110,225	--
2004	50	321	3,348	485	5,071	8,903	830	--	--	50,300	--	111,959	--
Trillion Btu													
1960	48.0	374.5	42.3	10.4	7.0	59.8	19.8	0.0	0.0	36.8	538.9	91.0	629.9
1965	30.5	425.6	45.4	20.6	9.2	75.2	16.1	0.0	0.0	49.5	596.9	118.2	715.0
1970	20.8	470.6	54.3	16.9	14.7	85.9	18.5	0.0	0.0	76.0	671.7	183.9	855.6
1975	7.6	438.1	62.8	11.7	18.1	92.6	19.3	0.0	0.0	95.2	652.7	228.8	881.5
1980	2.7	400.1	43.3	5.8	9.4	58.4	48.4	0.0	0.0	114.2	623.8	275.3	899.1
1985	4.5	342.0	27.1	5.3	12.0	44.4	50.3	0.0	0.0	115.8	557.1	266.8	823.9
1990	3.2	320.7	27.6	3.5	15.2	46.4	31.2	^f 0.3	^f (s)	129.3	^f 531.1	299.1	^f 830.1
1995	1.3	371.4	23.3	4.2	18.0	45.6	16.8	0.4	(s)	150.2	585.7	341.1	926.8
1996	1.9	389.1	22.0	4.6	24.1	50.8	17.4	0.5	(s)	152.1	611.7	345.9	957.7
1997	0.9	370.5	19.4	4.4	23.4	47.1	11.3	0.5	0.1	148.9	579.3	337.4	916.7
1998	1.1	308.5	16.9	4.4	20.2	41.5	10.1	0.5	0.1	151.9	513.6	344.6	858.1
1999	0.6	330.1	20.0	7.3	27.1	54.4	10.6	0.6	0.1	159.1	555.4	364.0	919.5
2000	0.6	358.5	17.5	2.4	23.3	43.2	11.4	0.6	0.1	158.6	572.9	360.9	933.8
2001	0.6	321.6	16.1	2.5	15.6	34.2	15.2	0.6	0.1	161.5	533.9	^R 363.3	^R 897.2
2002	1.0	329.7	18.5	1.9	19.0	39.4	15.4	0.7	0.1	173.5	559.8	388.8	948.6
2003	0.6	352.6	18.9	2.1	22.8	43.8	16.2	0.8	0.1	169.3	583.5	376.1	959.6
2004	1.1	328.7	19.5	2.7	18.3	40.6	16.6	0.9	0.2	171.6	559.7	382.0	941.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Ohio

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	1,399	108	1,443	95	309	541	2,118	4,507	0	--	--	7,594	--	18,782	--
1965	969	127	1,548	188	405	572	1,997	4,710	0	--	--	10,384	--	24,796	--
1970	712	183	1,850	155	687	401	824	3,917	0	--	--	17,073	--	41,324	--
1975	792	169	2,139	107	861	956	1,457	5,520	0	--	--	20,047	--	48,209	--
1980	439	166	2,591	130	451	2,058	380	5,610	0	--	--	23,323	--	56,236	--
1985	670	143	2,114	440	589	604	83	3,830	0	--	--	29,176	--	67,211	--
1990	523	144	1,920	189	742	1,059	22	3,932	^g 0	--	--	34,850	--	80,617	--
1995	356	175	1,709	89	879	438	5	3,119	0	--	--	40,093	--	91,075	--
1996	577	190	1,335	155	1,179	365	2	3,036	0	--	--	40,570	--	92,280	--
1997	293	184	1,402	127	1,141	1,956	2	4,628	0	--	--	40,935	--	92,767	--
1998	348	157	1,124	218	987	744	1	3,074	0	--	--	42,232	--	95,803	--
1999	191	168	1,810	129	1,321	175	0	3,435	0	--	--	43,297	--	99,063	--
2000	192	178	1,740	132	1,141	525	0	3,539	0	--	--	44,635	--	101,551	--
2001	205	173	1,886	147	761	213	1	3,007	0	--	--	43,310	--	^R 97,406	--
2002	314	163	2,256	93	929	403	4	3,685	0	--	--	44,029	--	98,637	--
2003	176	180	1,753	203	1,110	212	2	3,281	0	--	--	44,737	--	99,376	--
2004	406	170	1,932	258	895	538	101	3,723	0	--	--	45,313	--	100,860	--
Trillion Btu															
1960	33.4	111.7	8.4	0.5	1.2	2.8	13.3	26.3	0.0	0.4	0.0	25.9	197.7	64.1	261.8
1965	23.0	131.0	9.0	1.1	1.6	3.0	12.6	27.3	0.0	0.3	0.0	35.4	217.1	84.6	301.7
1970	16.3	187.6	10.8	0.9	2.6	2.1	5.2	21.5	0.0	0.3	0.0	58.3	284.1	141.0	425.1
1975	17.7	173.4	12.5	0.6	3.2	5.0	9.2	30.4	0.0	0.4	0.0	68.4	290.3	164.5	454.8
1980	10.2	168.9	15.1	0.7	1.7	10.8	2.4	30.7	0.0	1.2	0.0	79.6	290.5	191.9	482.4
1985	16.0	149.6	12.3	2.5	2.1	3.2	0.5	20.6	0.0	1.2	0.0	99.5	287.0	229.3	516.3
1990	12.6	149.2	11.2	1.1	2.7	5.6	0.1	20.6	^g 0.0	^g 3.6	^g 0.0	118.9	^g 305.1	275.1	^g 580.1
1995	8.7	181.8	10.0	0.5	3.2	2.3	(s)	16.0	0.0	2.5	0.1	136.8	345.8	310.7	656.6
1996	13.7	197.2	7.8	0.9	4.3	1.9	(s)	14.8	0.0	2.5	0.1	138.4	366.8	314.9	681.7
1997	7.0	192.1	8.2	0.7	4.1	10.2	(s)	23.2	0.0	2.6	0.2	139.7	364.8	316.5	681.3
1998	8.8	162.9	6.5	1.2	3.6	3.9	(s)	15.2	0.0	2.2	0.2	144.1	333.4	326.9	660.3
1999	4.6	173.8	10.5	0.7	4.8	0.9	0.0	17.0	0.0	2.2	0.2	147.7	345.5	338.0	683.5
2000	4.6	185.4	10.1	0.7	4.1	2.7	0.0	17.7	0.0	2.4	0.2	152.3	362.7	346.5	709.2
2001	4.9	179.9	11.0	0.8	2.7	1.1	(s)	15.7	0.0	2.9	0.2	147.8	351.5	^R 332.4	^R 683.8
2002	7.6	167.5	13.1	0.5	3.4	2.1	(s)	19.1	0.0	3.5	0.3	150.2	348.3	336.5	684.8
2003	4.3	184.6	10.2	1.2	4.0	1.1	(s)	16.5	0.0	3.5	0.3	152.6	361.9	339.1	701.0
2004	8.7	174.4	11.3	1.5	3.2	2.8	0.6	19.4	0.0	3.6	0.4	154.6	361.0	344.1	705.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Ohio

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	25,835	218	6,862	7,112	2,023	1,585	1,683	3,354	9,082	9,400	41,102	12	--	--	39,246	--	97,060	--
1965	26,758	327	7,344	8,479	2,513	2,649	2,050	2,598	8,228	14,683	48,544	1	--	--	41,757	--	99,714	--
1970	29,875	376	9,017	11,429	3,360	3,999	2,390	1,926	4,166	16,418	52,706	0	--	--	45,827	--	110,921	--
1975	22,307	345	8,749	11,150	1,433	3,993	1,987	1,519	7,038	17,782	53,651	0	--	--	55,597	--	133,703	--
1980	15,821	321	7,324	12,591	1,306	41,031	2,395	1,154	5,678	23,356	94,834	0	--	--	55,283	--	133,296	--
1985	10,420	253	6,339	6,944	328	23,612	2,180	1,074	2,098	15,667	58,242	0	--	--	61,109	--	140,775	--
1990	9,703	284	9,880	5,973	87	5,689	2,453	973	1,493	20,461	47,010	9	--	--	69,682	--	161,190	--
1995	6,386	332	8,973	5,861	187	8,159	2,340	1,200	1,362	19,884	47,967	0	--	--	74,473	--	169,175	--
1996	5,636	345	11,258	5,609	221	7,922	2,271	1,203	1,600	23,386	53,470	0	--	--	73,394	--	166,943	--
1997	5,599	336	14,376	5,721	244	3,219	2,399	1,231	1,185	23,362	51,736	0	--	--	73,888	--	167,448	--
1998	5,510	332	12,638	5,369	263	1,998	2,511	1,311	846	24,101	49,037	0	--	--	72,998	--	165,597	--
1999	5,156	327	14,091	5,271	103	3,936	2,537	1,126	1,193	25,610	53,867	0	--	--	74,293	--	169,980	--
2000	4,296	340	13,171	4,868	95	4,206	2,499	707	1,485	21,930	48,962	0	--	--	74,019	--	168,406	--
2001	^R 4,360	297	11,809	5,471	204	4,507	2,290	1,874	952	21,706	48,812	0	--	--	65,099	--	^R 146,412	--
2002	^R 3,336	307	10,765	5,451	152	7,021	2,263	1,976	852	21,691	50,170	0	--	--	58,472	--	130,992	--
2003	^R 3,637	291	9,857	6,201	153	12,964	2,092	2,098	553	22,175	56,094	0	--	--	57,828	--	128,456	--
2004	3,573	302	10,468	6,576	191	4,776	2,119	2,408	648	23,429	50,616	0	--	--	58,558	--	130,341	--
Trillion Btu																		
1960	664.3	226.1	45.5	41.4	11.5	6.4	10.2	17.6	57.1	56.4	246.1	0.1	16.5	0.0	133.9	1,287.1	331.2	1,618.2
1965	681.5	338.3	48.7	49.4	14.2	10.6	12.4	13.6	51.7	85.7	286.5	(s)	22.1	0.0	142.5	1,470.8	340.2	1,811.0
1970	738.5	384.8	59.8	66.6	19.1	15.1	14.5	10.1	26.2	94.9	306.3	0.0	25.2	0.0	156.4	1,611.1	378.5	1,989.6
1975	556.5	352.8	58.1	64.9	8.1	14.8	12.1	8.0	44.2	103.5	313.8	0.0	26.6	0.0	189.7	1,439.3	456.2	1,895.5
1980	404.7	326.0	48.6	73.3	7.4	150.7	14.5	6.1	35.7	133.1	469.5	0.0	57.7	0.0	188.6	1,446.5	454.8	1,901.3
1985	265.7	264.4	42.1	40.4	1.9	85.1	13.2	5.6	13.2	90.4	291.9	0.0	67.6	0.0	208.5	1,098.0	480.3	1,578.4
1990	248.2	294.9	65.6	34.8	0.5	20.6	14.9	5.1	9.4	117.2	268.0	^g 0.0	^g 27.6	^g 0.0	237.8	^g 1,076.5	550.0	^g 1,626.5
1995	162.9	344.5	59.5	34.1	1.1	29.6	14.2	6.3	8.6	114.0	267.3	0.0	45.5	0.0	254.1	1,074.3	577.2	1,651.6
1996	142.2	358.1	74.7	32.7	1.3	28.6	13.8	6.3	10.1	133.6	301.0	0.0	53.4	0.0	250.4	1,105.2	569.6	1,674.8
1997	141.2	351.2	95.4	33.3	1.4	11.6	14.5	6.4	7.5	133.4	303.5	0.0	53.6	0.0	252.1	1,101.7	571.3	1,673.0
1998	139.8	345.6	83.9	31.3	1.5	7.2	15.2	6.8	5.3	137.6	288.8	0.0	49.3	0.0	249.1	1,072.7	565.0	1,637.7
1999	131.1	339.1	93.5	30.7	0.6	14.2	15.4	5.9	7.5	145.8	313.5	0.0	55.9	0.0	253.5	1,093.1	580.0	1,673.1
2000	110.8	354.5	87.4	28.4	0.5	15.2	15.2	3.7	9.3	124.4	284.1	0.0	57.9	0.0	252.6	1,059.8	574.6	1,634.4
2001	^R 114.0	309.2	78.4	31.9	1.2	16.3	13.9	9.8	6.0	124.9	282.2	0.0	^R 26.0	0.0	222.1	^R 953.5	^R 499.6	^R 1,453.1
2002	^R 86.6	314.9	71.4	31.8	0.9	25.4	13.7	10.3	5.4	124.6	283.3	0.0	^R 12.5	0.0	199.5	^R 896.8	446.9	^R 1,343.7
2003	^R 94.8	299.6	65.4	36.1	0.9	47.0	12.7	10.9	3.5	127.6	304.1	0.0	^R 20.8	0.0	197.3	^R 916.6	438.3	^R 1,354.8
2004	93.7	309.3	69.5	38.3	1.1	17.3	12.9	12.6	4.1	135.0	290.6	0.0	21.5	0.0	199.8	914.9	444.7	1,359.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Ohio

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	444	9	1,395	7,987	1,808	36	1,381	74,274	310	87,192	0	91	--	225	--
1965	87	11	2,125	9,722	3,075	94	1,263	83,101	633	100,013	0	57	--	135	--
1970	48	12	712	11,068	5,857	133	1,241	103,970	758	123,739	0	54	--	130	--
1975	4	9	491	15,647	5,926	180	1,622	116,333	592	140,790	0	45	--	108	--
1980	0	11	473	24,578	7,219	225	1,425	110,021	255	144,198	0	46	--	110	--
1985	0	8	330	22,418	7,204	379	1,297	107,086	0	138,713	^f 1,300	46	--	105	--
1990	0	10	239	24,495	10,602	358	1,459	108,455	5	145,613	2,531	44	--	103	--
1995	0	18	235	27,993	11,236	256	1,392	114,584	56	155,753	5,147	49	--	112	--
1996	0	20	345	32,731	11,960	234	1,351	113,793	82	160,497	2,030	50	--	114	--
1997	0	20	379	36,052	12,604	277	1,427	115,149	59	165,948	3,675	50	--	113	--
1998	0	18	365	35,753	13,825	109	1,494	117,877	58	169,481	5,404	47	--	106	--
1999	0	18	244	36,490	16,457	190	1,510	119,601	7	174,499	5,537	52	--	119	--
2000	0	19	218	38,414	18,655	145	1,487	120,065	12	178,997	5,650	53	--	120	--
2001	0	16	147	38,560	18,579	201	1,363	119,363	68	178,280	4,966	43	--	97	--
2002	0	17	141	39,154	17,489	179	1,347	121,086	102	179,498	4,868	43	--	96	--
2003	0	16	129	38,736	17,685	267	1,245	121,972	16	180,049	4,497	45	--	100	--
2004	0	13	120	43,160	18,635	223	1,261	121,918	1	185,318	4,434	49	--	110	--
Trillion Btu															
1960	11.0	9.4	7.0	46.5	9.8	0.1	8.4	390.2	2.0	464.0	0.0	0.3	484.7	0.8	485.5
1965	2.1	11.4	10.7	56.6	17.0	0.4	7.7	436.5	4.0	532.9	0.0	0.2	546.7	0.5	547.1
1970	1.1	12.3	3.6	64.5	32.8	0.5	7.5	546.2	4.8	659.8	0.0	0.2	673.4	0.4	673.8
1975	0.1	9.2	2.5	91.1	33.3	0.7	9.8	611.1	3.7	752.2	0.0	0.2	761.7	0.4	762.1
1980	0.0	11.6	2.4	143.2	40.6	0.8	8.6	577.9	1.6	775.2	0.0	0.2	787.0	0.4	787.4
1985	0.0	8.6	1.7	130.6	40.6	1.4	7.9	562.5	0.0	744.6	^f 4.6	0.2	^f 758.0	0.4	^f 758.4
1990	0.0	10.5	1.2	142.7	59.9	1.3	8.9	569.7	(s)	783.7	9.0	0.2	803.3	0.3	803.6
1995	0.0	18.5	1.2	163.1	63.7	0.9	8.4	597.6	0.4	835.2	18.2	0.2	853.9	0.4	854.3
1996	0.0	21.2	1.7	190.7	67.8	0.8	8.2	593.5	0.5	863.3	7.2	0.2	884.7	0.4	885.1
1997	0.0	20.8	1.9	210.0	71.5	1.0	8.7	600.3	0.4	893.7	13.0	0.2	914.6	0.4	915.0
1998	0.0	18.7	1.8	208.3	78.4	0.4	9.1	614.4	0.4	912.7	19.1	0.2	931.5	0.4	931.9
1999	0.0	18.5	1.2	212.6	93.3	0.7	9.2	623.2	(s)	940.2	19.6	0.2	958.9	0.4	959.3
2000	0.0	19.8	1.1	223.8	105.8	0.5	9.0	625.5	0.1	965.8	20.0	0.2	985.7	0.4	986.1
2001	0.0	16.7	0.7	224.6	105.3	0.7	8.3	621.9	0.4	962.0	17.6	0.1	978.9	0.3	979.2
2002	0.0	17.2	0.7	228.1	99.2	0.6	8.2	630.6	0.6	968.0	17.2	0.1	985.4	0.3	985.7
2003	0.0	16.0	0.7	225.6	100.3	1.0	7.6	635.1	0.1	970.3	15.9	0.2	986.4	0.3	986.7
2004	0.0	13.8	0.6	251.4	105.7	0.8	7.6	635.8	(s)	1,001.9	15.7	0.2	1,015.9	0.4	1,016.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Ohio

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	21,559	3	94	107	0	201	0	7	--	0	0	0	0	--
1965	24,923	3	105	119	0	223	22	10	--	0	0	0	0	--
1970	35,321	21	697	791	0	1,487	0	7	--	0	0	0	0	--
1975	47,321	6	1,312	2,568	0	3,880	0	7	--	0	0	0	0	--
1980	48,537	5	605	1,643	0	2,248	2,119	6	--	0	0	0	0	--
1985	46,700	1	141	508	0	649	1,943	175	--	0	0	0	0	--
1990	48,848	1	136	452	0	588	10,664	181	--	0	0	0	0	--
1995	49,785	7	0	642	0	642	16,768	232	--	0	0	0	0	--
1996	53,543	3	0	584	0	584	13,919	397	--	0	0	0	0	--
1997	52,893	3	0	574	0	574	15,331	507	--	0	0	0	0	--
1998	54,613	8	11	635	0	647	16,476	406	--	0	0	0	0	--
1999	52,228	11	21	985	0	1,006	16,422	423	--	0	0	0	0	--
2000	55,734	10	13	792	0	804	16,781	583	--	0	0	0	0	--
2001	53,834	11	13	785	0	798	15,464	511	--	0	0	0	0	--
2002	55,917	23	8	671	0	678	10,865	488	--	0	0	0	-4	--
2003	57,224	19	0	869	0	869	8,475	511	--	0	0	0	-12	--
2004	54,994	18	0	741	1,893	2,634	15,950	730	--	0	0	0	-65	--
Trillion Btu														
1960	512.5	3.1	0.6	0.6	0.0	1.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	516.9
1965	587.3	3.0	0.7	0.7	0.0	1.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	592.1
1970	794.7	21.9	4.4	4.6	0.0	9.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	825.7
1975	1,037.2	5.3	8.2	14.9	0.0	23.2	0.0	0.1	(s)	0.0	0.0	0.0	0.0	1,065.8
1980	1,110.5	4.7	3.8	9.6	0.0	13.4	23.1	0.1	(s)	0.0	0.0	0.0	0.0	1,151.8
1985	1,103.3	0.7	0.9	3.0	0.0	3.8	20.6	1.8	2.8	0.0	0.0	0.0	0.0	1,133.1
1990	1,161.4	1.3	0.9	2.6	0.0	3.5	112.8	1.9	3.6	0.0	0.0	0.0	0.0	1,284.5
1995	1,206.9	7.6	0.0	3.7	0.0	3.7	176.2	2.4	0.6	0.0	0.0	0.0	0.0	1,397.5
1996	1,289.3	3.0	0.0	3.4	0.0	3.4	146.2	4.1	0.9	0.0	0.0	0.0	0.0	1,446.8
1997	1,258.2	3.6	0.0	3.3	0.0	3.3	160.9	5.2	0.7	0.0	0.0	0.0	0.0	1,431.9
1998	1,300.5	8.2	0.1	3.7	0.0	3.8	172.8	4.1	0.7	0.0	0.0	0.0	0.0	1,490.1
1999	1,245.9	11.6	0.1	5.7	0.0	5.9	171.6	4.3	0.8	0.0	0.0	0.0	0.0	1,440.1
2000	1,312.5	10.3	0.1	4.6	0.0	4.7	175.0	5.9	1.0	0.0	0.0	0.0	0.0	1,509.5
2001	^R 1,243.3	10.6	0.1	4.6	0.0	4.7	161.6	5.3	1.0	0.0	0.0	0.0	0.0	^R 1,426.4
2002	1,301.7	23.3	(s)	3.9	0.0	4.0	113.4	5.0	1.0	0.0	0.0	0.0	(s)	1,448.3
2003	1,343.8	19.4	0.0	5.1	0.0	5.1	88.3	5.2	1.2	0.0	0.0	0.0	(s)	1,463.0
2004	1,287.9	18.8	0.0	4.3	11.4	15.7	166.3	7.3	1.1	0.0	0.0	0.0	-0.2	1,496.9

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Oklahoma

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	77	308	2,034	562	2,618	2,920	431	6,433	661	22,708	1,454	7,983	47,803	0	705	--	--	-3,702	--
1965	30	468	3,586	745	2,877	3,453	945	7,654	679	25,815	851	8,673	55,278	0	825	--	--	-4,988	--
1970	7	597	4,598	448	5,584	4,378	1,103	9,618	622	32,521	807	8,988	68,667	0	1,406	--	--	-18,767	--
1975	23	669	5,675	309	9,449	3,916	328	9,342	810	38,469	641	9,645	78,585	0	2,945	--	--	-21,446	--
1980	6,046	722	4,826	328	12,125	4,900	342	8,987	1,356	39,633	732	9,336	82,565	0	1,315	--	--	-28,649	--
1985	13,602	587	4,003	217	18,723	5,870	114	8,035	1,234	42,170	219	4,753	85,338	0	3,980	--	--	-16,698	--
1990	15,514	612	3,508	146	15,473	7,832	38	3,289	1,389	38,998	623	7,473	78,768	0	2,731	--	--	544	--
1995	20,742	575	3,181	154	16,672	5,359	15	3,625	1,325	42,382	442	7,299	80,453	0	2,780	--	--	-20,613	--
1996	21,141	574	2,762	117	19,948	4,707	32	4,076	1,286	43,763	392	8,929	86,011	0	2,158	--	--	-12,941	--
1997	22,178	567	1,426	80	20,917	5,257	45	4,693	1,358	42,670	269	9,087	85,802	0	2,921	--	--	-13,599	--
1998	20,711	576	2,582	133	21,640	5,343	46	3,821	1,422	43,349	102	8,258	86,696	0	3,509	--	--	-12,348	--
1999	20,288	538	1,719	102	22,151	6,576	45	9,198	1,437	43,571	111	8,622	93,533	0	3,175	--	--	-9,978	--
2000	21,422	539	1,964	108	28,249	6,812	121	5,862	1,415	42,325	237	8,286	95,380	0	2,277	--	--	-5,152	--
2001	21,224	491	4,395	80	35,302	7,041	51	5,306	1,297	43,027	343	9,545	106,386	0	2,345	--	--	R -4,353	--
2002	22,090	508	3,892	121	30,752	6,434	31	7,343	1,281	42,224	461	9,076	101,616	0	1,988	--	--	-14,577	--
2003	22,283	540	3,077	106	29,738	6,240	29	5,472	1,185	43,361	513	9,877	99,596	0	1,798	--	--	-13,994	--
2004	21,008	538	4,081	135	22,757	6,898	33	7,348	1,200	45,403	623	9,803	98,282	0	2,977	--	--	-11,155	--
Trillion Btu																			
1960	1.8	319.3	13.5	2.8	15.3	15.7	2.4	25.8	4.0	119.3	9.1	47.9	255.9	0.0	7.6	10.2	0.0	-12.6	582.1
1965	0.7	480.1	23.8	3.8	16.8	18.7	5.4	30.7	4.1	135.6	5.4	52.0	296.2	0.0	8.6	7.6	0.0	-17.0	776.2
1970	0.2	616.3	30.5	2.3	32.5	24.0	6.3	36.3	3.8	170.8	5.1	53.9	365.5	0.0	14.8	7.0	0.0	-64.0	939.6
1975	0.5	678.9	37.7	1.6	55.0	21.5	1.9	34.7	4.9	202.1	4.0	57.9	421.2	0.0	30.6	12.0	0.0	-73.2	1,070.1
1980	106.3	738.9	32.0	1.7	70.6	26.9	1.9	33.0	8.2	208.2	4.6	56.0	443.2	0.0	13.7	11.2	0.0	-97.8	1,215.5
1985	237.2	603.9	26.6	1.1	109.1	32.5	0.6	29.0	7.5	221.5	1.4	29.5	458.7	0.0	41.6	15.4	0.0	-57.0	1,299.9
1990	278.8	628.2	23.3	0.7	90.1	43.8	0.2	11.9	8.4	204.9	3.9	44.8	432.0	0.0	28.4	21.4	0.1	1.9	1,390.8
1995	369.9	586.4	21.1	0.8	97.1	30.3	0.1	13.1	8.0	221.0	2.8	43.7	438.0	0.0	28.7	24.5	0.1	-70.3	1,377.3
1996	373.1	588.0	18.3	0.6	116.2	26.7	0.2	14.7	7.8	228.3	2.5	52.8	468.1	0.0	22.3	29.3	0.1	-44.2	1,436.6
1997	392.4	573.5	9.5	0.4	121.8	29.8	0.3	17.0	8.2	222.4	1.7	53.8	464.9	0.0	29.8	25.3	0.1	-46.4	1,439.6
1998	370.1	584.0	17.1	0.7	126.1	30.3	0.3	13.8	8.6	225.9	0.6	49.0	472.4	0.0	35.8	24.7	0.1	-42.1	1,444.9
1999	360.6	550.8	11.4	0.5	129.0	37.3	0.3	33.3	8.7	227.0	0.7	51.1	499.3	0.0	32.5	22.8	0.1	-34.0	1,432.0
2000	381.1	546.7	13.0	0.5	164.6	38.6	0.7	21.1	8.6	220.5	1.5	49.2	518.4	0.0	23.2	24.2	0.1	-17.6	1,476.0
2001	376.1	505.2	29.2	0.4	205.6	39.9	0.3	19.2	7.9	224.2	2.2	56.9	585.6	0.0	24.2	R 24.1	0.1	R -14.9	R 1,500.5
2002	391.4	523.0	25.8	0.6	179.1	36.5	0.2	26.5	7.8	219.9	2.9	54.1	553.4	0.0	20.2	20.7	0.1	-49.7	R 1,459.0
2003	393.8	R 558.5	20.4	0.5	173.2	35.4	0.2	19.9	7.2	225.8	3.2	58.8	544.6	0.0	18.4	R 23.2	0.6	-47.7	R 1,491.3
2004	372.1	555.9	27.1	0.7	132.6	39.1	0.2	26.6	7.3	236.8	3.9	58.3	532.5	0.0	29.8	27.9	5.8	-38.1	1,485.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oklahoma

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	30	60	2	18	3,938	3,959	460	--	--	2,372	--	5,866	--
1965	10	65	2	78	4,642	4,722	331	--	--	4,086	--	9,757	--
1970	3	77	3	52	5,802	5,856	308	--	--	7,293	--	17,652	--
1975	1	80	12	24	5,628	5,663	341	--	--	9,222	--	22,178	--
1980	6	77	15	21	1,759	1,795	142	--	--	12,309	--	29,679	--
1985	1	76	86	30	2,027	2,143	279	--	--	14,400	--	33,172	--
1990	(s)	66	(s)	10	1,274	1,284	222	--	--	17,077	--	39,504	--
1995	1	69	11	4	1,214	1,229	317	--	--	16,319	--	37,071	--
1996	(s)	77	23	20	1,630	1,673	329	--	--	17,303	--	39,357	--
1997	32	72	4	14	1,533	1,550	157	--	--	17,376	--	39,377	--
1998	(s)	67	1	13	1,619	1,632	140	--	--	19,511	--	44,260	--
1999	(s)	62	2	9	2,292	2,303	147	--	--	18,301	--	41,872	--
2000	0	67	2	59	2,607	2,668	158	--	--	19,640	--	44,685	--
2001	(s)	65	3	7	2,482	2,491	143	--	--	19,796	--	^R 44,522	--
2002	(s)	67	2	15	3,031	3,048	145	--	--	19,927	--	44,642	--
2003	(s)	^R 66	1	14	2,436	2,451	153	--	--	20,162	--	44,787	--
2004	0	59	1	17	2,018	2,035	157	--	--	19,699	--	43,847	--
Trillion Btu													
1960	0.7	61.9	(s)	0.1	15.8	15.9	9.2	0.0	0.0	8.1	95.8	20.0	115.8
1965	0.2	66.5	(s)	0.4	18.6	19.1	6.6	0.0	0.0	13.9	106.4	33.3	139.7
1970	0.1	79.9	(s)	0.3	21.9	22.2	6.2	0.0	0.0	24.9	133.3	60.2	193.5
1975	(s)	79.6	0.1	0.1	20.9	21.1	6.8	0.0	0.0	31.5	139.0	75.7	214.7
1980	0.1	76.8	0.1	0.1	6.5	6.7	2.8	0.0	0.0	42.0	128.4	101.3	229.7
1985	(s)	77.6	0.5	0.2	7.3	8.0	5.6	0.0	0.0	49.1	140.3	113.2	253.5
1990	(s)	67.0	(s)	0.1	4.6	4.7	4.4	^f (s)	^f 0.1	58.3	^f 134.5	134.8	^f 269.3
1995	(s)	69.7	0.1	(s)	4.4	4.5	6.3	(s)	0.1	55.7	136.3	126.5	262.8
1996	(s)	78.4	0.1	0.1	5.9	6.1	6.6	(s)	0.1	59.0	150.2	134.3	284.5
1997	0.6	72.2	(s)	0.1	5.5	5.6	3.1	(s)	0.1	59.3	140.9	134.4	275.3
1998	(s)	67.0	(s)	0.1	5.8	5.9	2.8	(s)	0.1	66.6	142.3	151.0	293.4
1999	(s)	62.9	(s)	0.1	8.3	8.3	2.9	(s)	0.1	62.4	136.7	142.9	279.6
2000	0.0	67.4	(s)	0.3	9.4	9.8	3.2	(s)	0.1	67.0	147.4	152.5	299.9
2001	(s)	66.6	(s)	(s)	9.0	9.0	2.9	(s)	0.1	67.5	146.1	^R 151.9	^R 298.0
2002	(s)	69.3	(s)	0.1	11.0	11.0	2.9	(s)	(s)	68.0	151.3	152.3	303.6
2003	(s)	^R 68.1	(s)	0.1	8.8	8.9	3.1	(s)	(s)	68.8	^R 148.9	152.8	^R 301.7
2004	0.0	61.3	(s)	0.1	7.3	7.4	3.1	(s)	(s)	67.2	139.1	149.6	288.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oklahoma

Year			Petroleum						Hydro- electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Coal ^a	Natural Gas ^b	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	21	29	72	83	695	177	395	1,422	0	--	--	1,904	--	4,710	--
1965	8	27	68	353	819	204	233	1,677	0	--	--	2,945	--	7,033	--
1970	3	44	95	233	1,024	229	190	1,771	0	--	--	4,415	--	10,686	--
1975	2	42	406	106	993	264	196	1,965	0	--	--	6,810	--	16,377	--
1980	24	47	315	15	310	301	30	972	0	--	--	9,005	--	21,712	--
1985	2	41	732	20	358	338	0	1,447	0	--	--	11,706	--	26,966	--
1990	(s)	37	626	13	225	374	80	1,317	^g 0	--	--	13,663	--	31,606	--
1995	10	40	270	5	214	38	(s)	527	0	--	--	13,359	--	30,347	--
1996	1	46	383	5	288	38	0	713	0	--	--	13,828	--	31,454	--
1997	259	45	566	16	270	37	0	890	0	--	--	14,275	--	32,351	--
1998	1	44	619	21	286	37	0	963	0	--	--	15,211	--	34,507	--
1999	2	40	362	12	404	37	0	816	0	--	--	15,164	--	34,696	--
2000	0	43	242	32	460	38	0	772	0	--	--	15,989	--	36,378	--
2001	1	41	673	8	438	39	0	1,157	0	--	--	16,515	--	^R 37,143	--
2002	1	40	350	5	535	76	10	976	0	--	--	16,661	--	37,324	--
2003	1	37	95	5	430	78	0	607	0	--	--	16,958	--	^R 37,670	--
2004	0	37	293	7	356	195	1	852	0	--	--	17,020	--	37,884	--
Trillion Btu															
1960	0.5	29.8	0.4	0.5	2.8	0.9	2.5	7.1	0.0	0.2	0.0	6.5	44.1	16.1	60.1
1965	0.2	27.9	0.4	2.0	3.3	1.1	1.5	8.2	0.0	0.1	0.0	10.0	46.5	24.0	70.5
1970	0.1	45.3	0.6	1.3	3.9	1.2	1.2	8.1	0.0	0.1	0.0	15.1	68.7	36.5	105.2
1975	(s)	41.6	2.4	0.6	3.7	1.4	1.2	9.3	0.0	0.1	0.0	23.2	74.3	55.9	130.2
1980	0.6	47.2	1.8	0.1	1.1	1.6	0.2	4.8	0.0	0.1	0.0	30.7	83.4	74.1	157.5
1985	0.1	41.6	4.3	0.1	1.3	1.8	0.0	7.4	0.0	0.1	0.0	39.9	89.2	92.0	181.2
1990	(s)	38.0	3.6	0.1	0.8	2.0	0.5	7.0	^g 0.0	^g 0.5	^g 0.0	46.6	^g 92.1	107.8	^g 199.9
1995	0.2	40.2	1.6	(s)	0.8	0.2	(s)	2.6	0.0	0.9	0.0	45.6	89.5	103.5	193.0
1996	(s)	47.2	2.2	(s)	1.0	0.2	0.0	3.5	0.0	0.9	0.0	47.2	98.8	107.3	206.1
1997	4.5	45.3	3.3	0.1	1.0	0.2	0.0	4.6	0.0	0.5	0.0	48.7	103.6	110.4	214.0
1998	(s)	44.1	3.6	0.1	1.0	0.2	0.0	5.0	0.0	0.5	0.0	51.9	101.4	117.7	219.2
1999	(s)	40.4	2.1	0.1	1.5	0.2	0.0	3.8	0.0	0.5	0.0	51.7	96.5	118.4	214.9
2000	0.0	43.5	1.4	0.2	1.7	0.2	0.0	3.5	0.0	0.5	0.0	54.6	102.0	124.1	226.1
2001	(s)	41.8	3.9	(s)	1.6	0.2	0.0	5.7	0.0	0.5	0.0	56.3	104.4	^R 126.7	^R 231.1
2002	(s)	41.5	2.0	(s)	1.9	0.4	0.1	4.5	0.0	0.5	0.0	56.8	103.3	127.4	230.7
2003	(s)	^R 38.8	0.6	(s)	1.6	0.4	0.0	2.5	0.0	0.5	0.0	57.9	^R 99.8	128.5	^R 228.3
2004	0.0	38.2	1.7	(s)	1.3	1.0	(s)	4.1	0.0	0.5	0.0	58.1	100.9	129.3	230.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oklahoma

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total	
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}								Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh		
1960	25	128	2,034	1,193	330	1,511	176	1,383	1,017	7,983	15,626	0	--	--	2,561	--	6,335	--
1965	11	236	3,586	1,203	514	1,704	152	812	346	8,673	16,990	0	--	--	3,563	--	8,508	--
1970	0	218	4,598	2,084	819	2,277	166	515	477	8,988	19,924	0	--	--	4,888	--	11,830	--
1975	20	223	5,675	4,166	198	2,248	274	437	374	9,645	23,018	0	--	--	7,233	--	17,394	--
1980	264	246	4,826	3,705	306	6,683	579	359	702	9,336	26,495	0	--	--	9,795	--	23,617	--
1985	852	245	4,003	7,215	64	5,517	527	977	211	4,753	23,267	0	--	--	10,576	--	24,364	--
1990	557	307	3,508	3,592	16	1,693	593	834	484	7,473	18,192	^g 0	--	--	11,764	--	27,212	--
1995	1,455	275	3,181	2,873	6	2,138	566	1,183	329	7,299	17,574	0	--	--	11,714	--	26,610	--
1996	738	274	2,762	3,388	7	2,117	549	1,216	259	8,929	19,226	0	--	--	12,160	--	27,660	--
1997	736	288	1,426	3,462	15	2,832	580	1,248	259	9,087	18,909	0	--	--	12,802	--	29,012	--
1998	698	260	2,582	3,329	12	1,846	607	1,319	100	8,258	18,053	0	--	--	13,175	--	29,887	--
1999	719	236	1,719	2,921	25	6,454	613	686	111	8,622	21,152	0	--	--	13,271	--	30,364	--
2000	714	231	1,964	3,341	30	2,751	604	671	237	8,286	17,884	0	--	--	13,935	--	31,704	--
2001	724	188	4,395	3,769	37	2,320	554	1,268	342	9,545	22,228	0	--	--	13,356	--	^R 30,039	--
2002	724	182	3,892	3,459	11	3,728	547	1,398	449	9,076	22,561	0	--	--	12,898	--	28,894	--
2003	702	209	3,077	3,657	10	2,538	506	1,442	478	9,877	21,584	0	--	--	13,308	--	29,562	--
2004	714	211	4,081	3,645	10	4,923	512	1,691	611	9,803	25,276	0	--	--	14,223	--	31,657	--
Trillion Btu																		
1960	0.6	132.5	13.5	7.0	1.9	6.1	1.1	7.3	6.4	47.9	91.0	0.0	0.8	0.0	8.7	233.8	21.6	255.4
1965	0.3	242.2	23.8	7.0	2.9	6.8	0.9	4.3	2.2	52.0	99.9	0.0	0.9	0.0	12.2	355.4	29.0	384.4
1970	0.0	225.3	30.5	12.1	4.6	8.6	1.0	2.7	3.0	53.9	116.5	0.0	0.7	0.0	16.7	359.1	40.4	399.5
1975	0.5	221.7	37.7	24.3	1.1	8.4	1.7	2.3	2.4	57.9	135.6	0.0	5.1	0.0	24.7	387.4	59.3	446.8
1980	5.6	246.4	32.0	21.6	1.7	24.6	3.5	1.9	4.4	56.0	145.7	0.0	8.3	0.0	33.4	439.4	80.6	520.0
1985	18.3	249.3	26.6	42.0	0.4	19.9	3.2	5.1	1.3	29.5	128.0	0.0	9.7	0.0	36.1	441.3	83.1	524.5
1990	12.7	313.1	23.3	20.9	0.1	6.1	3.6	4.4	3.0	44.8	106.2	^g 0.0	^g 16.5	^g 0.0	40.1	^g 488.6	92.8	^g 581.5
1995	33.0	278.9	21.1	16.7	(s)	7.7	3.4	6.2	2.1	43.7	100.9	0.0	17.3	0.0	40.0	470.2	90.8	561.0
1996	16.4	280.2	18.3	19.7	(s)	7.6	3.3	6.3	1.6	52.8	109.9	0.0	21.8	0.0	41.5	469.8	94.4	564.2
1997	15.4	289.9	9.5	20.2	0.1	10.2	3.5	6.5	1.6	53.8	105.4	0.0	21.6	0.0	43.7	475.9	99.0	574.9
1998	16.3	261.4	17.1	19.4	0.1	6.7	3.7	6.9	0.6	49.0	103.4	0.0	21.5	0.0	45.0	447.5	102.0	549.5
1999	16.8	240.6	11.4	17.0	0.1	23.3	3.7	3.6	0.7	51.1	111.0	0.0	19.4	0.0	45.3	433.0	103.6	536.6
2000	14.2	233.1	13.0	19.5	0.2	9.9	3.7	3.5	1.5	49.2	100.4	0.0	20.5	0.0	47.5	415.7	108.2	523.9
2001	14.5	193.8	29.2	22.0	0.2	8.4	3.4	6.6	2.1	56.9	128.7	0.0	^R 20.8	0.0	45.6	^R 403.2	^R 102.5	^R 505.7
2002	14.6	187.7	25.8	20.1	0.1	13.5	3.3	7.3	2.8	54.1	127.0	0.0	^R 17.2	0.0	44.0	^R 390.5	98.6	^R 489.1
2003	14.3	216.5	20.4	21.3	0.1	9.2	3.1	7.5	3.0	58.8	123.4	0.0	^R 19.6	0.0	45.4	419.2	100.9	520.1
2004	15.1	217.9	27.1	21.2	0.1	17.8	3.1	8.8	3.8	58.3	140.3	0.0	24.2	0.0	48.5	446.1	108.0	554.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oklahoma

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	Total ^e
1960	(s)	9	562	1,325	2,920	290	485	21,148	8	26,737	0	0	--	0	--
1965	(s)	13	745	1,582	3,453	489	527	24,799	244	31,839	0	0	--	0	--
1970	0	23	448	3,351	4,378	516	457	31,776	75	41,000	0	0	--	0	--
1975	(s)	24	309	4,809	3,916	474	537	37,768	42	47,854	0	0	--	0	--
1980	0	23	328	8,030	4,900	235	777	38,974	0	53,244	0	0	--	0	--
1985	0	25	217	10,611	5,870	133	707	40,855	0	58,394	^f 48	0	--	0	--
1990	0	26	146	11,227	7,832	97	796	37,790	0	57,888	0	0	--	0	--
1995	0	31	154	13,501	5,359	59	759	41,161	0	60,994	0	0	--	0	--
1996	0	34	117	16,070	4,707	41	737	42,509	0	64,181	0	0	--	0	--
1997	0	26	80	16,865	5,257	58	778	41,385	0	64,423	0	0	--	0	--
1998	0	25	133	17,673	5,343	72	815	41,993	2	66,030	0	0	--	0	--
1999	0	24	102	18,842	6,576	48	823	42,847	0	69,239	0	0	--	0	--
2000	0	22	108	24,586	6,812	44	811	41,617	0	73,978	0	0	--	0	--
2001	0	24	80	30,601	7,041	66	743	41,721	0	80,252	0	0	--	0	--
2002	0	24	121	26,923	6,434	49	734	40,750	0	75,011	0	0	--	0	--
2003	0	31	106	25,832	6,240	68	679	41,841	0	74,766	0	0	--	0	--
2004	0	31	135	18,787	6,898	51	688	43,517	0	70,076	0	0	--	0	--
Trillion Btu															
1960	(s)	9.3	2.8	7.7	15.7	1.2	2.9	111.1	0.1	141.4	0.0	0.0	150.8	0.0	150.8
1965	(s)	12.9	3.8	9.2	18.7	2.0	3.2	130.3	1.5	168.7	0.0	0.0	181.5	0.0	181.5
1970	0.0	23.5	2.3	19.5	24.0	1.9	2.8	166.9	0.5	217.9	0.0	0.0	241.4	0.0	241.4
1975	(s)	23.6	1.6	28.0	21.5	1.8	3.3	198.4	0.3	254.8	0.0	0.0	278.4	0.0	278.4
1980	0.0	22.8	1.7	46.8	26.9	0.9	4.7	204.7	0.0	285.6	0.0	0.0	308.4	0.0	308.4
1985	0.0	25.8	1.1	61.8	32.5	0.5	4.3	214.6	0.0	314.8	^f 0.2	0.0	^f 340.8	0.0	^f 340.8
1990	0.0	26.6	0.7	65.4	43.8	0.4	4.8	198.5	0.0	313.6	0.0	0.0	340.2	0.0	340.2
1995	0.0	31.3	0.8	78.6	30.3	0.2	4.6	214.7	0.0	329.2	0.0	0.0	360.5	0.0	360.5
1996	0.0	34.6	0.6	93.6	26.7	0.1	4.5	221.7	0.0	347.2	0.0	0.0	381.8	0.0	381.8
1997	0.0	26.3	0.4	98.2	29.8	0.2	4.7	215.7	0.0	349.1	0.0	0.0	375.4	0.0	375.4
1998	0.0	24.9	0.7	102.9	30.3	0.3	4.9	218.9	(s)	358.0	0.0	0.0	382.9	0.0	382.9
1999	0.0	25.0	0.5	109.8	37.3	0.2	5.0	223.3	0.0	376.0	0.0	0.0	401.0	0.0	401.0
2000	0.0	21.9	0.5	143.2	38.6	0.2	4.9	216.8	0.0	404.3	0.0	0.0	426.1	0.0	426.1
2001	0.0	25.0	0.4	178.3	39.9	0.2	4.5	217.4	0.0	440.7	0.0	0.0	465.7	0.0	465.7
2002	0.0	24.9	0.6	156.8	36.5	0.2	4.5	212.2	0.0	410.8	0.0	0.0	435.7	0.0	435.7
2003	0.0	32.5	0.5	150.5	35.4	0.2	4.1	217.9	0.0	408.6	0.0	0.0	441.1	0.0	441.1
2004	0.0	32.5	0.7	109.4	39.1	0.2	4.2	226.9	0.0	380.5	0.0	0.0	413.1	0.0	413.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Oklahoma

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	(s)	83	33	26	0	59	0	705	--	0	0	0	0	--
1965	1	127	28	22	0	50	0	825	--	0	0	0	0	--
1970	1	235	64	51	0	116	0	1,406	--	0	0	0	0	--
1975	(s)	301	29	55	0	85	0	2,945	--	0	0	0	0	--
1980	5,752	330	(s)	59	0	59	0	1,315	--	0	0	0	0	--
1985	12,747	201	9	79	0	87	0	3,980	--	0	0	0	0	--
1990	14,957	176	58	28	0	86	0	2,731	--	0	0	0	0	--
1995	19,276	161	112	17	0	129	0	2,780	--	0	0	0	0	--
1996	20,402	143	133	84	0	217	0	2,158	--	0	0	0	0	--
1997	21,151	135	10	20	0	30	0	2,921	--	0	0	0	0	--
1998	20,013	181	0	18	0	18	0	3,509	--	0	0	0	0	--
1999	19,567	177	(s)	24	0	24	0	3,175	--	0	0	0	0	--
2000	20,708	176	0	77	0	77	0	2,277	--	0	0	0	0	--
2001	20,500	174	1	257	0	258	0	2,345	--	0	0	0	0	--
2002	21,365	195	2	18	0	20	0	1,988	--	0	0	0	0	--
2003	21,580	197	35	153	0	188	0	1,798	--	0	0	54	0	--
2004	20,294	200	11	31	0	42	0	2,977	--	0	0	573	(s)	--
Trillion Btu														
1960	(s)	85.7	0.2	0.2	0.0	0.4	0.0	7.6	0.0	0.0	0.0	0.0	0.0	93.7
1965	(s)	130.5	0.2	0.1	0.0	0.3	0.0	8.6	0.0	0.0	0.0	0.0	0.0	139.5
1970	(s)	242.2	0.4	0.3	0.0	0.7	0.0	14.8	0.0	0.0	0.0	0.0	0.0	257.7
1975	(s)	312.3	0.2	0.3	0.0	0.5	0.0	30.6	0.0	0.0	0.0	0.0	0.0	343.5
1980	100.0	345.8	(s)	0.3	0.0	0.3	0.0	13.7	0.0	0.0	0.0	0.0	0.0	459.8
1985	218.8	209.5	0.1	0.5	0.0	0.5	0.0	41.6	0.0	0.0	0.0	0.0	0.0	470.4
1990	266.1	183.6	0.4	0.2	0.0	0.5	0.0	28.4	0.0	0.0	0.0	0.0	0.0	478.6
1995	336.6	166.3	0.7	0.1	0.0	0.8	0.0	28.7	0.0	0.0	0.0	0.0	0.0	532.4
1996	356.7	147.5	0.8	0.5	0.0	1.3	0.0	22.3	0.0	0.0	0.0	0.0	0.0	527.8
1997	372.0	139.8	0.1	0.1	0.0	0.2	0.0	29.8	0.0	0.0	0.0	0.0	0.0	541.8
1998	353.8	186.6	0.0	0.1	0.0	0.1	0.0	35.8	0.0	0.0	0.0	0.0	0.0	576.3
1999	343.8	182.0	(s)	0.1	0.0	0.1	0.0	32.5	0.0	0.0	0.0	0.0	0.0	558.4
2000	366.9	180.9	0.0	0.5	0.0	0.5	0.0	23.2	0.0	0.0	0.0	0.0	0.0	571.4
2001	361.6	178.1	(s)	1.5	0.0	1.5	0.0	24.2	0.0	0.0	0.0	0.0	0.0	565.4
2002	376.8	199.7	(s)	0.1	0.0	0.1	0.0	20.2	0.0	0.0	0.0	0.0	0.0	596.8
2003	379.4	202.5	0.2	0.9	0.0	1.1	0.0	18.4	0.0	0.0	0.0	0.6	0.0	602.0
2004	357.0	206.0	0.1	0.2	0.0	0.3	0.0	29.8	0.0	0.0	0.0	5.7	(s)	598.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Oregon

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	381	31	1,820	655	10,966	384	45	1,164	476	16,361	5,562	434	37,866	0	12,466	--	--	7,845	--
1965	305	56	1,960	277	13,085	812	19	961	612	19,838	5,115	1,653	44,332	0	16,508	--	--	13,505	--
1970	140	95	2,167	305	12,904	2,086	218	1,251	768	24,958	6,632	1,613	52,903	0	29,912	--	--	-4,518	--
1975	130	110	3,218	171	13,267	2,079	225	726	679	28,904	4,321	1,395	54,984	2	34,562	--	--	8,046	--
1980	715	79	2,483	260	16,764	2,465	112	1,354	751	30,511	4,511	1,043	60,254	5,395	30,222	--	--	16,834	--
1985	591	83	2,838	141	15,027	2,142	68	1,527	684	29,047	4,961	813	57,248	6,911	40,780	--	--	-34,670	--
1990	934	109	3,026	121	15,902	3,319	26	1,384	769	31,728	4,430	1,639	62,345	6,074	41,240	--	--	-11,600	--
1995	1,125	146	2,758	143	16,530	5,114	62	1,535	734	34,021	3,589	1,684	66,170	0	40,764	--	--	12,593	--
1996	1,134	181	2,745	191	16,074	5,235	89	1,627	712	35,161	3,249	1,575	66,658	0	44,906	--	--	4,422	--
1997	918	185	2,965	176	16,641	5,720	62	898	752	33,594	3,449	1,153	65,411	0	46,704	--	--	4,617	--
1998	2,074	229	4,187	150	16,005	5,861	147	773	788	36,360	3,871	2,338	70,478	0	39,902	--	--	5,109	--
1999	2,154	235	3,649	160	17,426	6,437	170	1,179	796	36,512	2,581	2,937	71,845	0	45,639	--	--	-8,699	--
2000	2,241	225	3,245	139	18,519	6,277	245	1,320	784	35,989	1,468	1,932	69,917	0	38,116	--	--	16,496	--
2001	2,490	230	2,187	226	17,413	5,217	302	1,009	718	36,157	1,360	2,823	67,413	0	28,645	--	--	R 22,403	--
2002	2,205	202	3,232	155	17,762	4,880	187	1,307	710	36,898	1,758	2,629	69,518	0	34,413	--	--	12,574	--
2003	2,598	213	3,309	136	15,547	5,314	126	1,335	656	36,527	1,942	2,457	67,350	0	33,250	--	--	R 4,349	--
2004	2,141	235	3,599	128	17,792	5,167	182	1,022	665	36,817	2,069	3,286	70,727	0	33,081	--	--	8,437	--
Trillion Btu																			
1960	8.9	31.9	12.1	3.3	63.9	2.1	0.3	4.7	2.9	85.9	35.0	2.6	212.7	0.0	134.1	56.4	0.0	26.8	470.8
1965	7.1	60.0	13.0	1.4	76.2	4.5	0.1	3.9	3.7	104.2	32.2	9.8	249.0	0.0	172.6	57.8	0.0	46.1	592.6
1970	3.0	99.6	14.4	1.5	75.2	11.8	1.2	4.7	4.7	131.1	41.7	9.5	295.7	0.0	313.9	57.4	0.0	-15.4	754.3
1975	2.7	114.2	21.4	0.9	77.3	11.7	1.3	2.7	4.1	151.8	27.2	8.3	306.6	(s)	359.7	57.7	(s)	27.5	868.3
1980	12.1	82.3	16.5	1.3	97.7	13.9	0.6	5.0	4.6	160.3	28.4	6.1	334.3	58.8	314.0	87.2	0.0	57.4	946.1
1985	10.0	85.5	18.8	0.7	87.5	12.1	0.4	5.5	4.1	152.6	31.2	4.8	317.8	73.4	426.0	103.6	17.4	-118.3	915.5
1990	15.7	111.7	20.1	0.6	92.6	18.8	0.1	5.0	4.7	166.7	27.9	9.8	346.2	64.3	429.0	i 57.7	i 3.6	-39.6	i 988.6
1995	20.2	152.1	18.3	0.7	96.3	29.0	0.4	5.6	4.5	177.4	22.6	9.9	364.5	0.0	420.4	45.9	3.8	43.0	1,049.8
1996	20.3	188.2	18.2	1.0	93.6	29.7	0.5	5.9	4.3	183.4	20.4	9.4	366.4	0.0	464.3	52.1	10.5	15.1	1,116.9
1997	16.4	193.8	19.7	0.9	96.9	32.4	0.4	3.2	4.6	175.1	21.7	6.8	361.7	0.0	477.0	52.6	3.7	15.8	1,120.9
1998	36.1	239.3	27.8	0.8	93.2	33.2	0.8	2.8	4.8	189.5	24.3	14.0	391.2	0.0	406.9	46.1	3.4	17.4	1,140.4
1999	38.6	247.0	24.2	0.8	101.5	36.5	1.0	4.3	4.8	190.3	16.2	17.5	397.1	0.0	466.7	41.1	3.3	-29.7	1,164.1
2000	38.7	231.0	21.5	0.7	107.9	35.6	1.4	4.8	4.8	187.5	9.2	11.5	384.9	0.0	388.8	46.0	2.6	56.3	1,148.2
2001	43.4	235.6	14.5	1.1	101.4	29.6	1.7	3.6	4.4	188.4	8.6	16.7	370.0	0.0	296.0	R 52.4	3.0	R 76.4	R 1,076.8
2002	37.8	208.2	21.4	0.8	103.5	27.7	1.1	4.7	4.3	192.2	11.1	15.5	382.2	0.0	350.1	R 46.0	10.5	R 42.9	R 1,077.6
2003	44.9	R 219.1	22.0	0.7	90.6	30.1	0.7	4.8	4.0	190.2	12.2	14.5	369.8	0.0	340.5	42.7	16.9	R 14.8	R 1,048.8
2004	36.5	243.2	23.9	0.6	103.6	29.3	1.0	3.7	4.0	192.0	13.0	19.5	390.8	0.0	331.5	46.4	16.4	28.8	1,093.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oregon

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	94	7	2,865	1	507	3,373	922	--	--	5,263	--	13,015	--
1965	73	11	3,382	5	785	4,172	661	--	--	7,169	--	17,120	--
1970	18	20	3,101	65	867	4,033	460	--	--	9,850	--	23,842	--
1975	4	29	2,390	48	362	2,800	489	--	--	12,096	--	29,090	--
1980	4	18	2,019	37	574	2,630	310	--	--	13,545	--	32,659	--
1985	1	21	2,308	41	517	2,866	530	--	--	14,526	--	33,463	--
1990	(s)	23	1,592	13	380	1,985	391	--	--	15,380	--	35,577	--
1995	(s)	28	1,276	26	488	1,790	495	--	--	16,315	--	37,061	--
1996	0	33	1,206	40	463	1,709	514	--	--	17,285	--	39,316	--
1997	(s)	33	1,072	34	393	1,499	438	--	--	17,185	--	38,944	--
1998	0	34	956	66	484	1,505	389	--	--	17,529	--	39,764	--
1999	(s)	39	1,089	81	544	1,714	410	--	--	18,058	--	41,316	--
2000	0	39	983	186	624	1,793	441	--	--	18,212	--	41,435	--
2001	0	38	1,053	173	694	1,920	703	--	--	17,503	--	^R 39,365	--
2002	0	39	971	110	821	1,902	714	--	--	17,554	--	39,326	--
2003	0	37	874	76	927	1,877	752	--	--	17,736	--	39,397	--
2004	0	39	760	93	394	1,247	770	--	--	18,001	--	40,067	--
Trillion Btu													
1960	2.3	7.0	16.7	(s)	2.0	18.7	18.4	0.0	0.0	18.0	64.5	44.4	108.9
1965	1.8	11.6	19.7	(s)	3.2	22.9	13.2	0.0	0.0	24.5	74.0	58.4	132.4
1970	0.4	20.6	18.1	0.4	3.3	21.7	9.2	0.0	0.0	33.6	85.6	81.3	166.9
1975	0.1	29.9	13.9	0.3	1.3	15.5	9.8	0.0	0.0	41.3	96.6	99.3	195.8
1980	0.1	19.2	11.8	0.2	2.1	14.1	6.2	0.0	0.0	46.2	85.8	111.4	197.3
1985	(s)	22.1	13.4	0.2	1.9	15.5	10.6	0.0	0.0	49.6	97.8	114.2	212.0
1990	(s)	23.9	9.3	0.1	1.4	10.7	7.8	^f 0.1	^f 0.3	52.5	^f 95.3	121.4	^f 216.7
1995	(s)	29.3	7.4	0.1	1.8	9.3	9.9	0.1	0.5	55.7	104.9	126.5	231.3
1996	0.0	34.7	7.0	0.2	1.7	8.9	10.3	0.1	0.6	59.0	113.6	134.1	247.7
1997	(s)	34.2	6.2	0.2	1.4	7.9	8.8	0.1	0.6	58.6	110.2	132.9	243.0
1998	0.0	36.1	5.6	0.4	1.7	7.7	7.8	0.1	0.6	59.8	112.2	135.7	247.9
1999	(s)	40.9	6.3	0.5	2.0	8.8	8.2	0.2	0.7	61.6	120.4	141.0	261.3
2000	0.0	39.9	5.7	1.1	2.3	9.0	8.8	0.3	0.7	62.1	120.8	141.4	262.2
2001	0.0	39.4	6.1	1.0	2.5	9.6	14.1	0.3	0.7	59.7	123.8	^R 134.3	^R 258.1
2002	0.0	40.2	5.7	0.6	3.0	9.2	14.3	0.3	0.7	59.9	124.6	134.2	258.8
2003	0.0	38.7	5.1	0.4	3.4	8.9	15.0	0.3	0.8	60.5	124.2	134.4	258.6
2004	0.0	40.2	4.4	0.5	1.4	6.4	15.4	0.4	0.8	61.4	124.6	136.7	261.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oregon

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours						
1960	66	3	1,485	(s)	89	139	991	2,704	0	--	--	3,083	--	7,625	--
1965	55	6	1,752	4	139	206	1,046	3,147	0	--	--	4,557	--	10,882	--
1970	14	11	1,607	46	153	249	1,326	3,382	0	--	--	6,674	--	16,153	--
1975	10	16	1,238	34	64	218	962	2,517	0	--	--	8,804	--	21,171	--
1980	13	15	1,792	37	101	291	876	3,098	0	--	--	10,456	--	25,211	--
1985	2	19	1,345	26	91	231	191	1,884	0	--	--	10,340	--	23,819	--
1990	2	20	1,192	8	67	272	283	1,823	^g 0	--	--	12,091	--	27,969	--
1995	1	22	1,061	14	86	33	87	1,281	0	--	--	13,558	--	30,798	--
1996	0	26	911	38	82	33	83	1,145	0	--	--	14,085	--	32,038	--
1997	1	25	951	22	69	30	48	1,121	0	--	--	14,477	--	32,808	--
1998	0	26	994	63	85	30	72	1,244	0	--	--	14,724	--	33,401	--
1999	(s)	29	834	31	96	30	48	1,038	0	--	--	15,347	--	35,114	--
2000	0	29	994	28	110	29	61	1,223	0	--	--	15,730	--	35,789	--
2001	0	28	1,204	73	122	31	50	1,480	0	--	--	15,263	--	^R 34,328	--
2002	0	28	1,027	46	145	31	64	1,313	0	--	--	15,370	--	34,432	--
2003	0	26	514	23	164	31	53	784	0	--	--	15,483	--	34,394	--
2004	0	26	592	45	70	31	55	792	0	--	--	15,667	--	34,871	--
Trillion Btu															
1960	1.6	3.2	8.6	(s)	0.4	0.7	6.2	16.0	0.0	0.3	0.0	10.5	31.7	26.0	57.7
1965	1.4	6.0	10.2	(s)	0.6	1.1	6.6	18.4	0.0	0.3	0.0	15.5	41.6	37.1	78.7
1970	0.3	11.9	9.4	0.3	0.6	1.3	8.3	19.8	0.0	0.2	0.0	22.8	55.0	55.1	110.1
1975	0.2	16.5	7.2	0.2	0.2	1.1	6.0	14.8	0.0	0.2	0.0	30.0	61.8	72.2	134.0
1980	0.3	15.9	10.4	0.2	0.4	1.5	5.5	18.1	0.0	0.2	0.0	35.7	70.1	86.0	156.1
1985	0.1	19.6	7.8	0.1	0.3	1.2	1.2	10.7	0.0	0.3	0.0	35.3	65.9	81.3	147.2
1990	(s)	20.9	6.9	(s)	0.2	1.4	1.8	10.4	^g 0.0	^g 2.0	^g 0.2	41.3	^g 74.9	95.4	^g 170.3
1995	(s)	23.4	6.2	0.1	0.3	0.2	0.5	7.3	0.0	1.4	0.2	46.3	78.6	105.1	183.7
1996	0.0	26.7	5.3	0.2	0.3	0.2	0.5	6.5	0.0	1.4	0.3	48.1	82.9	109.3	192.2
1997	(s)	26.8	5.5	0.1	0.3	0.2	0.3	6.4	0.0	1.5	0.2	49.4	84.3	111.9	196.2
1998	0.0	27.3	5.8	0.4	0.3	0.2	0.4	7.1	0.0	1.3	0.3	50.2	86.2	114.0	200.1
1999	(s)	30.2	4.9	0.2	0.3	0.2	0.3	5.8	0.0	1.3	0.3	52.4	90.1	119.8	209.9
2000	0.0	29.5	5.8	0.2	0.4	0.2	0.4	6.9	0.0	1.4	0.4	53.7	91.8	122.1	213.9
2001	0.0	28.7	7.0	0.4	0.4	0.2	0.3	8.3	0.0	2.5	0.4	52.1	92.0	^R 117.1	^R 209.1
2002	0.0	28.7	6.0	0.3	0.5	0.2	0.4	7.3	0.0	2.5	0.4	52.4	91.4	117.5	208.9
2003	0.0	27.1	3.0	0.1	0.6	0.2	0.3	4.2	0.0	2.6	0.5	52.8	87.3	117.4	204.6
2004	0.0	27.4	3.5	0.3	0.3	0.2	0.3	4.5	0.0	2.6	0.6	53.5	88.4	119.0	207.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oregon

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	217	20	1,820	3,723	44	558	175	1,080	3,411	434	11,244	77	--	--	5,247	--	12,976	--
1965	175	39	1,960	4,287	10	33	208	808	3,398	1,653	12,358	61	--	--	7,167	--	17,113	--
1970	109	58	2,167	3,413	107	212	281	722	4,217	1,613	12,733	77	--	--	9,123	--	22,082	--
1975	116	57	3,218	2,827	143	287	189	560	2,922	1,395	11,541	40	--	--	12,402	--	29,826	--
1980	213	39	2,483	3,992	38	614	221	417	2,528	1,043	11,337	28	--	--	13,847	--	33,387	--
1985	170	38	2,838	2,475	1	728	201	482	1,679	813	9,219	28	--	--	11,081	--	25,526	--
1990	82	49	3,026	2,537	4	755	227	425	447	1,639	9,060	⁹ 0	--	--	15,498	--	35,851	--
1995	147	69	2,758	3,556	23	850	216	513	325	1,684	9,925	0	--	--	15,839	--	35,980	--
1996	90	88	2,745	2,553	11	983	210	565	134	1,575	8,777	0	--	--	17,029	--	38,734	--
1997	95	90	2,965	2,813	6	370	222	584	166	1,153	8,279	0	--	--	16,880	--	38,254	--
1998	37	103	4,187	2,633	18	203	232	692	139	2,338	10,442	0	--	--	14,640	--	33,211	--
1999	0	108	3,649	2,719	58	516	235	396	144	2,937	10,653	0	--	--	14,106	--	32,274	--
2000	0	76	3,245	3,602	31	523	231	403	138	1,932	10,105	0	--	--	16,353	--	37,206	--
2001	0	70	2,187	3,020	56	172	212	807	134	2,823	9,410	0	--	--	13,084	--	^R 29,428	--
2002	50	71	3,232	2,949	31	318	209	861	474	2,629	10,703	0	--	--	12,296	--	27,546	--
2003	65	68	3,309	1,944	28	159	193	879	366	2,457	9,336	0	--	--	11,961	--	26,569	--
2004	64	72	3,599	2,217	45	477	196	1,041	302	3,286	11,162	0	--	--	11,954	--	26,607	--
Trillion Btu																		
1960	4.9	20.9	12.1	21.7	0.3	2.2	1.1	5.7	21.4	2.6	67.0	0.8	37.3	0.0	17.9	148.9	44.3	193.2
1965	3.9	41.5	13.0	25.0	0.1	0.1	1.3	4.2	21.4	9.8	74.8	0.6	44.1	0.0	24.5	189.5	58.4	247.9
1970	2.3	60.3	14.4	19.9	0.6	0.8	1.7	3.8	26.5	9.5	77.1	0.8	47.6	0.0	31.1	219.2	75.3	294.6
1975	2.4	59.6	21.4	16.5	0.8	1.1	1.1	2.9	18.4	8.3	70.4	0.4	47.8	0.0	42.3	222.9	101.8	324.7
1980	3.8	41.0	16.5	23.3	0.2	2.3	1.3	2.2	15.9	6.1	67.8	0.3	79.2	0.0	47.2	239.2	113.9	353.2
1985	3.0	39.0	18.8	14.4	(s)	2.6	1.2	2.5	10.6	4.8	55.0	0.3	92.7	0.0	37.8	227.9	87.1	315.0
1990	1.4	50.1	20.1	14.8	(s)	2.7	1.4	2.2	2.8	9.8	53.8	⁹ 0.0	⁹ 40.8	⁹ 0.1	52.9	⁹ 199.0	122.3	⁹ 321.4
1995	2.8	72.0	18.3	20.7	0.1	3.1	1.3	2.7	2.0	9.9	58.1	0.0	27.5	0.1	54.0	214.6	122.8	337.4
1996	1.9	91.6	18.2	14.9	0.1	3.6	1.3	2.9	0.8	9.4	51.2	0.0	33.7	0.1	58.1	236.6	132.2	368.7
1997	1.9	95.0	19.7	16.4	(s)	1.3	1.3	3.0	1.0	6.8	49.7	0.0	35.7	0.1	57.6	240.0	130.5	370.5
1998	0.8	107.9	27.8	15.3	0.1	0.7	1.4	3.6	0.9	14.0	63.8	0.0	30.1	0.1	50.0	252.6	113.3	365.9
1999	0.0	114.5	24.2	15.8	0.3	1.9	1.4	2.1	0.9	17.5	64.2	0.0	26.3	0.1	48.1	253.3	110.1	363.4
2000	0.0	78.7	21.5	21.0	0.2	1.9	1.4	2.1	0.9	11.5	60.5	0.0	29.6	0.1	55.8	224.7	126.9	351.6
2001	0.0	71.9	14.5	17.6	0.3	0.6	1.3	4.2	0.8	16.7	56.1	0.0	^R 29.6	0.2	44.6	^R 202.5	^R 100.4	^R 302.9
2002	1.1	73.0	21.4	17.2	0.2	1.1	1.3	4.5	3.0	15.5	64.2	0.0	^R 24.2	0.2	42.0	^R 204.7	94.0	^R 298.7
2003	1.5	^R 70.0	22.0	11.3	0.2	0.6	1.2	4.6	2.3	14.5	56.6	0.0	^R 18.3	0.1	40.8	^R 187.4	90.7	^R 278.0
2004	1.4	74.9	23.9	12.9	0.3	1.7	1.2	5.4	1.9	19.5	66.8	0.0	26.3	0.2	40.8	210.4	90.8	301.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Oregon

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	4	(s)	655	2,893	384	10	301	15,142	1,157	20,542	0	0	--	0	--
1965	1	1	277	3,664	812	4	404	18,824	670	24,654	0	0	--	0	--
1970	(s)	6	305	4,782	2,086	18	487	23,987	1,070	32,736	0	0	--	0	--
1975	(s)	8	171	6,783	2,079	13	490	28,125	438	38,098	0	0	--	0	--
1980	0	6	260	8,851	2,465	65	530	29,803	1,107	43,080	0	0	--	0	--
1985	0	5	141	8,895	2,142	191	482	28,335	3,091	43,277	^f (s)	0	--	0	--
1990	0	9	121	10,526	3,319	183	542	31,030	3,700	49,421	0	9	--	21	--
1995	0	7	143	10,625	5,114	110	518	33,476	3,178	53,163	0	14	--	31	--
1996	0	8	191	11,394	5,235	99	502	34,562	3,033	55,017	0	11	--	25	--
1997	0	13	176	11,781	5,720	66	531	32,980	3,235	54,489	0	11	--	25	--
1998	0	13	150	11,363	5,861	1	555	35,638	3,660	57,228	353	14	--	32	--
1999	0	10	160	12,769	6,437	23	561	36,085	2,389	58,426	299	33	--	75	--
2000	0	12	139	12,835	6,277	63	553	35,557	1,268	56,692	335	35	--	80	--
2001	0	11	226	11,954	5,217	21	507	35,320	1,176	54,421	438	34	--	77	--
2002	0	9	155	12,801	4,880	23	501	36,006	1,220	55,586	834	36	--	80	--
2003	0	7	136	12,114	5,314	85	463	35,617	1,524	55,253	635	^R 49	--	^R 108	--
2004	0	10	128	14,183	5,167	82	469	35,746	1,712	57,486	669	54	--	121	--
Trillion Btu															
1960	0.1	0.1	3.3	16.9	2.1	(s)	1.8	79.5	7.3	111.0	0.0	0.0	111.1	0.0	111.1
1965	(s)	0.7	1.4	21.3	4.5	(s)	2.4	98.9	4.2	132.8	0.0	0.0	133.6	0.0	133.6
1970	(s)	5.8	1.5	27.9	11.8	0.1	3.0	126.0	6.7	176.9	0.0	0.0	182.7	0.0	182.7
1975	(s)	8.2	0.9	39.5	11.7	(s)	3.0	147.7	2.8	205.6	0.0	0.0	213.8	0.0	213.8
1980	0.0	5.9	1.3	51.6	13.9	0.2	3.2	156.6	7.0	233.8	0.0	0.0	239.6	0.0	239.6
1985	0.0	4.7	0.7	51.8	12.1	0.7	2.9	148.8	19.4	236.5	^f (s)	0.0	^f 241.2	0.0	^f 241.2
1990	0.0	9.2	0.6	61.3	18.8	0.7	3.3	163.0	23.3	270.9	0.0	(s)	280.1	0.1	280.2
1995	0.0	7.6	0.7	61.9	29.0	0.4	3.1	174.6	20.0	289.7	0.0	(s)	297.4	0.1	297.5
1996	0.0	8.3	1.0	66.4	29.7	0.4	3.0	180.3	19.1	299.8	0.0	(s)	308.1	0.1	308.2
1997	0.0	13.3	0.9	68.6	32.4	0.2	3.2	171.9	20.3	297.7	0.0	(s)	311.0	0.1	311.1
1998	0.0	14.1	0.8	66.2	33.2	(s)	3.4	185.7	23.0	312.3	1.3	(s)	326.4	0.1	326.5
1999	0.0	10.9	0.8	74.4	36.5	0.1	3.4	188.0	15.0	318.2	1.1	0.1	329.3	0.3	329.5
2000	0.0	12.2	0.7	74.8	35.6	0.2	3.4	185.3	8.0	307.9	1.2	0.1	320.2	0.3	320.5
2001	0.0	11.4	1.1	69.6	29.6	0.1	3.1	184.0	7.4	294.9	1.5	0.1	306.4	0.3	306.7
2002	0.0	9.5	0.8	74.6	27.7	0.1	3.0	187.5	7.7	301.3	3.0	0.1	311.0	0.3	311.2
2003	0.0	7.4	0.7	70.6	30.1	0.3	2.8	185.5	9.6	299.5	2.2	^R 0.2	307.1	^R 0.4	^R 307.5
2004	0.0	10.2	0.6	82.6	29.3	0.3	2.8	186.4	10.8	312.9	2.4	0.2	323.3	0.4	323.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Oregon

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	1	3	(s)	0	3	0	12,389	--	0	0	0	0	--
1965	0	(s)	1	(s)	0	1	0	16,447	--	0	0	0	0	--
1970	0	1	18	(s)	0	19	0	29,836	--	0	0	0	0	--
1975	0	(s)	0	29	0	29	2	34,522	--	0	0	0	(s)	--
1980	485	(s)	0	110	0	110	5,395	30,194	--	0	0	0	0	--
1985	418	0	0	3	0	3	6,911	40,752	--	0	0	0	5,096	--
1990	850	7	0	56	0	56	6,074	41,240	--	ⁱ 0	ⁱ 0	ⁱ 1	852	--
1995	977	20	0	12	0	12	0	40,764	--	0	0	0	828	--
1996	1,044	26	0	10	0	10	0	44,906	--	0	0	0	2,774	--
1997	822	24	0	23	0	23	0	46,704	--	0	0	0	773	--
1998	2,037	53	0	59	0	59	0	39,902	--	0	0	20	591	--
1999	2,154	50	0	15	0	15	0	45,639	--	0	0	85	310	--
2000	2,241	69	0	105	0	105	0	38,116	--	0	0	67	153	--
2001	2,490	83	0	182	0	182	0	28,645	--	0	0	89	140	--
2002	2,155	56	0	14	0	14	0	34,413	--	0	0	376	1,468	--
2003	2,533	74	0	100	0	100	0	33,250	--	0	0	444	3,115	--
2004	2,077	89	0	40	0	40	0	33,081	--	0	0	619	2,445	--
Trillion Btu														
1960	0.0	0.7	(s)	(s)	0.0	(s)	0.0	133.3	0.3	0.0	0.0	0.0	0.0	134.3
1965	0.0	0.1	(s)	(s)	0.0	(s)	0.0	171.9	0.3	0.0	0.0	0.0	0.0	172.3
1970	0.0	1.1	0.1	(s)	0.0	0.1	0.0	313.1	0.5	0.0	0.0	0.0	0.0	314.7
1975	0.0	(s)	0.0	0.2	0.0	0.2	(s)	359.2	(s)	0.0	0.0	0.0	(s)	359.4
1980	7.9	0.3	0.0	0.6	0.0	0.6	58.8	313.7	1.7	0.0	0.0	0.0	0.0	383.1
1985	6.9	0.0	0.0	(s)	0.0	(s)	73.4	425.7	0.0	0.0	0.0	0.0	17.4	523.5
1990	14.2	7.6	0.0	0.3	0.0	0.3	64.3	429.0	ⁱ 7.2	ⁱ 0.0	ⁱ 0.0	ⁱ (s)	2.9	ⁱ 525.4
1995	17.4	19.7	0.0	0.1	0.0	0.1	0.0	420.4	7.1	0.0	0.0	0.0	2.8	467.5
1996	18.3	26.9	0.0	0.1	0.0	0.1	0.0	464.3	6.7	0.0	0.0	0.0	9.5	525.8
1997	14.4	24.6	0.0	0.1	0.0	0.1	0.0	477.0	6.6	0.0	0.0	0.0	2.6	525.3
1998	35.4	53.9	0.0	0.3	0.0	0.3	0.0	406.9	7.0	0.0	0.0	0.2	2.0	505.7
1999	38.6	50.5	0.0	0.1	0.0	0.1	0.0	466.7	5.3	0.0	0.0	0.9	1.1	563.1
2000	38.7	70.7	0.0	0.6	0.0	0.6	0.0	388.8	6.2	0.0	0.0	0.7	0.5	506.2
2001	43.4	84.3	0.0	1.1	0.0	1.1	0.0	296.0	6.2	0.0	0.0	0.9	0.5	432.2
2002	36.6	56.8	0.0	0.1	0.0	0.1	0.0	350.1	5.0	0.0	0.0	3.8	5.0	457.4
2003	43.4	76.0	0.0	0.6	0.0	0.6	0.0	340.5	6.6	0.0	0.0	4.5	10.6	482.3
2004	35.1	90.5	0.0	0.2	0.0	0.2	0.0	331.5	2.1	0.0	0.0	6.2	8.3	473.9

^a Includes supplemental gaseous fuels.
^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.
^g Solar thermal and photovoltaic energy.
^h Electricity traded with Canada and Mexico.
ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
 -- = Not applicable.
 (s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.
 Note: Totals may not equal sum of components due to independent rounding.
 Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Pennsylvania

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
	Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	60,646	522	4,731	1,994	46,257	1,036	3,508	2,334	2,775	80,104	42,958	11,310	197,008	230	1,826	--	--	-2,054	--
1965	68,911	629	6,201	1,922	54,459	3,406	3,851	3,030	3,540	85,723	43,238	14,319	219,689	313	1,329	--	--	4,986	--
1970	68,574	772	6,600	662	63,489	9,083	4,251	4,754	3,844	101,718	60,436	14,462	269,299	465	1,366	--	--	2,582	--
1975	67,043	654	5,663	426	68,017	8,548	3,398	6,077	3,349	108,765	41,631	15,988	261,861	15,869	1,576	--	--	-34,882	--
1980	65,911	776	5,148	337	68,602	10,148	2,763	7,255	4,069	107,925	35,099	19,800	261,145	12,091	734	--	--	-38,524	--
1985	56,702	626	4,913	208	57,887	10,126	3,557	7,577	3,703	101,979	17,799	16,976	224,724	26,232	972	--	--	-78,303	--
1990	61,019	656	7,466	145	59,661	12,042	1,654	6,313	4,166	107,467	18,762	21,599	239,276	57,787	2,869	--	--	-141,253	--
1995	62,969	736	7,808	125	61,656	12,313	2,760	5,509	3,975	112,282	13,715	21,900	242,044	66,462	2,030	--	--	-142,776	--
1996	65,691	746	7,472	121	61,297	11,831	3,116	6,080	3,857	113,639	12,959	19,495	239,866	68,672	3,012	--	--	-161,827	--
1997	66,667	706	6,962	107	59,438	14,813	3,015	5,283	4,075	114,779	11,495	22,947	242,913	67,655	2,249	--	--	-158,884	--
1998	62,342	644	7,890	126	57,603	16,716	3,375	5,452	4,266	116,867	13,933	22,141	248,368	61,149	2,381	--	--	-143,102	--
1999	59,822	689	4,996	205	62,519	15,943	3,064	5,677	4,310	117,420	11,872	22,230	248,237	71,127	1,947	--	--	-160,822	--
2000	63,516	703	7,365	154	68,564	19,009	3,413	7,115	4,246	118,034	12,071	19,709	259,680	73,771	2,290	--	--	-177,505	--
2001	^R 60,161	635	8,694	122	69,446	18,877	3,665	6,573	3,890	120,458	9,721	22,971	264,418	73,731	1,650	--	--	^R -144,632	--
2002	^R 60,583	676	6,881	121	69,282	17,006	2,471	6,974	3,844	122,851	7,834	22,949	260,212	76,089	2,211	--	--	-165,547	--
2003	^R 61,992	^R 693	7,822	95	66,350	17,473	2,067	11,231	3,554	122,575	11,456	24,668	267,291	74,361	3,346	--	--	^R -165,851	--
2004	62,797	696	8,783	96	71,869	16,381	2,429	11,037	3,600	124,559	11,859	25,458	276,071	77,459	3,155	--	--	-177,711	--
Trillion Btu																			
1960	1,530.5	540.1	31.4	10.1	269.4	5.7	19.9	9.4	16.8	420.8	270.1	67.7	1,121.3	2.7	19.6	46.5	0.0	-7.0	3,253.7
1965	1,751.3	652.9	41.2	9.7	317.2	19.2	21.8	12.2	21.5	450.3	271.8	84.1	1,249.0	3.7	13.9	47.4	0.0	17.0	3,735.1
1970	1,699.0	797.9	43.8	3.3	369.8	51.4	24.1	18.0	23.3	534.3	380.0	84.9	1,532.9	5.1	14.3	53.2	0.0	8.8	4,111.2
1975	1,646.7	670.1	37.6	2.1	396.2	48.4	19.3	22.6	20.3	571.3	261.7	94.0	1,473.5	174.8	16.4	57.5	0.0	-119.0	3,919.9
1980	1,636.1	792.8	34.2	1.7	399.6	57.4	15.7	26.7	24.7	566.9	220.7	114.5	1,462.0	131.9	7.6	129.2	0.0	-131.4	4,028.0
1985	1,409.1	646.9	32.6	1.1	337.2	57.3	20.2	27.3	22.5	535.7	111.9	100.0	1,245.6	278.6	10.1	138.1	0.0	-267.2	3,461.4
1990	1,469.7	680.7	49.5	0.7	347.5	68.2	9.4	22.9	25.3	564.5	118.0	126.6	1,332.6	611.5	29.8	^j 61.4	^j 0.7	-482.0	^j 3,704.4
1995	1,484.1	761.5	51.8	0.6	359.1	69.8	15.7	20.0	24.1	585.6	86.2	128.3	1,341.2	698.3	20.9	91.5	0.9	-487.2	3,911.3
1996	1,543.7	771.2	49.6	0.6	357.1	67.1	17.7	22.0	23.4	592.7	81.5	113.5	1,325.1	721.3	31.1	99.0	1.6	-552.2	3,940.9
1997	1,569.6	730.8	46.2	0.5	346.2	84.0	17.1	19.1	24.7	598.3	72.3	134.2	1,342.7	710.0	23.0	90.8	1.3	-542.1	3,926.0
1998	1,466.0	667.2	52.4	0.6	335.5	94.8	19.1	19.7	25.9	609.1	87.6	129.5	1,374.3	641.5	24.3	85.3	0.4	-488.3	3,770.8
1999	1,415.0	713.6	33.2	1.0	364.2	90.4	17.4	20.5	26.1	611.9	74.6	129.6	1,368.9	743.3	19.9	88.7	0.9	-548.7	3,801.6
2000	1,508.1	727.5	48.9	0.8	399.4	107.8	19.4	25.7	25.8	615.0	75.9	114.9	1,433.4	769.4	23.4	89.5	1.1	-605.6	3,946.6
2001	^R 1,392.2	669.1	57.7	0.6	404.5	107.0	20.8	23.8	23.6	627.6	61.1	134.1	1,460.8	770.3	17.0	^R 91.3	1.1	^R -493.5	^R 3,908.4
2002	^R 1,457.3	710.7	45.7	0.6	403.6	96.4	14.0	25.2	23.3	639.8	49.3	133.9	1,431.8	794.3	22.5	85.0	1.3	-564.8	^R 3,938.1
2003	^R 1,462.0	^R 729.5	51.9	0.5	386.5	99.1	11.7	40.8	21.6	638.2	72.0	144.1	1,466.4	774.9	34.3	^R 87.1	2.0	-565.9	^R 3,990.3
2004	1,474.3	732.5	58.3	0.5	418.6	92.9	13.8	39.9	21.8	649.6	74.6	148.6	1,518.6	807.7	31.6	87.4	3.7	-606.4	4,049.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Pennsylvania

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	5,236	232	25,101	2,763	1,125	28,989	1,307	--	--	11,094	--	27,436	--
1965	3,185	256	28,391	2,753	1,349	32,493	1,060	--	--	14,807	--	35,357	--
1970	2,028	297	31,242	3,368	1,890	36,500	1,024	--	--	23,007	--	55,687	--
1975	561	273	31,587	2,023	2,109	35,719	1,039	--	--	27,678	--	66,560	--
1980	329	288	27,838	2,362	1,589	31,789	2,666	--	--	31,767	--	76,595	--
1985	280	245	24,185	2,853	2,299	29,337	2,478	--	--	32,686	--	75,298	--
1990	262	240	20,207	1,377	2,533	24,117	1,300	--	--	38,164	--	88,283	--
1995	154	262	20,307	2,064	3,089	25,460	1,172	--	--	42,802	--	97,230	--
1996	119	279	20,704	2,411	3,362	26,477	1,217	--	--	43,645	--	99,274	--
1997	137	262	19,169	2,541	3,311	25,021	691	--	--	42,785	--	96,960	--
1998	93	218	16,232	2,906	3,486	22,624	614	--	--	42,923	--	97,370	--
1999	83	241	19,175	2,518	3,733	25,426	646	--	--	44,126	--	100,960	--
2000	82	263	20,910	2,790	4,489	28,190	695	--	--	45,008	--	102,400	--
2001	86	239	20,863	2,884	3,480	27,226	625	--	--	46,030	--	^R 103,525	--
2002	70	239	20,503	1,985	4,015	26,503	634	--	--	48,730	--	109,168	--
2003	91	265	22,251	1,597	5,017	28,864	667	--	--	49,651	--	110,293	--
2004	75	248	22,427	1,941	4,992	29,359	684	--	--	50,663	--	112,768	--
Trillion Btu													
1960	129.5	240.2	146.2	15.7	4.5	166.4	26.1	0.0	0.0	37.9	600.0	93.6	693.7
1965	77.6	265.3	165.4	15.6	5.4	186.4	21.2	0.0	0.0	50.5	601.0	120.6	721.7
1970	47.8	306.8	182.0	19.1	7.1	208.2	20.5	0.0	0.0	78.5	661.8	190.0	851.8
1975	12.6	279.5	184.0	11.5	7.8	203.3	20.8	0.0	0.0	94.4	610.6	227.1	837.7
1980	7.6	294.7	162.2	13.4	5.8	181.4	53.3	0.0	0.0	108.4	645.4	261.3	906.7
1985	6.6	253.2	140.9	16.2	8.3	165.3	49.6	0.0	0.0	111.5	586.3	256.9	843.2
1990	6.6	249.5	117.7	7.8	9.2	134.7	26.0	^f 0.2	^f 0.5	130.2	^f 547.6	301.2	^f 848.8
1995	3.8	271.4	118.3	11.7	11.2	141.2	23.4	0.2	0.5	146.0	586.6	331.7	918.4
1996	2.9	288.1	120.6	13.7	12.1	146.4	24.3	0.2	0.5	148.9	611.5	338.7	950.2
1997	3.4	271.7	111.7	14.4	12.0	138.0	13.8	0.3	0.5	146.0	573.7	330.8	904.6
1998	2.3	225.8	94.6	16.5	12.6	123.6	12.3	0.3	0.5	146.5	511.3	332.2	843.5
1999	2.1	250.2	111.7	14.3	13.5	139.5	12.9	0.3	0.5	150.6	556.0	344.5	900.5
2000	2.2	272.0	121.8	15.8	16.2	153.8	13.9	0.3	0.5	153.6	596.2	349.4	945.6
2001	2.2	251.9	121.5	16.4	12.6	150.5	12.5	0.3	0.4	157.1	574.9	^R 353.2	^R 928.1
2002	1.8	252.0	119.4	11.3	14.5	145.2	12.7	0.3	0.4	166.3	578.7	372.5	951.2
2003	2.3	^R 279.0	129.6	9.1	18.2	156.9	13.3	0.4	0.4	169.4	621.8	376.3	998.1
2004	1.9	261.1	130.6	11.0	18.1	159.7	13.7	0.5	0.5	172.9	610.2	384.8	995.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Pennsylvania

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	3,639	56	4,363	241	198	2,084	5,514	12,401	0	--	--	7,125	--	17,622	--
1965	2,403	68	4,935	240	238	2,585	5,899	13,897	0	--	--	9,417	--	22,487	--
1970	1,594	99	5,431	294	334	2,455	5,254	13,767	0	--	--	13,435	--	32,517	--
1975	1,308	99	5,491	177	372	1,310	3,630	10,980	0	--	--	18,608	--	44,750	--
1980	1,239	118	5,858	193	280	313	1,521	8,165	0	--	--	21,746	--	52,434	--
1985	993	115	5,508	359	406	448	1,414	8,134	0	--	--	24,580	--	56,624	--
1990	1,046	126	6,640	150	447	701	794	8,732	^g 0	--	--	30,198	--	69,856	--
1995	1,034	144	6,334	528	545	88	1,221	8,716	0	--	--	35,542	--	80,737	--
1996	875	155	6,152	556	593	87	1,304	8,692	0	--	--	36,373	--	82,735	--
1997	1,108	144	4,807	323	584	284	1,029	7,027	0	--	--	36,853	--	83,516	--
1998	749	131	4,597	284	615	929	598	7,023	0	--	--	38,088	--	86,404	--
1999	607	143	4,751	344	659	188	540	6,481	0	--	--	38,306	--	87,643	--
2000	660	145	5,495	407	792	146	634	7,475	0	--	--	42,988	--	97,805	--
2001	698	136	5,994	501	614	127	500	7,737	0	--	--	41,446	--	^R 93,216	--
2002	516	136	7,454	388	708	158	376	9,084	0	--	--	43,598	--	97,671	--
2003	609	^R 149	6,269	394	885	158	564	8,269	0	--	--	43,218	--	^R 96,002	--
2004	606	143	6,216	409	881	205	609	8,319	0	--	--	44,355	--	98,728	--

Trillion Btu															
1960	90.0	58.1	25.4	1.4	0.8	10.9	34.7	73.2	0.0	0.5	0.0	24.3	246.1	60.1	306.2
1965	58.5	70.1	28.7	1.4	1.0	13.6	37.1	81.7	0.0	0.4	0.0	32.1	242.9	76.7	319.6
1970	37.5	102.6	31.6	1.7	1.3	12.9	33.0	80.5	0.0	0.4	0.0	45.8	266.9	110.9	377.8
1975	29.4	101.5	32.0	1.0	1.4	6.9	22.8	64.1	0.0	0.4	0.0	63.5	258.9	152.7	411.5
1980	28.7	121.1	34.1	1.1	1.0	1.6	9.6	47.5	0.0	1.3	0.0	74.2	272.7	178.9	451.6
1985	23.6	119.3	32.1	2.0	1.5	2.4	8.9	46.8	0.0	1.2	0.0	83.9	274.7	193.2	467.9
1990	26.3	130.6	38.7	0.9	1.6	3.7	5.0	49.8	^g 0.0	^g 2.8	^g (s)	103.0	^g 312.6	238.3	^g 551.0
1995	25.7	148.8	36.9	3.0	2.0	0.5	7.7	50.0	0.0	7.1	0.1	121.3	353.0	275.5	628.5
1996	21.6	159.9	35.8	3.1	2.1	0.5	8.2	49.8	0.0	7.2	0.1	124.1	362.8	282.3	645.1
1997	27.3	149.2	28.0	1.8	2.1	1.5	6.5	39.9	0.0	6.1	0.2	125.7	348.3	285.0	633.3
1998	18.9	135.8	26.8	1.6	2.2	4.8	3.8	39.2	0.0	5.9	0.2	130.0	329.9	294.8	624.7
1999	15.4	148.4	27.7	2.0	2.4	1.0	3.4	36.4	0.0	5.9	0.2	130.7	337.1	299.0	636.1
2000	17.4	150.4	32.0	2.3	2.9	0.8	4.0	41.9	0.0	6.1	0.2	146.7	362.7	333.7	696.4
2001	17.6	143.9	34.9	2.8	2.2	0.7	3.1	43.8	0.0	6.1	0.2	141.4	353.0	^R 318.1	^R 671.1
2002	13.0	143.5	43.4	2.2	2.6	0.8	2.4	51.4	0.0	6.3	0.3	148.8	363.1	333.3	696.4
2003	15.3	^R 157.4	36.5	2.2	3.2	0.8	3.5	46.3	0.0	6.7	0.3	147.5	^R 373.4	327.6	^R 701.0
2004	15.2	150.3	36.2	2.3	3.2	1.1	3.8	46.6	0.0	6.1	0.3	151.3	369.9	336.9	706.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Pennsylvania

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total	
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh		
1960	33,140	213	4,731	8,645	503	992	1,432	1,456	29,692	11,310	58,762	16	--	--	20,693	--	51,175	--
1965	40,010	285	6,201	11,641	858	1,383	2,419	1,480	29,434	14,319	67,734	15	--	--	29,075	--	69,430	--
1970	35,753	340	6,600	10,196		2,396	2,518	1,181	27,132	14,462	65,074	12	--	--	38,993	--	94,380	--
1975	28,510	263	5,663	11,033	1,198	3,439	2,255	1,098	21,941	15,988	62,614	1	--	--	41,256	--	99,215	--
1980	21,877	337	5,148	11,128	208	5,238	2,756	586	11,555	19,484	56,104	1	--	--	46,045	--	111,021	--
1985	13,716	231	4,913	6,434	345	4,624	2,508	1,276	2,624	16,194	38,919	1	--	--	42,520	--	97,952	--
1990	14,546	241	7,466	7,489	127	3,177	2,822	1,180	5,734	20,594	48,589	^g 0	--	--	45,992	--	106,390	--
1995	14,885	252	7,808	4,392	169	1,687	2,693	934	2,888	20,590	41,161	0	--	--	47,528	--	107,965	--
1996	15,155	246	7,472	4,462	150	1,977	2,613	855	3,292	18,132	38,952	0	--	--	47,208	--	107,379	--
1997	14,825	240	6,962	4,179	151	1,272	2,761	887	2,227	21,629	40,067	0	--	--	48,063	--	108,920	--
1998	10,691	232	7,890	4,066	186	1,224	2,890	872	2,219	20,814	40,160	0	--	--	48,815	--	110,736	--
1999	10,160	236	4,996	5,034	201	1,188	2,920	741	1,903	21,511	38,495	0	--	--	46,059	--	105,382	--
2000	10,508	235	7,365	5,576	216	1,766	2,876	703	1,994	19,683	40,180	0	--	--	45,449	--	103,403	--
2001	^R 10,079	203	8,694	5,997	280	2,391	2,635	1,363	1,600	22,948	45,910	0	--	--	47,383	--	^R 106,568	--
2002	^R 10,137	212	6,881	5,254	98	2,153	2,604	1,432	1,316	22,337	42,075	0	--	--	47,090	--	105,493	--
2003	^R 10,366	200	7,822	4,739	76	5,176	2,408	1,510	2,111	23,824	47,666	0	--	--	46,773	--	103,901	--
2004	10,418	200	8,783	5,446	79	5,010	2,439	1,823	1,918	24,406	49,904	0	--	--	47,659	--	106,081	--

Trillion Btu																		
1960	873.1	220.0	31.4	50.4	2.9	4.0	8.7	7.6	186.7	67.7	359.3	0.2	19.8	0.0	70.6	1,543.0	174.6	1,717.7
1965	1,053.3	296.1	41.2	67.8	4.9	5.5	14.7	7.8	185.0	84.1	411.0	0.2	25.8	0.0	99.2	1,885.5	236.9	2,122.4
1970	932.1	351.2	43.8	59.4	3.3	9.1	15.3	6.2	170.6	84.9	392.6	0.1	32.3	0.0	133.0	1,841.4	322.0	2,163.4
1975	743.1	269.8	37.6	64.3	6.8	12.8	13.7	5.8	137.9	94.0	372.8	(s)	36.3	0.0	140.8	1,562.8	338.5	1,901.3
1980	573.1	344.0	34.2	64.8	1.2	19.2	16.7	3.1	72.6	112.6	324.4	(s)	74.6	0.0	157.1	1,473.2	378.8	1,852.0
1985	359.2	238.7	32.6	37.5	2.0	16.7	15.2	6.7	16.5	95.3	222.4	(s)	87.4	0.0	145.1	1,052.8	334.2	1,387.0
1990	382.1	250.9	49.5	43.6	0.7	11.5	17.1	6.2	36.0	120.5	285.3	^g 0.0	^g 23.7	^g 0.0	156.9	^g 1,099.0	363.0	^g 1,462.0
1995	392.2	261.4	51.8	25.6	1.0	6.1	16.3	4.9	18.2	120.4	244.2	0.0	33.2	0.0	162.2	1,093.2	368.4	1,461.6
1996	398.4	254.6	49.6	26.0	0.8	7.1	15.8	4.5	20.7	105.3	229.9	0.0	38.4	0.0	161.1	1,082.3	366.4	1,448.7
1997	390.0	248.3	46.2	24.3	0.9	4.6	16.7	4.6	14.0	126.3	237.6	0.0	41.8	0.0	164.0	1,081.7	371.6	1,453.4
1998	284.2	240.5	52.4	23.7	1.1	4.4	17.5	4.5	14.0	121.5	239.1	0.0	36.3	0.0	166.6	966.6	377.8	1,344.4
1999	269.6	244.2	33.2	29.3	1.1	4.3	17.7	3.9	12.0	125.3	226.7	0.0	38.5	0.0	157.2	936.3	359.6	1,295.8
2000	277.9	243.6	48.9	32.5	1.2	6.4	17.4	3.7	12.5	114.8	237.4	0.0	38.0	0.0	155.1	951.9	352.8	1,304.7
2001	^R 266.0	214.6	57.7	34.9	1.6	8.6	16.0	7.1	10.1	133.9	269.9	0.0	^R 36.5	0.0	161.7	^R 948.6	^R 363.6	^R 1,312.3
2002	^R 267.7	223.9	45.7	30.6	0.6	7.8	15.8	7.5	8.3	130.2	246.4	0.0	^R 30.5	0.0	160.7	^R 929.1	359.9	^R 1,289.1
2003	^R 274.0	210.8	51.9	27.6	0.4	18.8	14.6	7.9	13.3	139.1	273.5	0.0	31.2	0.0	159.6	^R 949.1	354.5	^R 1,303.6
2004	273.4	210.8	58.3	31.7	0.5	18.1	14.8	9.5	12.1	142.3	287.2	0.0	32.4	0.0	162.6	966.4	361.9	1,328.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	569	15	1,994	7,662	1,036	20	1,343	76,565	5,005	93,625	0	306	--	756	--
1965	130	19	1,922	8,900	3,406	60	1,121	81,658	4,554	101,622	0	232	--	553	--
1970	57	27	662	12,662	9,083	134	1,327	98,082	5,548	127,497	0	184	--	446	--
1975	5	18	426	16,566	8,469	157	1,094	106,357	5,788	138,857	0	194	--	466	--
1980	0	29	337	21,539	10,148	147	1,312	107,026	4,796	145,306	0	186	--	448	--
1985	0	33	208	20,337	10,126	249	1,194	100,255	2,139	134,508	^f 0	365	--	842	--
1990	0	34	145	23,187	12,042	157	1,344	105,586	5,584	148,044	0	396	--	917	--
1995	0	38	125	29,224	12,313	188	1,282	111,261	4,769	159,162	1,730	379	--	861	--
1996	0	41	121	28,464	11,831	148	1,244	112,697	3,326	157,831	1,298	397	--	904	--
1997	0	39	107	30,227	14,813	117	1,314	113,608	4,579	164,765	1,437	376	--	852	--
1998	0	33	126	31,153	16,716	127	1,376	115,066	5,481	170,045	330	381	--	864	--
1999	0	37	205	32,235	15,943	97	1,390	116,491	5,003	171,364	283	392	--	896	--
2000	0	39	154	33,989	19,009	68	1,369	117,185	4,699	176,473	319	401	--	912	--
2001	0	33	122	35,425	18,877	88	1,255	118,968	2,446	177,180	410	412	--	^R 927	--
2002	0	38	121	34,831	17,006	98	1,240	121,261	2,878	177,435	137	403	--	902	--
2003	0	37	95	31,746	17,473	153	1,146	120,907	2,959	174,479	163	727	--	1,615	--
2004	0	30	96	36,709	16,381	155	1,161	122,531	4,003	181,035	2,148	823	--	1,833	--
Trillion Btu															
1960	14.6	15.6	10.1	44.6	5.7	0.1	8.1	402.2	31.5	502.3	0.0	1.0	533.6	2.6	536.2
1965	3.3	20.1	9.7	51.8	19.2	0.2	6.8	429.0	28.6	545.4	0.0	0.8	569.5	1.9	571.4
1970	1.4	27.5	3.3	73.8	51.4	0.5	8.0	515.2	34.9	687.1	0.0	0.6	716.7	1.5	718.2
1975	0.1	18.1	2.1	96.5	47.9	0.6	6.6	558.7	36.4	748.9	0.0	0.7	767.8	1.6	769.4
1980	0.0	30.1	1.7	125.5	57.4	0.5	8.0	562.2	30.2	785.4	0.0	0.6	816.2	1.5	817.7
1985	0.0	34.1	1.1	118.5	57.3	0.9	7.2	526.6	13.4	725.0	^f 0.0	1.2	^f 760.4	2.9	^f 763.2
1990	0.0	35.8	0.7	135.1	68.2	0.6	8.1	554.6	35.1	802.4	0.0	1.4	839.5	3.1	842.7
1995	0.0	39.3	0.6	170.2	69.8	0.7	7.8	580.2	30.0	859.3	6.1	1.3	899.9	2.9	902.9
1996	0.0	42.2	0.6	165.8	67.1	0.5	7.5	587.8	20.9	850.3	4.6	1.4	893.8	3.1	896.9
1997	0.0	40.6	0.5	176.1	84.0	0.4	8.0	592.2	28.8	890.0	5.1	1.3	931.9	2.9	934.8
1998	0.0	34.0	0.6	181.5	94.8	0.5	8.3	599.7	34.5	919.9	1.2	1.3	955.2	2.9	958.1
1999	0.0	38.3	1.0	187.8	90.4	0.3	8.4	607.0	31.5	926.5	1.0	1.3	966.1	3.1	969.1
2000	0.0	40.2	0.8	198.0	107.8	0.2	8.3	610.5	29.5	955.2	1.1	1.4	996.8	3.1	999.9
2001	0.0	35.3	0.6	206.3	107.0	0.3	7.6	619.8	15.4	957.1	1.5	1.4	993.8	3.2	^R 997.0
2002	0.0	39.6	0.6	202.9	96.4	0.4	7.5	631.5	18.1	957.4	0.5	1.4	998.4	3.1	1,001.5
2003	0.0	39.5	0.5	184.9	99.1	0.6	7.0	629.6	18.6	940.1	0.6	2.5	982.1	5.5	987.6
2004	0.0	31.3	0.5	213.8	92.9	0.6	7.0	639.0	25.2	979.0	7.6	2.8	1,013.0	6.3	1,019.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Pennsylvania

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	18,062	6	2,747	485	0	3,232	230	1,810	--	0	0	0	0	--
1965	23,182	1	3,351	591	0	3,943	313	1,313	--	0	0	0	0	--
1970	29,141	9	22,502	3,959	0	26,460	465	1,354	--	0	0	0	0	--
1975	36,659	1	10,273	3,419	0	13,691	15,869	1,575	--	0	0	0	0	--
1980	42,466	3	17,226	2,238	316	19,780	12,091	734	--	0	0	0	0	--
1985	41,713	2	11,622	1,423	782	13,827	26,232	971	--	0	0	0	0	--
1990	45,165	15	6,650	2,140	1,005	9,795	57,787	2,869	--	0	0	0	0	--
1995	46,895	39	4,836	1,398	1,310	7,545	66,462	2,030	--	0	0	0	16	--
1996	49,541	26	5,037	1,514	1,363	7,914	68,672	3,012	--	0	0	0	199	--
1997	50,597	20	3,661	1,055	1,318	6,034	67,655	2,249	--	0	0	0	113	--
1998	50,810	30	5,635	1,555	1,327	8,517	61,149	2,381	--	0	0	0	-164	--
1999	48,971	31	4,426	1,325	719	6,471	71,127	1,947	--	0	0	0	-16	--
2000	52,266	21	4,744	2,593	26	7,363	73,771	2,290	--	0	0	10	0	--
2001	49,297	23	5,175	1,167	23	6,365	73,731	1,650	--	0	0	11	0	--
2002	49,860	50	3,264	1,238	612	5,115	76,089	2,211	--	0	0	58	-96	--
2003	50,926	41	5,822	1,346	844	8,012	74,361	3,346	--	0	0	112	-83	--
2004	51,698	76	5,331	1,072	1,051	7,453	77,459	3,155	--	0	0	306	-177	--
Trillion Btu														
1960	423.3	6.2	17.3	2.8	0.0	20.1	2.7	19.5	0.0	0.0	0.0	0.0	0.0	471.7
1965	558.6	1.3	21.1	3.4	0.0	24.5	3.7	13.7	0.0	0.0	0.0	0.0	0.0	601.8
1970	680.2	9.7	141.5	23.1	0.0	164.5	5.1	14.2	0.0	0.0	0.0	0.0	0.0	873.7
1975	861.4	1.2	64.6	19.9	0.0	84.5	174.8	16.4	0.0	0.0	0.0	0.0	0.0	1,138.3
1980	1,026.7	2.9	108.3	13.0	1.9	123.2	131.9	7.6	0.0	0.0	0.0	0.0	0.0	1,292.3
1985	1,019.7	1.6	73.1	8.3	4.7	86.1	278.6	10.1	0.0	0.0	0.0	0.0	0.0	1,396.1
1990	1,054.7	14.0	41.8	12.5	6.1	60.3	611.5	29.8	0.8	0.0	0.0	0.0	0.0	1,779.2
1995	1,062.4	40.6	30.4	8.1	7.9	46.4	698.3	20.9	27.7	0.0	0.0	0.0	0.1	1,896.5
1996	1,120.7	26.4	31.7	8.8	8.2	48.7	721.3	31.1	29.1	0.0	0.0	0.0	0.7	1,978.1
1997	1,149.0	21.0	23.0	6.1	7.9	37.1	710.0	23.0	29.0	0.0	0.0	0.0	0.4	1,969.4
1998	1,160.6	31.1	35.4	9.1	8.0	52.5	641.5	24.3	30.9	0.0	0.0	0.0	-0.6	1,940.3
1999	1,127.8	32.5	27.8	7.7	4.3	39.9	743.3	19.9	31.3	0.0	0.0	0.0	-0.1	1,994.6
2000	1,210.6	21.3	29.8	15.1	0.2	45.1	769.4	23.4	31.5	0.0	0.0	0.1	0.0	2,101.3
2001	1,106.5	23.4	32.5	6.8	0.1	39.5	770.3	17.0	36.2	0.0	0.0	0.1	0.0	1,993.1
2002	1,174.9	51.7	20.5	7.2	3.7	31.4	794.3	22.5	35.6	0.0	0.0	0.6	-0.3	2,110.7
2003	1,170.4	42.8	36.6	7.8	5.1	49.5	774.9	34.3	35.9	0.0	0.0	1.1	-0.3	2,108.7
2004	1,183.9	79.0	33.5	6.2	6.3	46.1	807.7	31.6	35.1	0.0	0.0	3.1	-0.6	2,185.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Rhode Island

Year	Coal ^a	Natural Gas ^b	Petroleum										Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ	
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels										Million kWh				Million kWh		
1960	598	12	735	19	8,106	38	886	207	155	5,975	9,827	221	26,170	0	9	--	--	440	--
1965	419	16	907	63	6,879	49	666	223	153	6,492	6,276	337	22,045	0	2	--	--	4,095	--
1970	10	25	937	148	8,631	137	432	375	125	8,009	9,727	313	28,833	0	3	--	--	7,123	--
1975	7	23	1,330	285	8,003	271	128	498	97	8,972	4,389	149	24,122	0	3	--	--	12,256	--
1980	7	28	1,041	269	5,032	348	84	293	132	8,416	2,525	539	18,680	0	1	--	--	13,937	--
1985	9	30	2,974	30	4,940	498	135	501	120	8,665	2,232	127	20,223	0	0	--	--	15,413	--
1990	5	39	1,634	42	5,285	776	54	501	135	8,765	1,424	58	18,674	0	10	--	--	17,514	--
1995	3	101	990	22	5,839	500	64	461	129	8,927	936	15	17,882	0	9	--	--	9,225	--
1996	3	120	337	37	6,008	540	35	536	125	9,006	984	39	17,647	0	10	--	--	979	--
1997	3	118	274	11	6,705	828	93	422	132	9,195	904	36	18,599	0	8	--	--	1,466	--
1998	2	131	282	9	5,578	919	122	481	138	9,391	683	45	17,648	0	9	--	--	2,231	--
1999	2	118	302	11	5,465	1,057	108	506	140	9,593	641	53	17,876	0	6	--	--	4,763	--
2000	2	88	203	13	5,459	1,283	85	447	138	9,468	681	39	17,815	0	5	--	--	7,204	--
2001	2	96	197	14	5,750	1,304	167	431	126	9,617	633	43	18,283	0	3	--	--	^R 5,107	--
2002	3	88	179	7	5,678	1,286	89	560	124	9,452	610	48	18,034	0	4	--	--	7,633	--
2003	4	78	328	7	6,390	1,056	52	473	115	9,474	683	41	18,620	0	6	--	--	12,005	--
2004	3	73	177	12	6,515	1,035	57	360	117	9,108	671	31	18,082	0	5	--	--	13,963	--

Trillion Btu																			
1960	16.8	12.3	4.9	0.1	47.2	0.2	5.0	0.8	0.9	31.4	61.8	1.3	153.7	0.0	0.1	2.9	0.0	1.5	187.1
1965	11.5	17.0	6.0	0.3	40.1	0.3	3.8	0.9	0.9	34.1	39.5	1.9	127.8	0.0	(s)	3.5	0.0	14.0	173.8
1970	0.2	25.6	6.2	0.7	50.3	0.8	2.4	1.4	0.8	42.1	61.2	1.8	167.6	0.0	(s)	5.2	0.0	24.3	223.0
1975	0.1	23.5	8.8	1.4	46.6	1.5	0.7	1.8	0.6	47.1	27.6	0.8	137.1	0.0	(s)	4.0	0.0	41.8	206.6
1980	0.2	28.2	6.9	1.4	29.3	2.0	0.5	1.1	0.8	44.2	15.9	3.0	104.9	0.0	(s)	7.3	0.0	47.6	188.2
1985	0.2	30.9	19.7	0.2	28.8	2.8	0.8	1.8	0.7	45.5	14.0	0.7	115.0	0.0	0.0	5.1	1.4	52.6	205.2
1990	0.1	40.5	10.8	0.2	30.8	4.4	0.3	1.8	0.8	46.0	9.0	0.3	104.5	0.0	0.1	ⁱ 4.4	^j 0.2	59.8	^j 209.4
1995	0.1	103.5	6.6	0.1	34.0	2.8	0.4	1.7	0.8	46.6	5.9	0.1	98.9	0.0	0.1	4.9	4.4	31.5	243.4
1996	0.1	127.2	2.2	0.2	35.0	3.1	0.2	1.9	0.8	47.0	6.2	0.2	96.7	0.0	0.1	5.4	4.6	3.3	237.4
1997	0.1	120.5	1.8	0.1	39.1	4.7	0.5	1.5	0.8	47.9	5.7	0.2	102.3	0.0	0.1	4.2	5.8	5.0	238.0
1998	0.1	134.0	1.9	(s)	32.5	5.2	0.7	1.7	0.8	48.9	4.3	0.2	96.4	0.0	0.1	4.1	6.0	7.6	248.3
1999	(s)	120.7	2.0	0.1	31.8	6.0	0.6	1.8	0.8	50.0	4.0	0.3	97.5	0.0	0.1	4.4	6.6	16.3	245.6
2000	0.1	91.8	1.3	0.1	31.8	7.3	0.5	1.6	0.8	49.3	4.3	0.2	97.2	0.0	(s)	4.5	5.4	24.6	223.6
2001	0.1	98.6	1.3	0.1	33.5	7.4	0.9	1.6	0.8	50.1	4.0	0.2	99.9	0.0	(s)	3.8	2.6	^R 17.4	^R 222.4
2002	0.1	90.5	1.2	(s)	33.1	7.3	0.5	2.0	0.8	49.2	3.8	0.3	98.2	0.0	(s)	3.6	1.1	26.0	219.7
2003	0.1	80.5	2.2	(s)	37.2	6.0	0.3	1.7	0.7	49.3	4.3	0.2	102.0	0.0	0.1	3.7	0.4	41.0	227.7
2004	0.1	74.6	1.2	0.1	38.0	5.9	0.3	1.3	0.7	47.5	4.2	0.2	99.3	0.0	0.1	3.8	1.1	47.6	226.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Rhode Island

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	12	7	5,507	770	149	6,426	52	--	--	620	--	1,533	--
1965	7	9	4,828	534	134	5,496	46	--	--	871	--	2,081	--
1970	4	12	5,835	335	158	6,328	58	--	--	1,390	--	3,364	--
1975	1	13	5,395	87	148	5,629	64	--	--	1,684	--	4,051	--
1980	1	14	3,297	54	115	3,466	355	--	--	1,840	--	4,437	--
1985	1	15	3,818	131	279	4,227	248	--	--	1,971	--	4,540	--
1990	1	18	3,035	38	277	3,349	152	--	--	2,376	--	5,497	--
1995	(s)	17	3,466	27	283	3,775	164	--	--	2,472	--	5,615	--
1996	(s)	19	3,479	30	354	3,864	171	--	--	2,481	--	5,642	--
1997	(s)	18	3,607	34	318	3,960	122	--	--	2,486	--	5,635	--
1998	(s)	16	3,265	41	372	3,678	108	--	--	2,522	--	5,721	--
1999	(s)	17	3,161	49	261	3,471	114	--	--	2,667	--	6,103	--
2000	(s)	19	3,262	65	278	3,604	123	--	--	2,664	--	6,062	--
2001	(s)	18	3,562	69	243	3,874	96	--	--	2,699	--	^R 6,070	--
2002	(s)	18	3,355	34	298	3,687	98	--	--	2,829	--	6,337	--
2003	1	20	3,705	46	306	4,058	103	--	--	2,998	--	6,660	--
2004	(s)	19	3,892	50	236	4,178	105	--	--	3,000	--	6,678	--
Trillion Btu													
1960	0.3	6.9	32.1	4.4	0.6	37.0	1.0	0.0	0.0	2.1	47.5	5.2	52.7
1965	0.2	9.3	28.1	3.0	0.5	31.7	0.9	0.0	0.0	3.0	45.1	7.1	52.2
1970	0.1	12.2	34.0	1.9	0.6	36.5	1.2	0.0	0.0	4.7	54.7	11.5	66.2
1975	(s)	13.2	31.4	0.5	0.5	32.5	1.3	0.0	0.0	5.7	52.7	13.8	66.6
1980	(s)	14.3	19.2	0.3	0.4	19.9	7.1	0.0	0.0	6.3	47.6	15.1	62.7
1985	(s)	15.5	22.2	0.7	1.0	24.0	5.0	0.0	0.0	6.7	51.2	15.5	66.7
1990	(s)	18.2	17.7	0.2	1.0	18.9	3.0	^f 0.0	^f (s)	8.1	^f 48.3	18.8	^f 67.1
1995	(s)	17.8	20.2	0.2	1.0	21.4	3.3	0.0	(s)	8.4	51.0	19.2	70.1
1996	(s)	20.7	20.3	0.2	1.3	21.7	3.4	0.0	(s)	8.5	54.4	19.3	73.6
1997	(s)	18.8	21.0	0.2	1.1	22.4	2.4	0.0	(s)	8.5	52.1	19.2	71.4
1998	(s)	16.9	19.0	0.2	1.3	20.6	2.2	0.0	(s)	8.6	48.3	19.5	67.8
1999	(s)	17.1	18.4	0.3	0.9	19.6	2.3	(s)	(s)	9.1	48.2	20.8	69.0
2000	(s)	19.5	19.0	0.4	1.0	20.4	2.5	(s)	(s)	9.1	51.5	20.7	72.2
2001	(s)	18.5	20.8	0.4	0.9	22.0	1.9	(s)	(s)	9.2	51.7	20.7	^R 72.4
2002	(s)	18.4	19.5	0.2	1.1	20.8	2.0	(s)	(s)	9.7	50.9	21.6	72.5
2003	(s)	20.8	21.6	0.3	1.1	23.0	2.1	(s)	(s)	10.2	56.1	22.7	78.8
2004	(s)	20.1	22.7	0.3	0.9	23.8	2.1	(s)	(s)	10.2	56.3	22.8	79.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Rhode Island

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	8	2	1,381	17	26	26	1,237	2,688	0	--	--	376	--	930	--
1965	6	3	1,211	12	24	32	634	1,913	0	--	--	546	--	1,304	--
1970	3	5	1,464	7	28	36	971	2,506	0	--	--	1,285	--	3,110	--
1975	3	4	1,353	2	26	41	602	2,024	0	--	--	1,576	--	3,789	--
1980	2	7	617	0	20	49	180	866	0	--	--	1,892	--	4,562	--
1985	4	8	493	4	49	32	552	1,130	0	--	--	2,159	--	4,974	--
1990	4	8	799	2	49	39	597	1,486	^g 0	--	--	2,688	--	6,219	--
1995	3	12	741	30	50	10	499	1,330	0	--	--	2,790	--	6,338	--
1996	3	12	808	2	63	10	667	1,550	0	--	--	2,773	--	6,307	--
1997	3	12	742	55	56	11	608	1,473	0	--	--	2,872	--	6,508	--
1998	2	11	620	67	66	10	388	1,150	0	--	--	2,908	--	6,597	--
1999	1	12	509	40	46	10	371	976	0	--	--	3,324	--	7,606	--
2000	2	13	629	19	49	10	419	1,125	0	--	--	3,243	--	7,379	--
2001	2	13	630	98	43	43	429	1,243	0	--	--	3,308	--	^R 7,440	--
2002	3	11	662	55	53	59	360	1,189	0	--	--	3,401	--	7,618	--
2003	3	11	980	5	54	59	373	1,471	0	--	--	3,490	--	7,752	--
2004	3	11	859	7	42	12	395	1,315	0	--	--	3,542	--	7,885	--
Trillion Btu															
1960	0.2	1.8	8.0	0.1	0.1	0.1	7.8	16.2	0.0	(s)	0.0	1.3	19.4	3.2	22.6
1965	0.1	2.7	7.1	0.1	0.1	0.2	4.0	11.4	0.0	(s)	0.0	1.9	16.1	4.4	20.5
1970	0.1	5.2	8.5	(s)	0.1	0.2	6.1	15.0	0.0	(s)	0.0	4.4	24.6	10.6	35.2
1975	0.1	4.3	7.9	(s)	0.1	0.2	3.8	12.0	0.0	(s)	0.0	5.4	21.7	12.9	34.7
1980	0.1	6.9	3.6	0.0	0.1	0.3	1.1	5.1	0.0	0.2	0.0	6.5	18.6	15.6	34.2
1985	0.1	7.8	2.9	(s)	0.2	0.2	3.5	6.7	0.0	0.1	0.0	7.4	22.1	17.0	39.1
1990	0.1	8.3	4.7	(s)	0.2	0.2	3.8	8.8	^g 0.0	^g 0.3	^g 0.0	9.2	^g 26.7	21.2	^g 47.9
1995	0.1	12.4	4.3	0.2	0.2	0.1	3.1	7.9	0.0	0.5	0.0	9.5	30.3	21.6	51.9
1996	0.1	13.5	4.7	(s)	0.2	0.1	4.2	9.2	0.0	0.5	0.0	9.5	32.7	21.5	54.2
1997	0.1	12.7	4.3	0.3	0.2	0.1	3.8	8.7	0.0	0.4	0.0	9.8	31.7	22.2	53.9
1998	0.1	11.8	3.6	0.4	0.2	0.1	2.4	6.7	0.0	0.4	0.0	9.9	28.8	22.5	51.3
1999	(s)	12.2	3.0	0.2	0.2	(s)	2.3	5.7	0.0	0.4	0.0	11.3	29.7	26.0	55.6
2000	(s)	13.6	3.7	0.1	0.2	0.1	2.6	6.6	0.0	0.4	0.0	11.1	31.7	25.2	56.9
2001	(s)	13.2	3.7	0.6	0.2	0.2	2.7	7.3	0.0	0.3	0.0	11.3	32.2	^R 25.4	57.5
2002	0.1	12.1	3.9	0.3	0.2	0.3	2.3	6.9	0.0	0.3	0.0	11.6	31.0	26.0	57.0
2003	0.1	11.7	5.7	(s)	0.2	0.3	2.3	8.6	0.0	0.4	0.0	11.9	32.7	26.4	59.1
2004	0.1	11.7	5.0	(s)	0.2	0.1	2.5	7.7	0.0	0.4	0.0	12.1	31.9	26.9	58.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Rhode Island

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	4	3	735	367	99	31	52	6	4,051	221	5,561	1	--	--	916	--	2,264
1965	4	4	907	431	120	61	85	5	2,135	337	4,082	(s)	--	--	1,274	--	3,042
1970	2	6	937	672	89	162	49	3	3,246	313	5,470	0	--	--	1,253	--	3,033
1975	2	6	1,330	440	40	297	40	3	1,916	149	4,215	0	--	--	1,191	--	2,865
1980	4	5	1,041	415	30	149	62	2	654	539	2,892	0	--	--	1,399	--	3,373
1985	4	5	2,974	275	(s)	150	56	26	973	127	4,584	0	--	--	1,300	--	2,995
1990	(s)	4	1,634	279	14	156	63	35	453	58	2,692	⁹ 0	--	--	1,354	--	3,133
1995	0	35	990	280	7	119	60	54	372	15	1,898	0	--	--	1,374	--	3,121
1996	0	26	337	294	3	112	59	47	315	39	1,204	0	--	--	1,351	--	3,073
1997	0	24	274	342	3	38	62	51	295	36	1,102	0	--	--	1,386	--	3,142
1998	0	42	282	249	13	43	65	45	294	45	1,035	0	--	--	1,458	--	3,307
1999	0	35	302	235	19	197	66	24	266	53	1,161	0	--	--	1,158	--	2,650
2000	0	8	203	165	1	118	65	33	257	39	881	0	--	--	1,394	--	3,171
2001	0	6	197	120	(s)	144	59	82	204	43	849	0	--	--	1,386	--	^R 3,117
2002	0	4	179	151	1	207	58	104	249	48	998	0	--	--	1,331	--	2,982
2003	0	4	328	236	(s)	104	54	104	310	41	1,177	0	--	--	1,309	--	^R 2,907
2004	0	6	177	251	0	75	55	104	276	31	968	0	--	--	1,345	--	2,993

Trillion Btu																	
1960	0.1	3.0	4.9	2.1	0.6	0.1	0.3	(s)	25.5	1.3	34.8	(s)	1.8	0.0	3.1	42.8	7.7
1965	0.1	4.4	6.0	2.5	0.7	0.2	0.5	(s)	13.4	1.9	25.3	(s)	2.6	0.0	4.3	36.8	10.4
1970	(s)	5.9	6.2	3.9	0.5	0.6	0.3	(s)	20.4	1.8	33.7	0.0	4.0	0.0	4.3	47.9	10.3
1975	0.1	5.9	8.8	2.6	0.2	1.1	0.2	(s)	12.0	0.8	25.9	0.0	2.7	0.0	4.1	38.6	9.8
1980	0.1	5.2	6.9	2.4	0.2	0.5	0.4	(s)	4.1	3.0	17.5	0.0	0.0	0.0	4.8	27.6	11.5
1985	0.1	4.8	19.7	1.6	(s)	0.5	0.3	0.1	6.1	0.7	29.2	0.0	0.0	0.0	4.4	38.5	10.2
1990	(s)	4.5	10.8	1.6	0.1	0.6	0.4	0.2	2.8	0.3	16.8	⁹ 0.0	⁹ 0.0	⁹ 0.0	4.6	⁹ 26.0	⁹ 36.6
1995	0.0	36.0	6.6	1.6	(s)	0.4	0.4	0.3	2.3	0.1	11.7	0.0	0.2	0.0	4.7	52.7	10.6
1996	0.0	28.4	2.2	1.7	(s)	0.4	0.4	0.2	2.0	0.2	7.2	0.0	0.3	0.0	4.6	40.5	10.5
1997	0.0	25.4	1.8	2.0	(s)	0.1	0.4	0.3	1.9	0.2	6.7	0.0	0.3	0.0	4.7	37.0	10.7
1998	0.0	43.4	1.9	1.4	0.1	0.2	0.4	0.2	1.8	0.2	6.3	0.0	0.2	0.0	5.0	54.9	11.3
1999	0.0	35.6	2.0	1.4	0.1	0.7	0.4	0.1	1.7	0.3	6.7	0.0	0.3	0.0	4.0	46.4	9.0
2000	0.0	8.4	1.3	1.0	(s)	0.4	0.4	0.2	1.6	0.2	5.1	0.0	0.2	0.0	4.8	18.5	10.8
2001	0.0	6.3	1.3	0.7	(s)	0.5	0.4	0.4	1.3	0.2	4.8	0.0	0.2	0.0	4.7	16.1	10.6
2002	0.0	4.7	1.2	0.9	(s)	0.7	0.4	0.5	1.6	0.3	5.5	0.0	0.1	0.0	4.5	14.8	10.2
2003	0.0	4.6	2.2	1.4	(s)	0.4	0.3	0.5	2.0	0.2	7.0	0.0	0.1	0.0	4.5	16.1	9.9
2004	0.0	5.7	1.2	1.5	0.0	0.3	0.3	0.5	1.7	0.2	5.7	0.0	0.1	0.0	4.6	16.1	10.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Rhode Island

Year			Petroleum								Ethanol	Retail Electricity Sales		Electrical System Energy Losses ^d	
	Coal ^a	Natural Gas ^b	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels												
1960	(s)	(s)	19	838	38	1	103	5,943	3,826	10,768	0	0	--	0	--
1965	(s)	(s)	63	393	49	4	69	6,455	2,637	9,669	0	0	--	0	--
1970	(s)	(s)	148	604	137	28	77	7,970	2,519	11,482	0	0	--	0	--
1975	(s)	(s)	285	788	271	27	57	8,929	329	10,685	0	0	--	0	--
1980	0	(s)	269	675	348	9	70	8,365	58	9,794	0	0	--	0	--
1985	0	(s)	30	334	498	22	64	8,606	0	9,554	^f 0	0	--	0	--
1990	0	(s)	42	1,154	776	19	72	8,692	34	10,789	0	0	--	0	--
1995	0	1	22	1,328	500	8	68	8,864	2	10,792	0	0	--	0	--
1996	0	1	37	1,290	540	7	66	8,950	2	10,892	0	0	--	0	--
1997	0	1	11	1,941	828	9	70	9,133	1	11,993	0	0	--	0	--
1998	0	(s)	9	1,397	919	1	73	9,337	1	11,737	0	0	--	0	--
1999	0	(s)	11	1,517	1,057	3	74	9,559	3	12,224	0	0	--	0	--
2000	0	(s)	13	1,364	1,283	2	73	9,425	5	12,165	0	0	--	0	--
2001	0	(s)	14	1,395	1,304	1	67	9,491	0	12,273	0	0	--	0	--
2002	0	(s)	7	1,477	1,286	2	66	9,289	0	12,127	10	0	--	0	--
2003	0	(s)	7	1,440	1,056	9	61	9,312	0	11,884	11	0	--	0	--
2004	0	(s)	12	1,491	1,035	7	62	8,993	0	11,599	198	0	--	0	--
Trillion Btu															
1960	(s)	0.2	0.1	4.9	0.2	(s)	0.6	31.2	24.1	61.1	0.0	0.0	61.3	0.0	61.3
1965	(s)	0.1	0.3	2.3	0.3	(s)	0.4	33.9	16.6	53.8	0.0	0.0	53.9	0.0	53.9
1970	(s)	(s)	0.7	3.5	0.8	0.1	0.5	41.9	15.8	63.3	0.0	0.0	63.3	0.0	63.3
1975	(s)	(s)	1.4	4.6	1.5	0.1	0.3	46.9	2.1	57.0	0.0	0.0	57.0	0.0	57.0
1980	0.0	0.2	1.4	3.9	2.0	(s)	0.4	43.9	0.4	52.0	0.0	0.0	52.2	0.0	52.2
1985	0.0	0.1	0.2	1.9	2.8	0.1	0.4	45.2	0.0	50.6	^f 0.0	0.0	^f 50.7	0.0	^f 50.7
1990	0.0	0.1	0.2	6.7	4.4	0.1	0.4	45.7	0.2	57.7	0.0	0.0	57.8	0.0	57.8
1995	0.0	0.6	0.1	7.7	2.8	(s)	0.4	46.2	(s)	57.4	0.0	0.0	58.0	0.0	58.0
1996	0.0	0.8	0.2	7.5	3.1	(s)	0.4	46.7	(s)	57.9	0.0	0.0	58.7	0.0	58.7
1997	0.0	0.9	0.1	11.3	4.7	(s)	0.4	47.6	(s)	64.1	0.0	0.0	65.0	0.0	65.0
1998	0.0	0.4	(s)	8.1	5.2	(s)	0.4	48.7	(s)	62.5	0.0	0.0	62.9	0.0	62.9
1999	0.0	0.3	0.1	8.8	6.0	(s)	0.4	49.8	(s)	65.2	0.0	0.0	65.5	0.0	65.5
2000	0.0	0.3	0.1	7.9	7.3	(s)	0.4	49.1	(s)	64.9	0.0	0.0	65.2	0.0	65.2
2001	0.0	0.3	0.1	8.1	7.4	(s)	0.4	49.4	0.0	65.5	0.0	0.0	65.8	0.0	65.8
2002	0.0	0.4	(s)	8.6	7.3	(s)	0.4	48.4	0.0	64.7	(s)	0.0	65.1	0.0	65.1
2003	0.0	0.4	(s)	8.4	6.0	(s)	0.4	48.5	0.0	63.3	(s)	0.0	63.7	0.0	63.7
2004	0.0	0.4	0.1	8.7	5.9	(s)	0.4	46.9	0.0	61.9	0.7	0.0	62.3	0.0	62.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Rhode Island

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	574	(s)	714	13	0	727	0	8	--	0	0	0	0	--
1965	403	(s)	870	16	0	886	0	1	--	0	0	0	0	--
1970	0	2	2,990	56	0	3,047	0	3	--	0	0	0	0	--
1975	0	(s)	1,542	26	0	1,568	0	3	--	0	0	0	0	--
1980	0	2	1,634	28	0	1,662	0	1	--	0	0	0	0	--
1985	0	3	708	20	0	728	0	0	--	0	0	0	421	--
1990	0	9	340	19	0	358	0	10	--	0	0	0	37	--
1995	0	36	63	24	0	87	0	9	--	0	0	0	1,276	--
1996	0	62	0	137	0	137	0	10	--	0	0	0	1,325	--
1997	0	62	0	72	0	72	0	8	--	0	0	0	1,699	--
1998	0	60	0	47	0	47	0	9	--	0	0	0	1,759	--
1999	0	55	0	43	0	43	0	6	--	0	0	0	1,934	--
2000	0	48	0	39	0	39	0	5	--	0	0	0	1,585	--
2001	0	58	0	43	0	43	0	3	--	0	0	0	766	--
2002	0	54	0	31	0	31	0	4	--	0	0	0	326	--
2003	0	42	0	29	0	29	0	6	--	0	0	0	106	--
2004	0	36	0	22	0	22	0	5	--	0	0	0	302	--
Trillion Btu														
1960	16.1	0.4	4.5	0.1	0.0	4.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	21.2
1965	11.1	0.5	5.5	0.1	0.0	5.6	0.0	(s)	0.0	0.0	0.0	0.0	0.0	17.1
1970	0.0	2.4	18.8	0.3	0.0	19.1	0.0	(s)	0.0	0.0	0.0	0.0	0.0	21.5
1975	0.0	(s)	9.7	0.2	0.0	9.8	0.0	(s)	0.0	0.0	0.0	0.0	0.0	9.9
1980	0.0	1.7	10.3	0.2	0.0	10.4	0.0	(s)	0.0	0.0	0.0	0.0	0.0	12.2
1985	0.0	2.6	4.4	0.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	1.4	8.6
1990	0.0	9.3	2.1	0.1	0.0	2.2	0.0	0.1	ⁱ 1.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.1	ⁱ 12.8
1995	0.0	36.6	0.4	0.1	0.0	0.5	0.0	0.1	1.0	0.0	0.0	0.0	4.4	42.6
1996	0.0	63.8	0.0	0.8	0.0	0.8	0.0	0.1	1.2	0.0	0.0	0.0	4.5	70.4
1997	0.0	62.7	0.0	0.4	0.0	0.4	0.0	0.1	1.1	0.0	0.0	0.0	5.8	70.2
1998	0.0	61.5	0.0	0.3	0.0	0.3	0.0	0.1	1.3	0.0	0.0	0.0	6.0	69.2
1999	0.0	55.6	0.0	0.3	0.0	0.3	0.0	0.1	1.5	0.0	0.0	0.0	6.6	64.0
2000	0.0	49.9	0.0	0.2	0.0	0.2	0.0	(s)	1.4	0.0	0.0	0.0	5.4	57.0
2001	0.0	60.3	0.0	0.2	0.0	0.2	0.0	(s)	1.3	0.0	0.0	0.0	2.6	64.5
2002	0.0	55.0	0.0	0.2	0.0	0.2	0.0	(s)	1.3	0.0	0.0	0.0	1.1	57.5
2003	0.0	42.9	0.0	0.2	0.0	0.2	0.0	0.1	1.2	0.0	0.0	0.0	0.4	44.7
2004	0.0	36.7	0.0	0.1	0.0	0.1	0.0	0.1	1.2	0.0	0.0	0.0	1.0	39.2

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, South Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh			Million kWh		
1960	3,719	59	1,636	215	5,234	3,131	4,488	1,376	375	18,094	4,732	380	39,661	0	3,611	--	--	9,103	--
1965	4,760	87	1,721	354	4,849	2,958	3,297	2,097	351	21,430	3,916	372	41,344	75	3,517	--	--	11,627	--
1970	5,817	160	2,220	228	9,423	3,170	2,377	2,927	386	28,756	5,335	512	55,335	7	2,293	--	--	22,226	--
1975	5,842	123	2,440	142	8,376	2,692	1,024	3,204	461	35,429	7,666	982	62,415	19,458	4,413	--	--	-18,772	--
1980	9,929	142	1,535	149	10,660	3,062	1,352	3,178	543	35,517	7,205	3,883	67,083	17,404	3,025	--	--	-1,738	--
1985	10,479	97	1,367	136	12,256	3,184	1,484	3,161	494	37,719	2,921	3,553	66,274	31,826	1,835	--	--	-10,252	--
1990	11,447	130	1,983	101	14,866	2,939	659	2,914	556	43,264	2,416	4,975	74,674	42,881	3,298	--	--	-28,670	--
1995	12,279	152	2,641	123	14,501	1,027	574	3,826	531	46,973	2,649	6,583	79,427	49,173	3,457	--	--	-27,311	--
1996	13,852	150	2,407	59	15,174	1,292	673	3,666	515	47,427	2,984	1,896	76,094	43,571	3,041	--	--	-13,042	--
1997	14,109	154	3,729	64	15,815	1,328	694	6,150	544	49,468	2,590	1,594	81,977	44,916	2,958	--	--	-15,864	--
1998	14,649	159	2,536	55	18,227	1,436	837	4,601	570	51,216	2,212	2,533	84,222	48,759	3,569	--	--	-22,665	--
1999	15,764	163	2,227	100	18,271	1,536	667	3,858	575	52,774	1,757	2,983	84,747	50,814	1,687	--	--	-26,706	--
2000	16,946	160	3,231	76	18,879	1,861	682	5,038	567	53,040	2,324	2,186	87,883	50,888	1,533	--	--	-23,768	--
2001	16,421	142	2,524	72	19,389	1,851	662	3,563	519	53,822	2,178	8,573	93,151	49,870	1,225	--	--	R -23,338	--
2002	16,263	185	2,244	87	19,240	1,548	395	3,362	513	55,222	2,079	8,534	93,224	53,326	1,390	--	--	-30,631	--
2003	16,697	147	2,533	93	18,968	1,459	473	3,152	474	55,935	3,816	8,771	95,674	50,418	3,665	--	--	R -29,644	--
2004	17,351	164	3,196	84	22,074	1,656	673	3,117	481	61,692	5,540	10,945	109,457	51,201	2,447	--	--	-32,182	--
Trillion Btu																			
1960	96.4	60.6	10.9	1.1	30.5	16.8	25.4	5.5	2.3	95.0	29.7	2.2	219.5	0.0	38.8	43.1	0.0	31.1	489.5
1965	121.5	90.5	11.4	1.8	28.2	15.8	18.7	8.4	2.1	112.6	24.6	2.1	225.8	0.9	36.8	40.6	0.0	39.7	555.7
1970	140.1	164.3	14.7	1.2	54.9	17.1	13.5	11.1	2.3	151.1	33.5	2.8	302.2	0.1	24.1	41.0	0.0	75.8	747.6
1975	140.2	125.9	16.2	0.7	48.8	14.5	5.8	11.9	2.8	186.1	48.2	5.5	340.5	214.3	45.9	41.9	0.0	-64.0	844.6
1980	245.8	146.9	10.2	0.8	62.1	16.6	7.7	11.7	3.3	186.6	45.3	21.6	365.8	189.8	31.4	39.8	0.0	-5.9	1,013.5
1985	262.7	100.2	9.1	0.7	71.4	17.2	8.4	11.4	3.0	198.1	18.4	19.8	357.5	338.1	19.2	47.4	0.0	-35.0	1,090.0
1990	289.2	134.1	13.2	0.5	86.6	16.0	3.7	10.6	3.4	227.3	15.2	27.9	404.3	453.8	34.3	71.7	0.1	-97.8	1,290.2
1995	314.5	156.0	17.5	0.6	84.5	5.8	3.3	13.9	3.2	245.0	16.7	36.1	426.5	516.7	35.7	88.9	0.1	-93.2	1,445.2
1996	352.6	154.1	16.0	0.3	88.4	7.3	3.8	13.2	3.1	247.4	18.8	10.9	409.3	457.6	31.4	100.2	0.1	-44.5	1,460.8
1997	361.4	158.7	24.7	0.3	92.1	7.5	3.9	22.2	3.3	257.9	16.3	9.1	437.5	471.3	30.2	101.6	0.1	-54.1	1,506.8
1998	373.4	164.9	16.8	0.3	106.2	8.1	4.7	16.6	3.5	266.9	13.9	14.8	451.9	511.5	36.4	93.4	0.1	-77.3	1,554.3
1999	402.2	168.0	14.8	0.5	106.4	8.7	3.8	13.9	3.5	275.0	11.0	17.5	455.2	531.0	17.3	79.7	0.2	-91.1	1,562.3
2000	432.2	165.1	21.4	0.4	110.0	10.6	3.9	18.2	3.4	276.3	14.6	12.7	471.5	530.7	15.6	76.8	0.2	-81.1	1,611.0
2001	414.5	147.2	16.7	0.4	112.9	10.5	3.8	12.9	3.1	280.4	13.7	47.5	501.9	521.0	12.7	R 58.9	0.2	R -79.6	R 1,576.7
2002	404.5	184.8	14.9	0.4	112.1	8.8	2.2	12.1	3.1	287.6	13.1	47.2	501.5	556.7	14.1	R 66.4	0.2	-104.5	R 1,623.7
2003	419.7	146.6	16.8	0.5	110.5	8.3	2.7	11.4	2.9	291.3	24.0	48.5	516.8	525.4	37.5	R 68.6	0.2	-101.1	R 1,613.7
2004	433.9	163.8	21.2	0.4	128.6	9.4	3.8	11.3	2.9	321.7	34.8	61.2	595.3	533.9	24.5	75.6	0.2	-109.8	1,717.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	197	7	1,595	3,475	926	5,996	1,269	--	--	3,272	--	8,092	--
1965	130	12	1,178	2,606	1,419	5,203	852	--	--	4,371	--	10,438	--
1970	138	19	2,400	2,011	1,778	6,188	489	--	--	7,347	--	17,783	--
1975	72	18	1,695	858	1,750	4,304	492	--	--	9,837	--	23,657	--
1980	41	19	1,580	1,200	1,510	4,290	587	--	--	12,580	--	30,332	--
1985	14	16	1,287	1,211	1,859	4,357	729	--	--	14,661	--	33,774	--
1990	1	18	1,199	550	1,682	3,431	296	--	--	18,258	--	42,234	--
1995	2	25	692	470	2,106	3,268	446	--	--	21,392	--	48,595	--
1996	2	29	712	561	1,951	3,225	463	--	--	22,514	--	51,210	--
1997	(s)	26	535	610	1,988	3,133	363	--	--	21,611	--	48,976	--
1998	3	25	475	680	1,683	2,838	323	--	--	23,558	--	53,441	--
1999	28	26	503	553	1,980	3,035	340	--	--	23,699	--	54,222	--
2000	0	29	482	514	2,277	3,273	365	--	--	25,270	--	57,494	--
2001	0	27	419	498	1,501	2,418	240	--	--	24,875	--	^R 55,945	--
2002	(s)	28	386	291	1,922	2,599	243	--	--	26,787	--	60,009	--
2003	0	29	432	377	1,932	2,741	256	--	--	26,422	--	58,692	--
2004	0	29	288	544	2,107	2,939	263	--	--	27,910	--	62,122	--
Trillion Btu													
1960	4.9	7.1	9.3	19.7	3.7	32.7	25.4	0.0	0.0	11.2	81.2	27.6	108.8
1965	3.2	12.4	6.9	14.8	5.7	27.3	17.0	0.0	0.0	14.9	74.9	35.6	110.5
1970	3.3	19.5	14.0	11.4	6.7	32.1	9.8	0.0	0.0	25.1	89.7	60.7	150.4
1975	1.7	18.6	9.9	4.9	6.5	21.2	9.8	0.0	0.0	33.6	85.0	80.7	165.7
1980	1.0	19.5	9.2	6.8	5.5	21.6	11.7	0.0	0.0	42.9	96.7	103.5	200.2
1985	0.4	16.9	7.5	6.9	6.7	21.1	14.6	0.0	0.0	50.0	102.9	115.2	218.2
1990	(s)	18.9	7.0	3.1	6.1	16.2	5.9	^f 0.1	^f (s)	62.3	^f 103.5	144.1	^f 247.6
1995	0.1	25.8	4.0	2.7	7.6	14.3	8.9	0.1	(s)	73.0	122.3	165.8	288.1
1996	0.1	30.3	4.1	3.2	7.1	14.4	9.3	0.1	(s)	76.8	130.9	174.7	305.7
1997	(s)	26.5	3.1	3.5	7.2	13.8	7.3	0.1	(s)	73.7	121.5	167.1	288.6
1998	0.1	26.3	2.8	3.9	6.1	12.7	6.5	0.1	(s)	80.4	126.0	182.3	308.4
1999	0.7	26.4	2.9	3.1	7.2	13.2	6.8	0.1	(s)	80.9	128.2	185.0	313.2
2000	0.0	29.9	2.8	2.9	8.2	13.9	7.3	0.1	(s)	86.2	137.5	196.2	333.7
2001	0.0	28.5	2.4	2.8	5.4	10.7	4.8	0.2	(s)	84.9	129.1	^R 190.9	^R 319.9
2002	(s)	27.4	2.3	1.6	6.9	10.8	4.9	0.2	(s)	91.4	134.7	204.8	339.5
2003	0.0	29.1	2.5	2.1	7.0	11.7	5.1	0.2	(s)	90.2	136.2	200.3	336.5
2004	0.0	28.9	1.7	3.1	7.6	12.4	5.3	0.2	(s)	95.2	142.0	212.0	353.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	137	5	474	93	163	275	176	1,182	0	--	--	1,957	--	4,840	--
1965	98	7	350	70	250	301	121	1,092	0	--	--	2,531	--	6,044	--
1970	108	14	714	54	314	204	80	1,366	0	--	--	4,237	--	10,255	--
1975	169	17	504	23	309	225	160	1,221	0	--	--	7,121	--	17,125	--
1980	156	23	481	25	266	240	35	1,047	0	--	--	8,705	--	20,989	--
1985	51	15	939	48	328	230	80	1,625	0	--	--	9,778	--	22,526	--
1990	5	15	721	12	297	256	17	1,303	^g 2	--	--	12,693	--	29,362	--
1995	15	19	1,002	26	372	32	38	1,470	3	--	--	14,863	--	33,764	--
1996	17	20	964	23	344	32	37	1,400	3	--	--	15,388	--	35,002	--
1997	1	20	1,049	16	351	31	10	1,458	2	--	--	15,645	--	35,456	--
1998	20	20	1,502	47	297	58	6	1,911	3	--	--	17,290	--	39,223	--
1999	209	21	1,043	30	349	34	10	1,466	1	--	--	17,488	--	40,012	--
2000	0	22	759	54	402	35	50	1,300	1	--	--	18,434	--	41,941	--
2001	0	21	769	40	265	36	113	1,223	1	--	--	18,430	--	^R 41,450	--
2002	(s)	21	669	24	339	38	19	1,089	(s)	--	--	19,107	--	42,804	--
2003	0	22	586	22	341	37	18	1,004	1	--	--	19,336	--	42,953	--
2004	0	22	553	26	372	35	47	1,033	2	--	--	20,113	--	44,768	--

Trillion Btu															
1960	3.4	4.8	2.8	0.5	0.7	1.4	1.1	6.5	0.0	0.5	0.0	6.7	21.9	16.5	38.4
1965	2.4	7.3	2.0	0.4	1.0	1.6	0.8	5.8	0.0	0.3	0.0	8.6	24.5	20.6	45.1
1970	2.6	14.2	4.2	0.3	1.2	1.1	0.5	7.2	0.0	0.2	0.0	14.5	38.7	35.0	73.7
1975	4.0	17.6	2.9	0.1	1.1	1.2	1.0	6.4	0.0	0.2	0.0	24.3	52.5	58.4	110.9
1980	3.8	23.6	2.8	0.1	1.0	1.3	0.2	5.4	0.0	0.3	0.0	29.7	62.8	71.6	134.4
1985	1.3	15.7	5.5	0.3	1.2	1.2	0.5	8.6	0.0	0.3	0.0	33.4	59.3	76.9	136.2
1990	0.1	15.8	4.2	0.1	1.1	1.3	0.1	6.8	^g (s)	^g 2.8	^g 0.0	43.3	^g 68.9	100.2	^g 169.1
1995	0.4	19.4	5.8	0.1	1.3	0.2	0.2	7.7	(s)	3.6	0.0	50.7	81.8	115.2	197.0
1996	0.4	20.9	5.6	0.1	1.2	0.2	0.2	7.4	(s)	3.6	0.0	52.5	84.9	119.4	204.3
1997	(s)	20.2	6.1	0.1	1.3	0.2	0.1	7.7	(s)	3.4	0.0	53.4	84.7	121.0	205.7
1998	0.5	20.5	8.8	0.3	1.1	0.3	(s)	10.4	(s)	3.4	0.0	59.0	93.9	133.8	227.8
1999	5.5	21.2	6.1	0.2	1.3	0.2	0.1	7.7	(s)	3.5	0.0	59.7	97.6	136.5	234.1
2000	0.0	22.7	4.4	0.3	1.4	0.2	0.3	6.7	(s)	3.5	0.0	62.9	95.8	143.1	238.9
2001	0.0	21.5	4.5	0.2	1.0	0.2	0.7	6.6	(s)	3.0	0.0	62.9	94.0	^R 141.4	^R 235.4
2002	(s)	20.9	3.9	0.1	1.2	0.2	0.1	5.6	(s)	0.9	0.0	65.2	92.5	146.0	238.6
2003	0.0	22.3	3.4	0.1	1.2	0.2	0.1	5.1	(s)	3.2	0.0	66.0	96.6	146.6	^R 243.1
2004	0.0	21.9	3.2	0.1	1.3	0.2	0.3	5.2	(s)	3.1	0.0	68.6	98.9	152.7	251.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	1,758	23	1,636	1,959	920	273	86	614	3,392	380	9,261	97	--	--	6,234	--	15,418
1965	1,835	47	1,721	1,748	621	415	108	517	2,438	372	7,941	79	--	--	7,450	--	17,791
1970	1,861	79	2,220	2,655	313	775	149	332	1,608	512	8,564	37	--	--	10,110	--	24,469
1975	1,200	70	2,440	2,040	143	1,066	248	209	2,687	982	9,813	48	--	--	12,766	--	30,700
1980	1,805	92	1,535	1,875	127	1,368	282	96	4,245	3,883	13,412	49	--	--	15,979	--	38,528
1985	2,525	63	1,367	1,897	225	834	257	702	2,233	3,553	11,068	49	--	--	21,829	--	50,287
1990	2,310	87	1,983	2,317	97	849	289	703	1,888	4,975	13,101	90	--	--	24,701	--	57,140
1995	2,188	98	2,641	1,904	77	1,272	276	426	2,111	6,583	15,289	0	--	--	28,819	--	65,465
1996	2,000	95	2,407	2,124	88	1,326	268	452	2,245	1,896	10,807	0	--	--	29,185	--	66,384
1997	2,012	103	3,729	1,937	68	3,748	283	478	1,974	1,594	13,811	0	--	--	31,278	--	70,882
1998	1,962	102	2,536	2,030	110	2,571	296	388	1,589	2,533	12,052	0	--	--	31,606	--	71,697
1999	1,861	103	2,227	2,190	84	1,502	299	346	1,120	2,983	10,751	0	--	--	32,117	--	73,483
2000	1,912	97	3,231	2,242	114	2,304	295	333	1,734	2,186	12,438	0	--	--	33,308	--	75,780
2001	2,038	80	2,524	2,458	124	1,759	270	812	1,700	8,573	18,221	0	--	--	31,528	--	^R 70,908
2002	1,923	96	2,244	2,333	80	1,070	267	870	1,477	8,534	16,874	0	--	--	31,926	--	^R 71,523
2003	1,983	79	2,533	2,320	74	819	247	921	3,167	8,691	18,773	0	--	--	31,296	--	^R 69,520
2004	1,794	78	3,196	2,612	103	564	250	1,061	3,433	10,141	21,359	0	--	--	31,886	--	70,972

Trillion Btu																	
1960	44.7	23.3	10.9	11.4	5.2	1.1	0.5	3.2	21.3	2.2	55.9	1.0	17.3	0.0	21.3	163.4	52.6
1965	46.2	48.7	11.4	10.2	3.5	1.7	0.7	2.7	15.3	2.1	47.6	0.8	23.2	0.0	25.4	192.0	60.7
1970	44.2	80.9	14.7	15.5	1.8	2.9	0.9	1.7	10.1	2.8	50.5	0.4	31.0	0.0	34.5	241.5	83.5
1975	28.2	72.0	16.2	11.9	0.8	4.0	1.5	1.1	16.9	5.5	57.8	0.5	31.9	0.0	43.6	233.8	104.7
1980	44.0	95.1	10.2	10.9	0.7	5.0	1.7	0.5	26.7	21.6	77.4	0.5	27.7	0.0	54.5	299.3	131.5
1985	62.8	64.8	9.1	11.1	1.3	3.0	1.6	3.7	14.0	19.8	63.5	0.5	32.5	0.0	74.5	298.6	171.6
1990	58.0	89.3	13.2	13.5	0.5	3.1	1.8	3.7	11.9	27.9	75.5	⁹ 0.0	⁹ 63.0	⁹ 0.0	84.3	⁹ 370.0	⁹ 565.0
1995	55.1	101.0	17.5	11.1	0.4	4.6	1.7	2.2	13.3	36.1	87.0	0.0	76.5	0.0	98.3	417.9	223.4
1996	50.1	98.4	16.0	12.4	0.5	4.8	1.6	2.4	14.1	10.9	62.7	0.0	87.4	0.0	99.6	398.1	226.5
1997	50.5	106.1	24.7	11.3	0.4	13.6	1.7	2.5	12.4	9.1	75.7	0.0	90.9	0.0	106.7	430.0	241.8
1998	49.1	105.8	16.8	11.8	0.6	9.3	1.8	2.0	10.0	14.8	67.2	0.0	83.5	0.0	107.8	413.4	244.6
1999	46.6	105.6	14.8	12.8	0.5	5.4	1.8	1.8	7.0	17.5	61.6	0.0	69.4	0.0	109.6	392.8	250.7
2000	50.2	100.1	21.4	13.1	0.6	8.3	1.8	1.7	10.9	12.7	70.6	0.0	66.1	0.0	113.6	400.6	258.6
2001	53.1	82.7	16.7	14.3	0.7	6.4	1.6	4.2	10.7	47.5	102.1	0.0	^R 51.1	0.0	107.6	^R 396.7	^R 241.9
2002	50.6	95.6	14.9	13.6	0.5	3.9	1.6	4.5	9.3	47.2	95.4	0.0	^R 60.5	0.0	108.9	^R 411.1	244.0
2003	51.9	78.6	16.8	13.5	0.4	3.0	1.5	4.8	19.9	48.0	108.0	0.0	^R 60.0	0.0	106.8	^R 405.3	237.2
2004	46.6	77.2	21.2	15.2	0.6	2.0	1.5	5.5	21.6	56.3	124.0	0.0	64.2	0.0	108.8	420.8	242.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Carolina

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	30	1	215	1,196	3,131	13	289	17,205	1,139	23,188	0	0	--	0	--
1965	6	2	354	1,556	2,958	12	243	20,612	1,313	27,048	0	0	--	0	--
1970	3	3	228	2,899	3,170	60	237	28,220	1,605	36,420	0	0	--	0	--
1975	(s)	3	142	4,019	2,692	79	213	34,995	419	42,560	0	0	--	0	--
1980	0	3	149	6,156	3,062	33	261	35,181	844	45,686	0	0	--	0	--
1985	0	2	136	7,949	3,184	140	237	36,787	606	49,039	^f 1	0	--	0	--
1990	0	3	101	10,512	2,939	87	267	42,305	502	56,713	148	0	--	0	--
1995	0	3	123	10,703	1,027	77	255	46,515	432	59,133	0	0	--	0	--
1996	0	3	59	11,107	1,292	44	247	46,944	662	60,356	0	0	--	0	--
1997	0	3	64	11,894	1,328	62	261	48,959	550	63,118	0	0	--	0	--
1998	0	3	55	13,609	1,436	50	273	50,770	418	66,612	0	0	--	0	--
1999	0	4	100	13,978	1,536	26	276	52,393	377	68,687	0	0	--	0	--
2000	0	3	76	14,791	1,861	55	272	52,672	373	70,100	0	0	--	0	--
2001	0	3	72	15,344	1,851	37	249	52,973	279	70,806	0	0	--	0	--
2002	0	3	87	15,520	1,548	31	246	54,314	516	72,262	0	0	--	0	--
2003	0	3	93	15,181	1,459	60	228	54,976	594	72,590	0	0	--	0	--
2004	0	3	84	18,270	1,656	74	231	60,595	1,993	82,904	0	0	--	0	--

Trillion Btu															
1960	0.8	1.3	1.1	7.0	16.8	0.1	1.8	90.4	7.2	124.2	0.0	0.0	126.2	0.0	126.2
1965	0.2	2.4	1.8	9.1	15.8	(s)	1.5	108.3	8.3	144.8	0.0	0.0	147.3	0.0	147.3
1970	0.1	3.4	1.2	16.9	17.1	0.2	1.4	148.2	10.1	195.2	0.0	0.0	198.6	0.0	198.6
1975	(s)	2.7	0.7	23.4	14.5	0.3	1.3	183.8	2.6	226.7	0.0	0.0	229.4	0.0	229.4
1980	0.0	3.1	0.8	35.9	16.6	0.1	1.6	184.8	5.3	245.0	0.0	0.0	248.1	0.0	248.1
1985	0.0	2.3	0.7	46.3	17.2	0.5	1.4	193.2	3.8	263.2	^f (s)	0.0	^f 265.5	0.0	^f 265.5
1990	0.0	2.9	0.5	61.2	16.0	0.3	1.6	222.2	3.2	305.1	0.5	0.0	308.6	0.0	308.6
1995	0.0	3.0	0.6	62.3	5.8	0.3	1.5	242.6	2.7	315.9	0.0	0.0	318.9	0.0	318.9
1996	0.0	3.2	0.3	64.7	7.3	0.2	1.5	244.9	4.2	323.0	0.0	0.0	326.2	0.0	326.2
1997	0.0	3.0	0.3	69.3	7.5	0.2	1.6	255.2	3.5	337.6	0.0	0.0	340.7	0.0	340.7
1998	0.0	3.3	0.3	79.3	8.1	0.2	1.7	264.6	2.6	356.8	0.0	0.0	360.1	0.0	360.1
1999	0.0	3.7	0.5	81.4	8.7	0.1	1.7	273.0	2.4	367.8	0.0	0.0	371.5	0.0	371.5
2000	0.0	3.6	0.4	86.2	10.6	0.2	1.7	274.4	2.3	375.7	0.0	0.0	379.3	0.0	379.3
2001	0.0	3.1	0.4	89.4	10.5	0.1	1.5	276.0	1.8	379.6	0.0	0.0	382.7	0.0	382.7
2002	0.0	3.2	0.4	90.4	8.8	0.1	1.5	282.9	3.2	387.3	0.0	0.0	390.5	0.0	390.5
2003	0.0	2.8	0.5	88.4	8.3	0.2	1.4	286.3	3.7	388.8	0.0	0.0	391.6	0.0	391.6
2004	0.0	2.5	0.4	106.4	9.4	0.3	1.4	316.0	12.5	446.4	0.0	0.0	448.9	0.0	448.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, South Carolina

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	1,596	23	24	9	0	33	0	3,513	--	0	0	0	0	--
1965	2,690	19	44	16	0	60	75	3,438	--	0	0	0	0	--
1970	3,708	45	2,042	756	0	2,798	7	2,256	--	0	0	0	0	--
1975	4,401	15	4,400	118	0	4,517	19,458	4,366	--	0	0	0	0	--
1980	7,927	5	2,080	567	0	2,647	17,404	2,976	--	0	0	0	0	--
1985	7,888	(s)	1	183	0	184	31,826	1,786	--	0	0	0	0	--
1990	9,131	7	8	117	0	125	42,881	3,296	--	0	0	0	0	--
1995	10,074	7	68	200	0	268	49,173	3,454	--	0	0	0	0	--
1996	11,832	1	39	267	0	306	43,571	3,038	--	0	0	0	0	--
1997	12,096	3	56	401	0	457	44,916	2,956	--	0	0	0	0	--
1998	12,664	9	198	611	0	809	48,759	3,567	--	0	0	0	0	--
1999	13,666	10	250	558	0	807	50,814	1,686	--	0	0	0	0	--
2000	15,034	9	166	606	0	772	50,888	1,533	--	0	0	0	0	--
2001	14,382	11	84	399	0	483	49,870	1,225	--	0	0	0	0	--
2002	14,341	37	68	331	0	399	53,326	1,389	--	0	0	0	0	--
2003	14,714	13	37	450	80	566	50,418	3,665	--	0	0	0	0	--
2004	15,557	31	67	352	804	1,223	51,201	2,445	--	0	0	0	0	--
Trillion Btu														
1960	42.7	24.1	0.2	0.1	0.0	0.2	0.0	37.8	0.0	0.0	0.0	0.0	0.0	104.8
1965	69.5	19.6	0.3	0.1	0.0	0.4	0.9	35.9	0.0	0.0	0.0	0.0	0.0	126.2
1970	90.0	46.3	12.8	4.4	0.0	17.2	0.1	23.7	0.0	0.0	0.0	0.0	0.0	177.3
1975	106.3	15.0	27.7	0.7	0.0	28.3	214.3	45.4	0.0	0.0	0.0	0.0	0.0	409.4
1980	196.9	5.6	13.1	3.3	0.0	16.4	189.8	30.9	0.0	0.0	0.0	0.0	0.0	439.6
1985	198.2	0.5	(s)	1.1	0.0	1.1	338.1	18.7	0.0	0.0	0.0	0.0	0.0	556.5
1990	231.0	7.1	(s)	0.7	0.0	0.7	453.8	34.3	0.0	0.0	0.0	0.0	0.0	727.0
1995	259.0	6.8	0.4	1.2	0.0	1.6	516.7	35.6	0.0	0.0	0.0	0.0	0.0	819.6
1996	302.0	1.2	0.2	1.6	0.0	1.8	457.6	31.4	0.0	0.0	0.0	0.0	0.0	794.1
1997	310.9	2.8	0.4	2.3	0.0	2.7	471.3	30.2	0.0	0.0	0.0	0.0	0.0	817.9
1998	323.7	9.0	1.2	3.6	0.0	4.8	511.5	36.4	0.0	0.0	0.0	0.0	0.0	885.3
1999	349.3	11.1	1.6	3.2	0.0	4.8	531.0	17.2	0.0	0.0	0.0	0.0	0.0	913.5
2000	382.0	8.8	1.0	3.5	0.0	4.6	530.7	15.6	0.0	0.0	0.0	0.0	0.0	941.7
2001	361.3	11.3	0.5	2.3	0.0	2.9	521.0	12.7	0.0	0.0	0.0	0.0	0.0	909.2
2002	353.8	37.7	0.4	1.9	0.0	2.4	556.7	14.1	0.1	0.0	0.0	0.0	0.0	964.9
2003	367.7	13.9	0.2	2.6	0.5	3.3	525.4	37.5	0.2	0.0	0.0	0.0	0.0	948.1
2004	387.2	33.3	0.4	2.0	4.8	7.3	533.9	24.5	3.0	0.0	0.0	0.0	0.0	989.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, South Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	374	25	724	106	2,941	1,145	975	1,370	193	8,561	102	0	16,118	0	1,156	--	--	-1,001	--
1965	310	27	588	128	3,766	1,111	563	1,541	158	8,955	71	0	16,881	0	3,872	--	--	-7,049	--
1970	338	36	894	99	4,375	1,173	16	2,712	166	9,903	328	0	19,666	0	6,579	--	--	-13,865	--
1975	1,888	33	862	77	3,841	1,056	5	2,930	160	10,636	218	0	19,784	0	7,927	--	--	-18,251	--
1980	2,827	24	638	97	4,801	1,311	15	2,530	160	9,688	122	0	19,362	0	5,818	--	--	-10,373	--
1985	2,703	25	841	87	5,154	1,019	41	1,241	145	9,279	36	0	17,843	0	5,333	--	--	-6,251	--
1990	2,571	25	790	93	5,939	1,097	8	3,691	163	8,986	60	0	20,828	0	3,934	--	--	-209	--
1995	2,537	34	821	46	6,255	1,463	6	2,294	156	10,007	14	21	21,082	0	6,010	--	--	-3,211	--
1996	1,852	37	1,136	53	6,537	1,014	9	2,908	151	10,148	40	12	22,008	0	7,978	--	--	-6,919	--
1997	2,442	36	1,354	48	6,129	697	9	2,627	160	10,165	64	11	21,263	0	9,012	--	--	-12,580	--
1998	2,316	33	1,294	33	5,874	818	7	2,151	167	10,440	101	11	20,896	0	5,758	--	--	-2,286	--
1999	2,649	36	1,879	59	6,080	770	7	1,988	169	10,337	88	9	21,385	0	6,677	--	--	-6,099	--
2000	2,815	38	1,733	51	6,036	1,024	6	2,597	167	10,304	133	8	22,057	0	5,716	--	--	-2,423	--
2001	2,599	37	1,058	42	6,317	967	8	2,071	153	10,204	106	22	20,948	0	3,432	--	--	^R 5,062	--
2002	2,358	42	1,034	29	6,792	919	6	3,022	151	10,599	104	19	22,674	0	4,354	--	--	5,373	--
2003	2,543	44	1,326	34	6,084	769	6	2,618	139	10,307	46	18	21,349	0	4,276	--	--	4,778	--
2004	2,574	42	1,161	39	6,555	776	5	2,441	141	10,388	93	18	21,618	0	3,598	--	--	6,546	--
Trillion Btu																			
1960	6.7	25.4	4.8	0.5	17.1	6.1	5.5	5.5	1.2	45.0	0.6	0.0	86.4	0.0	12.4	1.5	0.0	-3.4	129.1
1965	5.7	26.9	3.9	0.6	21.9	6.0	3.2	6.2	1.0	47.0	0.4	0.0	90.3	0.0	40.5	1.1	0.0	-24.1	140.3
1970	5.7	36.5	5.9	0.5	25.5	6.3	0.1	10.2	1.0	52.0	2.1	0.0	103.7	0.0	69.0	1.1	0.0	-47.3	168.7
1975	24.3	32.5	5.7	0.4	22.4	5.7	(s)	10.9	1.0	55.9	1.4	0.0	103.3	0.0	82.5	1.5	0.0	-62.3	181.8
1980	36.6	24.0	4.2	0.5	28.0	7.1	0.1	9.3	1.0	50.9	0.8	0.0	101.8	0.0	60.4	3.3	0.0	-35.4	190.8
1985	34.5	25.5	5.6	0.4	30.0	5.5	0.2	4.5	0.9	48.7	0.2	0.0	96.1	0.0	55.7	4.1	0.0	-21.3	195.0
1990	34.9	25.5	5.2	0.5	34.6	5.9	(s)	13.4	1.0	47.2	0.4	0.0	108.2	0.0	40.9	^j 2.2	^j 0.2	-0.7	^j 211.7
1995	37.4	34.8	5.4	0.2	36.4	7.9	(s)	8.3	0.9	52.2	0.1	0.1	111.7	0.0	62.0	2.1	0.2	-11.0	237.3
1996	33.5	37.4	7.5	0.3	38.1	5.7	(s)	10.5	0.9	52.9	0.3	0.1	116.3	0.0	82.5	2.2	0.3	-23.6	248.6
1997	42.9	36.8	9.0	0.2	35.7	4.0	(s)	9.5	1.0	53.0	0.4	0.1	112.8	0.0	92.0	1.9	0.6	-42.9	244.1
1998	41.0	33.4	8.6	0.2	34.2	4.6	(s)	7.8	1.0	54.4	0.6	0.1	111.5	0.0	58.7	1.6	0.3	-7.8	238.8
1999	46.3	36.0	12.5	0.3	35.4	4.4	(s)	7.2	1.0	53.9	0.6	0.1	115.3	0.0	68.3	1.7	1.2	-20.8	248.0
2000	50.6	38.1	11.5	0.3	35.2	5.8	(s)	9.4	1.0	53.7	0.8	(s)	117.7	0.0	58.3	1.8	0.5	-8.3	258.7
2001	44.4	37.0	7.0	0.2	36.8	5.5	(s)	7.5	0.9	53.2	0.7	0.1	111.9	0.0	35.5	1.8	0.5	^R 17.3	^R 248.4
2002	40.0	42.4	6.9	0.1	39.6	5.2	(s)	10.9	0.9	55.2	0.7	0.1	119.6	0.0	44.3	1.7	0.6	18.3	266.9
2003	43.0	44.8	8.8	0.2	35.4	4.4	(s)	9.5	0.8	53.7	0.3	0.1	113.2	0.0	43.8	1.8	1.1	16.3	263.9
2004	43.6	42.5	7.7	0.2	38.2	4.4	(s)	8.8	0.9	54.2	0.6	0.1	115.1	0.0	36.1	1.8	2.3	22.3	263.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Net Energy	
1960	72	8	567	903	1,067	2,537	61	--	--	847	--	2,095	--
1965	39	10	677	524	1,198	2,398	42	--	--	1,183	--	2,825	--
1970	18	14	763	14	2,010	2,787	33	--	--	1,586	--	3,838	--
1975	7	12	574	3	1,994	2,571	35	--	--	2,068	--	4,972	--
1980	4	11	762	10	1,165	1,937	127	--	--	2,623	--	6,324	--
1985	4	11	772	35	703	1,510	160	--	--	2,769	--	6,378	--
1990	1	10	936	4	1,731	2,671	89	--	--	2,866	--	6,630	--
1995	1	13	501	4	1,384	1,889	78	--	--	3,268	--	7,424	--
1996	(s)	14	623	5	1,857	2,485	81	--	--	3,426	--	7,793	--
1997	(s)	13	463	6	1,798	2,266	64	--	--	3,376	--	7,652	--
1998	0	12	382	5	1,450	1,837	57	--	--	3,303	--	7,494	--
1999	(s)	12	336	4	1,396	1,736	60	--	--	3,302	--	7,555	--
2000	(s)	13	351	4	1,664	2,018	65	--	--	3,423	--	7,789	--
2001	1	12	366	4	1,376	1,746	62	--	--	3,580	--	^R 8,053	--
2002	(s)	13	267	3	1,598	1,868	63	--	--	3,733	--	8,363	--
2003	(s)	13	305	2	1,631	1,938	67	--	--	3,740	--	8,308	--
2004	(s)	12	246	3	1,226	1,475	68	--	--	3,696	--	8,226	--
Trillion Btu													
1960	1.4	7.9	3.3	5.1	4.3	12.7	1.2	0.0	0.0	2.9	26.1	7.1	33.3
1965	0.8	10.1	3.9	3.0	4.8	11.7	0.8	0.0	0.0	4.0	27.4	9.6	37.0
1970	0.3	13.8	4.4	0.1	7.6	12.1	0.7	0.0	0.0	5.4	32.4	13.1	45.4
1975	0.1	12.0	3.3	(s)	7.4	10.8	0.7	0.0	0.0	7.1	30.6	17.0	47.6
1980	0.1	10.5	4.4	0.1	4.3	8.8	2.5	0.0	0.0	8.9	30.9	21.6	52.5
1985	0.1	11.5	4.5	0.2	2.5	7.2	3.2	0.0	0.0	9.4	31.4	21.8	53.2
1990	(s)	10.4	5.5	(s)	6.3	11.7	1.8	^f (s)	^f (s)	9.8	^f 33.7	22.6	^f 56.3
1995	(s)	12.8	2.9	(s)	5.0	8.0	1.6	(s)	(s)	11.2	33.5	25.3	58.8
1996	(s)	14.3	3.6	(s)	6.7	10.4	1.6	(s)	(s)	11.7	38.0	26.6	64.6
1997	(s)	13.4	2.7	(s)	6.5	9.2	1.3	0.1	(s)	11.5	35.5	26.1	61.6
1998	0.0	11.7	2.2	(s)	5.2	7.5	1.1	0.1	(s)	11.3	31.7	25.6	57.3
1999	(s)	11.8	2.0	(s)	5.0	7.0	1.2	0.1	(s)	11.3	31.4	25.8	57.2
2000	(s)	12.7	2.0	(s)	6.0	8.1	1.3	0.1	(s)	11.7	33.8	26.6	60.3
2001	(s)	12.3	2.1	(s)	5.0	7.1	1.2	0.1	(s)	12.2	33.0	^R 27.5	^R 60.5
2002	(s)	13.2	1.6	(s)	5.8	7.3	1.3	0.1	(s)	12.7	34.6	28.5	63.1
2003	(s)	13.5	1.8	(s)	5.9	7.7	1.3	0.1	(s)	12.8	35.4	28.3	63.7
2004	(s)	12.5	1.4	(s)	4.4	5.9	1.4	0.1	(s)	12.6	32.5	28.1	60.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	50	7	226	0	188	37	16	466	0	--	--	409	--	1,010	--
1965	29	9	269	0	211	46	8	534	0	--	--	645	--	1,540	--
1970	14	11	303	0	355	50	16	724	0	--	--	937	--	2,267	--
1975	17	11	228	0	352	58	20	658	0	--	--	995	--	2,393	--
1980	13	9	365	0	206	65	19	655	0	--	--	1,139	--	2,746	--
1985	13	10	288	1	124	98	19	530	0	--	--	1,863	--	4,292	--
1990	2	9	242	(s)	305	78	24	650	^g 0	--	--	1,811	--	4,189	--
1995	6	11	301	1	244	11	2	559	0	--	--	2,424	--	5,505	--
1996	1	12	251	1	328	11	0	590	0	--	--	2,525	--	5,744	--
1997	1	10	263	1	317	11	8	600	0	--	--	2,555	--	5,791	--
1998	0	9	237	(s)	256	11	5	510	0	--	--	2,653	--	6,017	--
1999	1	10	202	1	246	11	8	468	0	--	--	2,671	--	6,112	--
2000	1	10	195	1	294	11	69	570	0	--	--	2,857	--	6,499	--
2001	8	10	251	1	243	30	5	530	0	--	--	3,380	--	^R 7,603	--
2002	1	10	180	2	282	28	(s)	492	0	--	--	3,600	--	8,065	--
2003	1	10	127	2	288	12	0	428	0	--	--	3,713	--	8,249	--
2004	1	10	194	2	216	12	13	436	0	--	--	3,627	--	8,073	--
Trillion Btu															
1960	1.0	7.5	1.3	0.0	0.8	0.2	0.1	2.4	0.0	(s)	0.0	1.4	12.2	3.4	15.7
1965	0.6	8.8	1.6	0.0	0.8	0.2	(s)	2.7	0.0	(s)	0.0	2.2	14.3	5.3	19.5
1970	0.3	11.4	1.8	0.0	1.3	0.3	0.1	3.5	0.0	(s)	0.0	3.2	18.3	7.7	26.1
1975	0.3	11.5	1.3	0.0	1.3	0.3	0.1	3.1	0.0	(s)	0.0	3.4	18.2	8.2	26.4
1980	0.2	8.5	2.1	0.0	0.8	0.3	0.1	3.3	0.0	0.1	0.0	3.9	16.0	9.4	25.4
1985	0.3	10.1	1.7	(s)	0.4	0.5	0.1	2.8	0.0	0.1	0.0	6.4	19.5	14.6	34.2
1990	(s)	8.7	1.4	(s)	1.1	0.4	0.2	3.1	^g 0.0	^g 0.2	^g 0.1	6.2	^g 18.3	14.3	^g 32.6
1995	0.1	10.8	1.8	(s)	0.9	0.1	(s)	2.7	0.0	0.2	0.2	8.3	22.3	18.8	41.1
1996	(s)	11.8	1.5	(s)	1.2	0.1	0.0	2.7	0.0	0.2	0.2	8.6	23.6	19.6	43.2
1997	(s)	10.6	1.5	(s)	1.1	0.1	0.1	2.8	0.0	0.2	0.2	8.7	22.6	19.8	42.4
1998	0.0	9.3	1.4	(s)	0.9	0.1	(s)	2.4	0.0	0.2	0.3	9.1	21.3	20.5	41.8
1999	(s)	9.6	1.2	(s)	0.9	0.1	(s)	2.2	0.0	0.2	0.3	9.1	21.4	20.9	42.3
2000	(s)	10.2	1.1	(s)	1.1	0.1	0.4	2.7	0.0	0.2	0.3	9.7	23.1	22.2	45.3
2001	0.2	9.7	1.5	(s)	0.9	0.2	(s)	2.5	0.0	0.2	0.3	11.5	24.5	25.9	^R 50.5
2002	(s)	10.5	1.0	(s)	1.0	0.1	(s)	2.2	0.0	0.2	0.4	12.3	25.6	27.5	53.1
2003	(s)	10.6	0.7	(s)	1.0	0.1	0.0	1.9	0.0	0.2	0.5	12.7	25.9	28.1	54.0
2004	(s)	10.2	1.1	(s)	0.8	0.1	0.1	2.1	0.0	0.2	0.5	12.4	25.4	27.5	52.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Dakota

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	5	5	724	1,780	72	93	19	2,615	35	0	5,339	20	--	--	258	--	639
1965	4	5	588	2,177	39	108	15	2,455	15	0	5,397	38	--	--	246	--	588
1970	5	7	894	2,332	2	298	14	2,209	35	0	5,784	35	--	--	281	--	679
1975	59	6	862	1,635	2	527	20	1,626	52	0	4,725	36	--	--	994	--	2,390
1980	127	5	638	1,640	5	1,090	4	1,473	95	0	4,943	32	--	--	1,322	--	3,188
1985	279	4	841	1,734	5	389	3	694	16	0	3,683	32	--	--	1,019	--	2,347
1990	223	6	790	2,377	3	1,632	4	489	36	0	5,330	⁹ 0	--	--	1,657	--	3,833
1995	393	7	821	2,202	2	652	4	534	11	21	4,246	0	--	--	1,722	--	3,911
1996	398	8	1,136	2,284	3	709	3	540	40	12	4,728	0	--	--	1,785	--	4,060
1997	436	8	1,354	2,055	2	503	4	566	55	11	4,551	0	--	--	1,841	--	4,172
1998	450	6	1,294	1,913	1	433	4	386	95	11	4,137	0	--	--	1,868	--	4,238
1999	489	6	1,879	2,036	2	341	4	446	80	9	4,797	0	--	--	1,949	--	4,459
2000	602	5	1,733	1,930	2	625	4	418	63	8	4,783	0	--	--	2,003	--	4,556
2001	378	5	1,058	1,978	3	440	3	631	101	22	4,237	0	--	--	1,666	--	^R 3,747
2002	306	11	1,034	1,776	1	1,117	3	627	103	19	4,681	0	--	--	1,604	--	3,593
2003	368	12	1,326	1,701	2	684	3	692	46	18	4,473	0	--	--	1,627	--	3,614
2004	245	12	1,161	1,748	1	989	3	829	80	18	4,830	0	--	--	1,891	--	4,209

Trillion Btu																	
1960	0.1	5.3	4.8	10.4	0.4	0.4	0.1	13.7	0.2	0.0	30.0	0.2	0.3	0.0	0.9	36.9	2.2
1965	0.1	4.7	3.9	12.7	0.2	0.4	0.1	12.9	0.1	0.0	30.3	0.4	0.3	0.0	0.8	36.6	2.0
1970	0.1	6.8	5.9	13.6	(s)	1.1	0.1	11.6	0.2	0.0	32.6	0.4	0.5	0.0	1.0	41.3	2.3
1975	1.1	5.8	5.7	9.5	(s)	2.0	0.1	8.5	0.3	0.0	26.2	0.4	0.8	0.0	3.4	37.7	8.2
1980	2.4	4.7	4.2	9.6	(s)	4.0	(s)	7.7	0.6	0.0	26.2	0.3	0.7	0.0	4.5	38.8	10.9
1985	4.8	3.6	5.6	10.1	(s)	1.4	(s)	3.6	0.1	0.0	20.9	0.3	0.9	0.0	3.5	34.0	8.0
1990	3.9	6.0	5.2	13.8	(s)	5.9	(s)	2.6	0.2	0.0	27.8	⁹ 0.0	⁹ 0.2	⁹ (s)	5.7	⁹ 43.7	13.1
1995	6.8	7.4	5.4	12.8	(s)	2.4	(s)	2.8	0.1	0.1	23.6	0.0	0.3	(s)	5.9	44.1	13.3
1996	6.9	7.7	7.5	13.3	(s)	2.6	(s)	2.8	0.3	0.1	26.6	0.0	0.3	(s)	6.1	47.6	13.9
1997	7.6	8.0	9.0	12.0	(s)	1.8	(s)	2.9	0.3	0.1	26.2	0.0	0.4	(s)	6.3	48.4	14.2
1998	7.9	6.5	8.6	11.1	(s)	1.6	(s)	2.0	0.6	0.1	24.0	0.0	0.3	(s)	6.4	45.1	14.5
1999	8.6	5.9	12.5	11.9	(s)	1.2	(s)	2.3	0.5	0.1	28.5	0.0	0.3	0.1	6.6	50.0	15.2
2000	12.6	5.3	11.5	11.2	(s)	2.3	(s)	2.2	0.4	(s)	27.6	0.0	0.3	0.1	6.8	52.7	15.5
2001	6.4	4.7	7.0	11.5	(s)	1.6	(s)	3.3	0.6	0.1	24.2	0.0	0.3	0.1	5.7	41.4	12.8
2002	5.2	11.3	6.9	10.3	(s)	4.0	(s)	3.3	0.7	0.1	25.3	0.0	0.2	0.1	5.5	47.5	12.3
2003	6.2	12.0	8.8	9.9	(s)	2.5	(s)	3.6	0.3	0.1	25.2	0.0	0.2	(s)	5.6	49.2	12.3
2004	4.1	11.8	7.7	10.2	(s)	3.6	(s)	4.3	0.5	0.1	26.4	0.0	0.2	(s)	6.5	49.0	14.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, South Dakota

Year			Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
	Coal ^a	Natural Gas ^b	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total				Electrical System Energy Losses ^d	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Thousand Barrels		Million Kilowatthours	
1960	(s)	(s)	106	362	1,145	22	174	5,909	11	7,729	0	0	--	0	--
1965	(s)	(s)	128	635	1,111	24	143	6,454	1	8,496	0	0	--	0	--
1970	(s)	(s)	99	929	1,173	50	151	7,645	6	10,052	0	0	--	0	--
1975	(s)	(s)	77	1,337	1,056	57	140	8,952	1	11,618	0	0	--	0	--
1980	0	(s)	97	1,977	1,311	69	156	8,150	0	11,760	0	0	--	0	--
1985	0	(s)	87	2,322	1,019	24	142	8,487	0	12,081	^f 98	0	--	0	--
1990	0	(s)	93	2,352	1,097	23	160	8,419	(s)	12,145	142	0	--	0	--
1995	0	3	46	3,203	1,463	15	152	9,462	0	14,341	506	0	--	0	--
1996	0	3	53	3,346	1,014	14	148	9,596	0	14,171	357	0	--	0	--
1997	0	3	48	3,325	697	9	156	9,588	0	13,823	399	0	--	0	--
1998	0	3	33	3,274	818	12	164	10,043	0	14,344	458	0	--	0	--
1999	0	6	59	3,447	770	5	165	9,880	0	14,326	509	0	--	0	--
2000	0	6	51	3,425	1,024	14	163	9,875	0	14,551	555	0	--	0	--
2001	0	6	42	3,614	967	13	149	9,543	0	14,328	522	0	--	0	--
2002	0	6	29	4,551	919	25	147	9,944	0	15,616	591	0	--	0	--
2003	0	6	34	3,909	769	15	136	9,604	0	14,467	585	0	--	0	--
2004	0	6	39	4,311	776	10	138	9,547	0	14,821	553	0	--	0	--
Trillion Btu															
1960	(s)	(s)	0.5	2.1	6.1	0.1	1.1	31.0	0.1	41.0	0.0	0.0	41.1	0.0	41.1
1965	(s)	(s)	0.6	3.7	6.0	0.1	0.9	33.9	(s)	45.2	0.0	0.0	45.2	0.0	45.2
1970	(s)	(s)	0.5	5.4	6.3	0.2	0.9	40.2	(s)	53.5	0.0	0.0	53.6	0.0	53.6
1975	(s)	(s)	0.4	7.8	5.7	0.2	0.8	47.0	(s)	62.0	0.0	0.0	62.0	0.0	62.0
1980	0.0	0.1	0.5	11.5	7.1	0.3	0.9	42.8	0.0	63.1	0.0	0.0	63.2	0.0	63.2
1985	0.0	0.2	0.4	13.5	5.5	0.1	0.9	44.6	0.0	65.0	^f 0.3	0.0	^f 65.6	0.0	^f 65.6
1990	0.0	0.1	0.5	13.7	5.9	0.1	1.0	44.2	(s)	65.4	0.5	0.0	66.0	0.0	66.0
1995	0.0	2.8	0.2	18.7	7.9	0.1	0.9	49.3	0.0	77.2	1.8	0.0	79.9	0.0	79.9
1996	0.0	2.9	0.3	19.5	5.7	0.1	0.9	50.1	0.0	76.5	1.3	0.0	79.4	0.0	79.4
1997	0.0	3.0	0.2	19.4	4.0	(s)	0.9	50.0	0.0	74.5	1.4	0.0	77.5	0.0	77.5
1998	0.0	2.8	0.2	19.1	4.6	(s)	1.0	52.3	0.0	77.3	1.6	0.0	80.1	0.0	80.1
1999	0.0	6.1	0.3	20.1	4.4	(s)	1.0	51.5	0.0	77.2	1.8	0.0	83.3	0.0	83.3
2000	0.0	6.3	0.3	19.9	5.8	0.1	1.0	51.4	0.0	78.5	2.0	0.0	84.8	0.0	84.8
2001	0.0	5.8	0.2	21.1	5.5	(s)	0.9	49.7	0.0	77.4	1.8	0.0	83.2	0.0	83.2
2002	0.0	6.2	0.1	26.5	5.2	0.1	0.9	51.8	0.0	84.6	2.1	0.0	90.8	0.0	90.8
2003	0.0	6.5	0.2	22.8	4.4	0.1	0.8	50.0	0.0	78.2	2.1	0.0	84.7	0.0	84.7
2004	0.0	6.4	0.2	25.1	4.4	(s)	0.8	49.8	0.0	80.4	2.0	0.0	86.7	0.0	86.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, South Dakota

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	246	4	40	7	0	47	0	1,136	--	0	0	0	0	--
1965	237	3	47	8	0	55	0	3,835	--	0	0	0	0	--
1970	301	4	270	48	0	318	0	6,544	--	0	0	0	0	--
1975	1,804	3	145	67	0	212	0	7,890	--	0	0	0	0	--
1980	2,683	(s)	9	58	0	67	0	5,786	--	0	0	0	0	--
1985	2,407	(s)	1	39	0	40	0	5,301	--	0	0	0	0	--
1990	2,345	(s)	0	32	0	32	0	3,934	--	0	0	0	0	--
1995	2,137	1	0	48	0	48	0	6,010	--	0	0	0	0	--
1996	1,453	1	0	33	0	33	0	7,978	--	0	0	0	0	--
1997	2,005	2	0	23	0	23	0	9,012	--	0	0	0	78	--
1998	1,866	3	0	68	0	68	0	5,758	--	0	0	0	-30	--
1999	2,159	3	0	59	0	59	0	6,677	--	0	0	0	227	--
2000	2,211	4	0	136	0	136	0	5,716	--	0	0	0	13	--
2001	2,212	4	0	107	0	107	0	3,432	--	0	0	1	(s)	--
2002	2,051	1	0	18	0	18	0	4,354	--	0	0	6	(s)	--
2003	2,174	2	0	43	0	43	0	4,276	--	0	0	44	0	--
2004	2,328	2	0	56	0	56	0	3,598	--	0	0	158	-1	--
Trillion Btu														
1960	4.2	4.6	0.3	(s)	0.0	0.3	0.0	12.2	0.0	0.0	0.0	0.0	0.0	21.4
1965	4.2	3.3	0.3	(s)	0.0	0.3	0.0	40.1	0.0	0.0	0.0	0.0	0.0	48.0
1970	5.0	4.4	1.7	0.3	0.0	2.0	0.0	68.7	0.0	0.0	0.0	0.0	0.0	80.0
1975	22.8	3.2	0.9	0.4	0.0	1.3	0.0	82.1	0.0	0.0	0.0	0.0	0.0	109.4
1980	33.8	0.3	0.1	0.3	0.0	0.4	0.0	60.1	0.0	0.0	0.0	0.0	0.0	94.6
1985	29.4	(s)	(s)	0.2	0.0	0.2	0.0	55.4	0.0	0.0	0.0	0.0	0.0	85.0
1990	31.0	0.2	0.0	0.2	0.0	0.2	0.0	40.9	0.0	0.0	0.0	0.0	0.0	72.3
1995	30.5	0.9	0.0	0.3	0.0	0.3	0.0	62.0	0.0	0.0	0.0	0.0	0.0	93.7
1996	26.6	0.7	0.0	0.2	0.0	0.2	0.0	82.5	0.0	0.0	0.0	0.0	0.0	110.0
1997	35.3	1.8	0.0	0.1	0.0	0.1	0.0	92.0	0.0	0.0	0.0	0.0	0.3	129.5
1998	33.1	2.9	0.0	0.4	0.0	0.4	0.0	58.7	0.0	0.0	0.0	0.0	-0.1	95.1
1999	37.7	2.6	0.0	0.3	0.0	0.3	0.0	68.3	0.0	0.0	0.0	0.0	0.8	109.7
2000	38.0	3.7	0.0	0.8	0.0	0.8	0.0	58.3	0.0	0.0	0.0	0.0	(s)	100.8
2001	37.8	4.5	0.0	0.6	0.0	0.6	0.0	35.5	0.0	0.0	0.0	(s)	(s)	78.4
2002	34.8	1.2	0.0	0.1	0.0	0.1	0.0	44.3	0.0	0.0	0.0	0.1	(s)	80.5
2003	36.8	2.2	0.0	0.3	0.0	0.3	0.0	43.8	0.0	0.0	0.0	0.5	0.0	83.5
2004	39.5	1.6	0.0	0.3	0.0	0.3	0.0	36.1	0.0	0.0	0.0	1.6	(s)	79.1

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Tennessee

Year	Coal ^a	Natural Gas ^b	Petroleum										Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ	
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels										Million kWh				Million kWh		
1960	15,438	147	1,785	1,040	5,291	570	2,624	1,311	760	27,268	188	1,413	42,250	0	8,676	--	--	20,362	--
1965	14,172	202	3,441	1,024	7,295	1,174	2,540	1,912	800	32,481	287	4,292	55,245	0	8,750	--	--	46,343	--
1970	17,726	256	3,628	116	10,952	3,335	4,135	3,182	825	41,869	597	6,209	74,849	0	8,067	--	--	50,602	--
1975	21,308	217	3,765	70	17,479	3,936	2,289	3,830	1,328	53,735	714	5,571	92,718	0	11,806	--	--	73,143	--
1980	24,687	230	3,378	290	19,176	4,154	1,534	2,787	1,241	54,948	1,499	8,213	97,218	519	8,764	--	--	73,235	--
1985	25,167	190	4,408	154	22,594	4,862	1,107	2,281	1,129	58,047	539	6,293	101,415	9,672	6,539	--	--	32,919	--
1990	24,878	220	5,798	174	24,502	4,181	438	2,906	1,270	58,001	307	10,276	107,853	14,003	10,015	--	--	35,009	--
1995	27,399	257	5,434	397	25,839	8,096	490	3,416	1,212	64,822	362	11,492	121,560	15,708	9,629	--	--	24,756	--
1996	26,744	280	5,171	231	26,831	9,317	585	4,303	1,176	64,868	210	6,285	118,978	22,924	11,467	--	--	20,378	--
1997	28,207	283	4,917	312	26,946	9,433	580	4,028	1,242	66,148	156	6,051	119,814	24,648	11,038	--	--	4,674	--
1998	26,786	279	5,928	136	29,043	9,855	613	3,264	1,301	67,522	157	7,591	125,410	28,388	10,806	--	--	12,657	--
1999	26,613	279	5,919	109	26,610	11,816	528	4,709	1,314	69,769	50	8,518	129,343	27,227	7,802	--	--	32,857	--
2000	28,862	271	6,067	124	28,047	12,857	578	5,514	1,295	68,862	66	7,419	130,828	25,825	6,396	--	--	33,332	--
2001	28,202	256	5,759	60	28,590	12,561	432	4,469	1,186	68,392	150	13,734	135,334	28,576	6,947	--	--	R 29,127	--
2002	28,034	256	5,160	150	29,731	13,442	238	5,837	1,172	71,963	135	13,532	141,362	27,574	7,974	--	--	44,159	--
2003	26,677	R 257	5,218	131	32,349	13,376	319	4,278	1,084	72,552	255	13,968	143,528	24,153	12,004	--	--	R 48,048	--
2004	28,135	231	4,795	94	33,312	13,623	382	4,614	1,098	72,966	342	15,559	146,785	28,612	10,408	--	--	39,607	--
Trillion Btu																			
1960	374.5	151.7	11.8	5.2	30.8	3.1	14.9	5.3	4.6	143.2	1.2	8.3	228.5	0.0	93.4	45.4	0.0	69.5	962.9
1965	338.9	211.1	22.8	5.2	42.5	6.5	14.4	7.7	4.8	170.6	1.8	24.6	300.9	0.0	91.5	46.5	0.0	158.1	1,147.0
1970	403.7	261.8	24.1	0.6	63.8	18.8	23.4	12.0	5.0	219.9	3.8	35.3	406.7	0.0	84.7	53.8	0.0	172.7	1,383.3
1975	471.9	224.1	25.0	0.4	101.8	22.2	13.0	14.2	8.1	282.3	4.5	32.2	503.6	0.0	122.9	54.4	0.0	249.6	1,626.5
1980	576.9	233.3	22.4	1.5	111.7	23.4	8.7	10.2	7.5	288.6	9.4	46.1	529.7	5.7	91.0	69.3	0.0	249.9	1,755.8
1985	599.7	196.7	29.3	0.8	131.6	27.5	6.3	8.2	6.8	304.9	3.4	35.6	554.3	102.7	68.3	93.2	0.0	112.3	1,729.7
1990	600.5	227.5	38.5	0.9	142.7	23.6	2.5	10.5	7.7	304.7	1.9	57.3	590.4	148.2	104.2	56.5	0.1	119.5	1,848.9
1995	669.0	264.9	36.1	2.0	150.5	45.9	2.8	12.4	7.4	338.0	2.3	63.8	661.1	165.0	99.3	60.4	0.1	84.5	2,004.4
1996	650.8	289.4	34.3	1.2	156.3	52.8	3.3	15.5	7.1	338.3	1.3	36.0	646.3	240.8	118.6	56.0	0.1	69.5	2,071.4
1997	680.6	291.8	32.6	1.6	157.0	53.5	3.3	14.6	7.5	344.8	1.0	34.6	650.5	258.7	112.7	47.3	0.1	15.9	2,057.6
1998	651.8	287.4	39.3	0.7	169.2	55.9	3.5	11.8	7.9	351.9	1.0	43.9	685.1	297.8	110.2	46.5	0.1	43.2	2,122.1
1999	648.3	286.4	39.3	0.6	155.0	67.0	3.0	17.0	8.0	363.6	0.3	49.4	703.1	284.5	79.8	50.2	0.1	112.1	2,164.6
2000	705.1	280.7	40.3	0.6	163.4	72.9	3.3	19.9	7.9	358.8	0.4	42.8	710.2	269.3	65.2	53.0	0.1	113.7	2,197.4
2001	R 687.4	265.5	38.2	0.3	166.5	71.2	2.5	16.2	7.2	356.3	0.9	77.7	737.1	298.6	71.8	R 66.1	0.1	R 99.4	R 2,225.8
2002	655.9	276.0	34.2	0.8	173.2	76.2	1.3	21.1	7.1	374.8	0.9	76.5	766.1	287.8	81.1	R 64.6	0.1	150.7	R 2,282.3
2003	621.4	R 266.3	34.6	0.7	188.4	75.8	1.8	15.5	6.6	377.8	1.6	79.0	781.8	251.7	122.9	R 59.3	0.2	163.9	R 2,267.6
2004	648.0	239.2	31.8	0.5	194.0	77.2	2.2	16.7	6.7	380.5	2.1	88.0	799.8	298.3	104.3	72.7	0.1	135.1	2,297.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Tennessee

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	563	34	80	797	862	1,740	1,269	--	--	8,683	--	21,475	--
1965	378	37	100	881	1,136	2,117	949	--	--	12,134	--	28,975	--
1970	304	47	169	2,027	2,316	4,512	806	--	--	17,942	--	43,426	--
1975	98	44	237	1,316	2,767	4,320	840	--	--	23,034	--	55,393	--
1980	49	45	308	549	1,501	2,358	971	--	--	26,207	--	63,189	--
1985	37	39	269	737	1,209	2,215	1,725	--	--	25,546	--	58,849	--
1990	44	46	275	324	1,716	2,315	918	--	--	28,757	--	66,521	--
1995	19	60	260	372	2,129	2,761	737	--	--	30,967	--	70,345	--
1996	13	70	269	456	2,857	3,581	765	--	--	35,333	--	80,369	--
1997	14	64	237	437	2,582	3,255	407	--	--	33,367	--	75,617	--
1998	3	59	230	424	2,432	3,087	362	--	--	35,428	--	80,368	--
1999	12	61	230	423	3,047	3,701	381	--	--	35,425	--	81,051	--
2000	12	68	174	378	3,447	3,999	409	--	--	36,622	--	83,321	--
2001	15	68	166	247	2,701	3,114	331	--	--	36,932	--	^R 83,062	--
2002	8	^R 69	115	168	3,210	3,492	336	--	--	38,752	--	86,815	--
2003	17	^R 70	117	231	2,840	3,188	354	--	--	37,697	--	^R 83,738	--
2004	8	65	125	292	2,791	3,208	363	--	--	38,526	--	85,752	--
Trillion Btu													
1960	13.9	35.1	0.5	4.5	3.5	8.4	25.4	0.0	0.0	29.6	112.4	73.3	185.7
1965	9.3	38.9	0.6	5.0	4.6	10.1	19.0	0.0	0.0	41.4	118.7	98.9	217.5
1970	7.2	47.6	1.0	11.5	8.8	21.2	16.1	0.0	0.0	61.2	153.4	148.2	301.6
1975	2.3	45.4	1.4	7.5	10.3	19.1	16.8	0.0	0.0	78.6	162.2	189.0	351.2
1980	1.2	45.6	1.8	3.1	5.5	10.4	19.4	0.0	0.0	89.4	166.1	215.6	381.7
1985	0.9	40.8	1.6	4.2	4.4	10.1	34.5	0.0	0.0	87.2	173.5	200.8	374.3
1990	1.1	48.0	1.6	1.8	6.2	9.7	18.4	^f (s)	^f 0.1	98.1	^f 175.3	227.0	^f 402.2
1995	0.5	61.9	1.5	2.1	7.7	11.3	14.7	(s)	0.1	105.7	194.2	240.0	434.2
1996	0.3	72.7	1.6	2.6	10.3	14.5	15.3	(s)	0.1	120.6	223.4	274.2	497.7
1997	0.4	66.1	1.4	2.5	9.3	13.2	8.1	(s)	0.1	113.8	201.8	258.0	459.8
1998	0.1	61.2	1.3	2.4	8.8	12.5	7.2	(s)	0.1	120.9	202.0	274.2	476.2
1999	0.3	62.2	1.3	2.4	11.0	14.8	7.6	(s)	0.1	120.9	205.9	276.5	482.4
2000	0.3	71.0	1.0	2.1	12.4	15.6	8.2	(s)	0.1	125.0	220.1	284.3	504.4
2001	0.4	70.6	1.0	1.4	9.8	12.1	6.6	0.1	0.1	126.0	215.8	^R 283.4	^R 499.2
2002	0.2	^R 74.9	0.7	1.0	11.6	13.2	6.7	0.1	(s)	132.2	227.4	296.2	523.6
2003	0.4	^R 72.2	0.7	1.3	10.3	12.3	7.1	0.1	(s)	128.6	^R 220.7	285.7	^R 506.4
2004	0.2	67.6	0.7	1.7	10.1	12.5	7.3	0.1	(s)	131.4	219.1	292.6	511.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Tennessee

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	391	24	200	157	152	173	(s)	682	0	--	--	2,796	--	6,916	--
1965	285	28	248	173	200	277	(s)	899	0	--	--	4,274	--	10,205	--
1970	239	43	422	399	409	392	1	1,622	0	--	--	6,352	--	15,375	--
1975	228	42	589	259	488	419	1	1,757	0	--	--	7,440	--	17,893	--
1980	185	44	1,015	104	265	465	48	1,897	0	--	--	14,216	--	34,277	--
1985	132	43	3,204	167	213	337	98	4,019	0	--	--	9,856	--	22,705	--
1990	174	44	739	69	303	464	33	1,607	9 0	--	--	13,075	--	30,246	--
1995	126	51	739	80	376	50	14	1,258	0	--	--	6,234	--	14,162	--
1996	97	58	906	89	504	49	28	1,576	0	--	--	6,543	--	14,883	--
1997	117	55	827	99	456	49	44	1,474	0	--	--	25,839	--	58,556	--
1998	22	52	949	123	429	49	1	1,552	0	--	--	25,859	--	58,661	--
1999	86	53	959	52	538	49	0	1,598	0	--	--	26,260	--	60,083	--
2000	100	53	1,078	105	608	49	0	1,840	0	--	--	26,814	--	61,007	--
2001	124	53	935	90	477	53	0	1,555	0	--	--	27,049	--	^R 60,834	--
2002	56	54	1,034	47	566	53	0	1,700	0	--	--	27,634	--	61,908	--
2003	116	57	1,066	54	501	53	0	1,674	0	--	--	27,481	--	^R 61,045	--
2004	62	54	1,071	43	493	53	13	1,673	0	--	--	28,249	--	62,877	--

Trillion Btu															
1960	9.7	25.1	1.2	0.9	0.6	0.9	(s)	3.6	0.0	0.5	0.0	9.5	48.4	23.6	72.0
1965	7.0	29.6	1.4	1.0	0.8	1.5	(s)	4.7	0.0	0.4	0.0	14.6	56.2	34.8	91.1
1970	5.7	43.7	2.5	2.3	1.5	2.1	(s)	8.3	0.0	0.3	0.0	21.7	79.6	52.5	132.1
1975	5.4	43.8	3.4	1.5	1.8	2.2	(s)	8.9	0.0	0.3	0.0	25.4	83.8	61.1	144.8
1980	4.4	44.8	5.9	0.6	1.0	2.4	0.3	10.2	0.0	0.5	0.0	48.5	108.4	117.0	225.3
1985	3.2	44.9	18.7	0.9	0.8	1.8	0.6	22.8	0.0	0.8	0.0	33.6	105.3	77.5	182.8
1990	4.3	45.1	4.3	0.4	1.1	2.4	0.2	8.4	9 0.0	9 4.9	9 0.0	44.6	9 107.3	103.2	9 210.5
1995	3.2	52.8	4.3	0.5	1.4	0.3	0.1	6.5	0.0	4.7	0.0	21.3	88.5	48.3	136.8
1996	2.4	60.4	5.3	0.5	1.8	0.3	0.2	8.0	0.0	5.1	0.0	22.3	98.2	50.8	149.0
1997	2.9	56.8	4.8	0.6	1.6	0.3	0.3	7.6	0.0	5.1	0.0	88.2	160.6	199.8	360.4
1998	0.6	54.0	5.5	0.7	1.6	0.3	(s)	8.0	0.0	4.0	0.0	88.2	154.9	200.2	355.0
1999	2.2	54.0	5.6	0.3	1.9	0.3	0.0	8.1	0.0	4.0	0.0	89.6	157.9	205.0	362.9
2000	2.6	55.3	6.3	0.6	2.2	0.3	0.0	9.3	0.0	3.9	0.0	91.5	162.6	208.2	370.8
2001	3.0	55.0	5.4	0.5	1.7	0.3	0.0	8.0	0.0	3.5	0.0	92.3	161.7	^R 207.6	^R 369.3
2002	1.4	58.0	6.0	0.3	2.0	0.3	0.0	8.6	0.0	1.9	0.0	94.3	164.2	211.2	375.5
2003	2.8	^R 58.6	6.2	0.3	1.8	0.3	0.0	8.6	0.0	1.2	0.0	93.8	^R 164.9	208.3	^R 373.2
2004	1.5	56.1	6.2	0.2	1.8	0.3	0.1	8.6	0.0	1.2	0.0	96.4	163.8	214.5	378.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Tennessee

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	2,307	76	1,785	2,096	1,670	275	256	627	180	1,413	8,301	0	--	--	27,514	--	68,047	--
1965	2,862	97	3,441	2,601	1,486	522	321	484	264	4,292	13,410	0	--	--	28,362	--	67,725	--
1970	2,452	123	3,628	3,172	1,709	363	334	235	593	6,209	16,245	0	--	--	27,776	--	67,229	--
1975	2,134	112	3,765	4,712	714	455	522	117	523	5,571	16,379	0	--	--	37,904	--	91,153	--
1980	2,774	123	3,378	4,252	881	960	565	36	1,445	8,213	19,730	0	--	--	32,968	--	79,491	--
1985	4,145	97	4,408	3,615	203	693	514	642	441	6,293	16,810	0	--	--	33,624	--	77,458	--
1990	3,846	110	5,798	3,399	46	761	578	583	269	10,276	21,710	9	--	--	35,313	--	81,687	--
1995	3,777	126	5,434	3,682	37	777	552	865	346	11,492	23,186	827	--	--	44,828	--	101,832	--
1996	3,670	127	5,171	3,733	41	810	535	890	181	6,285	17,645	888	--	--	45,781	--	104,135	--
1997	3,613	139	4,917	4,333	44	871	566	937	108	6,051	17,826	965	--	--	27,710	--	62,798	--
1998	3,441	145	5,928	3,978	66	400	592	630	156	7,591	19,341	799	--	--	30,461	--	69,102	--
1999	3,299	145	5,919	2,647	53	1,066	598	569	50	8,518	19,420	652	--	--	31,493	--	72,056	--
2000	3,349	130	6,067	2,443	95	1,384	589	561	66	7,419	18,624	520	--	--	32,289	--	73,463	--
2001	3,575	119	5,759	2,620	95	1,277	540	954	146	13,734	25,126	404	--	--	32,149	--	72,305	--
2002	3,340	118	5,160	2,217	23	1,947	534	902	133	13,532	24,448	656	--	--	31,845	--	71,342	--
2003	3,354	112	5,218	2,972	34	843	493	980	247	13,968	24,754	917	--	--	32,278	--	71,701	--
2004	3,233	99	4,795	3,538	48	1,168	500	1,217	287	15,559	27,111	759	--	--	32,885	--	73,197	--
Trillion Btu																		
1960	58.1	78.6	11.8	12.2	9.5	1.1	1.5	3.3	1.1	8.3	48.9	0.0	19.5	0.0	93.9	299.0	232.2	531.2
1965	71.4	101.9	22.8	15.2	8.4	2.1	1.9	2.5	1.7	24.6	79.2	0.0	27.2	0.0	96.8	376.5	231.1	607.6
1970	58.0	125.9	24.1	18.5	9.7	1.4	2.0	1.2	3.7	35.3	95.9	0.0	37.3	0.0	94.8	411.9	229.4	641.2
1975	49.9	115.1	25.0	27.4	4.1	1.7	3.2	0.6	3.3	32.2	97.5	0.0	37.3	0.0	129.3	429.2	311.0	740.2
1980	67.2	125.1	22.4	24.8	5.0	3.5	3.4	0.2	9.1	46.1	114.5	0.0	49.4	0.0	112.5	468.7	271.2	739.9
1985	102.2	100.6	29.3	21.1	1.1	2.5	3.1	3.4	2.8	35.6	98.8	0.0	57.9	0.0	114.7	474.2	264.3	738.5
1990	96.8	113.6	38.5	19.8	0.3	2.8	3.5	3.1	1.7	57.3	126.9	9	33.3	9	120.5	491.0	278.7	769.8
1995	94.9	129.8	36.1	21.5	0.2	2.8	3.3	4.5	2.2	63.8	134.4	8.5	40.7	0.0	153.0	561.3	347.4	908.8
1996	91.8	130.6	34.3	21.7	0.2	2.9	3.2	4.6	1.1	36.0	104.3	9.2	35.3	0.0	156.2	527.4	355.3	882.7
1997	90.3	143.2	32.6	25.2	0.3	3.1	3.4	4.9	0.7	34.6	104.9	9.9	33.7	0.0	94.5	476.5	214.3	690.8
1998	86.1	149.0	39.3	23.2	0.4	1.4	3.6	3.3	1.0	43.9	116.1	8.1	34.9	0.0	103.9	498.2	235.8	734.0
1999	82.5	148.5	39.3	15.4	0.3	3.9	3.6	3.0	0.3	49.4	115.2	6.7	38.3	0.0	107.5	498.6	245.9	744.5
2000	87.4	134.6	40.3	14.2	0.5	5.0	3.6	2.9	0.4	42.8	109.8	5.3	40.6	0.0	110.2	487.8	250.7	738.4
2001	92.0	123.0	38.2	15.3	0.5	4.6	3.3	5.0	0.9	77.7	145.5	4.2	55.5	0.0	109.7	530.0	246.7	776.7
2002	87.0	127.9	34.2	12.9	0.1	7.0	3.2	4.7	0.8	76.5	139.6	6.7	55.5	0.0	108.7	525.2	243.4	768.7
2003	87.2	116.4	34.6	17.3	0.2	3.1	3.0	5.1	1.6	79.0	143.8	9.4	50.6	0.0	110.1	517.6	244.6	762.2
2004	84.0	102.2	31.8	20.6	0.3	4.2	3.0	6.3	1.8	88.0	156.1	7.6	64.0	0.0	112.2	526.2	249.7	776.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Tennessee

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	40	5	1,040	2,914	570	22	505	26,468	8	31,527	0	(s)	--	(s)	--
1965	9	23	1,024	4,346	1,174	54	479	31,721	22	38,819	0	(s)	--	(s)	--
1970	4	26	116	7,189	3,335	94	491	41,241	3	52,469	0	(s)	--	(s)	--
1975	(s)	19	70	10,631	3,936	120	807	53,199	191	68,953	0	(s)	--	(s)	--
1980	0	16	290	13,196	4,154	61	676	54,446	6	72,828	0	(s)	--	(s)	--
1985	0	10	154	15,268	4,862	166	615	57,068	0	78,134	^f 686	(s)	--	1	--
1990	0	20	174	19,857	4,181	126	692	56,954	5	81,989	583	(s)	--	1	--
1995	0	18	397	20,702	8,096	135	660	63,907	2	93,899	358	1	--	3	--
1996	0	24	231	21,464	9,317	133	641	63,928	2	95,715	7	1	--	3	--
1997	0	23	312	21,175	9,433	120	677	65,162	4	96,883	7	1	--	3	--
1998	0	16	136	22,438	9,855	3	709	66,842	0	99,982	8	2	--	4	--
1999	0	15	109	21,732	11,816	58	716	69,151	0	103,583	0	2	--	4	--
2000	0	14	124	23,293	12,857	75	705	68,252	0	105,305	0	2	--	5	--
2001	0	14	60	23,977	12,561	14	646	67,385	4	104,648	0	2	--	4	--
2002	0	12	150	25,921	13,442	114	639	71,009	3	111,278	0	2	--	4	--
2003	0	13	131	27,374	13,376	94	590	71,519	8	113,092	0	2	--	4	--
2004	0	11	94	28,266	13,623	162	598	71,696	42	114,481	0	1	--	2	--

Trillion Btu															
1960	1.0	5.5	5.2	17.0	3.1	0.1	3.1	139.0	0.1	167.6	0.0	(s)	174.1	(s)	174.1
1965	0.2	23.7	5.2	25.3	6.5	0.2	2.9	166.6	0.1	206.9	0.0	(s)	230.9	(s)	230.9
1970	0.1	27.0	0.6	41.9	18.8	0.4	3.0	216.6	(s)	281.2	0.0	(s)	308.4	(s)	308.4
1975	(s)	19.7	0.4	61.9	22.2	0.4	4.9	279.5	1.2	370.5	0.0	(s)	390.2	(s)	390.2
1980	0.0	16.8	1.5	76.9	23.4	0.2	4.1	286.0	(s)	392.1	0.0	(s)	408.9	(s)	408.9
1985	0.0	10.5	0.8	88.9	27.5	0.6	3.7	299.8	0.0	421.3	^f 2.4	(s)	^f 434.2	(s)	^f 434.2
1990	0.0	20.3	0.9	115.7	23.6	0.5	4.2	299.2	(s)	444.0	2.1	(s)	466.4	(s)	466.4
1995	0.0	18.3	2.0	120.6	45.9	0.5	4.0	333.3	(s)	506.3	1.3	(s)	524.6	(s)	524.6
1996	0.0	25.1	1.2	125.0	52.8	0.5	3.9	333.4	(s)	516.8	(s)	(s)	542.0	(s)	542.0
1997	0.0	24.0	1.6	123.3	53.5	0.4	4.1	339.7	(s)	522.7	(s)	(s)	546.7	(s)	546.7
1998	0.0	17.0	0.7	130.7	55.9	(s)	4.3	348.4	0.0	540.0	(s)	(s)	556.9	(s)	557.0
1999	0.0	15.7	0.6	126.6	67.0	0.2	4.3	360.3	0.0	559.0	0.0	(s)	574.7	(s)	574.7
2000	0.0	14.4	0.6	135.7	72.9	0.3	4.3	355.6	0.0	569.3	0.0	(s)	583.7	(s)	583.8
2001	0.0	14.3	0.3	139.7	71.2	0.1	3.9	351.1	(s)	566.3	0.0	(s)	580.6	(s)	580.6
2002	0.0	12.5	0.8	151.0	76.2	0.4	3.9	369.8	(s)	602.1	0.0	(s)	614.6	(s)	614.6
2003	0.0	13.3	0.7	159.5	75.8	0.3	3.6	372.4	0.1	612.3	0.0	(s)	625.7	(s)	625.7
2004	0.0	11.0	0.5	164.6	77.2	0.6	3.6	373.9	0.3	620.7	0.0	(s)	631.7	(s)	631.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Tennessee

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	12,138	7	0	(s)	0	(s)	0	8,676	--	0	0	0	0	--
1965	10,637	16	0	0	0	0	0	8,750	--	0	0	0	0	--
1970	14,727	17	0	0	0	0	0	8,067	--	0	0	0	0	--
1975	18,848	0	0	1,310	0	1,310	0	11,806	--	0	0	0	0	--
1980	21,679	1	0	406	0	406	519	8,764	--	0	0	0	0	--
1985	20,853	0	0	237	0	237	9,672	6,539	--	0	0	0	0	--
1990	20,814	1	0	232	0	232	14,003	10,015	--	ⁱ 0	ⁱ 0	ⁱ 0	0	--
1995	23,477	2	0	455	0	455	15,708	8,802	--	0	0	0	0	--
1996	22,963	1	0	460	0	460	22,924	10,579	--	0	0	0	0	--
1997	24,464	2	0	375	0	375	24,648	10,073	--	0	0	0	0	--
1998	23,321	6	0	1,448	0	1,448	28,388	10,007	--	0	0	0	0	--
1999	23,216	6	0	1,042	0	1,042	27,227	7,150	--	0	0	0	0	--
2000	25,401	5	0	1,059	0	1,059	25,825	5,876	--	0	0	0	0	--
2001	24,487	2	0	891	0	891	28,576	6,543	--	0	0	0	0	--
2002	24,630	3	0	443	0	443	27,574	7,317	--	0	0	4	0	--
2003	23,189	6	0	819	0	819	24,153	11,087	--	0	0	4	(s)	--
2004	24,832	2	0	313	0	313	28,612	9,649	--	0	0	4	(s)	--
Trillion Btu														
1960	291.8	7.5	0.0	(s)	0.0	(s)	0.0	93.4	0.0	0.0	0.0	0.0	0.0	392.6
1965	250.9	17.0	0.0	0.0	0.0	0.0	0.0	91.5	0.0	0.0	0.0	0.0	0.0	359.4
1970	332.7	17.6	0.0	0.0	0.0	0.0	0.0	84.7	0.0	0.0	0.0	0.0	0.0	435.0
1975	414.3	0.0	0.0	7.6	0.0	7.6	0.0	122.9	0.0	0.0	0.0	0.0	0.0	544.8
1980	504.1	1.1	0.0	2.4	0.0	2.4	5.7	91.0	0.0	0.0	0.0	0.0	0.0	604.3
1985	493.3	0.0	0.0	1.4	0.0	1.4	102.7	68.3	0.0	0.0	0.0	0.0	0.0	665.8
1990	498.4	0.6	0.0	1.4	0.0	1.4	148.2	104.2	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 752.7
1995	570.4	2.1	0.0	2.7	0.0	2.7	165.0	90.8	0.2	0.0	0.0	0.0	0.0	831.2
1996	556.2	0.6	0.0	2.7	0.0	2.7	240.8	109.4	0.3	0.0	0.0	0.0	0.0	909.9
1997	587.0	1.7	0.0	2.2	0.0	2.2	258.7	102.9	0.3	0.0	0.0	0.0	0.0	952.7
1998	565.1	6.3	0.0	8.4	0.0	8.4	297.8	102.0	0.3	0.0	0.0	0.0	0.0	980.0
1999	563.2	6.0	0.0	6.1	0.0	6.1	284.5	73.1	0.3	0.0	0.0	0.0	0.0	933.2
2000	614.8	5.4	0.0	6.2	0.0	6.2	269.3	59.9	0.4	0.0	0.0	0.0	0.0	956.0
2001	591.9	2.6	0.0	5.2	0.0	5.2	298.6	67.6	0.5	0.0	0.0	0.0	0.0	966.3
2002	567.4	2.7	0.0	2.6	0.0	2.6	287.8	74.4	0.5	0.0	0.0	(s)	0.0	935.4
2003	531.0	5.8	0.0	4.8	0.0	4.8	251.7	113.5	0.4	0.0	0.0	(s)	(s)	907.2
2004	562.3	2.3	0.0	1.8	0.0	1.8	298.3	96.7	0.2	0.0	0.0	(s)	(s)	961.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Texas

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total					Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh		Million kWh			
1960	1,067	2,720	6,284	3,261	24,400	10,842	3,391	73,297	3,493	91,841	22,584	55,967	295,360	0	1,102	--	--	-2,882	--
1965	1,146	3,068	7,811	3,457	24,854	15,365	3,459	109,109	3,788	107,851	14,322	80,537	370,553	0	743	--	--	-3,005	--
1970	1,154	4,093	11,885	2,007	32,410	24,430	7,500	151,223	4,204	141,393	14,146	100,279	489,477	0	1,005	--	--	4,369	--
1975	12,765	3,944	8,150	1,312	54,706	27,308	7,196	157,246	4,321	175,538	38,536	124,910	599,224	0	1,927	--	--	-7,135	--
1980	48,602	4,091	10,906	1,264	72,513	30,934	15355	189,802	5,340	180,997	65,070	218,266	790,447	0	979	--	--	-24,937	--
1985	77,017	3,386	11,808	1,317	79,984	74,500	776	256,932	4,859	205,419	28,713	141,141	805,449	0	1,401	--	--	20,636	--
1990	91,415	3,729	14,013	838	67,909	95,903	200	293,043	5,468	205,402	27,463	179,964	890,202	15,859	1,794	--	--	12,499	--
1995	92,612	3,893	11,794	645	88,126	83,002	196	370,395	5,216	213,428	22,544	189,795	985,141	36,151	1,703	--	--	-3,759	--
1996	98,997	4,132	11,962	625	96,751	99,870	237	395,062	5,062	226,381	20,292	217,884	1,074,126	35,767	960	--	--	17,348	--
1997	101,303	4,116	10,509	658	98,062	105,610	364	449,056	5,348	224,997	22,092	233,872	1,150,568	37,358	1,791	--	--	17,345	--
1998	99,097	4,206	11,201	555	106,480	108,536	430	447,111	5,599	236,779	25,507	221,434	1,163,631	38,685	1,425	--	--	16,000	--
1999	102,151	4,010	8,438	796	104,717	104,896	222	445,191	5,657	242,992	18,115	222,504	1,153,529	36,760	1,120	--	--	6,626	--
2000	101,578	4,422	7,957	609	111,848	102,717	323	406,539	5,572	249,819	21,810	218,366	1,125,559	37,556	829	--	--	9,619	--
2001	96,894	4,279	11,720	468	119,392	112,845	603	391,010	5,105	256,553	17,237	198,092	1,113,025	38,163	1,200	--	--	R 29,593	--
2002	99,785	4,328	13,203	533	114,102	115,598	148	419,078	5,045	268,490	16,993	196,796	1,149,987	35,618	1,123	--	--	R 17,031	--
2003	104,542	R 4,100	13,916	511	114,604	101,334	249	427,336	4,664	269,532	18,554	209,242	1,159,943	33,437	897	--	--	R 35,714	--
2004	105,922	3,941	12,986	466	120,621	88,821	324	446,608	4,725	275,717	21,548	226,555	1,198,370	40,435	1,301	--	--	17,793	--
Trillion Btu																			
1960	25.0	2,815.5	41.7	16.5	142.1	58.6	19.2	294.0	21.2	482.4	142.0	334.3	1,552.0	0.0	11.9	38.3	-0.6	-9.8	4,432.1
1965	29.2	3,181.5	51.8	17.5	144.8	84.3	19.6	437.6	23.0	566.5	90.0	473.8	1,909.0	0.0	7.8	41.2	-0.3	-10.3	5,158.1
1970	30.8	4,203.9	78.9	10.1	188.8	135.9	42.5	571.5	25.5	742.7	88.9	584.2	2,469.1	0.0	10.5	52.2	-0.4	14.9	6,780.9
1975	196.2	4,046.9	54.1	6.6	318.7	152.7	40.8	584.2	26.2	922.1	242.3	726.8	3,074.4	0.0	20.1	55.8	-1.2	-24.3	7,367.8
1980	734.1	4,226.1	72.4	6.4	422.4	173.3	87.1	697.3	32.4	950.8	409.1	1,241.1	4,092.2	0.0	10.2	55.6	-2.0	-85.1	9,031.2
1985	1,149.0	3,514.4	78.4	6.6	465.9	420.5	4.4	925.7	29.5	1,079.1	180.5	808.2	3,998.8	0.0	14.6	78.8	(s)	70.4	8,828.9
1990	1,333.7	3,877.8	93.0	4.2	395.6	542.1	1.1	1,062.3	33.2	1,079.0	172.7	1,024.4	4,407.5	167.8	18.7	96.0	0.4	42.6	9,946.6
1995	1,364.8	4,037.5	78.3	3.3	513.3	470.5	1.1	1,341.9	31.6	1,113.0	141.7	1,071.9	4,766.7	379.8	17.6	99.5	-2.3	-12.8	10,650.8
1996	1,485.6	4,268.7	79.4	3.2	563.6	566.2	1.3	1,427.4	30.7	1,180.8	127.6	1,224.2	5,204.3	375.7	9.9	98.8	-1.7	59.2	11,500.5
1997	1,523.2	4,231.6	69.7	3.3	571.2	598.8	2.1	1,623.8	32.4	1,172.9	138.9	1,318.1	5,531.3	392.0	18.3	102.6	-0.2	59.2	11,858.0
1998	1,488.6	4,378.0	74.3	2.8	620.2	615.4	2.4	1,615.9	34.0	1,234.1	160.4	1,246.8	5,606.3	405.8	14.5	93.7	4.4	54.6	12,045.9
1999	1,530.4	4,138.1	56.0	4.0	610.0	594.8	1.3	1,609.8	34.3	1,266.2	113.9	1,248.9	5,539.1	384.1	11.5	78.4	5.1	22.6	11,709.3
2000	1,548.2	4,550.1	52.8	3.1	651.5	582.4	1.8	1,466.4	33.8	1,301.6	137.1	1,222.5	5,453.0	391.7	8.5	81.7	6.1	32.8	12,072.1
2001	1,493.0	4,389.9	77.8	2.4	695.5	639.8	3.4	1,413.1	31.0	1,336.6	108.4	1,125.9	5,433.8	398.7	12.4	R 71.5	13.5	R 101.0	R 11,913.7
2002	1,550.3	4,721.9	87.6	2.7	664.6	655.4	0.8	1,514.1	30.6	1,398.3	106.8	1,118.1	5,579.2	371.8	11.4	R 82.3	27.6	58.1	R 12,402.6
2003	1,604.0	R 4,551.3	92.3	2.6	667.6	574.6	1.4	1,550.8	28.3	1,403.5	116.7	1,190.5	5,628.1	348.5	9.2	R 79.4	27.0	121.9	R 12,369.3
2004	1,626.0	3,941.2	86.2	2.4	702.6	503.6	1.8	1,615.8	28.7	1,437.9	135.5	1,286.9	5,801.3	421.6	13.0	75.3	32.2	60.7	11,971.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatt-hours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Texas

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	10	172	96	6	10,083	10,185	705	--	--	11,316	--	27,985	--
1965	3	183	71	7	13,052	13,131	469	--	--	18,745	--	44,761	--
1970	1	232	134	33	15,397	15,565	322	--	--	32,591	--	78,884	--
1975	0	232	270	39	11,419	11,728	378	--	--	40,892	--	98,338	--
1980	(s)	225	8	198	6,131	6,337	647	--	--	57,178	--	137,865	--
1985	2	213	27	112	7,262	7,402	1,319	--	--	71,740	--	165,264	--
1990	2	211	2	26	6,133	6,161	1,107	--	--	82,548	--	190,952	--
1995	0	206	6	22	3,319	3,347	688	--	--	92,831	--	210,877	--
1996	0	229	(s)	38	2,312	2,351	715	--	--	99,656	--	226,679	--
1997	(s)	235	(s)	45	3,503	3,548	543	--	--	101,094	--	229,101	--
1998	2	199	(s)	31	4,552	4,583	483	--	--	110,434	--	250,519	--
1999	1	176	2	31	9,091	9,125	508	--	--	108,591	--	248,454	--
2000	1	194	3	30	10,755	10,788	546	--	--	116,895	--	265,955	--
2001	2	208	1	58	12,217	12,276	588	--	--	117,343	--	^R 263,912	--
2002	8	210	4	17	10,943	10,964	597	--	--	121,435	--	272,047	--
2003	18	207	(s)	18	10,127	10,146	628	--	--	121,355	--	^R 269,573	--
2004	1	192	145	12	7,348	7,504	644	--	--	120,330	--	267,834	--
Trillion Btu													
1960	0.2	177.7	0.6	(s)	40.4	41.0	14.1	0.0	0.0	38.6	271.6	95.5	367.1
1965	0.1	189.3	0.4	(s)	52.4	52.8	9.4	0.0	0.0	64.0	315.5	152.7	468.3
1970	(s)	238.5	0.8	0.2	58.2	59.2	6.4	0.0	0.0	111.2	415.3	269.2	684.4
1975	0.0	239.2	1.6	0.2	42.4	44.2	7.6	0.0	0.0	139.5	430.5	335.5	766.0
1980	(s)	231.7	(s)	1.1	22.5	23.7	12.9	0.0	0.0	195.1	463.5	470.4	933.9
1985	(s)	221.0	0.2	0.6	26.2	27.0	26.4	0.0	0.0	244.8	519.1	563.9	1,083.0
1990	0.1	219.5	(s)	0.1	22.2	22.4	22.1	^f 0.2	^f 0.4	281.7	^f 546.3	651.5	^f 1,197.9
1995	0.0	215.2	(s)	0.1	12.0	12.2	13.8	0.2	0.5	316.7	558.6	719.5	1,278.1
1996	0.0	237.7	(s)	0.2	8.4	8.6	14.3	0.3	0.5	340.0	601.4	773.4	1,374.8
1997	(s)	242.1	(s)	0.3	12.7	12.9	10.9	0.3	0.5	344.9	611.6	781.7	1,393.3
1998	(s)	209.4	(s)	0.2	16.5	16.6	9.7	0.3	0.6	376.8	613.4	854.8	1,468.1
1999	(s)	182.5	(s)	0.2	32.9	33.1	10.2	0.3	0.6	370.5	597.2	847.7	1,445.0
2000	(s)	200.0	(s)	0.2	38.8	39.0	10.9	0.3	0.6	398.8	649.7	907.4	1,557.2
2001	(s)	213.5	(s)	0.3	44.2	44.5	11.8	0.4	0.6	400.4	671.1	^R 900.5	^R 1,571.6
2002	0.1	237.5	(s)	0.1	39.5	39.7	11.9	0.4	0.6	414.3	704.6	928.2	1,632.8
2003	0.4	239.6	(s)	0.1	36.8	36.9	12.6	0.5	0.6	414.1	704.5	919.8	1,624.3
2004	(s)	189.1	0.8	0.1	26.6	27.5	12.9	0.6	0.6	410.6	641.2	913.8	1,555.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Texas

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	7	60	595	656	1,779	663	191	3,884	0	--	--	9,801	--	24,238	--
1965	3	81	440	788	2,303	711	64	4,307	0	--	--	14,804	--	35,351	--
1970	1	146	830	3,603	2,717	692	78	7,920	0	--	--	22,869	--	55,353	--
1975	0	117	1,669	4,192	2,015	687	677	9,240	0	--	--	33,884	--	81,486	--
1980	1	169	2,842	3,251	1,082	3,299	2,569	13,043	0	--	--	44,062	--	106,240	--
1985	5	152	6,778	250	1,282	1,954	252	10,516	0	--	--	60,150	--	138,565	--
1990	8	172	2,225	25	1,082	2,294	71	5,696	^g 0	--	--	70,781	--	163,733	--
1995	0	210	2,669	46	586	164	(s)	3,465	0	--	--	80,354	--	182,535	--
1996	0	179	2,680	38	408	163	0	3,289	0	--	--	83,477	--	189,878	--
1997	(s)	216	2,411	38	618	163	0	3,230	0	--	--	85,162	--	192,996	--
1998	13	170	3,072	52	803	163	0	4,091	0	--	--	91,548	--	207,677	--
1999	7	172	2,871	57	1,604	165	0	4,696	0	--	--	93,492	--	213,907	--
2000	11	190	5,657	48	1,898	167	0	7,770	0	--	--	99,748	--	226,944	--
2001	15	172	3,627	84	2,156	176	11	6,054	0	--	--	102,459	--	^R 230,438	--
2002	58	226	2,316	58	1,931	178	23	4,506	0	--	--	97,115	--	217,565	--
2003	122	219	2,626	35	1,787	177	0	4,625	0	--	--	96,694	--	^R 214,793	--
2004	10	202	1,796	34	1,297	178	0	3,306	0	--	--	99,616	--	221,727	--
Trillion Btu															
1960	0.1	61.8	3.5	3.7	7.1	3.5	1.2	19.0	0.0	0.3	0.0	33.4	114.6	82.7	197.3
1965	(s)	83.6	2.6	4.5	9.2	3.7	0.4	20.4	0.0	0.2	0.0	50.5	154.7	120.6	275.3
1970	(s)	150.0	4.8	20.4	10.3	3.6	0.5	39.7	0.0	0.1	0.0	78.0	267.9	188.9	456.7
1975	0.0	120.2	9.7	23.8	7.5	3.6	4.3	48.8	0.0	0.1	0.0	115.6	284.8	278.0	562.8
1980	(s)	173.7	16.6	18.4	4.0	17.3	16.2	72.4	0.0	0.3	0.0	150.3	396.8	362.5	759.3
1985	0.1	157.7	39.5	1.4	4.6	10.3	1.6	57.4	0.0	0.6	0.0	205.2	421.1	472.8	893.8
1990	0.2	179.6	13.0	0.1	3.9	12.0	0.4	29.5	^g 0.0	^g 2.5	^g (s)	241.5	^g 453.3	558.7	^g 1,012.0
1995	0.0	218.5	15.5	0.3	2.1	0.9	(s)	18.8	0.0	1.9	0.1	274.2	513.5	622.8	1,136.3
1996	0.0	185.1	15.6	0.2	1.5	0.9	0.0	18.1	0.0	2.1	0.2	284.8	490.3	647.9	1,138.2
1997	(s)	222.8	14.0	0.2	2.2	0.8	0.0	17.3	0.0	1.9	0.2	290.6	532.8	658.5	1,191.3
1998	0.3	178.0	17.9	0.3	2.9	0.9	0.0	21.9	0.0	1.7	0.2	312.4	514.6	708.6	1,223.2
1999	0.1	178.2	16.7	0.3	5.8	0.9	0.0	23.7	0.0	1.8	0.2	319.0	523.0	729.9	1,252.9
2000	0.2	196.8	33.0	0.3	6.8	0.9	0.0	40.9	0.0	1.9	0.2	340.3	580.4	774.3	1,354.8
2001	0.4	176.0	21.1	0.5	7.8	0.9	0.1	30.4	0.0	2.2	0.3	349.6	558.8	^R 786.3	^R 1,345.0
2002	1.1	256.0	13.5	0.3	7.0	0.9	0.1	21.9	0.0	2.3	0.3	331.4	612.8	742.3	1,355.2
2003	2.4	^R 253.3	15.3	0.2	6.5	0.9	0.0	22.9	0.0	2.8	0.3	329.9	^R 611.6	732.9	^R 1,344.5
2004	0.2	199.0	10.5	0.2	4.7	0.9	0.0	16.3	0.0	2.5	0.4	339.9	558.4	756.5	1,314.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Texas

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total				Million kWh		Million kWh	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	1,031	2,029	6,284	10,118	2,729	59,411	1,712	3,798	4,615	55,967	144,635	0	--	--	14,602	--	36,112	--
1965	1,136	2,098	7,811	8,519	2,663	89,166	1,974	2,563	1,879	80,537	195,111	0	--	--	23,685	--	56,558	--
1970	1,150	2,557	11,885	8,947	3,863	127,521	2,581	1,410	2,297	100,279	258,783	0	--	--	40,274	--	97,480	--
1975	3,720	2,160	8,150	15,301	2,965	138,844	2,583	997	11,070	124,910	304,819	5	--	--	54,712	--	131,574	--
1980	3,250	2,163	10,906	20,250	11,906	181,940	3,431	470	16,029	218,266	463,198	0	--	--	78,190	--	188,528	--
1985	5,192	1,732	11,808	19,330	414	247,779	3,122	4,704	5,969	141,141	434,265	0	--	--	81,235	--	187,137	--
1990	4,157	2,105	14,013	17,592	149	285,349	3,513	4,336	1,273	179,964	506,188	9	--	--	84,087	--	194,513	--
1995	4,255	2,188	11,794	19,960	128	366,168	3,351	3,944	2,459	187,335	595,139	0	--	--	90,093	--	204,657	--
1996	4,808	2,442	11,962	23,185	161	392,068	3,252	4,040	2,092	215,347	652,107	0	--	--	95,308	--	216,790	--
1997	4,766	2,351	10,509	21,893	282	444,688	3,436	4,236	1,847	231,400	718,291	0	--	--	100,429	--	227,593	--
1998	4,422	2,329	11,201	23,835	347	441,020	3,597	4,961	856	218,913	704,730	0	--	--	102,702	--	232,980	--
1999	4,397	2,146	8,438	21,472	134	434,130	3,634	2,501	635	220,071	691,016	0	--	--	99,741	--	228,205	--
2000	4,490	2,397	7,957	21,192	245	393,652	3,580	2,576	401	215,529	645,133	0	--	--	101,588	--	231,130	--
2001	4,439	2,321	11,720	20,895	461	376,051	3,280	4,632	519	196,041	613,600	0	--	--	98,208	--	^R 220,878	--
2002	4,047	2,251	13,203	19,710	73	405,724	3,241	5,005	796	193,897	641,649	0	--	--	102,251	--	229,070	--
2003	4,132	^R 2,137	13,916	19,010	196	414,937	2,996	5,244	1,408	207,978	665,685	0	--	--	104,547	--	^R 232,236	--
2004	4,148	2,096	12,986	16,873	278	437,390	3,036	6,023	1,077	223,927	701,588	0	--	--	100,588	--	223,892	--
Trillion Btu																		
1960	24.4	2,100.3	41.7	58.9	15.5	238.3	10.4	19.9	29.0	334.3	748.0	0.0	23.9	0.0	49.8	2,946.5	123.2	3,069.7
1965	29.0	2,175.3	51.8	49.6	15.1	357.6	12.0	13.5	11.8	473.8	985.2	0.0	30.7	0.0	80.8	3,301.1	193.0	3,494.1
1970	30.7	2,626.3	78.9	52.1	21.9	481.9	15.7	7.4	14.4	584.2	1,256.5	0.0	44.6	0.0	137.4	4,095.5	332.6	4,428.1
1975	77.7	2,224.0	54.1	89.1	16.8	515.8	15.7	5.2	69.6	726.8	1,493.1	0.1	47.2	0.0	186.7	4,028.6	448.9	4,477.6
1980	63.3	2,229.7	72.4	118.0	67.5	668.4	20.8	2.5	100.8	1,241.1	2,291.4	0.0	41.6	0.0	266.8	4,892.8	643.3	5,536.1
1985	85.4	1,799.3	78.4	112.6	2.3	892.7	18.9	24.7	37.5	808.2	1,975.4	0.0	48.7	0.0	277.2	4,186.0	638.5	4,824.5
1990	61.5	2,194.1	93.0	102.5	0.8	1,034.4	21.3	22.8	8.0	1,024.4	2,307.2	⁹ 0.0	⁹ 68.1	⁹ 0.0	286.9	⁹ 4,917.8	663.7	⁹ 5,581.5
1995	63.7	2,280.6	78.3	116.3	0.7	1,326.6	20.3	20.6	15.5	1,057.1	2,635.3	0.0	83.4	0.0	307.4	5,370.4	698.3	6,068.6
1996	73.8	2,531.9	79.4	135.1	0.9	1,416.5	19.7	21.1	13.2	1,208.9	2,894.8	0.0	81.9	0.0	325.2	5,907.6	739.7	6,647.3
1997	74.1	2,421.8	69.7	127.5	1.6	1,608.0	20.8	22.1	11.6	1,303.2	3,164.6	0.0	89.1	0.0	342.7	6,092.4	776.5	6,868.9
1998	62.9	2,445.0	74.3	138.8	2.0	1,593.8	21.8	25.9	5.4	1,231.6	3,093.6	0.0	81.6	0.0	350.4	6,033.6	794.9	6,828.5
1999	62.6	2,227.0	56.0	125.1	0.8	1,569.8	22.0	13.0	4.0	1,234.2	3,024.9	0.0	65.7	0.0	340.3	5,720.5	778.6	6,499.1
2000	73.1	2,477.4	52.8	123.4	1.4	1,419.9	21.7	13.4	2.5	1,205.5	2,840.7	0.0	68.0	0.0	346.6	5,805.7	788.6	6,594.3
2001	75.5	2,377.2	77.8	121.7	2.6	1,359.0	19.9	24.1	3.3	1,113.5	2,722.0	0.0	^R 56.7	0.0	335.1	^R 5,566.3	^R 753.6	^R 6,320.0
2002	71.6	2,546.3	87.6	114.8	0.4	1,465.9	19.7	26.1	5.0	1,100.6	2,820.1	0.0	^R 65.9	0.0	348.9	^R 5,852.8	781.6	^R 6,634.4
2003	72.5	^R 2,476.8	92.3	110.7	1.1	1,505.8	18.2	27.3	8.9	1,182.9	2,947.2	0.0	^R 60.6	0.0	356.7	^R 5,913.7	792.4	^R 6,706.1
2004	70.9	2,069.3	86.2	98.3	1.6	1,582.5	18.4	31.4	6.8	1,271.0	3,096.1	0.0	57.0	0.0	343.2	5,636.5	763.9	6,400.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Texas

Year			Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
	Coal ^a	Natural Gas ^b	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Thousand Barrels		Million Kilowatthours	
1960	18	52	3,261	13,571	10,842	2,024	1,780	87,381	17,736	136,595	0	8	--	20	--
1965	4	68	3,457	15,810	15,365	4,588	1,814	104,577	12,346	157,957	0	4	--	10	--
1970	2	96	2,007	22,454	24,430	5,587	1,623	139,292	11,667	207,059	0	0	--	0	--
1975	1	82	1,312	37,391	27,308	4,969	1,738	173,854	25,049	271,622	0	0	--	0	--
1980	0	105	1,264	48,286	30,934	649	1,909	177,228	45,812	306,082	0	0	--	0	--
1985	0	92	1,317	53,074	74,500	609	1,738	198,761	21,610	351,609	^f 807	0	--	0	--
1990	0	106	838	47,369	95,903	479	1,955	198,773	25,865	371,182	584	0	--	0	--
1995	0	82	645	64,957	83,002	322	1,865	209,319	20,024	380,135	1,215	0	--	0	--
1996	0	76	625	70,191	99,870	274	1,810	222,177	17,866	412,812	452	8	--	17	--
1997	0	82	658	73,424	105,610	246	1,912	220,599	20,220	422,669	1,069	19	--	42	--
1998	0	67	555	79,063	108,536	735	2,002	231,655	24,640	447,186	1,583	21	--	47	--
1999	0	71	796	79,575	104,896	365	2,023	240,326	17,471	445,453	1,364	19	--	44	--
2000	0	63	609	82,848	102,717	234	1,992	247,076	21,007	456,482	1,563	30	--	69	--
2001	0	71	468	91,945	112,845	586	1,826	251,744	16,090	475,504	1,582	34	--	76	--
2002	0	91	533	91,635	115,598	480	1,804	263,306	16,088	489,444	689	44	--	99	--
2003	0	84	511	90,414	101,334	485	1,668	264,111	16,648	475,172	561	90	--	200	--
2004	0	58	466	101,507	88,821	573	1,690	269,516	20,281	482,853	665	81	--	181	--
Trillion Btu															
1960	0.3	54.1	16.5	79.1	58.6	8.1	10.8	459.0	111.5	743.5	0.0	(s)	797.9	0.1	798.0
1965	0.1	70.0	17.5	92.1	84.3	18.4	11.0	549.3	77.6	850.3	0.0	(s)	920.4	(s)	920.4
1970	(s)	98.8	10.1	130.8	135.9	21.1	9.8	731.7	73.3	1,112.9	0.0	0.0	1,211.7	0.0	1,211.7
1975	(s)	84.6	6.6	217.8	152.7	18.5	10.5	913.3	157.5	1,476.8	0.0	0.0	1,561.4	0.0	1,561.4
1980	0.0	108.1	6.4	281.3	173.3	2.4	11.6	931.0	288.0	1,693.9	0.0	0.0	1,801.9	0.0	1,801.9
1985	0.0	95.6	6.6	309.2	420.5	2.2	10.5	1,044.1	135.9	1,929.0	^f 2.9	0.0	^f 2,027.5	0.0	^f 2,027.5
1990	0.0	110.5	4.2	275.9	542.1	1.7	11.9	1,044.2	162.6	2,042.7	2.1	0.0	2,155.2	0.0	2,155.2
1995	0.0	85.7	3.3	378.4	470.5	1.2	11.3	1,091.6	125.9	2,082.1	4.3	0.0	2,167.8	0.0	2,167.8
1996	0.0	78.8	3.2	408.9	566.2	1.0	11.0	1,158.9	112.3	2,261.4	1.6	(s)	2,340.2	0.1	2,340.3
1997	0.0	84.8	3.3	427.7	598.8	0.9	11.6	1,150.0	127.1	2,319.4	3.8	0.1	2,404.3	0.1	2,404.4
1998	0.0	69.9	2.8	460.5	615.4	2.7	12.1	1,207.4	154.9	2,455.8	5.6	0.1	2,525.8	0.2	2,526.0
1999	0.0	74.0	4.0	463.5	594.8	1.3	12.3	1,252.3	109.8	2,438.1	4.8	0.1	2,512.2	0.2	2,512.3
2000	0.0	65.2	3.1	482.6	582.4	0.8	12.1	1,287.3	132.1	2,500.3	5.5	0.1	2,565.6	0.2	2,565.8
2001	0.0	73.0	2.4	535.6	639.8	2.1	11.1	1,311.6	101.2	2,603.7	5.6	0.1	2,676.9	0.3	2,677.1
2002	0.0	102.7	2.7	533.8	655.4	1.7	10.9	1,371.3	101.1	2,677.0	2.4	0.2	2,779.9	0.3	2,780.2
2003	0.0	97.8	2.6	526.7	574.6	1.8	10.1	1,375.2	104.7	2,595.6	2.0	0.3	2,693.7	0.7	2,694.4
2004	0.0	57.5	2.4	591.3	503.6	2.1	10.2	1,405.5	127.5	2,642.6	2.4	0.3	2,700.4	0.6	2,701.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Texas

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	407	43	18	0	61	0	1,102	--	0	0	0	-175	--
1965	0	640	33	14	0	47	0	743	--	0	0	0	-82	--
1970	0	1,062	104	45	0	149	0	1,005	--	0	0	0	-122	--
1975	9,044	1,353	1,740	75	0	1,815	0	1,922	--	0	0	0	-343	--
1980	45,351	1,430	660	1,126	0	1,786	0	979	--	0	0	0	-581	--
1985	71,818	1,198	881	775	0	1,657	0	1,401	--	0	0	0	-4	--
1990	87,248	1,134	254	721	0	975	15,859	1,794	--	ⁱ 0	ⁱ (s)	ⁱ 0	-63	--
1995	88,358	1,207	62	534	2,460	3,055	36,151	1,703	--	0	(s)	0	-925	--
1996	94,190	1,206	335	696	2,537	3,568	35,767	960	--	0	(s)	83	-1,024	--
1997	96,537	1,232	24	334	2,472	2,830	37,358	1,791	--	0	(s)	81	-577	--
1998	94,661	1,441	11	509	2,521	3,041	38,685	1,425	--	0	(s)	80	734	--
1999	97,746	1,445	10	796	2,433	3,239	36,760	1,120	--	0	(s)	320	185	--
2000	97,076	1,578	401	2,147	2,836	5,385	37,556	829	--	0	(s)	492	-16	--
2001	92,438	1,506	617	2,924	2,051	5,591	38,163	1,200	--	0	(s)	1,188	1	--
2002	95,673	1,550	86	437	2,899	3,422	35,618	1,123	--	0	0	2,656	-219	--
2003	100,269	1,454	498	2,554	1,264	4,316	33,437	897	--	0	0	2,570	-217	--
2004	101,763	1,394	190	300	2,628	3,118	40,435	1,301	--	0	0	3,138	-216	--
Trillion Btu														
1960	0.0	421.6	0.3	0.1	0.0	0.4	0.0	11.9	0.0	0.0	0.0	0.0	-0.6	433.2
1965	0.0	663.2	0.2	0.1	0.0	0.3	0.0	7.8	0.9	0.0	0.0	0.0	-0.3	671.9
1970	0.0	1,090.3	0.7	0.3	0.0	0.9	0.0	10.5	1.0	0.0	0.0	0.0	-0.4	1,102.4
1975	118.5	1,379.0	10.9	0.4	0.0	11.4	0.0	20.0	0.9	0.0	0.0	0.0	-1.2	1,528.6
1980	670.8	1,482.9	4.2	6.6	0.0	10.7	0.0	10.2	0.8	0.0	0.0	0.0	-2.0	2,173.4
1985	1,063.4	1,240.7	5.5	4.5	0.0	10.1	0.0	14.6	3.1	0.0	0.0	0.0	(s)	2,331.9
1990	1,271.9	1,174.0	1.6	4.2	0.0	5.8	167.8	18.7	ⁱ 3.3	ⁱ 0.0	ⁱ (s)	ⁱ 0.0	-0.2	ⁱ 2,641.3
1995	1,301.1	1,237.7	0.4	3.1	14.8	18.3	379.8	17.6	0.4	0.0	(s)	0.0	-3.2	2,951.7
1996	1,411.8	1,235.1	2.1	4.1	15.3	21.4	375.7	9.9	0.6	0.0	(s)	0.9	-3.5	3,051.9
1997	1,449.1	1,260.0	0.2	1.9	14.9	17.0	392.0	18.3	0.7	0.0	(s)	0.8	-2.0	3,135.9
1998	1,425.3	1,475.6	0.1	3.0	15.2	18.2	405.8	14.5	0.7	0.0	(s)	0.8	2.5	3,343.5
1999	1,467.7	1,476.4	0.1	4.6	14.7	19.4	384.1	11.5	0.7	0.0	(s)	3.3	0.6	3,363.6
2000	1,474.9	1,610.7	2.5	12.5	17.1	32.1	391.7	8.5	0.9	0.0	(s)	5.0	-0.1	3,523.7
2001	1,417.1	1,550.2	3.9	17.0	12.4	33.3	398.7	12.4	0.9	0.0	(s)	12.3	(s)	3,424.8
2002	1,477.5	1,579.4	0.5	2.5	17.5	20.6	371.8	11.4	2.2	0.0	0.0	27.0	-0.7	3,489.1
2003	1,528.8	1,483.8	3.1	14.9	7.6	25.6	348.5	9.2	3.4	0.0	0.0	26.3	-0.7	3,424.9
2004	1,554.8	1,426.3	1.2	1.8	15.8	18.8	421.6	13.0	2.9	0.0	0.0	31.4	-0.7	3,468.1

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Utah

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	3,449	70	813	595	3,775	1,003	36	452	214	7,813	5,715	1,926	22,341	0	304	--	--	1,987	--
1965	2,857	108	838	383	4,193	1,244	474	677	251	9,001	5,662	2,305	25,029	0	913	--	--	3,084	--
1970	3,025	122	1,576	178	5,107	1,808	250	939	256	12,308	4,656	2,372	29,450	0	741	--	--	8,201	--
1975	4,636	124	1,219	161	9,165	1,903	146	1,169	232	15,063	4,603	2,731	36,391	0	1,074	--	--	8,578	--
1980	7,106	115	1,477	139	8,401	2,637	102	1,301	299	15,534	3,495	2,598	35,983	0	821	--	--	-497	--
1985	8,303	115	1,576	94	5,715	3,808	31	1,486	272	16,240	431	2,155	31,809	0	1,019	--	--	-4,703	--
1990	15,738	117	1,378	106	7,162	5,281	13	1,074	307	16,724	367	2,670	35,082	0	508	--	--	-43,314	--
1995	15,675	157	2,179	64	8,469	5,658	6	1,531	292	20,771	294	2,453	41,718	0	969	--	--	-37,637	--
1996	15,615	161	2,361	52	8,746	6,303	9	2,621	284	21,170	87	2,996	44,628	0	1,049	--	--	-33,800	--
1997	16,507	165	1,992	61	9,976	6,277	12	750	300	22,024	149	2,985	44,526	0	1,344	--	--	-36,071	--
1998	17,482	170	2,452	51	10,398	6,373	13	430	314	22,735	96	2,583	45,446	0	1,315	--	--	-37,876	--
1999	16,611	160	2,380	73	9,793	7,443	13	1,013	317	23,141	60	2,573	46,806	0	1,255	--	--	-36,032	--
2000	17,373	165	2,295	84	10,629	7,701	13	1,804	312	23,895	71	2,375	49,179	0	746	--	--	-32,925	--
2001	^R 16,748	159	1,441	76	11,236	6,880	17	1,988	286	22,993	18	3,232	48,167	0	508	--	--	^R -31,004	--
2002	16,434	163	618	69	11,482	6,416	11	1,280	283	24,158	82	3,207	47,607	0	458	--	--	-35,696	--
2003	16,975	154	2,535	60	11,731	6,758	11	716	262	24,325	111	3,388	49,897	0	421	--	--	^R -36,941	--
2004	18,150	156	1,676	79	12,264	7,137	13	805	265	24,743	171	3,472	50,625	0	450	--	--	-34,207	--
Trillion Btu																			
1960	91.0	72.4	5.4	3.0	22.0	5.4	0.2	1.8	1.3	41.0	35.9	11.6	127.6	0.0	3.3	2.2	0.0	6.8	303.3
1965	75.4	99.8	5.6	1.9	24.4	6.8	2.7	2.7	1.5	47.3	35.6	13.9	142.4	0.0	9.5	2.0	0.0	10.5	339.6
1970	78.8	114.4	10.5	0.9	29.8	10.0	1.4	3.5	1.6	64.7	29.3	14.3	165.8	0.0	7.8	2.3	0.0	28.0	397.0
1975	115.7	118.0	8.1	0.8	53.4	10.6	0.8	4.3	1.4	79.1	28.9	16.4	203.9	0.0	11.2	2.9	0.0	29.3	480.9
1980	168.3	125.0	9.8	0.7	48.9	14.6	0.6	4.8	1.8	81.6	22.0	15.6	200.4	0.0	8.5	4.5	0.0	-1.7	505.0
1985	199.4	123.8	10.5	0.5	33.3	21.3	0.2	5.4	1.7	85.3	2.7	13.3	174.0	0.0	10.6	6.9	2.3	-16.0	501.0
1990	366.8	126.9	9.1	0.5	41.7	29.7	0.1	3.9	1.9	87.9	2.3	16.1	193.2	0.0	5.3	^j 3.4	^j 3.7	-147.8	^j 551.6
1995	361.4	166.9	14.5	0.3	49.3	31.8	(s)	5.5	1.8	108.3	1.9	14.8	228.3	0.0	10.0	3.6	3.5	-128.4	645.2
1996	360.0	168.1	15.7	0.3	50.9	35.7	0.1	9.5	1.7	110.4	0.5	18.0	242.8	0.0	10.8	3.8	4.6	-115.3	674.7
1997	375.1	172.2	13.2	0.3	58.1	35.6	0.1	2.7	1.8	114.8	0.9	17.9	245.5	0.0	13.7	4.4	4.2	-123.1	692.1
1998	396.1	178.0	16.3	0.3	60.6	36.1	0.1	1.6	1.9	118.5	0.6	15.6	251.5	0.0	13.4	3.9	3.9	-129.2	717.6
1999	384.1	169.3	15.8	0.4	57.0	42.2	0.1	3.7	1.9	120.6	0.4	15.5	257.5	0.0	12.8	5.4	3.8	-122.9	710.0
2000	403.1	173.4	15.2	0.4	61.9	43.7	0.1	6.5	1.9	124.5	0.4	14.4	269.0	0.0	7.6	5.7	3.8	-112.3	750.3
2001	^R 384.5	167.6	9.6	0.4	65.4	39.0	0.1	7.2	1.7	119.8	0.1	19.3	262.6	0.0	5.3	3.9	3.8	^R -105.8	^R 721.9
2002	370.6	172.9	4.1	0.3	66.9	36.4	0.1	4.6	1.7	125.8	0.5	19.2	259.6	0.0	4.7	4.0	5.2	-121.8	695.1
2003	379.2	163.1	16.8	0.3	68.3	38.3	0.1	2.6	1.6	126.7	0.7	20.2	275.6	0.0	4.3	4.0	4.8	-126.0	704.9
2004	399.7	164.9	11.1	0.4	71.4	40.5	0.1	2.9	1.6	129.0	1.1	20.7	278.8	0.0	4.5	4.1	4.8	-116.7	740.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Utah

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	147	23	100	1	249	349	92	--	--	1,012	--	2,503	--
1965	103	31	98	20	505	624	79	--	--	1,243	--	2,969	--
1970	61	45	143	6	694	844	87	--	--	1,688	--	4,086	--
1975	39	60	357	4	564	925	101	--	--	2,493	--	5,995	--
1980	50	58	112	0	349	460	189	--	--	3,116	--	7,513	--
1985	55	59	67	10	631	707	301	--	--	3,985	--	9,179	--
1990	53	43	139	5	424	567	148	--	--	4,246	--	9,822	--
1995	10	49	72	3	210	285	150	--	--	5,041	--	11,451	--
1996	11	54	74	4	251	329	155	--	--	5,481	--	12,468	--
1997	14	58	88	5	489	582	177	--	--	5,661	--	12,828	--
1998	12	57	70	4	148	222	157	--	--	5,756	--	13,057	--
1999	14	55	79	4	312	396	166	--	--	6,236	--	14,269	--
2000	6	56	79	4	590	672	178	--	--	6,514	--	14,819	--
2001	7	55	91	3	1,003	1,097	99	--	--	6,693	--	^R 15,053	--
2002	24	59	83	2	621	705	101	--	--	6,938	--	15,544	--
2003	8	55	67	2	548	618	106	--	--	7,166	--	15,919	--
2004	23	61	85	2	569	655	109	--	--	7,325	--	16,304	--
Trillion Btu													
1960	3.8	23.4	0.6	(s)	1.0	1.6	1.8	0.0	0.0	3.5	34.1	8.5	42.6
1965	2.7	28.4	0.6	0.1	2.0	2.7	1.6	0.0	0.0	4.2	39.6	10.1	49.7
1970	1.5	41.9	0.8	(s)	2.6	3.5	1.7	0.0	0.0	5.8	54.4	13.9	68.3
1975	0.9	56.8	2.1	(s)	2.1	4.2	2.0	0.0	0.0	8.5	72.4	20.5	92.9
1980	1.2	62.9	0.6	0.0	1.3	1.9	3.8	0.0	0.0	10.6	80.4	25.6	106.1
1985	1.3	63.1	0.4	0.1	2.3	2.7	6.0	0.0	0.0	13.6	86.8	31.3	118.1
1990	1.2	47.3	0.8	(s)	1.5	2.4	3.0	^f 0.1	^f (s)	14.5	^f 68.4	33.5	^f 101.9
1995	0.2	52.1	0.4	(s)	0.8	1.2	3.0	0.1	0.1	17.2	73.8	39.1	112.9
1996	0.3	56.7	0.4	(s)	0.9	1.4	3.1	0.1	0.1	18.7	80.2	42.5	122.7
1997	0.3	60.6	0.5	(s)	1.8	2.3	3.5	0.1	0.1	19.3	86.2	43.8	129.9
1998	0.3	59.5	0.4	(s)	0.5	1.0	3.1	0.1	0.1	19.6	83.6	44.6	128.2
1999	0.3	58.6	0.5	(s)	1.1	1.6	3.3	(s)	(s)	21.3	85.2	48.7	133.9
2000	0.1	58.5	0.5	(s)	2.1	2.6	3.6	(s)	(s)	22.2	87.1	50.6	137.7
2001	0.2	58.7	0.5	(s)	3.6	4.2	2.0	(s)	(s)	22.8	87.9	^R 51.4	^R 139.3
2002	0.6	63.2	0.5	(s)	2.2	2.7	2.0	(s)	(s)	23.7	92.2	53.0	145.3
2003	0.2	58.1	0.4	(s)	2.0	2.4	2.1	(s)	(s)	24.5	87.3	54.3	141.7
2004	0.6	64.3	0.5	(s)	2.1	2.6	2.2	(s)	(s)	25.0	94.6	55.6	150.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Utah

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	102	10	362	6	44	281	656	1,349	0	--	--	640	--	1,583	--
1965	78	16	356	148	89	234	1,072	1,899	0	--	--	1,128	--	2,693	--
1970	48	10	521	46	122	202	795	1,687	0	--	--	1,890	--	4,574	--
1975	92	6	1,300	28	99	210	1,098	2,736	0	--	--	2,479	--	5,963	--
1980	187	(s)	1,028	34	62	81	1,051	2,255	0	--	--	3,141	--	7,573	--
1985	197	9	484	19	111	88	45	747	0	--	--	4,596	--	10,587	--
1990	214	16	364	5	75	96	73	613	^g 0	--	--	5,389	--	12,467	--
1995	67	27	382	1	37	21	13	454	0	--	--	6,462	--	14,680	--
1996	83	30	374	3	44	21	14	456	0	--	--	6,717	--	15,278	--
1997	109	31	406	4	86	21	11	527	0	--	--	7,285	--	16,509	--
1998	101	31	524	5	26	21	3	579	0	--	--	7,433	--	16,863	--
1999	100	30	593	4	55	21	10	682	0	--	--	8,074	--	18,473	--
2000	52	31	366	4	104	22	16	513	0	--	--	8,746	--	19,899	--
2001	53	31	696	8	177	23	18	922	0	--	--	9,102	--	^R 20,472	--
2002	174	34	558	4	110	23	0	694	0	--	--	9,293	--	20,820	--
2003	53	31	527	5	97	23	0	652	0	--	--	9,024	--	20,045	--
2004	190	31	490	8	100	24	0	622	0	--	--	9,345	--	20,801	--
Trillion Btu															
1960	2.6	10.5	2.1	(s)	0.2	1.5	4.1	7.9	0.0	(s)	0.0	2.2	23.3	5.4	28.7
1965	2.0	14.4	2.1	0.8	0.4	1.2	6.7	11.2	0.0	(s)	0.0	3.8	31.5	9.2	40.7
1970	1.2	9.5	3.0	0.3	0.5	1.1	5.0	9.8	0.0	(s)	0.0	6.4	27.0	15.6	42.6
1975	2.2	5.8	7.6	0.2	0.4	1.1	6.9	16.1	0.0	(s)	0.0	8.5	32.5	20.3	52.9
1980	4.3	0.4	6.0	0.2	0.2	0.4	6.6	13.4	0.0	0.1	0.0	10.7	28.9	25.8	54.8
1985	4.6	9.1	2.8	0.1	0.4	0.5	0.3	4.1	0.0	0.1	0.0	15.7	33.7	36.1	69.8
1990	4.9	17.7	2.1	(s)	0.3	0.5	0.5	3.4	^g 0.0	^g 0.3	^g 0.1	18.4	^g 44.8	42.5	^g 87.4
1995	1.6	28.5	2.2	(s)	0.1	0.1	0.1	2.6	0.0	0.4	0.1	22.0	55.2	50.1	105.3
1996	1.9	30.8	2.2	(s)	0.2	0.1	0.1	2.6	0.0	0.4	0.1	22.9	58.8	52.1	110.9
1997	2.5	32.4	2.4	(s)	0.3	0.1	0.1	2.9	0.0	0.6	0.1	24.9	63.4	56.3	119.8
1998	2.4	32.4	3.1	(s)	0.1	0.1	(s)	3.3	0.0	0.5	0.2	25.4	64.1	57.5	121.7
1999	2.3	32.1	3.5	(s)	0.2	0.1	0.1	3.8	0.0	0.5	0.2	27.5	66.5	63.0	129.5
2000	1.2	32.9	2.1	(s)	0.4	0.1	0.1	2.7	0.0	0.6	0.2	29.8	67.4	67.9	135.3
2001	1.2	33.0	4.1	(s)	0.6	0.1	0.1	5.0	0.0	0.3	0.2	31.1	70.8	^R 69.9	^R 140.7
2002	4.1	35.6	3.3	(s)	0.4	0.1	0.0	3.8	0.0	0.4	0.2	31.7	75.8	71.0	146.8
2003	1.3	33.0	3.1	(s)	0.4	0.1	0.0	3.6	0.0	0.4	0.2	30.8	69.2	68.4	137.6
2004	4.5	33.1	2.9	(s)	0.4	0.1	0.0	3.4	0.0	0.4	0.2	31.9	73.4	71.0	144.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Utah

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	2,640	33	813	990	29	124	62	299	2,399	1,926	6,642	(s)	--	--	1,822	--	4,505	--
1965	2,306	57	838	1,163	305	70	101	233	2,895	2,305	7,910	3	--	--	1,404	--	3,354	--
1970	2,477	63	1,576	1,564	197	116	95	261	2,068	2,372	8,249	3	--	--	1,648	--	3,988	--
1975	2,478	55	1,219	3,356	114	495	73	266	3,285	2,731	11,541	0	--	--	2,968	--	7,137	--
1980	1,974	51	1,477	2,220	68	876	106	165	2,386	2,598	9,897	0	--	--	4,448	--	10,725	--
1985	1,726	46	1,576	989	3	668	96	220	360	2,155	6,068	0	--	--	4,458	--	10,269	--
1990	1,907	55	1,378	1,520	4	524	108	198	245	2,670	6,649	⁹ 0	--	--	5,766	--	13,339	--
1995	1,905	69	2,179	1,383	2	1,252	103	323	282	2,453	7,977	0	--	--	6,957	--	15,804	--
1996	1,559	69	2,361	1,360	2	2,301	100	331	73	2,996	9,525	0	--	--	7,660	--	17,423	--
1997	1,729	69	1,992	1,803	3	160	106	334	139	2,985	7,522	0	--	--	7,430	--	16,838	--
1998	2,275	73	2,452	2,188	4	254	111	248	94	2,583	7,934	0	--	--	7,511	--	17,039	--
1999	1,486	65	2,380	1,783	5	612	112	236	50	2,573	7,750	0	--	--	7,568	--	17,316	--
2000	2,151	64	2,295	1,730	5	1,068	110	240	54	2,375	7,877	0	--	--	7,917	--	18,013	--
2001	^R 1,783	54	1,441	1,802	6	752	101	500	0	3,232	7,834	0	--	--	7,411	--	^R 16,669	--
2002	592	49	618	1,819	5	503	100	517	82	3,207	6,851	0	--	--	7,019	--	15,725	--
2003	611	46	2,535	2,400	4	47	92	551	111	3,388	9,129	0	--	--	7,646	--	16,984	--
2004	1,330	46	1,676	2,095	3	88	94	591	171	3,472	8,188	0	--	--	7,816	--	17,398	--
Trillion Btu																		
1960	70.5	34.7	5.4	5.8	0.2	0.5	0.4	1.6	15.1	11.6	40.4	(s)	0.3	0.0	6.2	152.1	15.4	167.5
1965	61.5	52.3	5.6	6.8	1.7	0.3	0.6	1.2	18.2	13.9	48.2	(s)	0.3	0.0	4.8	167.2	11.4	178.6
1970	65.2	59.2	10.5	9.1	1.1	0.4	0.6	1.4	13.0	14.3	50.3	(s)	0.5	0.0	5.6	180.9	13.6	194.5
1975	64.7	52.3	8.1	19.6	0.6	1.8	0.4	1.4	20.7	16.4	69.0	0.0	0.8	0.0	10.1	197.0	24.4	221.3
1980	50.7	55.8	9.8	12.9	0.4	3.2	0.6	0.9	15.0	15.6	58.4	0.0	0.6	0.0	15.2	180.7	36.6	217.3
1985	44.1	49.9	10.5	5.8	(s)	2.4	0.6	1.2	2.3	13.3	35.9	0.0	0.7	0.0	15.2	145.9	35.0	181.0
1990	48.7	60.1	9.1	8.9	(s)	1.9	0.7	1.0	1.5	16.1	39.2	⁹ 0.0	⁹ 0.2	⁹ 0.2	19.7	⁹ 168.1	45.5	⁹ 213.6
1995	47.6	73.8	14.5	8.1	(s)	4.5	0.6	1.7	1.8	14.8	46.0	0.0	0.2	0.3	23.7	191.5	53.9	245.4
1996	40.0	72.3	15.7	7.9	(s)	8.3	0.6	1.7	0.5	18.0	52.7	0.0	0.3	0.3	26.1	191.6	59.4	251.1
1997	44.0	71.7	13.2	10.5	(s)	0.6	0.6	1.7	0.9	17.9	45.5	0.0	0.3	0.3	25.4	187.1	57.5	244.6
1998	56.7	76.4	16.3	12.7	(s)	0.9	0.7	1.3	0.6	15.6	48.1	0.0	0.2	0.3	25.6	207.3	58.1	265.4
1999	37.5	68.3	15.8	10.4	(s)	2.2	0.7	1.2	0.3	15.5	46.2	0.0	0.2	0.3	25.8	178.3	59.1	237.4
2000	54.1	67.3	15.2	10.1	(s)	3.9	0.7	1.3	0.3	14.4	45.8	0.0	0.2	0.4	27.0	194.8	61.5	256.3
2001	^R 44.0	57.2	9.6	10.5	(s)	2.7	0.6	2.6	0.0	19.3	45.3	0.0	0.3	0.4	25.3	^R 172.5	^R 56.9	^R 229.4
2002	13.6	51.7	4.1	10.6	(s)	1.8	0.6	2.7	0.5	19.2	39.5	0.0	0.2	0.4	24.0	129.3	53.7	183.0
2003	14.2	49.0	16.8	14.0	(s)	0.2	0.6	2.9	0.7	20.2	55.3	0.0	0.2	0.3	26.1	145.1	57.9	203.0
2004	28.0	48.7	11.1	12.2	(s)	0.3	0.6	3.1	1.1	20.7	49.1	0.0	0.2	0.3	26.7	152.9	59.4	212.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Utah

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	45	(s)	595	2,312	1,003	35	152	7,232	370	11,698	0	0	--	0	--
1965	8	(s)	383	2,569	1,244	12	151	8,534	98	12,991	0	0	--	0	--
1970	4	(s)	178	2,870	1,808	6	161	11,845	25	16,893	0	0	--	0	--
1975	(s)	(s)	161	4,141	1,903	11	158	14,586	68	21,028	0	0	--	0	--
1980	0	1	139	4,974	2,637	14	194	15,288	0	23,245	0	0	--	0	--
1985	0	1	94	4,121	3,808	76	176	15,932	0	24,207	^f 12	0	--	0	--
1990	0	1	106	5,056	5,281	51	198	16,430	48	27,169	1	0	--	0	--
1995	0	3	64	6,566	5,658	32	189	20,428	0	32,936	0	0	--	0	--
1996	0	4	52	6,878	6,303	25	184	20,818	0	34,260	22	0	--	0	--
1997	0	3	61	7,621	6,277	16	194	21,670	0	35,838	0	0	--	0	--
1998	0	3	51	7,549	6,373	2	203	22,466	0	36,643	297	0	--	0	--
1999	0	3	73	7,283	7,443	34	205	22,884	0	37,923	253	1	--	1	--
2000	0	4	84	8,353	7,701	43	202	23,633	0	40,015	287	8	--	19	--
2001	0	5	76	8,537	6,880	56	185	22,470	0	38,204	378	10	--	23	--
2002	0	6	69	8,926	6,416	47	183	23,618	0	39,259	100	16	--	36	--
2003	0	8	60	8,675	6,758	24	169	23,751	0	39,438	77	25	--	55	--
2004	0	9	79	9,535	7,137	48	171	24,129	0	41,100	37	25	--	56	--
Trillion Btu															
1960	1.2	0.1	3.0	13.5	5.4	0.1	0.9	38.0	2.3	63.2	0.0	0.0	64.5	0.0	64.5
1965	0.2	0.4	1.9	15.0	6.8	(s)	0.9	44.8	0.6	70.1	0.0	0.0	70.6	0.0	70.6
1970	0.1	0.5	0.9	16.7	10.0	(s)	1.0	62.2	0.2	91.0	0.0	0.0	91.5	0.0	91.5
1975	(s)	0.3	0.8	24.1	10.6	(s)	1.0	76.6	0.4	113.6	0.0	0.0	113.8	0.0	113.8
1980	0.0	0.9	0.7	29.0	14.6	0.1	1.2	80.3	0.0	125.8	0.0	0.0	126.8	0.0	126.8
1985	0.0	1.3	0.5	24.0	21.3	0.3	1.1	83.7	0.0	130.8	^f (s)	0.0	^f 132.1	0.0	^f 132.1
1990	0.0	1.0	0.5	29.4	29.7	0.2	1.2	86.3	0.3	147.7	(s)	0.0	148.7	0.0	148.7
1995	0.0	3.3	0.3	38.2	31.8	0.1	1.1	106.5	0.0	178.2	0.0	0.0	181.5	0.0	181.5
1996	0.0	4.1	0.3	40.1	35.7	0.1	1.1	108.6	0.0	185.8	0.1	0.0	190.0	0.0	190.0
1997	0.0	3.3	0.3	44.4	35.6	0.1	1.2	113.0	0.0	194.5	0.0	0.0	197.8	0.0	197.8
1998	0.0	3.6	0.3	44.0	36.1	(s)	1.2	117.1	0.0	198.7	1.1	0.0	202.3	0.0	202.3
1999	0.0	3.6	0.4	42.4	42.2	0.1	1.2	119.2	0.0	205.6	0.9	(s)	209.3	(s)	209.3
2000	0.0	3.7	0.4	48.7	43.7	0.2	1.2	123.1	0.0	217.2	1.0	(s)	221.0	0.1	221.0
2001	0.0	4.9	0.4	49.7	39.0	0.2	1.1	117.1	0.0	207.5	1.3	(s)	212.5	0.1	212.6
2002	0.0	6.9	0.3	52.0	36.4	0.2	1.1	123.0	0.0	213.0	0.4	0.1	219.9	0.1	220.1
2003	0.0	8.4	0.3	50.5	38.3	0.1	1.0	123.7	0.0	213.9	0.3	0.1	222.5	0.2	222.7
2004	0.0	9.5	0.4	55.5	40.5	0.2	1.0	125.8	0.0	223.5	0.1	0.1	233.0	0.2	233.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Utah

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	515	4	2,291	12	0	2,302	0	304	--	0	0	0	0	--
1965	363	5	1,597	8	0	1,605	0	910	--	0	0	0	0	--
1970	435	4	1,768	9	0	1,777	0	738	--	0	0	0	0	--
1975	2,026	3	152	10	0	162	0	1,074	--	0	0	0	0	--
1980	4,895	5	58	67	0	126	0	821	--	0	0	0	0	--
1985	6,325	(s)	25	55	0	80	0	1,019	--	110	0	0	0	--
1990	13,563	1	0	84	0	84	0	508	--	ⁱ 152	ⁱ 0	ⁱ 0	0	--
1995	13,693	9	0	66	0	66	0	969	--	140	0	0	0	--
1996	13,963	4	0	59	0	59	0	1,049	--	192	0	0	0	--
1997	14,654	4	0	58	0	58	0	1,344	--	169	0	0	28	--
1998	15,094	6	0	66	0	66	0	1,315	--	160	0	0	2	--
1999	15,011	6	0	55	0	55	0	1,255	--	156	0	0	0	--
2000	15,164	11	0	101	0	101	0	746	--	152	0	0	0	--
2001	14,906	15	0	110	0	110	0	508	--	153	0	0	0	--
2002	15,644	15	0	96	0	96	0	458	--	218	0	0	9	--
2003	16,302	14	0	61	0	61	0	421	--	198	0	0	6	--
2004	16,606	9	0	60	0	60	0	450	--	195	0	0	15	--
Trillion Btu														
1960	12.8	3.8	14.4	0.1	0.0	14.5	0.0	3.3	0.0	0.0	0.0	0.0	0.0	34.4
1965	9.1	4.4	10.0	(s)	0.0	10.1	0.0	9.5	0.0	0.0	0.0	0.0	0.0	33.1
1970	10.8	3.3	11.1	0.1	0.0	11.2	0.0	7.7	0.0	0.0	0.0	0.0	0.0	33.0
1975	47.9	2.9	1.0	0.1	0.0	1.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	63.0
1980	112.1	4.9	0.4	0.4	0.0	0.8	0.0	8.5	0.0	0.0	0.0	0.0	0.0	126.3
1985	149.3	0.3	0.2	0.3	0.0	0.5	0.0	10.6	0.0	2.3	0.0	0.0	0.0	163.0
1990	312.0	0.9	0.0	0.5	0.0	0.5	0.0	5.3	ⁱ 0.0	ⁱ 3.2	ⁱ 0.0	ⁱ 0.0	0.0	ⁱ 321.9
1995	312.1	9.1	0.0	0.4	0.0	0.4	0.0	10.0	0.0	2.9	0.0	0.0	0.0	334.5
1996	317.8	4.2	0.0	0.3	0.0	0.3	0.0	10.8	0.0	4.0	0.0	0.0	0.0	337.2
1997	328.3	4.2	0.0	0.3	0.0	0.3	0.0	13.7	0.0	3.5	0.0	0.0	0.1	350.1
1998	336.8	6.2	0.0	0.4	0.0	0.4	0.0	13.4	0.0	3.4	0.0	0.0	(s)	360.1
1999	343.9	6.7	0.0	0.3	0.0	0.3	0.0	12.8	1.4	3.3	0.0	0.0	0.0	368.4
2000	347.6	11.0	0.0	0.6	0.0	0.6	0.0	7.6	1.4	3.2	0.0	0.0	0.0	371.4
2001	339.1	13.7	0.0	0.6	0.0	0.6	0.0	5.3	1.3	3.2	0.0	0.0	0.0	363.2
2002	352.3	15.5	0.0	0.6	0.0	0.6	0.0	4.7	1.4	4.6	0.0	0.0	(s)	379.0
2003	363.6	14.5	0.0	0.4	0.0	0.4	0.0	4.3	1.3	4.2	0.0	0.0	(s)	388.3
2004	366.7	9.4	0.0	0.3	0.0	0.3	0.0	4.5	1.4	4.1	0.0	0.0	0.1	386.5

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Vermont

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	137	0	224	19	2,958	82	819	404	70	3,332	478	46	8,431	0	873	--	--	254	--
1965	105	0	171	25	4,285	79	760	450	63	3,789	910	39	10,572	0	714	--	--	2,035	--
1970	87	3	271	14	5,741	121	502	542	66	5,077	905	45	13,285	0	786	--	--	5,758	--
1975	31	4	28	11	4,642	177	317	833	56	5,698	796	90	12,647	3,561	938	--	--	-4,439	--
1980	22	4	43	25	4,095	155	283	666	67	5,437	471	89	11,331	2,979	813	--	--	1,107	--
1985	80	5	330	22	4,583	201	577	791	61	5,813	122	75	12,574	2,999	922	--	--	-156	--
1990	8	7	27	15	4,566	180	223	1,401	69	6,696	237	86	13,499	3,616	1,365	--	--	-1,916	--
1995	3	7	253	12	5,361	127	204	1,673	66	7,211	215	0	15,121	3,859	973	--	--	-3,138	--
1996	2	7	290	10	5,732	99	239	1,834	64	7,331	282	0	15,882	3,799	1,231	--	--	-2,831	--
1997	110	8	792	12	5,344	106	282	1,540	67	7,606	323	0	16,073	4,267	1,067	--	--	-4,081	--
1998	2	8	162	10	5,215	121	509	1,777	70	7,510	274	0	15,650	3,358	1,194	--	--	-1,468	--
1999	82	8	174	12	5,441	143	355	1,617	71	7,699	220	0	15,732	4,059	1,196	--	--	-6,898	--
2000	1	10	166	40	5,276	144	444	1,769	70	8,394	309	0	16,613	4,548	1,221	--	--	-4,703	--
2001	2	8	297	44	5,371	120	401	2,425	64	8,021	241	0	16,984	4,171	884	--	--	^R -1,628	--
2002	1	8	175	10	4,866	65	218	2,352	64	8,164	253	0	16,166	3,963	1,115	--	--	-2,149	--
2003	1	8	93	9	5,251	68	369	1,867	59	8,304	292	0	16,311	4,444	1,154	--	--	-4,589	--
2004	1	9	464	21	5,861	309	492	1,987	59	8,407	297	0	17,899	3,858	1,187	--	--	-1,007	--

Trillion Btu																			
1960	3.5	0.0	1.5	0.1	17.2	0.4	4.6	1.6	0.4	17.5	3.0	0.3	46.7	0.0	9.4	7.9	0.2	0.9	68.6
1965	2.7	0.0	1.1	0.1	25.0	0.4	4.3	1.8	0.4	19.9	5.7	0.2	59.0	0.0	7.5	6.9	0.1	6.9	83.2
1970	2.1	2.7	1.8	0.1	33.4	0.7	2.8	2.0	0.4	26.7	5.7	0.3	73.9	0.0	8.2	6.5	0.2	19.6	113.2
1975	0.7	4.0	0.2	0.1	27.0	1.0	1.8	3.1	0.3	29.9	5.0	0.5	68.9	39.2	9.8	6.6	0.3	-15.1	114.4
1980	0.5	4.0	0.3	0.1	23.9	0.9	1.6	2.4	0.4	28.6	3.0	0.5	61.6	32.5	8.4	14.4	0.6	3.8	125.9
1985	2.0	5.0	2.2	0.1	26.7	1.1	3.3	2.8	0.4	30.5	0.8	0.4	68.3	31.9	9.6	17.3	1.1	-0.5	134.6
1990	0.2	6.7	0.2	0.1	26.6	1.0	1.3	5.1	0.4	35.2	1.5	0.5	71.7	38.3	14.2	^j 5.3	^j 5.8	-6.5	^j 135.7
1995	0.1	7.3	1.7	0.1	31.2	0.7	1.2	6.1	0.4	37.6	1.4	0.0	80.3	40.5	10.0	9.1	13.5	-10.7	150.1
1996	(s)	7.5	1.9	0.1	33.4	0.6	1.4	6.6	0.4	38.2	1.8	0.0	84.3	39.9	12.7	9.1	12.0	-9.7	155.9
1997	2.7	8.3	5.3	0.1	31.1	0.6	1.6	5.6	0.4	39.7	2.0	0.0	86.3	44.8	10.9	9.0	13.6	-13.9	161.7
1998	0.1	7.8	1.1	0.1	30.4	0.7	2.9	6.4	0.4	39.1	1.7	0.0	82.8	35.2	12.2	8.1	13.2	-5.0	154.4
1999	2.0	8.1	1.2	0.1	31.7	0.8	2.0	5.8	0.4	40.1	1.4	0.0	83.5	42.4	12.2	8.4	26.4	-23.5	159.6
2000	(s)	10.6	1.1	0.2	30.7	0.8	2.5	6.4	0.4	43.7	1.9	0.0	87.9	47.4	12.5	8.8	13.5	-16.0	164.6
2001	0.1	8.0	2.0	0.2	31.3	0.7	2.3	8.8	0.4	41.8	1.5	0.0	88.9	43.6	9.1	^R 8.1	10.4	-5.6	^R 162.6
2002	(s)	8.4	1.2	0.1	28.3	0.4	1.2	8.5	0.4	42.5	1.6	0.0	84.1	41.4	11.3	11.2	8.4	-7.3	157.6
2003	(s)	8.5	0.6	(s)	30.6	0.4	2.1	6.8	0.4	43.2	1.8	0.0	85.9	46.3	11.8	12.2	6.7	-15.7	155.8
2004	(s)	8.7	3.1	0.1	34.1	1.8	2.8	7.2	0.4	43.8	1.9	0.0	95.1	40.2	11.9	10.0	6.8	-3.4	169.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Vermont

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	45	0	2,044	701	258	3,003	173	--	--	451	--	1,114	--
1965	27	0	3,110	649	316	4,075	137	--	--	678	--	1,619	--
1970	16	1	3,873	436	356	4,665	105	--	--	1,216	--	2,944	--
1975	5	1	3,101	235	555	3,891	123	--	--	1,427	--	3,432	--
1980	2	1	2,171	230	356	2,757	215	--	--	1,781	--	4,294	--
1985	10	1	2,482	514	601	3,597	155	--	--	1,538	--	3,543	--
1990	1	2	2,293	193	1,109	3,595	99	--	--	1,809	--	4,184	--
1995	(s)	2	2,321	180	1,223	3,724	108	--	--	1,973	--	4,483	--
1996	(s)	3	2,368	203	1,378	3,950	113	--	--	2,006	--	4,563	--
1997	(s)	3	2,309	238	1,229	3,776	82	--	--	1,992	--	4,515	--
1998	(s)	2	2,008	326	1,388	3,722	73	--	--	1,951	--	4,427	--
1999	(s)	3	2,016	262	1,356	3,634	76	--	--	1,999	--	4,573	--
2000	(s)	3	2,450	326	1,315	4,091	82	--	--	2,037	--	4,634	--
2001	(s)	3	2,220	320	1,804	4,344	65	--	--	2,009	--	^R 4,519	--
2002	(s)	3	2,114	186	1,804	4,104	66	--	--	2,047	--	4,585	--
2003	(s)	3	2,301	276	1,465	4,042	69	--	--	2,011	--	4,468	--
2004	(s)	3	2,696	400	1,561	4,657	71	--	--	2,109	--	4,695	--
Trillion Btu													
1960	1.1	0.0	11.9	4.0	1.0	16.9	3.5	0.0	0.0	1.5	23.0	3.8	26.8
1965	0.7	0.0	18.1	3.7	1.3	23.1	2.7	0.0	0.0	2.3	28.8	5.5	34.3
1970	0.4	1.1	22.6	2.5	1.3	26.4	2.1	0.0	0.0	4.1	34.1	10.0	44.1
1975	0.1	1.1	18.1	1.3	2.1	21.5	2.5	0.0	0.0	4.9	30.0	11.7	41.7
1980	0.1	1.3	12.6	1.3	1.3	15.3	4.3	0.0	0.0	6.1	27.0	14.7	41.6
1985	0.2	1.4	14.5	2.9	2.2	19.5	3.1	0.0	0.0	5.2	29.6	12.1	41.7
1990	(s)	2.1	13.4	1.1	4.0	18.5	2.0	^f 0.0	^f (s)	6.2	^f 28.8	14.3	^f 43.1
1995	(s)	2.3	13.5	1.0	4.4	19.0	2.2	0.0	(s)	6.7	30.2	15.3	45.5
1996	(s)	2.6	13.8	1.2	5.0	19.9	2.3	0.0	(s)	6.8	31.6	15.6	47.2
1997	(s)	2.7	13.4	1.4	4.4	19.2	1.6	0.0	(s)	6.8	30.4	15.4	45.8
1998	(s)	2.5	11.7	1.8	5.0	18.6	1.5	0.0	(s)	6.7	29.2	15.1	44.3
1999	(s)	2.6	11.7	1.5	4.9	18.1	1.5	(s)	(s)	6.8	29.1	15.6	44.7
2000	(s)	2.9	14.3	1.8	4.7	20.9	1.6	(s)	(s)	7.0	32.4	15.8	48.2
2001	(s)	2.8	12.9	1.8	6.5	21.3	1.3	(s)	(s)	6.9	32.2	15.4	47.6
2002	(s)	2.8	12.3	1.1	6.5	19.9	1.3	(s)	(s)	7.0	31.0	15.6	46.6
2003	(s)	3.1	13.4	1.6	5.3	20.3	1.4	(s)	(s)	6.9	31.7	15.2	47.0
2004	(s)	3.1	15.7	2.3	5.6	23.6	1.4	(s)	(s)	7.2	35.4	16.0	51.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Vermont

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
	Thousand Short Tons	Billion Cubic Feet	Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total	Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
			Thousand Barrels												
1960	31	0	418	43	46	127	225	859	0	--	--	233	--	577	--
1965	21	0	636	40	56	24	422	1,177	0	--	--	303	--	724	--
1970	13	1	792	27	63	25	414	1,320	0	--	--	609	--	1,473	--
1975	11	1	634	15	98	30	373	1,149	0	--	--	709	--	1,705	--
1980	9	1	620	44	63	33	237	996	0	--	--	923	--	2,225	--
1985	36	2	591	36	106	40	24	797	0	--	--	959	--	2,209	--
1990	6	2	669	12	196	41	119	1,037	^g 0	--	--	1,526	--	3,531	--
1995	3	3	692	14	216	7	71	999	0	--	--	1,647	--	3,741	--
1996	1	3	795	13	243	7	72	1,131	0	--	--	1,696	--	3,858	--
1997	2	3	850	21	217	7	111	1,205	0	--	--	1,759	--	3,987	--
1998	2	3	938	32	245	7	107	1,328	0	--	--	1,878	--	4,260	--
1999	2	2	946	35	239	7	71	1,298	0	--	--	1,941	--	4,442	--
2000	1	3	1,040	23	232	7	101	1,403	0	--	--	1,956	--	4,450	--
2001	2	2	1,009	35	318	7	92	1,461	0	--	--	1,968	--	^R 4,425	--
2002	1	2	865	16	318	7	121	1,327	0	--	--	1,991	--	4,460	--
2003	1	3	942	21	259	7	151	1,380	0	--	--	1,881	--	4,178	--
2004	1	3	1,036	34	276	7	147	1,499	0	--	--	1,978	--	4,402	--
Trillion Btu															
1960	0.8	0.0	2.4	0.2	0.2	0.7	1.4	4.9	0.0	0.1	0.0	0.8	6.6	2.0	8.5
1965	0.5	0.0	3.7	0.2	0.2	0.1	2.7	6.9	0.0	0.1	0.0	1.0	8.5	2.5	11.0
1970	0.3	0.6	4.6	0.2	0.2	0.1	2.6	7.7	0.0	(s)	0.0	2.1	10.7	5.0	15.7
1975	0.2	0.8	3.7	0.1	0.4	0.2	2.3	6.6	0.0	(s)	0.0	2.4	10.1	5.8	15.9
1980	0.2	0.8	3.6	0.2	0.2	0.2	1.5	5.7	0.0	0.1	0.0	3.1	10.0	7.6	17.6
1985	0.9	1.6	3.4	0.2	0.4	0.2	0.1	4.4	0.0	0.1	0.0	3.3	10.2	7.5	17.7
1990	0.1	2.0	3.9	0.1	0.7	0.2	0.7	5.6	^g 0.0	^g 0.2	^g 0.0	5.2	^g 13.2	12.0	^g 25.3
1995	0.1	2.7	4.0	0.1	0.8	(s)	0.4	5.4	0.0	0.3	0.0	5.6	14.0	12.8	26.8
1996	(s)	2.9	4.6	0.1	0.9	(s)	0.5	6.1	0.0	0.3	0.0	5.8	15.1	13.2	28.2
1997	0.1	3.1	4.9	0.1	0.8	(s)	0.7	6.6	0.0	0.3	0.0	6.0	16.0	13.6	29.6
1998	(s)	3.0	5.5	0.2	0.9	(s)	0.7	7.2	0.0	0.2	0.0	6.4	16.9	14.5	31.5
1999	(s)	2.3	5.5	0.2	0.9	(s)	0.4	7.1	0.0	0.3	0.0	6.6	16.3	15.2	31.5
2000	(s)	2.6	6.1	0.1	0.8	(s)	0.6	7.7	0.0	0.3	0.0	6.7	17.3	15.2	32.5
2001	(s)	2.5	5.9	0.2	1.2	(s)	0.6	7.8	0.0	0.2	0.0	6.7	17.3	15.1	32.4
2002	(s)	2.5	5.0	0.1	1.2	(s)	0.8	7.1	0.0	0.2	0.0	6.8	16.6	15.2	31.8
2003	(s)	2.8	5.5	0.1	0.9	(s)	1.0	7.5	0.0	0.2	0.0	6.4	17.0	14.3	31.2
2004	(s)	2.7	6.0	0.2	1.0	(s)	0.9	8.2	0.0	0.2	0.0	6.7	17.9	15.0	32.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Vermont

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	41	0	224	234	75	99	2	0	252	46	931	64	--	--	191	--	471
1965	14	0	171	316	71	77	19	100	484	39	1,278	53	--	--	352	--	841
1970	3	1	271	463	39	121	17	68	466	45	1,489	62	--	--	787	--	1,905
1975	2	2	28	364	68	179	10	77	421	90	1,237	67	--	--	858	--	2,064
1980	2	2	43	501	9	245	15	19	235	89	1,155	70	--	--	1,247	--	3,007
1985	6	2	330	500	26	70	14	117	98	75	1,230	70	--	--	1,518	--	3,497
1990	1	2	27	554	17	85	16	81	115	86	981	^g 17	--	--	1,381	--	3,195
1995	0	2	253	328	10	220	15	89	144	0	1,058	18	--	--	1,484	--	3,371
1996	0	2	290	326	22	196	14	90	210	0	1,149	16	--	--	1,537	--	3,496
1997	107	2	792	345	23	77	15	95	212	0	1,560	22	--	--	1,561	--	3,536
1998	0	2	162	379	151	144	16	76	168	0	1,095	24	--	--	1,534	--	3,480
1999	80	3	174	409	58	19	16	82	149	0	908	20	--	--	1,587	--	3,632
2000	0	4	166	381	95	223	16	79	207	0	1,166	20	--	--	1,646	--	3,745
2001	0	3	297	366	46	303	15	170	149	0	1,344	16	--	--	1,608	--	^R 3,617
2002	0	3	175	338	15	229	14	179	132	0	1,083	16	--	--	1,592	--	3,566
2003	0	2	93	432	71	139	13	210	141	0	1,099	6	--	--	1,460	--	3,243
2004	0	3	464	586	59	145	13	237	151	0	1,656	21	--	--	1,577	--	3,510

Trillion Btu																	
1960	1.1	0.0	1.5	1.4	0.4	0.4	(s)	0.0	1.6	0.3	5.5	0.7	4.4	0.0	0.7	12.4	1.6
1965	0.4	0.0	1.1	1.8	0.4	0.3	0.1	0.5	3.0	0.2	7.6	0.6	4.1	0.0	1.2	13.9	2.9
1970	0.1	1.1	1.8	2.7	0.2	0.5	0.1	0.4	2.9	0.3	8.8	0.6	4.3	0.0	2.7	17.6	6.5
1975	0.1	1.5	0.2	2.1	0.4	0.7	0.1	0.4	2.6	0.5	7.0	0.7	4.1	0.0	2.9	16.3	7.0
1980	(s)	1.6	0.3	2.9	0.1	0.9	0.1	0.1	1.5	0.5	6.3	0.7	9.5	0.0	4.3	22.5	10.3
1985	0.1	1.9	2.2	2.9	0.1	0.3	0.1	0.6	0.6	0.4	7.2	0.7	11.2	0.0	5.2	26.3	11.9
1990	(s)	1.8	0.2	3.2	0.1	0.3	0.1	0.4	0.7	0.5	5.5	^g 0.2	^g 2.1	^g 0.0	4.7	^g 14.4	^g 25.3
1995	0.0	2.1	1.7	1.9	0.1	0.8	0.1	0.5	0.9	0.0	5.9	0.2	3.2	0.0	5.1	16.5	11.5
1996	0.0	2.0	1.9	1.9	0.1	0.7	0.1	0.5	1.3	0.0	6.5	0.2	2.9	0.0	5.2	16.9	11.9
1997	2.6	2.4	5.3	2.0	0.1	0.3	0.1	0.5	1.3	0.0	9.6	0.2	3.2	0.0	5.3	23.4	12.1
1998	0.0	2.1	1.1	2.2	0.9	0.5	0.1	0.4	1.1	0.0	6.2	0.2	2.7	0.0	5.2	16.5	11.9
1999	2.0	2.9	1.2	2.4	0.3	0.1	0.1	0.4	0.9	0.0	5.4	0.2	2.5	0.0	5.4	18.4	12.4
2000	0.0	4.0	1.1	2.2	0.5	0.8	0.1	0.4	1.3	0.0	6.5	0.2	3.0	0.0	5.6	19.3	12.8
2001	0.0	2.6	2.0	2.1	0.3	1.1	0.1	0.9	0.9	0.0	7.4	0.2	2.6	0.0	5.5	18.2	^R 12.3
2002	0.0	3.1	1.2	2.0	0.1	0.8	0.1	0.9	0.8	0.0	5.9	0.2	1.3	0.0	5.4	15.9	12.2
2003	0.0	2.5	0.6	2.5	0.4	0.5	0.1	1.1	0.9	0.0	6.1	0.1	1.2	0.0	5.0	14.8	11.1
2004	0.0	2.8	3.1	3.4	0.3	0.5	0.1	1.2	0.9	0.0	9.6	0.2	1.5	0.0	5.4	19.5	12.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Vermont

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	1	0	19	254	82	(s)	68	3,205	0	3,629	0	0	--	0	--
1965	(s)	0	25	185	79	1	44	3,665	0	4,000	0	0	--	0	--
1970	(s)	0	14	346	121	3	49	4,985	2	5,519	0	0	--	0	--
1975	(s)	0	11	504	129	1	45	5,591	2	6,284	0	0	--	0	--
1980	0	0	25	757	137	2	52	5,386	0	6,359	0	0	--	0	--
1985	0	(s)	22	977	201	13	47	5,656	0	6,916	^f 0	0	--	0	--
1990	0	(s)	15	1,043	180	11	53	6,574	3	7,878	0	0	--	0	--
1995	0	(s)	12	1,981	127	15	51	7,116	0	9,302	0	0	--	0	--
1996	0	(s)	10	2,227	99	16	49	7,234	0	9,636	0	0	--	0	--
1997	0	(s)	12	1,809	106	17	52	7,504	0	9,501	0	0	--	0	--
1998	0	(s)	10	1,784	121	(s)	55	7,428	0	9,398	0	(s)	--	(s)	--
1999	0	(s)	12	2,006	143	2	55	7,610	0	9,828	0	0	--	0	--
2000	0	(s)	40	1,245	144	0	54	8,309	0	9,793	0	0	--	0	--
2001	0	(s)	44	1,690	120	(s)	50	7,844	0	9,748	0	0	--	0	--
2002	0	(s)	10	1,518	65	(s)	49	7,978	0	9,621	0	0	--	0	--
2003	0	(s)	9	1,519	68	4	45	8,088	0	9,733	0	0	--	0	--
2004	0	(s)	21	1,498	309	5	46	8,164	0	10,042	0	0	--	0	--

Trillion Btu															
1960	(s)	0.0	0.1	1.5	0.4	(s)	0.4	16.8	0.0	19.3	0.0	0.0	19.3	0.0	19.3
1965	(s)	0.0	0.1	1.1	0.4	(s)	0.3	19.3	0.0	21.2	0.0	0.0	21.2	0.0	21.2
1970	(s)	0.0	0.1	2.0	0.7	(s)	0.3	26.2	(s)	29.3	0.0	0.0	29.3	0.0	29.3
1975	(s)	0.0	0.1	2.9	0.7	(s)	0.3	29.4	(s)	33.4	0.0	0.0	33.4	0.0	33.4
1980	0.0	0.0	0.1	4.4	0.8	(s)	0.3	28.3	0.0	33.9	0.0	0.0	33.9	0.0	33.9
1985	0.0	(s)	0.1	5.7	1.1	(s)	0.3	29.7	0.0	37.0	^f 0.0	0.0	^f 37.0	0.0	^f 37.0
1990	0.0	(s)	0.1	6.1	1.0	(s)	0.3	34.5	(s)	42.1	0.0	0.0	42.1	0.0	42.1
1995	0.0	(s)	0.1	11.5	0.7	0.1	0.3	37.1	0.0	49.8	0.0	0.0	49.8	0.0	49.8
1996	0.0	(s)	0.1	13.0	0.6	0.1	0.3	37.7	0.0	51.7	0.0	0.0	51.7	0.0	51.7
1997	0.0	0.2	0.1	10.5	0.6	0.1	0.3	39.1	0.0	50.7	0.0	0.0	50.9	0.0	50.9
1998	0.0	(s)	0.1	10.4	0.7	(s)	0.3	38.7	0.0	50.2	0.0	(s)	50.2	(s)	50.2
1999	0.0	(s)	0.1	11.7	0.8	(s)	0.3	39.7	0.0	52.6	0.0	0.0	52.6	0.0	52.6
2000	0.0	(s)	0.2	7.3	0.8	0.0	0.3	43.3	0.0	51.9	0.0	0.0	51.9	0.0	51.9
2001	0.0	(s)	0.2	9.8	0.7	(s)	0.3	40.9	0.0	51.9	0.0	0.0	51.9	0.0	51.9
2002	0.0	(s)	0.1	8.8	0.4	(s)	0.3	41.5	0.0	51.1	0.0	0.0	51.1	0.0	51.1
2003	0.0	(s)	(s)	8.8	0.4	(s)	0.3	42.1	0.0	51.7	0.0	0.0	51.7	0.0	51.7
2004	0.0	(s)	0.1	8.7	1.8	(s)	0.3	42.6	0.0	53.5	0.0	0.0	53.5	0.0	53.5

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Vermont

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	19	0	1	8	0	9	0	809	--	0	0	0	64	--
1965	43	0	3	38	0	42	0	661	--	0	0	0	41	--
1970	55	0	23	268	0	291	0	724	--	0	0	0	50	--
1975	13	1	(s)	86	0	87	3,561	871	--	0	0	0	75	--
1980	9	(s)	0	63	0	63	2,979	743	--	0	0	0	187	--
1985	28	(s)	0	34	0	34	2,999	852	--	0	0	0	321	--
1990	0	1	0	8	0	8	3,616	1,348	--	ⁱ 0	ⁱ 0	ⁱ 0	1,710	--
1995	0	(s)	0	39	0	39	3,859	954	--	0	0	0	3,954	--
1996	0	(s)	0	16	0	16	3,799	1,216	--	0	0	0	3,517	--
1997	0	(s)	0	31	0	31	4,267	1,046	--	0	0	0	3,974	--
1998	0	(s)	0	107	0	107	3,358	1,170	--	0	0	0	3,861	--
1999	0	(s)	0	64	0	64	4,059	1,175	--	0	0	14	7,672	--
2000	0	1	0	159	0	159	4,548	1,201	--	0	0	12	3,917	--
2001	0	(s)	0	87	0	87	4,171	868	--	0	0	12	2,999	--
2002	0	(s)	0	31	0	31	3,963	1,099	--	0	0	10	2,433	--
2003	0	(s)	0	57	0	57	4,444	1,148	--	0	0	11	1,916	--
2004	0	(s)	0	45	0	45	3,858	1,166	--	0	0	11	1,938	--
Trillion Btu														
1960	0.5	0.0	(s)	(s)	0.0	0.1	0.0	8.7	0.0	0.0	0.0	0.0	0.2	9.5
1965	1.2	0.0	(s)	0.2	0.0	0.2	0.0	6.9	0.0	0.0	0.0	0.0	0.1	8.5
1970	1.4	0.0	0.1	1.6	0.0	1.7	0.0	7.6	0.0	0.0	0.0	0.0	0.2	10.8
1975	0.3	0.6	(s)	0.5	0.0	0.5	39.2	9.1	0.0	0.0	0.0	0.0	0.3	49.9
1980	0.2	0.2	0.0	0.4	0.0	0.4	32.5	7.7	0.5	0.0	0.0	0.0	0.6	42.2
1985	0.7	0.1	0.0	0.2	0.0	0.2	31.9	8.9	2.9	0.0	0.0	0.0	1.1	45.8
1990	0.0	0.7	0.0	(s)	0.0	(s)	38.3	14.0	ⁱ 1.0	ⁱ 0.0	ⁱ 0.0	ⁱ 0.0	5.8	ⁱ 59.9
1995	0.0	0.1	0.0	0.2	0.0	0.2	40.5	9.8	3.4	0.0	0.0	0.0	13.5	67.7
1996	0.0	(s)	0.0	0.1	0.0	0.1	39.9	12.6	3.6	0.0	0.0	0.0	12.0	68.2
1997	0.0	(s)	0.0	0.2	0.0	0.2	44.8	10.7	3.9	0.0	0.0	0.0	13.6	73.1
1998	0.0	0.2	0.0	0.6	0.0	0.6	35.2	11.9	3.7	0.0	0.0	0.0	13.2	64.8
1999	0.0	0.3	0.0	0.4	0.0	0.4	42.4	12.0	4.2	0.0	0.0	0.1	26.2	85.5
2000	0.0	1.0	0.0	0.9	0.0	0.9	47.4	12.3	3.9	0.0	0.0	0.1	13.4	79.1
2001	0.0	0.1	0.0	0.5	0.0	0.5	43.6	9.0	3.9	0.0	0.0	0.1	10.2	67.5
2002	0.0	(s)	0.0	0.2	0.0	0.2	41.4	11.2	8.4	0.0	0.0	0.1	8.3	69.6
2003	0.0	(s)	0.0	0.3	0.0	0.3	46.3	11.8	9.4	0.0	0.0	0.1	6.5	74.5
2004	0.0	0.1	0.0	0.3	0.0	0.3	40.2	11.7	6.8	0.0	0.0	0.1	6.6	65.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	12,141	66	1,753	382	14,146	4,441	5,038	1,146	633	31,077	17,825	1,705	78,148	0	1,267	--	--	-13,330	--
1965	14,904	96	2,681	721	18,609	6,504	5,544	1,658	664	36,104	16,780	2,647	91,912	0	883	--	--	-4,623	--
1970	11,294	137	2,250	356	24,640	11,093	5,029	2,412	720	48,684	33,373	3,876	132,434	0	691	--	--	16,222	--
1975	7,130	121	2,328	251	22,996	11,602	2,264	3,077	734	59,293	40,953	2,688	146,186	8,970	1,311	--	--	22,564	--
1980	9,291	158	2,618	218	24,599	12,279	1,716	3,131	952	59,035	24,651	10,233	139,431	11,466	892	--	--	55,974	--
1985	11,656	139	4,033	131	26,519	11,038	4,032	3,932	866	62,979	8,571	4,958	127,059	22,303	845	--	--	61,352	--
1990	13,960	184	4,701	70	29,812	15,806	1,374	4,088	975	70,333	7,807	3,979	138,942	23,820	1,309	--	--	86,757	--
1995	15,084	276	3,639	85	30,580	10,589	1,618	4,783	930	78,828	5,482	5,231	141,765	25,135	995	--	--	92,598	--
1996	16,931	260	3,512	79	35,832	9,204	1,935	5,156	903	79,164	4,082	6,215	146,082	26,286	1,429	--	--	89,266	--
1997	17,165	249	3,474	50	37,717	9,402	2,046	5,216	953	81,440	5,202	6,616	152,118	27,084	1,020	--	--	84,096	--
1998	17,320	260	3,889	90	35,855	10,183	2,604	4,006	998	82,197	7,332	6,546	153,700	27,234	1,283	--	--	83,703	--
1999	17,431	277	4,770	106	35,952	9,314	1,922	4,587	1,009	84,814	7,492	6,704	156,669	28,301	682	--	--	86,484	--
2000	19,606	269	3,883	97	39,664	9,943	1,974	6,097	993	85,628	9,895	6,398	164,572	28,321	712	--	--	86,280	--
2001	^R 19,049	238	4,252	165	39,291	9,981	1,972	4,825	910	90,793	9,099	7,563	168,851	25,759	1,014	--	--	^R 89,033	--
2002	^R 18,876	258	3,382	134	37,379	9,955	1,069	5,345	899	91,548	6,734	7,772	164,216	27,346	868	--	--	^R 99,225	--
2003	^R 18,709	263	3,808	117	42,026	11,461	1,506	5,686	832	93,019	10,664	7,984	177,102	24,816	1,782	--	--	^R 105,082	--
2004	18,205	277	4,311	141	45,636	16,754	1,754	5,452	842	94,823	11,525	8,463	189,701	28,315	1,583	--	--	106,981	--
Trillion Btu																			
1960	316.4	68.4	11.6	1.9	82.4	24.0	28.6	4.6	3.8	163.2	112.1	10.1	442.5	0.0	13.6	56.1	0.0	-45.5	851.5
1965	386.3	98.6	17.8	3.6	108.4	35.8	31.4	6.6	4.0	189.7	105.5	15.4	518.2	0.0	9.2	54.2	0.0	-15.8	1,050.8
1970	275.3	140.1	14.9	1.8	143.5	61.9	28.5	9.1	4.4	255.7	209.8	22.5	752.2	0.0	7.3	55.5	0.0	55.3	1,285.6
1975	169.2	123.6	15.4	1.3	133.9	64.9	12.8	11.4	4.5	311.5	257.5	15.5	828.8	98.8	13.6	53.2	0.0	77.0	1,364.2
1980	231.8	161.0	17.4	1.1	143.3	68.8	9.7	11.5	5.8	310.1	155.0	56.8	779.4	125.1	9.3	76.3	0.0	191.0	1,573.9
1985	297.1	144.9	26.8	0.7	154.5	61.7	22.9	14.2	5.3	330.8	53.9	27.4	697.9	236.9	8.8	90.5	0.0	209.3	1,687.9
1990	355.1	192.1	31.2	0.4	173.7	88.5	7.8	14.8	5.9	369.5	49.1	22.2	763.0	252.1	13.6	^j 90.4	^j 0.3	296.0	^j 1,963.9
1995	385.1	284.3	24.1	0.4	178.1	60.0	9.2	17.3	5.6	411.1	34.5	29.0	769.4	264.1	10.3	115.4	0.4	315.9	2,144.9
1996	428.7	270.6	23.3	0.4	208.7	52.2	11.0	18.6	5.5	412.9	25.7	34.2	792.4	276.1	14.8	121.0	0.4	304.6	2,208.6
1997	432.8	259.9	23.1	0.3	219.7	53.3	11.6	18.9	5.8	424.5	32.7	36.5	826.4	284.2	10.4	112.5	0.4	286.9	2,213.6
1998	438.5	271.5	25.8	0.5	208.9	57.7	14.8	14.5	6.1	428.4	46.1	36.1	838.7	285.7	13.1	109.2	0.5	285.6	2,242.9
1999	444.5	287.3	31.7	0.5	209.4	52.8	10.9	16.6	6.1	442.0	47.1	36.8	853.8	295.7	7.0	112.8	0.5	295.1	2,296.9
2000	507.0	278.2	25.8	0.5	231.0	56.4	11.2	22.0	6.0	446.1	62.2	35.0	896.2	295.4	7.3	106.4	0.5	294.4	2,385.3
2001	^R 487.6	246.7	28.2	0.8	228.9	56.6	11.2	17.4	5.5	473.0	57.2	41.5	920.4	269.1	10.5	89.9	0.6	^R 303.8	^R 2,328.6
2002	^R 482.8	267.2	22.4	0.7	217.7	56.4	6.1	19.3	5.5	476.8	42.3	42.7	889.9	285.5	8.8	76.9	0.7	338.6	^R 2,350.4
2003	^R 464.4	272.2	25.3	0.6	244.8	65.0	8.5	20.6	5.0	484.4	67.0	44.0	965.2	258.6	18.2	95.3	0.8	358.5	^R 2,433.3
2004	452.5	284.9	28.6	0.7	265.8	95.0	9.9	19.7	5.1	494.5	72.5	46.6	1,038.5	295.2	15.9	105.2	0.9	365.0	2,558.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Net Energy	
1960	766	27	6,520	4,655	734	11,909	1,499	--	--	4,099	--	10,137	--
1965	454	36	7,471	4,847	1,133	13,452	1,110	--	--	6,557	--	15,657	--
1970	264	50	9,734	4,544	1,430	15,708	882	--	--	11,546	--	27,945	--
1975	97	49	9,091	2,056	1,561	12,708	925	--	--	15,871	--	38,167	--
1980	41	55	7,380	1,403	1,506	10,289	1,027	--	--	19,731	--	47,574	--
1985	60	49	5,738	3,611	1,805	11,154	1,259	--	--	22,568	--	51,988	--
1990	47	51	6,069	1,160	2,124	9,352	518	--	--	28,130	--	65,070	--
1995	37	69	5,162	1,220	2,874	9,256	779	--	--	33,472	--	76,035	--
1996	47	76	5,770	1,544	3,188	10,502	809	--	--	34,651	--	78,816	--
1997	20	74	5,214	1,583	3,438	10,235	618	--	--	33,923	--	76,878	--
1998	19	63	5,021	2,053	2,624	9,697	549	--	--	34,703	--	78,724	--
1999	15	69	4,951	1,548	2,927	9,426	578	--	--	35,779	--	81,861	--
2000	9	80	5,679	1,642	3,500	10,820	621	--	--	37,541	--	85,412	--
2001	14	70	5,187	1,681	3,179	10,046	395	--	--	37,325	--	^R 83,947	--
2002	9	75	4,884	935	3,059	8,878	401	--	--	40,358	--	90,414	--
2003	14	85	5,144	1,261	3,869	10,274	422	--	--	40,877	--	90,802	--
2004	10	83	5,601	1,454	3,944	10,999	432	--	--	42,503	--	94,605	--
Trillion Btu													
1960	19.0	27.9	38.0	26.4	2.9	67.3	30.0	0.0	0.0	14.0	158.1	34.6	192.7
1965	11.2	37.4	43.5	27.5	4.5	75.5	22.2	0.0	0.0	22.4	168.7	53.4	222.2
1970	6.3	50.8	56.7	25.8	5.4	87.9	17.6	0.0	0.0	39.4	202.0	95.3	297.4
1975	2.3	49.7	53.0	11.7	5.8	70.4	18.5	0.0	0.0	54.2	195.0	130.2	325.3
1980	1.0	55.6	43.0	8.0	5.5	56.5	20.5	0.0	0.0	67.3	201.0	162.3	363.3
1985	1.5	50.7	33.4	20.5	6.5	60.4	25.2	0.0	0.0	77.0	214.7	177.4	392.1
1990	1.2	53.6	35.4	6.6	7.7	49.6	10.4	^f 0.1	^f 0.1	96.0	^f 211.0	222.0	^f 433.0
1995	0.9	70.8	30.1	6.9	10.4	47.4	15.6	0.1	0.1	114.2	249.2	259.4	508.6
1996	1.2	79.2	33.6	8.8	11.5	53.9	16.2	0.1	0.1	118.2	269.0	268.9	537.9
1997	0.5	77.1	30.4	9.0	12.4	51.8	12.4	0.1	0.1	115.7	257.8	262.3	520.1
1998	0.5	66.0	29.2	11.6	9.5	50.4	11.0	0.1	0.1	118.4	246.5	268.6	515.1
1999	0.4	71.8	28.8	8.8	10.6	48.2	11.6	0.2	0.1	122.1	254.3	279.3	533.7
2000	0.2	82.5	33.1	9.3	12.6	55.0	12.4	0.2	0.1	128.1	278.5	291.4	570.0
2001	0.4	72.9	30.2	9.5	11.5	51.2	7.9	0.2	0.2	127.4	260.1	^R 286.4	^R 546.5
2002	0.2	78.2	28.4	5.3	11.1	44.8	8.0	0.2	0.2	137.7	269.4	308.5	577.9
2003	0.3	88.4	30.0	7.1	14.0	51.2	8.4	0.3	0.2	139.5	288.3	309.8	598.1
2004	0.3	85.0	32.6	8.2	14.3	55.1	8.6	0.3	0.2	145.0	294.6	322.8	617.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical

system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^R = Revised data.

-- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	533	11	1,388	93	130	223	175	2,009	0	--	--	3,676	--	9,091	--
1965	342	15	1,591	97	200	275	211	2,373	0	--	--	6,192	--	14,786	--
1970	207	30	2,072	91	252	210	118	2,744	0	--	--	10,804	--	26,149	--
1975	226	32	1,935	41	275	310	245	2,807	0	--	--	14,014	--	33,700	--
1980	152	38	1,634	46	266	371	443	2,759	0	--	--	16,969	--	40,914	--
1985	211	34	2,747	214	319	456	443	4,179	0	--	--	21,491	--	49,509	--
1990	189	41	2,815	139	375	478	218	4,025	^g 0	--	--	28,082	--	64,960	--
1995	248	57	2,657	275	507	132	205	3,776	0	--	--	33,051	--	75,079	--
1996	348	59	3,398	277	563	130	253	4,621	0	--	--	33,839	--	76,971	--
1997	162	62	2,974	372	607	137	128	4,217	0	--	--	34,165	--	77,425	--
1998	153	58	3,097	433	463	123	112	4,229	0	--	--	35,793	--	81,197	--
1999	109	62	2,864	317	517	166	182	4,045	0	--	--	36,893	--	84,411	--
2000	74	66	3,322	276	618	122	431	4,768	0	--	--	38,459	--	87,501	--
2001	115	60	2,959	228	561	124	282	4,154	0	--	--	39,329	--	^R 88,453	--
2002	68	63	2,457	88	540	127	74	3,285	0	--	--	40,642	--	91,050	--
2003	92	64	3,150	195	683	123	405	4,556	0	--	--	41,179	--	91,474	--
2004	82	65	3,027	242	696	126	316	4,407	0	--	--	43,025	--	95,766	--

Trillion Btu															
1960	13.2	11.7	8.1	0.5	0.5	1.2	1.1	11.4	0.0	0.6	0.0	12.5	49.4	31.0	80.5
1965	8.4	15.3	9.3	0.5	0.8	1.4	1.3	13.4	0.0	0.4	0.0	21.1	58.6	50.4	109.1
1970	4.9	30.9	12.1	0.5	1.0	1.1	0.7	15.4	0.0	0.3	0.0	36.9	88.4	89.2	177.6
1975	5.3	33.0	11.3	0.2	1.0	1.6	1.5	15.7	0.0	0.4	0.0	47.8	102.1	115.0	217.1
1980	3.7	39.0	9.5	0.3	1.0	1.9	2.8	15.5	0.0	0.5	0.0	57.9	116.6	139.6	256.2
1985	5.3	35.3	16.0	1.2	1.1	2.4	2.8	23.5	0.0	0.6	0.0	73.3	138.0	168.9	307.0
1990	4.7	42.8	16.4	0.8	1.4	2.5	1.4	22.4	^g 0.0	^g 7.3	^g (s)	95.8	^g 173.1	221.6	^g 394.7
1995	6.2	58.7	15.5	1.6	1.8	0.7	1.3	20.8	0.0	5.4	0.1	112.8	204.1	256.2	460.2
1996	8.7	61.6	19.8	1.6	2.0	0.7	1.6	25.7	0.0	9.1	0.1	115.5	220.7	262.6	483.3
1997	4.0	64.6	17.3	2.1	2.2	0.7	0.8	23.1	0.0	9.5	0.2	116.6	218.0	264.2	482.2
1998	4.0	60.8	18.0	2.5	1.7	0.6	0.7	23.5	0.0	9.7	0.2	122.1	220.5	277.0	497.5
1999	2.9	63.8	16.7	1.8	1.9	0.9	1.1	22.4	0.0	9.3	0.2	125.9	224.4	288.0	512.5
2000	1.9	68.4	19.3	1.6	2.2	0.6	2.7	26.5	0.0	10.1	0.2	131.2	238.3	298.6	536.9
2001	2.9	62.1	17.2	1.3	2.0	0.6	1.8	23.0	0.0	9.7	0.3	134.2	232.1	^R 301.8	^R 533.9
2002	1.7	65.0	14.3	0.5	2.0	0.7	0.5	17.9	0.0	8.5	0.3	138.7	232.0	310.7	542.7
2003	2.3	66.3	18.3	1.1	2.5	0.6	2.5	25.1	0.0	10.4	0.3	140.5	245.0	312.1	557.1
2004	2.1	66.3	17.6	1.4	2.5	0.7	2.0	24.2	0.0	12.0	0.4	146.8	251.6	326.8	578.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh						
1960	4,503	22	1,753	2,133	291	275	182	882	5,739	1,705	12,961	79	--	--	3,786	--	9,364	--
1965	5,824	36	2,681	2,977	600	301	236	838	6,754	2,647	17,033	87	--	--	5,834	--	13,931	--
1970	4,172	45	2,250	4,415	395	682	289	653	4,170	3,020	15,874	41	--	--	7,467	--	18,073	--
1975	2,816	37	2,328	3,128	167	1,184	307	460	7,611	2,688	17,872	38	--	--	9,437	--	22,695	--
1980	3,538	55	2,618	3,573	267	1,312	422	278	5,203	10,233	23,905	27	--	--	11,637	--	28,059	--
1985	4,219	51	4,033	3,389	207	1,707	384	686	3,408	4,958	18,772	27	--	--	13,561	--	31,241	--
1990	4,641	75	4,701	3,625	75	1,526	432	705	2,853	3,979	17,896	⁹ 0	--	--	16,399	--	37,934	--
1995	3,551	99	3,639	3,661	122	1,338	412	718	1,777	5,231	16,899	14	--	--	18,554	--	42,148	--
1996	3,594	86	3,512	4,366	114	1,349	400	766	1,790	6,215	18,512	9	--	--	19,021	--	43,265	--
1997	3,486	87	3,474	4,997	91	1,124	423	801	2,412	6,616	19,938	13	--	--	19,249	--	43,623	--
1998	3,385	94	3,889	4,431	118	884	443	794	2,012	6,546	19,115	11	--	--	20,024	--	45,425	--
1999	3,249	97	4,770	4,279	56	1,130	447	571	1,704	6,704	19,661	13	--	--	20,269	--	46,375	--
2000	^R 3,425	78	3,883	4,857	56	1,945	441	569	1,867	6,398	20,015	13	--	--	20,619	--	46,911	--
2001	^R 3,492	67	4,252	5,091	63	1,078	404	1,377	1,220	7,563	21,048	1	--	--	19,702	--	^R 44,311	--
2002	^R 3,382	77	3,382	4,570	46	1,727	399	1,392	686	7,772	19,974	2	--	--	19,521	--	43,732	--
2003	^R 3,403	71	3,808	5,797	50	1,084	369	1,398	2,092	7,984	22,581	6	--	--	19,282	--	42,833	--
2004	3,230	76	4,311	6,758	57	766	374	1,744	2,446	8,463	24,918	(s)	--	--	19,734	--	43,926	--
Trillion Btu																		
1960	114.9	23.3	11.6	12.4	1.6	1.1	1.1	4.6	36.1	10.1	78.8	0.8	25.5	0.0	12.9	256.2	32.0	288.2
1965	147.4	36.6	17.8	17.3	3.4	1.2	1.4	4.4	42.5	15.4	103.4	0.9	31.6	0.0	19.9	339.8	47.5	387.3
1970	99.3	46.0	14.9	25.7	2.2	2.6	1.8	3.4	26.2	17.3	94.2	0.4	37.5	0.0	25.5	302.8	61.7	364.5
1975	66.1	37.3	15.4	18.2	0.9	4.4	1.9	2.4	47.9	15.5	106.7	0.4	34.4	0.0	32.2	277.0	77.4	354.5
1980	88.1	55.4	17.4	20.8	1.5	4.8	2.6	1.5	32.7	56.8	138.0	0.3	55.3	0.0	39.7	376.8	95.7	472.5
1985	106.7	52.8	26.8	19.7	1.2	6.1	2.3	3.6	21.4	27.4	108.6	0.3	64.8	0.0	46.3	379.4	106.6	486.0
1990	117.9	78.4	31.2	21.1	0.4	5.5	2.6	3.7	17.9	22.2	104.8	⁹ 0.0	⁹ 66.1	⁹ 0.0	56.0	⁹ 423.1	129.4	⁹ 552.5
1995	90.7	101.8	24.1	21.3	0.7	4.8	2.5	3.7	11.2	29.0	97.4	0.1	81.4	0.0	63.3	434.9	143.8	578.7
1996	91.9	88.9	23.3	25.4	0.6	4.9	2.4	4.0	11.3	34.2	106.1	0.1	82.2	0.0	64.9	434.1	147.6	581.7
1997	88.8	90.4	23.1	29.1	0.5	4.1	2.6	4.2	15.2	36.5	115.2	0.1	78.0	0.0	65.7	438.2	148.8	587.0
1998	86.8	98.2	25.8	25.8	0.7	3.2	2.7	4.1	12.6	36.1	111.0	0.1	76.3	0.0	68.3	440.7	155.0	595.6
1999	83.4	100.3	31.7	24.9	0.3	4.1	2.7	3.0	10.7	36.8	114.1	0.1	78.0	0.0	69.2	445.1	158.2	603.4
2000	91.5	80.8	25.8	28.3	0.3	7.0	2.7	3.0	11.7	35.0	113.8	0.1	78.2	0.0	70.4	434.7	160.1	594.8
2001	^R 92.9	69.4	28.2	29.7	0.4	3.9	2.4	7.2	7.7	41.5	121.0	(s)	^R 61.5	0.0	67.2	^R 412.0	^R 151.2	^R 563.2
2002	^R 88.9	79.8	22.4	26.6	0.3	6.2	2.4	7.2	4.3	42.7	112.2	(s)	43.9	0.0	66.6	^R 391.5	149.2	^R 540.7
2003	^R 90.9	73.8	25.3	33.8	0.3	3.9	2.2	7.3	13.1	44.0	129.9	0.1	^R 59.6	0.0	65.8	^R 419.9	146.1	^R 566.1
2004	86.1	77.6	28.6	39.4	0.3	2.8	2.3	9.1	15.4	46.6	144.4	(s)	65.3	0.0	67.3	440.8	149.9	590.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	77	4	382	4,099	4,441	7	451	29,972	11,780	51,134	0	0	--	0	--
1965	19	7	721	6,564	6,504	24	428	34,992	9,645	58,877	0	0	--	0	--
1970	7	8	356	7,698	11,093	47	430	47,821	12,000	79,446	0	0	--	0	--
1975	(s)	3	251	8,217	11,602	57	427	58,524	6,356	85,436	0	0	--	0	--
1980	0	8	218	11,219	12,279	47	530	58,386	4,419	87,098	0	32	--	78	--
1985	0	4	131	14,305	11,038	102	482	61,837	3,419	91,313	^f 658	60	--	138	--
1990	0	7	70	16,749	15,806	63	542	69,150	3,316	105,696	381	86	--	200	--
1995	0	6	85	18,418	10,589	64	518	77,978	1,923	109,575	1	86	--	195	--
1996	0	8	79	21,422	9,204	56	502	78,268	1,217	110,748	954	85	--	194	--
1997	0	8	50	22,274	9,402	48	531	80,503	1,453	114,260	737	83	--	188	--
1998	0	7	90	22,842	10,183	35	555	81,280	1,258	116,244	920	88	--	199	--
1999	0	8	106	23,217	9,314	14	561	84,077	1,220	118,509	787	91	--	209	--
2000	0	8	97	24,840	9,943	35	553	84,937	4,225	124,630	891	96	--	219	--
2001	0	8	165	24,618	9,981	8	507	89,292	1,048	125,618	839	97	--	219	--
2002	0	8	134	24,930	9,955	18	501	90,030	838	126,404	1,480	97	--	217	--
2003	0	7	117	25,375	11,461	51	463	91,498	1,566	130,530	1,951	172	--	381	--
2004	0	6	141	29,027	16,754	46	469	92,953	1,829	141,219	2,056	162	--	360	--

Trillion Btu															
1960	2.0	4.1	1.9	23.9	24.0	(s)	2.7	157.4	74.1	284.1	0.0	0.0	290.2	0.0	290.2
1965	0.5	7.0	3.6	38.2	35.8	0.1	2.6	183.8	60.6	324.8	0.0	0.0	332.2	0.0	332.2
1970	0.2	8.0	1.8	44.8	61.9	0.2	2.6	251.2	75.4	438.0	0.0	0.0	446.1	0.0	446.1
1975	(s)	3.1	1.3	47.9	64.9	0.2	2.6	307.4	40.0	464.3	0.0	0.0	467.4	0.0	467.4
1980	0.0	8.4	1.1	65.3	68.8	0.2	3.2	306.7	27.8	473.1	0.0	0.1	481.6	0.3	481.8
1985	0.0	4.6	0.7	83.3	61.7	0.4	2.9	324.8	21.5	495.3	^f 2.3	0.2	^f 502.4	0.5	^f 502.9
1990	0.0	7.2	0.4	97.6	88.5	0.2	3.3	363.2	20.8	574.1	1.3	0.3	582.9	0.7	583.6
1995	0.0	6.6	0.4	107.3	60.0	0.2	3.1	406.7	12.1	589.9	(s)	0.3	596.7	0.7	597.4
1996	0.0	8.2	0.4	124.8	52.2	0.2	3.0	408.2	7.7	596.5	3.4	0.3	605.0	0.7	605.7
1997	0.0	7.9	0.3	129.7	53.3	0.2	3.2	419.7	9.1	615.5	2.6	0.3	623.7	0.6	624.3
1998	0.0	7.3	0.5	133.1	57.7	0.1	3.4	423.6	7.9	626.3	3.3	0.3	633.9	0.7	634.6
1999	0.0	8.5	0.5	135.2	52.8	(s)	3.4	438.1	7.7	637.8	2.8	0.3	646.7	0.7	647.4
2000	0.0	8.5	0.5	144.7	56.4	0.1	3.4	442.5	26.6	674.1	3.2	0.3	682.9	0.7	683.7
2001	0.0	8.1	0.8	143.4	56.6	(s)	3.1	465.2	6.6	675.7	3.0	0.3	684.2	0.7	684.9
2002	0.0	8.4	0.7	145.2	56.4	0.1	3.0	468.9	5.3	679.6	5.2	0.3	688.3	0.7	689.1
2003	0.0	7.4	0.6	147.8	65.0	0.2	2.8	476.4	9.8	702.6	6.9	0.6	710.7	1.3	712.0
2004	0.0	6.0	0.7	169.1	95.0	0.2	2.8	484.8	11.5	764.0	7.3	0.6	770.6	1.2	771.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Virginia

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	6,262	1	130	6	0	136	0	1,189	--	0	0	0	0	--
1965	8,265	2	170	7	0	178	0	797	--	0	0	0	0	--
1970	6,644	4	17,085	721	856	18,662	0	650	--	0	0	0	0	--
1975	3,991	(s)	26,741	624	0	27,364	8,970	1,273	--	0	0	0	0	--
1980	5,560	2	14,586	793	0	15,379	11,466	864	--	0	0	0	0	--
1985	7,166	2	1,301	340	0	1,641	22,303	818	--	0	0	0	0	--
1990	9,083	10	1,421	553	0	1,973	23,820	1,309	--	ⁱ 0	ⁱ (s)	ⁱ 0	0	--
1995	11,248	45	1,577	683	0	2,260	25,135	981	--	0	(s)	0	0	--
1996	12,942	32	822	876	0	1,698	26,286	1,419	--	0	0	0	0	--
1997	13,496	19	1,209	2,259	0	3,468	27,084	1,007	--	0	0	0	0	--
1998	13,762	38	3,950	464	0	4,414	27,234	1,272	--	0	0	0	0	--
1999	14,057	41	4,387	641	0	5,028	28,301	669	--	0	0	0	0	--
2000	16,098	37	3,373	966	0	4,339	28,321	699	--	0	0	0	0	--
2001	15,428	33	6,549	1,436	0	7,985	25,759	1,013	--	0	0	0	0	--
2002	15,417	35	5,136	539	0	5,675	27,346	867	--	0	0	0	(s)	--
2003	15,201	35	6,602	2,560	0	9,161	24,816	1,776	--	0	0	0	(s)	--
2004	14,882	49	6,934	1,223	0	8,157	28,315	1,583	--	0	0	0	0	--
Trillion Btu														
1960	167.4	1.5	0.8	(s)	0.0	0.9	0.0	12.8	0.0	0.0	0.0	0.0	0.0	182.5
1965	218.8	2.3	1.1	(s)	0.0	1.1	0.0	8.3	0.0	0.0	0.0	0.0	0.0	230.6
1970	164.6	4.4	107.4	4.2	5.2	116.8	0.0	6.8	0.0	0.0	0.0	0.0	0.0	292.6
1975	95.5	0.5	168.1	3.6	0.0	171.8	98.8	13.2	0.0	0.0	0.0	0.0	0.0	379.8
1980	139.1	2.5	91.7	4.6	0.0	96.3	125.1	9.0	0.0	0.0	0.0	0.0	0.0	372.0
1985	183.6	1.6	8.2	2.0	0.0	10.2	236.9	8.5	0.0	0.0	0.0	0.0	0.0	440.8
1990	231.3	10.1	8.9	3.2	0.0	12.2	252.1	13.6	ⁱ 6.6	ⁱ 0.0	ⁱ (s)	ⁱ 0.0	0.0	ⁱ 525.8
1995	287.3	46.4	9.9	4.0	0.0	13.9	264.1	10.1	12.9	0.0	(s)	0.0	0.0	634.7
1996	326.9	32.7	5.2	5.1	0.0	10.3	276.1	14.7	13.5	0.0	0.0	0.0	0.0	674.1
1997	339.4	19.9	7.6	13.2	0.0	20.8	284.2	10.3	12.7	0.0	0.0	0.0	0.0	687.3
1998	347.2	39.3	24.8	2.7	0.0	27.5	285.7	13.0	12.2	0.0	0.0	0.0	0.0	724.9
1999	357.9	42.9	27.6	3.7	0.0	31.3	295.7	6.8	14.0	0.0	0.0	0.0	0.0	748.6
2000	413.3	38.1	21.2	5.6	0.0	26.8	295.4	7.1	5.7	0.0	0.0	0.0	0.0	786.4
2001	391.4	34.1	41.2	8.4	0.0	49.5	269.1	10.5	10.8	0.0	0.0	0.0	0.0	765.5
2002	391.9	35.8	32.3	3.1	0.0	35.4	285.5	8.8	16.5	0.0	0.0	0.0	(s)	773.9
2003	370.9	36.2	41.5	14.9	0.0	56.4	258.6	18.2	16.9	0.0	0.0	0.0	(s)	757.2
2004	364.2	50.1	43.6	7.1	0.0	50.7	295.2	15.9	19.3	0.0	0.0	0.0	0.0	795.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Washington

Year	Coal ^a Thousand Short Tons	Natural Gas ^b Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electricity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
			Thousand Barrels															Million kWh	
1960	608	65	1,309	2,161	18,123	4,502	105	548	571	23,076	9,300	3,562	63,257	0	34,349	--	--	-17,559	--
1965	488	108	1,683	434	17,116	6,919	34	1,227	597	26,906	9,140	7,881	71,937	0	49,295	--	--	-34,437	--
1970	245	150	2,335	351	18,201	10,637	239	1,659	666	36,068	10,384	9,620	90,161	2,614	69,525	--	--	-59,610	--
1975	4,492	164	2,910	274	16,970	14,037	346	763	620	41,007	8,459	12,236	97,622	3,308	83,708	--	--	-92,231	--
1980	5,443	129	2,050	356	18,471	12,036	120	1,487	703	42,653	17,277	10,218	105,370	2,041	83,111	--	--	-46,626	--
1985	5,616	135	2,039	202	20,008	15,417	1,212	2,466	640	44,020	11,406	11,021	108,432	8,038	77,053	--	--	-34,812	--
1990	5,147	163	2,481	313	20,155	22,343	75	2,292	720	53,464	16,272	17,534	135,649	5,742	87,467	--	--	-6,550	--
1995	4,158	254	3,558	229	21,307	23,039	121	2,913	687	58,836	17,305	19,321	147,318	6,942	82,500	--	--	-13,023	--
1996	5,682	274	3,696	292	22,488	22,323	142	3,195	666	61,611	12,768	19,806	146,987	5,588	98,518	--	--	-70,763	--
1997	4,948	256	4,048	202	24,543	22,454	167	5,116	704	61,213	12,924	17,199	148,570	6,244	104,171	--	--	-70,321	--
1998	6,241	290	4,087	356	21,859	21,859	181	4,716	737	61,833	9,632	23,233	148,493	6,916	79,815	--	--	4,744	--
1999	5,838	287	4,104	283	24,237	22,155	124	4,458	745	63,239	7,989	25,915	153,248	6,086	96,989	--	--	-24,418	--
2000	6,501	287	4,952	332	25,122	24,726	102	6,456	733	63,053	7,551	19,825	152,852	8,605	80,263	--	--	-5,481	--
2001	6,151	312	3,427	148	24,128	21,815	147	7,083	672	63,492	6,415	26,710	154,038	8,250	54,734	--	--	^R 11,703	--
2002	6,252	234	3,737	258	24,826	18,076	68	4,830	664	64,544	5,447	24,922	147,372	9,048	78,167	--	--	-59,623	--
2003	7,427	250	2,878	225	23,551	17,493	142	2,735	614	64,317	6,071	24,896	142,921	7,615	71,757	--	--	-41,896	--
2004	6,986	262	3,313	205	24,003	19,219	127	2,752	622	64,301	6,535	30,031	151,107	8,982	71,576	--	--	-33,828	--
Trillion Btu																			
1960	15.2	67.2	8.7	10.9	105.6	24.4	0.6	2.2	3.5	121.2	58.5	21.4	356.9	0.0	369.6	58.5	-0.2	-59.9	807.4
1965	12.1	116.2	11.2	2.2	99.7	38.2	0.2	4.9	3.6	141.3	57.5	47.2	406.0	0.0	515.3	66.2	-1.6	-117.5	996.8
1970	5.9	158.2	15.5	1.8	106.0	59.3	1.4	6.3	4.0	189.5	65.3	57.6	506.7	28.7	729.6	66.5	2.1	-203.4	1,294.3
1975	76.2	171.2	19.3	1.4	98.8	78.8	2.0	2.8	3.8	215.4	53.2	73.4	548.9	36.4	871.1	64.3	5.9	-314.7	1,459.3
1980	91.0	135.5	13.6	1.8	107.6	67.5	0.7	5.5	4.3	224.1	108.6	61.1	594.7	22.3	863.4	88.3	2.9	-159.1	1,638.9
1985	93.7	140.0	13.5	1.0	116.5	86.6	6.9	8.9	3.9	231.2	71.7	67.2	607.5	85.4	805.0	112.0	3.1	-118.8	1,727.9
1990	85.6	167.6	16.5	1.6	117.4	126.0	0.4	8.3	4.4	280.8	102.3	105.4	763.2	60.8	909.8	^J 93.4	^J 1.3	-22.3	^J 2,060.0
1995	69.8	264.5	23.6	1.2	124.1	130.4	0.7	10.6	4.2	306.8	108.8	115.4	825.7	72.9	850.7	90.1	-2.1	-44.4	2,127.3
1996	90.9	283.9	24.5	1.5	131.0	126.5	0.8	11.5	4.0	321.4	80.3	118.7	820.3	58.7	1,018.7	89.7	16.3	-241.4	2,137.0
1997	80.5	268.1	26.9	1.0	143.0	127.3	0.9	18.5	4.3	319.1	81.3	103.0	825.2	65.5	1,063.9	94.2	13.0	-239.9	2,170.5
1998	103.5	303.3	27.1	1.8	127.3	123.9	1.0	17.0	4.5	322.3	60.6	139.6	825.2	72.6	813.9	87.1	9.1	16.2	2,230.8
1999	96.9	302.3	27.2	1.4	141.2	125.6	0.7	16.1	4.5	329.5	50.2	155.7	852.2	63.6	991.8	89.4	6.9	-83.3	2,319.7
2000	106.2	297.6	32.9	1.7	146.3	140.2	0.6	23.3	4.4	328.5	47.5	119.2	844.6	89.7	818.8	89.6	-3.2	-18.7	2,224.5
2001	99.4	322.4	22.7	0.7	140.5	123.7	0.8	25.6	4.1	330.8	40.3	159.8	849.2	86.2	565.6	^R 94.3	-16.6	^R 39.9	^R 2,040.4
2002	100.8	238.2	24.8	1.3	144.6	102.5	0.4	17.5	4.0	336.1	34.2	149.1	814.5	94.5	795.2	^R 89.1	0.8	-203.4	^R 1,929.7
2003	118.2	255.1	19.1	1.1	137.2	99.2	0.8	9.9	3.7	334.9	38.2	148.8	792.9	79.4	734.9	^R 97.1	0.2	^R -143.0	^R 1,934.8
2004	112.5	268.5	22.0	1.0	139.8	109.0	0.7	10.0	3.8	335.3	41.1	179.7	842.4	93.7	717.3	94.3	-8.5	-115.4	2,004.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Washington

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	106	8	7,303	0	347	7,650	888	--	--	8,755	--	21,651	--
1965	83	17	6,495	9	894	7,399	624	--	--	11,015	--	26,302	--
1970	19	32	7,035	115	1,145	8,296	479	--	--	15,355	--	37,164	--
1975	6	34	4,806	203	404	5,413	513	--	--	19,209	--	46,194	--
1980	34	30	3,422	65	626	4,113	487	--	--	24,445	--	58,941	--
1985	47	33	3,010	86	553	3,648	849	--	--	27,933	--	64,347	--
1990	13	40	2,675	49	657	3,381	665	--	--	28,809	--	66,642	--
1995	10	53	2,003	86	1,237	3,327	854	--	--	30,147	--	68,483	--
1996	3	63	2,202	110	1,258	3,570	886	--	--	32,012	--	72,816	--
1997	2	62	1,851	133	2,404	4,389	749	--	--	31,749	--	71,951	--
1998	2	62	1,757	123	2,182	4,062	666	--	--	31,362	--	71,145	--
1999	2	72	1,891	86	2,005	3,983	701	--	--	32,817	--	75,084	--
2000	2	72	1,737	65	2,070	3,872	754	--	--	33,036	--	75,162	--
2001	2	84	1,896	101	2,255	4,252	1,190	--	--	31,608	--	^R 71,090	--
2002	3	73	1,896	35	3,078	5,008	1,207	--	--	32,066	--	71,836	--
2003	3	71	1,456	101	1,776	3,332	1,271	--	--	31,872	--	^R 70,799	--
2004	3	71	1,354	69	1,768	3,191	1,303	--	--	32,455	--	72,239	--
Trillion Btu													
1960	2.4	8.3	42.5	0.0	1.4	43.9	17.8	0.0	0.0	29.9	102.3	73.9	176.2
1965	1.9	18.7	37.8	0.1	3.6	41.5	12.5	0.0	0.0	37.6	112.1	89.7	201.9
1970	0.4	33.7	41.0	0.7	4.3	46.0	9.6	0.0	0.0	52.4	142.0	126.8	268.9
1975	0.1	35.8	28.0	1.1	1.5	30.6	10.3	0.0	0.0	65.5	142.3	157.6	300.0
1980	0.8	31.3	19.9	0.4	2.3	22.6	9.7	0.0	0.0	83.4	147.8	201.1	348.9
1985	1.1	34.3	17.5	0.5	2.0	20.0	17.0	0.0	0.0	95.3	167.7	219.6	387.3
1990	0.3	41.6	15.6	0.3	2.4	18.2	13.3	^f (s)	^f 0.4	98.3	^f 172.1	227.4	^f 399.4
1995	0.2	55.0	11.7	0.5	4.5	16.6	17.1	(s)	0.4	102.9	192.2	233.7	425.9
1996	0.1	65.1	12.8	0.6	4.5	18.0	17.7	(s)	0.4	109.2	210.5	248.4	459.0
1997	0.1	64.8	10.8	0.8	8.7	20.2	15.0	(s)	0.4	108.3	208.8	245.5	454.3
1998	(s)	64.8	10.2	0.7	7.9	18.8	13.3	(s)	0.4	107.0	204.4	242.7	447.1
1999	0.1	75.6	11.0	0.5	7.3	18.8	14.0	(s)	0.3	112.0	220.7	256.2	476.9
2000	0.1	74.8	10.1	0.4	7.5	18.0	15.1	(s)	0.3	112.7	221.0	256.5	477.4
2001	0.1	87.4	11.0	0.6	8.1	19.8	23.8	(s)	0.3	107.8	239.1	^R 242.6	^R 481.7
2002	0.1	74.6	11.0	0.2	11.1	22.4	24.1	(s)	0.3	109.4	230.9	245.1	476.0
2003	0.1	72.7	8.5	0.6	6.4	15.5	25.4	(s)	0.2	108.7	222.7	241.6	464.3
2004	0.1	71.0	7.9	0.4	6.4	14.7	26.1	(s)	0.2	110.7	222.7	246.5	469.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Washington

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours						
1960	74	6	2,308	0	61	222	441	3,032	0	--	--	3,220	--	7,964	--
1965	63	11	2,053	1	158	255	412	2,880	0	--	--	4,380	--	10,458	--
1970	15	18	2,224	15	202	304	481	3,226	0	--	--	6,723	--	16,273	--
1975	14	32	1,519	26	71	374	355	2,345	0	--	--	10,377	--	24,954	--
1980	127	31	1,073	18	111	478	426	2,105	0	--	--	13,845	--	33,383	--
1985	168	35	4,154	206	98	357	748	5,562	0	--	--	18,965	--	43,689	--
1990	53	39	1,865	14	116	281	53	2,329	^g 85	--	--	21,510	--	49,757	--
1995	68	43	1,264	14	218	59	110	1,665	83	--	--	23,912	--	54,318	--
1996	21	48	989	8	222	60	168	1,447	77	--	--	25,147	--	57,199	--
1997	19	47	1,087	13	424	60	45	1,630	79	--	--	25,209	--	57,128	--
1998	12	46	856	24	385	63	33	1,362	75	--	--	25,876	--	58,699	--
1999	15	51	950	12	354	321	28	1,665	82	--	--	26,695	--	61,076	--
2000	18	50	902	12	365	275	27	1,580	70	--	--	28,047	--	63,812	--
2001	20	57	1,204	22	398	146	7	1,776	57	--	--	27,528	--	^R 61,913	--
2002	20	46	1,155	23	543	187	3	1,912	0	--	--	27,528	--	61,669	--
2003	23	48	1,067	29	313	83	1	1,493	53	--	--	28,039	--	^R 62,285	--
2004	20	48	746	30	312	86	0	1,173	73	--	--	28,226	--	62,826	--
Trillion Btu															
1960	1.7	6.7	13.4	0.0	0.2	1.2	2.8	17.6	0.0	0.3	0.0	11.0	37.3	27.2	64.5
1965	1.4	11.5	12.0	(s)	0.6	1.3	2.6	16.5	0.0	0.2	0.0	14.9	44.6	35.7	80.3
1970	0.3	19.5	13.0	0.1	0.8	1.6	3.0	18.4	0.0	0.2	0.0	22.9	61.4	55.5	116.9
1975	0.3	33.3	8.8	0.1	0.3	2.0	2.2	13.5	0.0	0.2	0.0	35.4	82.7	85.1	167.8
1980	2.9	32.4	6.2	0.1	0.4	2.5	2.7	11.9	0.0	0.2	0.0	47.2	94.7	113.9	208.6
1985	3.9	36.9	24.2	1.2	0.4	1.9	4.7	32.3	0.0	0.4	0.0	64.7	138.2	149.1	287.3
1990	1.1	39.8	10.9	0.1	0.4	1.5	0.3	13.2	^g 0.9	^g 1.5	^g 0.1	73.4	^g 129.9	169.8	^g 299.7
1995	1.5	44.4	7.4	0.1	0.8	0.3	0.7	9.2	0.9	2.3	0.2	81.6	140.1	185.3	325.4
1996	0.5	50.0	5.8	(s)	0.8	0.3	1.1	8.0	0.8	2.4	0.2	85.8	147.7	195.2	342.8
1997	0.4	49.0	6.3	0.1	1.5	0.3	0.3	8.5	0.8	2.5	0.2	86.0	147.5	194.9	342.4
1998	0.3	47.7	5.0	0.1	1.4	0.3	0.2	7.1	0.8	2.2	0.3	88.3	146.6	200.3	346.9
1999	0.4	53.5	5.5	0.1	1.3	1.7	0.2	8.7	0.8	2.3	0.3	91.1	157.1	208.4	365.5
2000	0.5	52.6	5.3	0.1	1.3	1.4	0.2	8.2	0.7	2.5	0.3	95.7	160.5	217.7	378.2
2001	0.5	59.1	7.0	0.1	1.4	0.8	(s)	9.4	0.6	4.2	0.3	93.9	168.0	^R 211.2	^R 379.3
2002	0.5	47.3	6.7	0.1	2.0	1.0	(s)	9.8	0.0	4.3	0.3	93.9	156.1	210.4	366.5
2003	0.5	48.9	6.2	0.2	1.1	0.4	(s)	8.0	0.5	4.5	0.4	95.7	158.5	212.5	371.0
2004	0.5	48.5	4.3	0.2	1.1	0.4	0.0	6.1	0.7	4.4	0.5	96.3	156.9	214.4	371.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Washington

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	420	50	1,309	5,937	105	134	158	802	7,137	3,562	19,144	195	--	--	13,975	--	34,562	--
1965	341	79	1,683	5,546	23	155	216	765	7,281	7,881	23,551	190	--	--	18,703	--	44,662	--
1970	210	93	2,335	4,986	109	274	267	551	7,874	9,620	26,015	135	--	--	25,530	--	61,792	--
1975	463	92	2,910	4,025	118	250	192	438	5,924	12,236	26,094	181	--	--	27,416	--	65,932	--
1980	332	64	2,050	4,350	37	658	202	278	6,538	10,218	24,331	129	--	--	31,366	--	75,628	--
1985	208	63	2,039	2,689	920	1,487	184	692	5,167	11,021	24,199	129	--	--	29,431	--	67,799	--
1990	229	78	2,481	3,976	11	1,228	207	658	1,989	17,534	28,084	^g 189	--	--	40,712	--	94,177	--
1995	223	110	3,558	3,724	21	1,278	197	555	644	19,321	29,299	197	--	--	34,276	--	77,863	--
1996	152	114	3,696	3,700	24	1,568	191	565	323	19,806	29,872	178	--	--	31,247	--	71,076	--
1997	156	111	4,048	3,449	21	2,190	202	593	303	17,199	28,005	217	--	--	33,956	--	76,952	--
1998	117	133	4,087	4,299	33	2,049	211	491	255	23,233	34,658	163	--	--	37,616	--	85,333	--
1999	95	124	4,104	3,608	26	2,085	214	506	351	25,915	36,808	216	--	--	39,499	--	90,372	--
2000	126	84	4,952	2,953	25	4,003	210	533	888	19,825	33,390	32	--	--	35,410	--	80,563	--
2001	128	75	3,427	3,586	25	4,405	193	1,040	138	26,710	39,523	3	--	--	19,339	--	^R 43,495	--
2002	103	68	3,737	3,193	10	1,182	191	1,103	156	24,922	34,494	178	--	--	15,792	--	35,377	--
2003	90	66	2,878	2,886	12	545	176	1,115	83	24,896	32,591	2	--	--	18,180	--	^R 40,384	--
2004	84	68	3,313	2,434	28	569	178	1,272	19	30,031	37,844	2	--	--	19,259	--	42,868	--
Trillion Btu																		
1960	10.9	51.8	8.7	34.6	0.6	0.5	1.0	4.2	44.9	21.4	115.8	2.1	40.4	0.0	47.7	268.7	117.9	386.7
1965	8.8	85.3	11.2	32.3	0.1	0.6	1.3	4.0	45.8	47.2	142.6	2.0	53.5	0.0	63.8	356.0	152.4	508.4
1970	5.1	98.3	15.5	29.0	0.6	1.0	1.6	2.9	49.5	57.6	157.8	1.4	56.8	0.0	87.1	406.5	210.8	617.3
1975	10.9	96.0	19.3	23.4	0.7	0.9	1.2	2.3	37.2	73.4	158.5	1.9	53.9	0.0	93.5	414.7	225.0	639.6
1980	7.1	67.0	13.6	25.3	0.2	2.4	1.2	1.5	41.1	61.1	146.5	1.3	78.3	0.0	107.0	407.2	258.0	665.3
1985	4.5	65.7	13.5	15.7	5.2	5.4	1.1	3.6	32.5	67.2	144.2	1.4	91.7	0.0	100.4	407.9	231.3	639.2
1990	5.2	80.8	16.5	23.2	0.1	4.5	1.3	3.5	12.5	105.4	166.8	^g 2.0	^g 75.0	^g 0.0	138.9	^g 468.6	321.3	^g 789.9
1995	4.2	114.6	23.6	21.7	0.1	4.6	1.2	2.9	4.1	115.4	173.6	2.0	64.7	0.0	117.0	476.2	265.7	741.9
1996	3.0	118.6	24.5	21.6	0.1	5.7	1.2	2.9	2.0	118.7	176.7	1.8	62.9	0.0	106.6	469.8	242.5	712.3
1997	3.2	116.6	26.9	20.1	0.1	7.9	1.2	3.1	1.9	103.0	164.2	2.2	70.1	0.0	115.9	472.2	262.6	734.7
1998	2.7	139.3	27.1	25.0	0.2	7.4	1.3	2.6	1.6	139.6	204.8	1.7	64.9	0.0	128.3	541.7	291.2	832.9
1999	2.2	131.0	27.2	21.0	0.1	7.5	1.3	2.6	2.2	155.7	217.7	2.2	65.6	0.0	134.8	553.6	308.3	861.9
2000	2.8	87.3	32.9	17.2	0.1	14.4	1.3	2.8	5.6	119.2	193.5	0.3	62.2	0.0	120.8	466.9	274.9	741.8
2001	2.9	77.6	22.7	20.9	0.1	15.9	1.2	5.4	0.9	159.8	227.0	(s)	^R 57.6	0.0	66.0	^R 431.1	^R 148.4	^R 579.5
2002	2.3	68.9	24.8	18.6	0.1	4.3	1.2	5.7	1.0	149.1	204.7	1.8	^R 50.5	0.0	53.9	^R 382.0	120.7	^R 502.7
2003	2.1	67.4	19.1	16.8	0.1	2.0	1.1	5.8	0.5	148.8	194.2	(s)	^R 53.4	0.0	62.0	^R 379.1	137.8	^R 516.9
2004	1.8	67.9	22.0	14.2	0.2	2.1	1.1	6.6	0.1	179.7	225.9	(s)	51.6	0.0	65.7	412.9	146.3	559.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Washington

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	7	(s)	2,161	2,574	4,502	6	413	22,052	1,707	33,415	0	1	--	3	--
1965	1	1	434	3,022	6,919	21	381	25,886	1,443	38,104	0	2	--	4	--
1970	(s)	6	351	3,956	10,637	38	400	35,213	2,025	52,620	0	2	--	4	--
1975	(s)	6	274	6,616	14,036	37	428	40,196	2,109	63,696	0	2	--	4	--
1980	0	4	356	9,595	12,036	92	501	41,897	10,112	74,589	0	2	--	5	--
1985	0	3	202	10,139	15,417	329	456	42,971	5,492	75,005	^f 14	14	--	31	--
1990	0	5	313	11,609	22,343	291	513	52,525	14,229	101,823	205	16	--	36	--
1995	0	9	229	14,082	23,039	179	490	58,222	16,551	112,793	739	18	--	41	--
1996	0	7	292	15,233	22,323	148	475	60,986	12,277	111,734	328	17	--	40	--
1997	0	9	202	17,668	22,454	97	502	60,559	12,576	114,058	621	18	--	41	--
1998	0	9	356	14,863	21,859	100	525	61,279	9,345	108,327	835	18	--	41	--
1999	0	8	283	17,767	22,155	13	531	62,412	7,610	110,771	710	20	--	46	--
2000	0	6	332	18,748	24,726	18	523	62,246	6,635	113,227	800	18	--	42	--
2001	0	9	148	16,924	21,815	25	479	62,306	6,271	107,968	581	19	--	^R 44	--
2002	0	7	258	18,541	18,076	27	473	63,254	5,288	105,918	1,687	19	--	42	--
2003	0	7	225	18,113	17,493	101	438	63,119	5,987	105,475	1,622	42	--	94	--
2004	0	9	205	19,415	19,219	104	443	62,943	6,515	108,845	544	42	--	93	--

Trillion Btu															
1960	0.2	0.4	10.9	15.0	24.4	(s)	2.5	115.8	10.7	179.4	0.0	(s)	180.0	(s)	180.0
1965	(s)	0.7	2.2	17.6	38.2	0.1	2.3	136.0	9.1	205.4	0.0	(s)	206.2	(s)	206.2
1970	(s)	6.8	1.8	23.0	59.3	0.1	2.4	185.0	12.7	284.4	0.0	(s)	291.2	(s)	291.2
1975	(s)	6.1	1.4	38.5	78.7	0.1	2.6	211.1	13.3	345.8	0.0	(s)	351.9	(s)	351.9
1980	0.0	3.9	1.8	55.9	67.5	0.3	3.0	220.1	63.6	412.2	0.0	(s)	416.1	(s)	416.1
1985	0.0	3.0	1.0	59.1	86.6	1.2	2.8	225.7	34.5	410.9	^f 0.1	(s)	^f 414.0	0.1	^f 414.1
1990	0.0	5.3	1.6	67.6	126.0	1.1	3.1	275.9	89.5	564.8	0.7	0.1	570.8	0.1	570.9
1995	0.0	9.1	1.2	82.0	130.4	0.6	3.0	303.6	104.1	624.9	2.6	0.1	634.0	0.1	634.2
1996	0.0	7.3	1.5	88.7	126.5	0.5	2.9	318.1	77.2	615.4	1.2	0.1	622.8	0.1	622.9
1997	0.0	9.4	1.0	102.9	127.3	0.4	3.0	315.7	79.1	629.4	2.2	0.1	638.9	0.1	639.0
1998	0.0	9.7	1.8	86.6	123.9	0.4	3.2	319.4	58.8	594.0	3.0	0.1	603.8	0.1	603.9
1999	0.0	8.3	1.4	103.5	125.6	(s)	3.2	325.2	47.8	606.9	2.5	0.1	615.2	0.2	615.4
2000	0.0	6.6	1.7	109.2	140.2	0.1	3.2	324.3	41.7	620.3	2.8	0.1	626.9	0.1	627.1
2001	0.0	9.7	0.7	98.6	123.7	0.1	2.9	324.6	39.4	590.1	2.1	0.1	599.8	0.1	599.9
2002	0.0	6.8	1.3	108.0	102.5	0.1	2.9	329.4	33.2	577.4	6.0	0.1	584.3	0.1	584.4
2003	0.0	7.0	1.1	105.5	99.2	0.4	2.7	328.7	37.6	575.1	5.7	0.1	582.3	0.3	582.6
2004	0.0	9.2	1.0	113.1	109.0	0.4	2.7	328.3	41.0	595.4	1.9	0.1	604.7	0.3	605.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Washington

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	0	0	14	2	0	16	0	34,154	--	0	0	0	-50	--
1965	0	0	3	(s)	0	3	0	49,105	--	0	0	0	-481	--
1970	0	0	3	(s)	0	4	2,614	69,391	--	0	0	0	617	--
1975	4,009	0	71	4	0	75	3,308	83,527	--	0	0	0	1,730	--
1980	4,950	1	201	31	0	232	2,041	82,982	--	0	0	0	859	--
1985	5,192	(s)	0	17	0	17	8,038	76,923	--	0	0	0	904	--
1990	4,852	(s)	1	30	0	31	5,742	87,193	--	0	0	0	243	--
1995	3,857	40	0	234	0	234	6,942	82,220	--	0	0	0	-765	--
1996	5,507	42	0	364	0	364	5,588	98,262	--	0	0	0	4,606	--
1997	4,771	28	0	488	0	488	6,244	103,875	--	0	0	0	3,632	--
1998	6,111	40	0	83	0	83	6,916	79,577	--	0	0	0	2,467	--
1999	5,727	33	0	21	0	21	6,086	96,691	--	0	0	0	1,808	--
2000	6,355	74	0	782	(s)	783	8,605	80,161	--	0	0	0	-1,133	--
2001	6,001	86	0	519	0	519	8,250	54,674	--	0	0	0	-5,057	--
2002	6,126	40	0	39	0	39	9,048	77,989	--	0	0	417	-1,187	--
2003	7,311	58	0	30	0	30	7,615	71,702	--	0	0	604	-1,956	--
2004	6,879	66	0	54	0	54	8,982	71,501	--	0	0	737	-4,848	--
Trillion Btu														
1960	0.0	0.0	0.1	(s)	0.0	0.1	0.0	367.5	(s)	0.0	0.0	0.0	-0.2	367.4
1965	0.0	0.0	(s)	(s)	0.0	(s)	0.0	513.3	0.0	0.0	0.0	0.0	-1.6	511.7
1970	0.0	0.0	(s)	(s)	0.0	(s)	28.7	728.2	(s)	0.0	0.0	0.0	2.1	759.0
1975	64.9	0.0	0.4	(s)	0.0	0.5	36.4	869.2	0.0	0.0	0.0	0.0	5.9	976.9
1980	80.2	1.0	1.3	0.2	0.0	1.4	22.3	862.0	0.0	0.0	0.0	0.0	2.9	969.8
1985	84.1	0.1	0.0	0.1	0.0	0.1	85.4	803.6	2.9	0.0	0.0	0.0	3.1	979.3
1990	78.9	0.2	(s)	0.2	0.0	0.2	60.8	907.0	3.7	0.0	0.0	0.0	0.8	1,051.6
1995	63.8	41.4	0.0	1.4	0.0	1.4	72.9	847.9	6.0	0.0	0.0	0.0	-2.6	1,030.7
1996	87.4	42.9	0.0	2.1	0.0	2.1	58.7	1,016.0	6.6	0.0	0.0	0.0	15.7	1,229.4
1997	76.7	28.4	0.0	2.8	0.0	2.8	65.5	1,060.9	6.6	0.0	0.0	0.0	12.4	1,253.3
1998	100.4	41.8	0.0	0.5	0.0	0.5	72.6	811.4	6.8	0.0	0.0	0.0	8.4	1,041.8
1999	94.3	33.9	0.0	0.1	0.0	0.1	63.6	988.8	7.5	0.0	0.0	0.0	6.2	1,194.3
2000	102.9	76.3	0.0	4.6	(s)	4.6	89.7	817.7	9.8	0.0	0.0	0.0	-3.9	1,097.2
2001	96.0	88.6	0.0	3.0	0.0	3.0	86.2	564.9	8.7	0.0	0.0	0.0	-17.3	830.3
2002	98.0	40.6	0.0	0.2	0.0	0.2	94.5	793.4	10.2	0.0	0.0	4.2	-4.1	1,037.1
2003	115.5	59.1	0.0	0.2	0.0	0.2	79.4	734.3	13.8	0.0	0.0	6.2	-6.7	1,001.7
2004	110.2	71.9	0.0	0.3	0.0	0.3	93.7	716.6	12.3	0.0	0.0	7.4	-16.5	995.7

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, West Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	14,058	150	918	119	2,473	169	276	558	570	11,609	1,481	4,691	22,864	0	938	--	--	-12,363	--
1965	19,049	164	907	201	2,837	130	253	961	636	12,762	2,153	11,875	32,714	0	828	--	--	-16,712	--
1970	25,376	181	863	78	3,917	290	320	1,230	684	15,831	2,065	14,523	39,801	0	996	--	--	-52,380	--
1975	34,469	158	944	58	5,922	249	325	1,498	686	19,314	2,504	16,544	48,043	0	1,063	--	--	-120,759	--
1980	34,939	143	717	65	10,541	357	496	3,435	671	19,390	1,463	20,395	57,530	0	1,114	--	--	-134,129	--
1985	34,999	117	430	39	10,414	235	696	1,157	610	18,513	970	13,876	46,939	0	1,058	--	--	-161,158	--
1990	34,896	120	728	36	10,597	273	295	1,612	687	19,643	1,268	19,036	54,174	0	1,295	--	--	-144,389	--
1995	35,381	149	639	27	11,287	174	394	1,944	655	20,891	197	13,273	49,482	0	1,193	--	--	-144,104	--
1996	37,104	155	944	32	9,197	170	490	2,199	636	18,899	352	2,780	35,699	0	1,425	--	--	-159,753	--
1997	38,098	160	1,157	22	10,526	172	513	2,874	672	19,752	231	2,588	38,507	0	1,139	--	--	-171,626	--
1998	39,877	143	1,227	30	12,378	175	583	2,157	703	19,724	72	3,476	40,525	0	1,086	--	--	-173,361	--
1999	40,351	140	762	22	11,854	184	633	1,076	710	19,491	93	3,947	38,772	0	930	--	--	-178,579	--
2000	39,892	148	786	20	12,539	189	436	1,578	700	19,424	293	3,193	39,157	0	1,151	--	--	-173,543	--
2001	^R 35,622	141	722	35	12,554	191	429	1,386	641	19,717	228	11,304	47,207	0	952	--	--	^R -144,621	--
2002	^R 40,779	146	1,271	27	15,060	249	333	992	633	19,288	113	11,281	49,247	0	1,066	--	--	-179,344	--
2003	^R 40,223	^R 127	716	24	12,346	262	322	1,192	586	19,592	50	11,654	46,744	0	1,356	--	--	-178,247	--
2004	38,747	122	621	29	13,761	252	353	1,638	593	20,341	344	13,502	51,436	0	1,318	--	--	-163,756	--
Trillion Btu																			
1960	354.4	155.6	6.1	0.6	14.4	0.9	1.6	2.2	3.5	61.0	9.3	27.3	126.8	0.0	10.1	13.4	0.0	-42.2	618.1
1965	477.4	176.1	6.0	1.0	16.5	0.7	1.4	3.9	3.9	67.0	13.5	67.0	181.0	0.0	8.7	11.9	0.0	-57.0	798.0
1970	612.4	186.5	5.7	0.4	22.8	1.6	1.8	4.6	4.2	83.2	13.0	80.4	217.7	0.0	10.4	10.7	0.0	-178.7	859.1
1975	817.4	164.3	6.3	0.3	34.5	1.4	1.8	5.6	4.2	101.5	15.7	92.8	264.0	0.0	11.1	11.7	0.0	-412.0	856.5
1980	857.8	147.6	4.8	0.3	61.4	2.0	2.8	12.6	4.1	101.9	9.2	112.5	311.5	0.0	11.6	11.8	0.0	-457.6	882.7
1985	871.7	125.0	2.9	0.2	60.7	1.3	3.9	4.2	3.7	97.2	6.1	75.8	256.0	0.0	11.1	14.0	0.0	-549.9	727.9
1990	873.5	129.0	4.8	0.2	61.7	1.5	1.7	5.8	4.2	103.2	8.0	104.4	295.5	0.0	13.5	^j 5.0	^j (s)	-492.7	^j 823.8
1995	871.3	157.8	4.2	0.1	65.7	1.0	2.2	7.0	4.0	108.9	1.2	72.3	266.8	0.0	12.3	7.1	(s)	-491.7	823.8
1996	913.6	164.3	6.3	0.2	53.6	1.0	2.8	7.9	3.9	98.6	2.2	15.8	192.1	0.0	14.7	7.3	(s)	-545.1	747.0
1997	937.7	170.3	7.7	0.1	61.3	1.0	2.9	10.4	4.1	103.0	1.5	14.6	206.4	0.0	11.6	5.9	(s)	-585.6	746.5
1998	978.3	151.9	8.1	0.2	72.1	1.0	3.3	7.8	4.3	102.8	0.5	19.9	219.9	0.0	11.1	5.1	(s)	-591.5	774.9
1999	993.0	147.7	5.1	0.1	69.0	1.0	3.6	3.9	4.3	101.6	0.6	22.7	211.9	0.0	9.5	5.3	0.1	-609.3	758.2
2000	977.8	157.9	5.2	0.1	73.0	1.1	2.5	5.7	4.2	101.2	1.8	18.2	213.0	0.0	11.7	5.7	(s)	-592.1	774.1
2001	^R 866.6	150.5	4.8	0.2	73.1	1.1	2.4	5.0	3.9	102.7	1.4	62.3	257.0	0.0	9.8	5.0	(s)	^R -493.4	^R 795.6
2002	^R 993.5	147.5	8.4	0.1	87.7	1.4	1.9	3.6	3.8	100.5	0.7	62.2	270.4	0.0	10.8	4.3	0.1	-611.9	^R 814.7
2003	^R 978.4	^R 133.2	4.8	0.1	71.9	1.5	1.8	4.3	3.6	102.0	0.3	64.3	254.6	0.0	13.9	4.5	1.8	-608.2	^R 778.2
2004	937.1	143.2	4.1	0.1	80.2	1.4	2.0	5.9	3.6	106.1	2.2	74.7	280.3	0.0	13.2	4.5	1.7	-558.7	821.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, West Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	144	50	204	148	226	578	416	--	--	1,714	--	4,238	--
1965	138	50	304	184	280	768	320	--	--	2,365	--	5,648	--
1970	107	58	250	267	266	783	287	--	--	3,459	--	8,373	--
1975	71	51	581	172	331	1,084	298	--	--	4,979	--	11,973	--
1980	33	48	1,169	408	395	1,973	375	--	--	6,606	--	15,928	--
1985	18	37	516	390	225	1,131	446	--	--	6,712	--	15,462	--
1990	36	33	682	210	416	1,308	162	--	--	7,578	--	17,529	--
1995	8	35	496	287	416	1,199	232	--	--	9,166	--	20,821	--
1996	13	37	599	377	479	1,455	241	--	--	9,277	--	21,100	--
1997	12	36	603	399	677	1,680	175	--	--	9,027	--	20,456	--
1998	18	30	547	473	512	1,532	156	--	--	9,053	--	20,537	--
1999	20	31	481	551	712	1,744	164	--	--	9,452	--	21,626	--
2000	24	32	524	340	751	1,616	176	--	--	9,738	--	22,155	--
2001	5	32	520	354	988	1,862	114	--	--	9,828	--	^R 22,104	--
2002	4	31	504	262	630	1,396	115	--	--	10,444	--	23,398	--
2003	6	^R 32	472	219	786	1,477	121	--	--	10,473	--	23,265	--
2004	6	30	430	255	1,149	1,833	124	--	--	10,756	--	23,941	--
Trillion Btu													
1960	3.6	51.4	1.2	0.8	0.9	2.9	8.3	0.0	0.0	5.8	72.1	14.5	86.6
1965	3.4	53.2	1.8	1.0	1.1	3.9	6.4	0.0	0.0	8.1	75.0	19.3	94.3
1970	2.6	59.7	1.5	1.5	1.0	4.0	5.7	0.0	0.0	11.8	83.8	28.6	112.3
1975	1.7	53.2	3.4	1.0	1.2	5.6	6.0	0.0	0.0	17.0	83.5	40.9	124.3
1980	0.8	49.8	6.8	2.3	1.5	10.6	7.5	0.0	0.0	22.5	91.2	54.3	145.6
1985	0.4	39.2	3.0	2.2	0.8	6.0	8.9	0.0	0.0	22.9	77.5	52.8	130.3
1990	0.9	34.9	4.0	1.2	1.5	6.7	3.2	^f 0.0	^f (s)	25.9	^f 71.6	59.8	^f 131.4
1995	0.2	37.5	2.9	1.6	1.5	6.0	4.6	0.0	(s)	31.3	79.7	71.0	150.8
1996	0.3	39.7	3.5	2.1	1.7	7.4	4.8	0.0	(s)	31.7	83.9	72.0	155.9
1997	0.3	38.4	3.5	2.3	2.4	8.2	3.5	0.0	(s)	30.8	81.3	69.8	151.1
1998	0.5	31.5	3.2	2.7	1.8	7.7	3.1	0.0	(s)	30.9	73.8	70.1	143.8
1999	0.5	33.1	2.8	3.1	2.6	8.5	3.3	(s)	(s)	32.3	77.7	73.8	151.5
2000	0.6	33.8	3.1	1.9	2.7	7.7	3.5	(s)	(s)	33.2	78.9	75.6	154.4
2001	0.1	34.1	3.0	2.0	3.6	8.6	2.3	(s)	(s)	33.5	78.7	^R 75.4	^R 154.1
2002	0.1	31.0	2.9	1.5	2.3	6.7	2.3	(s)	(s)	35.6	75.8	79.8	155.6
2003	0.1	^R 33.8	2.7	1.2	2.9	6.8	2.4	(s)	(s)	35.7	^R 79.0	79.4	^R 158.3
2004	0.2	35.6	2.5	1.4	4.2	8.1	2.5	(s)	(s)	36.7	83.1	81.7	164.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, West Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	100	15	75	8	40	65	8	195	0	--	--	1,134	--	2,804	--
1965	104	15	111	9	49	66	12	248	0	--	--	1,620	--	3,869	--
1970	84	22	92	14	47	56	9	218	0	--	--	2,238	--	5,416	--
1975	167	25	213	9	58	59	9	349	0	--	--	2,858	--	6,873	--
1980	123	22	262	37	70	110	5	484	0	--	--	3,658	--	8,820	--
1985	63	17	674	129	40	307	5	1,154	0	--	--	4,462	--	10,279	--
1990	143	21	526	46	73	330	65	1,041	^g 0	--	--	5,085	--	11,763	--
1995	57	26	357	37	73	20	0	487	0	--	--	5,944	--	13,502	--
1996	96	28	264	37	85	20	0	404	0	--	--	6,030	--	13,716	--
1997	93	26	316	51	120	19	0	506	0	--	--	6,040	--	13,689	--
1998	144	25	370	57	90	19	0	537	0	--	--	6,297	--	14,285	--
1999	148	27	318	64	126	19	0	527	0	--	--	6,565	--	15,022	--
2000	193	26	360	73	133	19	0	585	0	--	--	6,872	--	15,635	--
2001	43	28	406	63	174	20	0	663	0	--	--	6,863	--	^R 15,436	--
2002	30	^R 25	325	64	111	20	0	521	0	--	--	7,117	--	15,944	--
2003	37	^R 27	226	92	139	20	0	476	0	--	--	7,136	--	15,853	--
2004	50	25	235	81	203	28	0	547	0	--	--	7,217	--	16,063	--
Trillion Btu															
1960	2.5	16.0	0.4	(s)	0.2	0.3	(s)	1.0	0.0	0.2	0.0	3.9	23.6	9.6	33.2
1965	2.6	15.6	0.6	0.1	0.2	0.3	0.1	1.3	0.0	0.1	0.0	5.5	25.1	13.2	38.3
1970	2.0	22.3	0.5	0.1	0.2	0.3	0.1	1.1	0.0	0.1	0.0	7.6	33.2	18.5	51.7
1975	4.0	25.7	1.2	0.1	0.2	0.3	0.1	1.9	0.0	0.1	0.0	9.8	41.4	23.4	64.9
1980	3.0	22.7	1.5	0.2	0.3	0.6	(s)	2.6	0.0	0.2	0.0	12.5	40.9	30.1	71.0
1985	1.6	18.4	3.9	0.7	0.1	1.6	(s)	6.4	0.0	0.2	0.0	15.2	41.8	35.1	76.9
1990	3.6	22.9	3.1	0.3	0.3	1.7	0.4	5.7	^g 0.0	^g 0.4	^g 0.0	17.4	^g 49.9	40.1	^g 90.1
1995	1.4	27.5	2.1	0.2	0.3	0.1	0.0	2.7	0.0	0.6	0.0	20.3	52.4	46.1	98.5
1996	2.4	29.7	1.5	0.2	0.3	0.1	0.0	2.2	0.0	0.7	0.0	20.6	55.5	46.8	102.3
1997	2.3	27.7	1.8	0.3	0.4	0.1	0.0	2.7	0.0	0.6	0.0	20.6	53.8	46.7	100.6
1998	3.7	26.6	2.2	0.3	0.3	0.1	0.0	2.9	0.0	0.5	0.0	21.5	55.2	48.7	103.9
1999	3.8	28.8	1.9	0.4	0.5	0.1	0.0	2.8	0.0	0.5	(s)	22.4	58.3	51.3	109.6
2000	5.0	28.0	2.1	0.4	0.5	0.1	0.0	3.1	0.0	0.6	(s)	23.4	60.0	53.3	113.4
2001	1.1	29.6	2.4	0.4	0.6	0.1	0.0	3.5	0.0	0.4	(s)	23.4	57.9	^R 52.7	^R 110.6
2002	0.7	24.9	1.9	0.4	0.4	0.1	0.0	2.8	0.0	0.4	(s)	24.3	53.1	54.4	107.5
2003	0.9	^R 28.0	1.3	0.5	0.5	0.1	0.0	2.4	0.0	0.4	(s)	24.3	^R 56.1	54.1	^R 110.2
2004	1.2	29.6	1.4	0.5	0.7	0.1	0.0	2.7	0.0	0.4	(s)	24.6	58.5	54.8	113.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, West Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	7,802	76	918	452	120	290	372	204	1,437	4,691	8,485	540	--	--	5,915	--	14,629
1965	10,747	81	907	890	60	627	438	155	2,080	11,875	17,033	493	--	--	7,984	--	19,065
1970	10,279	93	863	1,087	39	907	500	114	1,621	14,523	19,655	558	--	--	9,426	--	22,814
1975	8,424	68	944	1,533	144	1,095	447	78	1,787	16,544	22,571	595	--	--	9,102	--	21,889
1980	6,284	59	717	3,585	51	2,955	420	81	1,458	20,395	29,663	690	--	--	10,567	--	25,479
1985	3,551	45	430	2,119	177	871	383	229	964	13,876	19,048	690	--	--	9,673	--	22,284
1990	4,845	58	728	3,173	39	1,103	430	249	1,203	19,036	25,961	^g 610	--	--	10,469	--	24,218
1995	3,768	60	639	3,315	71	1,443	411	194	197	13,273	19,542	556	--	--	10,867	--	24,686
1996	3,256	57	944	3,142	77	1,625	399	189	348	2,780	9,503	661	--	--	10,820	--	24,612
1997	2,569	65	1,157	2,842	63	2,077	421	199	231	2,588	9,579	509	--	--	11,180	--	25,337
1998	3,654	57	1,227	3,048	53	1,555	441	226	72	3,476	10,098	521	--	--	11,161	--	25,319
1999	3,156	51	762	3,040	18	237	445	187	93	3,947	8,729	433	--	--	11,126	--	25,457
2000	3,051	57	786	2,937	23	692	439	200	293	3,193	8,563	453	--	--	11,083	--	25,216
2001	^R 2,880	48	722	3,168	12	223	402	316	228	11,304	16,376	439	--	--	10,978	--	^R 24,690
2002	^R 2,918	55	1,271	6,142	7	248	397	322	113	11,281	19,781	467	--	--	10,902	--	24,423
2003	^R 2,712	^R 48	716	3,273	11	252	367	349	50	11,654	16,672	726	--	--	10,687	--	23,740
2004	2,735	46	621	3,606	17	274	372	413	344	13,502	19,149	711	--	--	10,942	--	24,354

Trillion Btu																	
1960	204.4	78.4	6.1	2.6	0.7	1.2	2.3	1.1	9.0	27.3	50.2	5.8	4.9	0.0	20.2	363.8	49.9
1965	280.0	87.1	6.0	5.2	0.3	2.5	2.7	0.8	13.1	67.0	97.6	5.1	5.4	0.0	27.2	502.5	65.1
1970	260.2	95.7	5.7	6.3	0.2	3.4	3.0	0.6	10.2	80.4	109.9	5.9	4.9	0.0	32.2	508.8	77.8
1975	212.5	70.5	6.3	8.9	0.8	4.1	2.7	0.4	11.2	92.8	127.2	6.2	5.7	0.0	31.1	453.2	74.7
1980	162.4	61.4	4.8	20.9	0.3	10.9	2.5	0.4	9.2	112.5	161.4	7.2	4.2	0.0	36.1	432.5	86.9
1985	91.0	48.4	2.9	12.3	1.0	3.1	2.3	1.2	6.1	75.8	104.7	7.2	4.9	0.0	33.0	289.1	76.0
1990	124.3	61.7	4.8	18.5	0.2	4.0	2.6	1.3	7.6	104.4	143.4	^g 6.3	^g 1.4	^g 0.0	35.7	^g 372.8	82.6
1995	97.4	64.0	4.2	19.3	0.4	5.2	2.5	1.0	1.2	72.3	106.2	5.7	1.8	0.0	37.1	312.2	84.2
1996	84.2	60.0	6.3	18.3	0.4	5.9	2.4	1.0	2.2	15.8	52.2	6.8	1.8	0.0	36.9	242.0	84.0
1997	65.7	69.0	7.7	16.6	0.4	7.5	2.6	1.0	1.5	14.6	51.7	5.2	1.8	0.0	38.1	231.6	86.4
1998	95.2	60.3	8.1	17.8	0.3	5.6	2.7	1.2	0.5	19.9	56.1	5.3	1.5	0.0	38.1	256.4	86.4
1999	82.3	53.6	5.1	17.7	0.1	0.9	2.7	1.0	0.6	22.7	50.7	4.4	1.5	0.0	38.0	230.5	86.9
2000	81.1	60.7	5.2	17.1	0.1	2.5	2.7	1.0	1.8	18.2	48.7	4.6	1.4	0.0	37.8	234.3	86.0
2001	^R 75.9	51.6	4.8	18.5	0.1	0.8	2.4	1.6	1.4	62.3	92.0	4.5	2.0	0.0	37.5	^R 263.5	^R 84.2
2002	^R 77.0	55.5	8.4	35.8	(s)	0.9	2.4	1.7	0.7	62.2	112.1	4.7	1.4	0.0	37.2	^R 288.0	83.3
2003	^R 71.2	^R 49.9	4.8	19.1	0.1	0.9	2.2	1.8	0.3	64.3	93.4	7.4	1.5	0.0	36.5	^R 259.9	81.0
2004	70.7	54.2	4.1	21.0	0.1	1.0	2.3	2.2	2.2	74.7	107.5	7.1	1.5	0.0	37.3	278.3	83.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, West Virginia

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	134	8	119	1,742	169	2	199	11,340	3	13,573	0	0	--	0	--
1965	35	18	201	1,530	130	4	198	12,541	0	14,603	0	0	--	0	--
1970	16	8	78	2,485	290	10	185	15,660	5	18,713	0	0	--	0	--
1975	1	14	58	3,589	242	14	239	19,176	0	23,318	0	0	--	0	--
1980	0	13	65	4,846	353	14	250	19,199	0	24,728	0	0	--	0	--
1985	0	18	39	6,736	235	22	228	17,977	(s)	25,236	^f 0	0	--	0	--
1990	0	9	36	5,850	273	19	256	19,063	0	25,497	0	0	--	0	--
1995	0	26	27	6,781	174	12	244	20,678	0	27,916	33	0	--	0	--
1996	0	33	32	4,840	170	10	237	18,691	4	23,984	5	0	--	0	--
1997	0	32	22	6,472	172	(s)	250	19,533	0	26,451	5	0	--	0	--
1998	0	31	30	8,089	175	(s)	262	19,479	0	28,034	1	0	--	0	--
1999	0	30	22	7,694	184	1	265	19,284	0	27,451	(s)	0	--	0	--
2000	0	33	20	8,269	189	2	261	19,205	0	27,945	8	0	--	0	--
2001	0	30	35	8,039	191	(s)	239	19,381	0	27,884	126	0	--	0	--
2002	0	34	27	7,637	249	2	236	18,946	0	27,098	312	0	--	0	--
2003	0	18	24	7,951	262	15	218	19,224	0	27,694	411	0	--	0	--
2004	0	19	29	9,030	252	13	221	19,900	0	29,446	441	4	--	10	--

Trillion Btu															
1960	3.4	8.7	0.6	10.1	0.9	(s)	1.2	59.6	(s)	72.5	0.0	0.0	84.6	0.0	84.6
1965	0.9	19.3	1.0	8.9	0.7	(s)	1.2	65.9	0.0	77.7	0.0	0.0	97.9	0.0	97.9
1970	0.4	8.1	0.4	14.5	1.6	(s)	1.1	82.3	(s)	99.9	0.0	0.0	108.5	0.0	108.5
1975	(s)	14.6	0.3	20.9	1.3	0.1	1.5	100.7	0.0	124.8	0.0	0.0	139.4	0.0	139.4
1980	0.0	13.6	0.3	28.2	2.0	0.1	1.5	100.9	0.0	133.0	0.0	0.0	146.6	0.0	146.6
1985	0.0	19.0	0.2	39.2	1.3	0.1	1.4	94.4	(s)	136.6	^f 0.0	0.0	^f 155.6	0.0	^f 155.6
1990	0.0	9.3	0.2	34.1	1.5	0.1	1.6	100.1	0.0	137.5	0.0	0.0	146.9	0.0	146.9
1995	0.0	28.1	0.1	39.5	1.0	(s)	1.5	107.8	0.0	150.0	0.1	0.0	178.1	0.0	178.1
1996	0.0	34.5	0.2	28.2	1.0	(s)	1.4	97.5	(s)	128.3	(s)	0.0	162.9	0.0	162.9
1997	0.0	34.6	0.1	37.7	1.0	(s)	1.5	101.8	0.0	142.1	(s)	0.0	176.8	0.0	176.8
1998	0.0	33.0	0.2	47.1	1.0	(s)	1.6	101.5	0.0	151.4	(s)	0.0	184.3	0.0	184.3
1999	0.0	31.7	0.1	44.8	1.0	(s)	1.6	100.5	0.0	148.1	(s)	0.0	179.7	0.0	179.7
2000	0.0	35.0	0.1	48.2	1.1	(s)	1.6	100.1	0.0	151.0	(s)	0.0	186.0	0.0	186.0
2001	0.0	32.5	0.2	46.8	1.1	(s)	1.5	101.0	0.0	150.5	0.4	0.0	183.0	0.0	183.0
2002	0.0	34.2	0.1	44.5	1.4	(s)	1.4	98.7	0.0	146.1	1.1	0.0	180.3	0.0	180.3
2003	0.0	19.3	0.1	46.3	1.5	0.1	1.3	100.1	0.0	149.4	1.5	0.0	168.7	0.0	168.7
2004	0.0	22.4	0.1	52.6	1.4	(s)	1.3	103.8	0.0	159.3	1.6	(s)	181.7	(s)	181.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, West Virginia

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	5,879	1	33	(s)	0	33	0	398	--	0	0	0	0	--
1965	8,025	1	61	(s)	0	62	0	336	--	0	0	0	0	--
1970	14,889	1	430	3	0	433	0	437	--	0	0	0	0	--
1975	25,805	(s)	708	14	0	722	0	467	--	0	0	0	0	--
1980	28,499	(s)	0	683	0	683	0	424	--	0	0	0	0	--
1985	31,367	(s)	0	369	0	369	0	368	--	0	0	0	0	--
1990	29,873	(s)	0	368	0	368	0	685	--	0	0	0	0	--
1995	31,549	1	0	338	0	338	0	637	--	0	0	0	0	--
1996	33,739	(s)	0	353	0	353	0	764	--	0	0	0	0	--
1997	35,424	1	0	292	0	292	0	630	--	0	0	0	0	--
1998	36,060	1	0	324	0	324	0	565	--	0	0	0	0	--
1999	37,027	(s)	0	321	0	321	0	497	--	0	0	0	0	--
2000	36,625	1	0	448	0	448	0	698	--	0	0	0	0	--
2001	32,694	3	0	422	0	422	0	513	--	0	0	0	0	--
2002	37,828	2	0	451	0	451	0	599	--	0	0	9	0	--
2003	37,468	2	0	424	0	424	0	630	--	0	0	170	0	--
2004	35,956	1	0	460	0	460	0	608	--	0	0	161	0	--
Trillion Btu														
1960	140.6	1.0	0.2	(s)	0.0	0.2	0.0	4.3	0.0	0.0	0.0	0.0	0.0	146.0
1965	190.5	1.0	0.4	(s)	0.0	0.4	0.0	3.5	0.0	0.0	0.0	0.0	0.0	195.4
1970	347.2	0.7	2.7	(s)	0.0	2.7	0.0	4.6	(s)	0.0	0.0	0.0	0.0	355.2
1975	599.2	0.2	4.4	0.1	0.0	4.5	0.0	4.9	0.0	0.0	0.0	0.0	0.0	608.8
1980	691.7	0.1	0.0	4.0	0.0	4.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	700.1
1985	778.7	0.1	0.0	2.1	0.0	2.1	0.0	3.8	0.0	0.0	0.0	0.0	0.0	784.9
1990	744.8	0.1	0.0	2.1	0.0	2.1	0.0	7.1	0.0	0.0	0.0	0.0	0.0	754.2
1995	772.4	0.7	0.0	2.0	0.0	2.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	781.7
1996	826.7	0.3	0.0	2.1	0.0	2.1	0.0	7.9	0.0	0.0	0.0	0.0	0.0	837.0
1997	869.4	0.6	0.0	1.7	0.0	1.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0	878.1
1998	879.0	0.5	0.0	1.9	0.0	1.9	0.0	5.8	0.0	0.0	0.0	0.0	0.0	887.2
1999	906.4	0.5	0.0	1.9	0.0	1.9	0.0	5.1	0.0	0.0	0.0	0.0	0.0	913.8
2000	891.2	0.5	0.0	2.6	0.0	2.6	0.0	7.1	0.1	0.0	0.0	0.0	0.0	901.6
2001	789.5	2.7	0.0	2.5	0.0	2.5	0.0	5.3	0.3	0.0	0.0	0.0	0.0	800.2
2002	915.7	2.0	0.0	2.6	0.0	2.6	0.0	6.1	0.2	0.0	0.0	0.1	0.0	926.6
2003	906.1	2.2	0.0	2.5	0.0	2.5	0.0	6.5	0.2	0.0	0.0	1.7	0.0	919.2
2004	865.0	1.5	0.0	2.7	0.0	2.7	0.0	6.1	0.2	0.0	0.0	1.6	0.0	877.0

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Wisconsin

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	12,735	91	2,847	427	21,750	245	2,964	4,258	872	33,125	4,394	530	71,412	0	2,399	--	--	-364	--
1965	14,528	200	2,806	636	23,508	629	1,249	5,246	898	36,295	3,209	1,240	75,716	0	2,131	--	--	1,348	--
1970	16,898	338	4,671	332	25,841	1,603	3,002	7,679	992	45,483	2,936	1,539	94,078	157	1,904	--	--	-1,994	--
1975	12,733	365	3,019	173	26,561	2,206	974	8,448	923	51,548	2,106	1,979	97,936	10,293	2,037	--	--	-1,563	--
1980	15,644	352	3,016	124	22,495	2,397	222	6,036	1,019	49,606	1,772	2,051	88,738	9,911	2,115	--	--	3,741	--
1985	18,034	308	1,690	102	23,154	1,663	234	5,377	927	46,557	402	2,371	82,478	10,979	2,546	--	--	17,345	--
1990	20,122	309	3,685	122	24,192	1,424	48	6,664	1,044	48,989	1,109	2,322	89,599	11,226	2,014	--	--	18,996	--
1995	23,151	381	4,154	374	23,471	2,044	59	8,753	996	55,053	829	3,735	99,467	10,970	2,378	--	--	29,873	--
1996	24,076	403	4,126	367	24,908	1,530	73	11,139	966	56,313	1,020	14,148	114,590	10,121	2,696	--	--	28,759	--
1997	25,487	401	5,155	486	24,999	1,949	67	9,935	1,021	55,696	1,065	15,178	115,551	3,916	2,483	--	--	40,550	--
1998	24,740	368	6,012	454	25,199	1,864	65	8,461	1,069	58,740	923	15,205	117,990	9,397	1,747	--	--	33,228	--
1999	25,276	381	6,192	134	28,622	3,407	117	11,009	1,080	58,976	1,011	15,520	126,066	11,495	1,985	--	--	31,279	--
2000	25,928	394	5,783	112	29,301	3,139	111	11,129	1,064	58,194	1,110	15,002	124,943	11,512	1,986	--	--	31,035	--
2001	25,921	360	5,971	236	31,694	2,590	112	10,094	974	58,870	918	4,810	116,269	11,507	2,056	--	--	^R 29,613	--
2002	25,174	385	5,267	126	30,051	2,293	74	12,304	963	60,351	1,050	5,111	117,589	12,449	2,515	--	--	32,082	--
2003	26,197	395	6,645	54	25,586	1,336	79	10,658	890	60,902	930	5,145	112,226	12,215	1,843	--	--	33,826	--
2004	26,696	383	6,598	164	28,240	2,641	104	11,556	902	61,128	1,154	5,786	118,273	11,888	1,981	--	--	33,283	--
Trillion Btu																			
1960	304.6	93.8	18.9	2.2	126.7	1.3	16.8	17.1	5.3	174.0	27.6	3.1	393.0	0.0	25.8	39.2	0.0	-1.2	855.1
1965	347.9	204.1	18.6	3.2	136.9	3.5	7.1	21.0	5.4	190.7	20.2	6.9	413.5	0.0	22.3	39.4	0.0	4.6	1,031.8
1970	381.6	344.2	31.0	1.7	150.5	9.0	17.0	29.0	6.0	238.9	18.5	8.8	510.5	1.7	20.0	38.3	0.0	-6.8	1,289.5
1975	272.0	372.1	20.0	0.9	154.7	12.5	5.5	31.4	5.6	270.8	13.2	11.2	525.8	113.4	21.2	44.9	0.0	-5.3	1,344.1
1980	327.3	354.7	20.0	0.6	131.0	13.5	1.3	22.2	6.2	260.6	11.1	11.5	478.0	108.1	22.0	165.3	0.0	12.8	1,468.1
1985	360.7	311.4	11.2	0.5	134.9	9.3	1.3	19.4	5.6	244.6	2.5	13.1	442.5	116.6	26.6	191.2	(s)	59.2	1,508.3
1990	394.5	311.2	24.5	0.6	140.9	8.0	0.3	24.2	6.3	257.3	7.0	13.0	482.1	118.8	21.0	^j 81.3	^j 0.3	64.8	^j 1,474.7
1995	441.6	385.3	27.6	1.9	136.7	11.6	0.3	31.7	6.0	287.1	5.2	21.0	529.2	115.3	24.5	86.1	0.3	101.9	1,684.3
1996	454.6	408.1	27.4	1.9	145.1	8.7	0.4	40.2	5.9	293.7	6.4	76.8	606.4	106.3	27.9	95.1	0.9	98.1	1,797.4
1997	486.6	405.0	34.2	2.5	145.6	11.1	0.4	35.9	6.2	290.3	6.7	82.8	615.7	41.1	25.4	96.9	3.3	138.4	1,812.3
1998	472.0	372.1	39.9	2.3	146.8	10.6	0.4	30.6	6.5	306.2	5.8	82.9	631.8	98.6	17.8	89.4	3.1	113.4	1,798.3
1999	480.7	385.1	41.1	0.7	166.7	19.3	0.7	39.8	6.5	307.3	6.4	84.3	672.8	120.1	20.3	93.1	1.7	106.7	1,880.6
2000	^R 499.2	397.6	38.4	0.6	170.7	17.8	0.6	40.1	6.5	303.2	7.0	81.2	666.0	120.1	20.3	92.3	0.4	105.9	1,901.6
2001	^R 494.0	363.0	39.6	1.2	184.6	14.7	0.6	36.5	5.9	306.7	5.8	26.9	622.5	120.2	21.2	^R 101.0	1.1	^R 101.0	^R 1,824.2
2002	492.0	386.9	34.9	0.6	175.0	13.0	0.4	44.5	5.8	314.3	6.6	28.6	623.9	130.0	25.6	^R 74.1	0.8	109.5	^R 1,842.7
2003	488.2	397.5	44.1	0.3	149.0	7.6	0.4	38.7	5.4	317.1	5.8	28.9	597.4	127.3	18.9	^R 86.7	1.4	115.4	^R 1,832.8
2004	499.2	384.9	43.8	0.8	164.5	15.0	0.6	41.8	5.5	318.8	7.3	32.7	630.7	124.0	19.9	74.1	1.4	113.6	1,847.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wisconsin

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	1,622	47	11,206	1,227	2,675	15,107	974	--	--	5,298	--	13,102	--
1965	1,153	79	11,790	660	3,692	16,142	744	--	--	6,963	--	16,626	--
1970	724	105	11,721	1,608	5,606	18,935	595	--	--	9,825	--	23,781	--
1975	173	120	11,019	530	5,405	16,953	587	--	--	11,782	--	28,334	--
1980	11	123	8,155	124	2,983	11,261	1,103	--	--	13,597	--	32,784	--
1985	6	116	6,669	195	3,045	9,909	1,161	--	--	16,307	--	37,566	--
1990	1	114	5,385	29	4,187	9,601	734	--	--	16,385	--	37,903	--
1995	17	136	3,659	34	5,560	9,253	400	--	--	18,635	--	42,332	--
1996	13	148	3,869	41	7,463	11,372	415	--	--	18,685	--	42,501	--
1997	18	136	3,239	44	6,596	9,879	275	--	--	18,510	--	41,949	--
1998	14	116	2,801	39	5,926	8,767	245	--	--	19,087	--	43,300	--
1999	19	128	3,240	61	6,995	10,296	257	--	--	19,502	--	44,619	--
2000	18	135	3,027	44	6,589	9,660	277	--	--	19,929	--	45,342	--
2001	21	125	3,341	40	6,234	9,616	370	--	--	20,418	--	^R 45,921	--
2002	15	137	2,855	30	7,447	10,332	375	--	--	21,575	--	48,335	--
2003	20	142	2,940	27	6,880	9,847	395	--	--	21,364	--	^R 47,457	--
2004	17	135	2,919	40	6,680	9,639	405	--	--	21,192	--	47,171	--
Trillion Btu													
1960	35.6	49.1	65.3	7.0	10.7	83.0	19.5	0.0	0.0	18.1	205.1	44.7	249.8
1965	25.1	80.9	68.7	3.7	14.8	87.2	14.9	0.0	0.0	23.8	231.9	56.7	288.6
1970	15.3	107.2	68.3	9.1	21.2	98.6	11.9	0.0	0.0	33.5	266.5	81.1	347.6
1975	3.3	122.4	64.2	3.0	20.1	87.3	11.7	0.0	0.0	40.2	264.9	96.7	361.6
1980	0.3	124.2	47.5	0.7	11.0	59.2	22.1	0.0	0.0	46.4	252.1	111.9	364.0
1985	0.1	117.4	38.8	1.1	11.0	50.9	23.2	0.0	0.0	55.6	247.3	128.2	375.5
1990	(s)	114.7	31.4	0.2	15.2	46.7	14.7	^f 0.1	^f 0.2	55.9	^f 232.3	129.3	^f 361.6
1995	0.4	137.5	21.3	0.2	20.1	41.7	8.0	0.1	0.2	63.6	251.5	144.4	395.9
1996	0.3	149.8	22.5	0.2	27.0	49.7	8.3	0.1	0.2	63.8	272.3	145.0	417.3
1997	0.4	137.3	18.9	0.3	23.8	43.0	5.5	0.1	0.2	63.2	249.7	143.1	392.8
1998	0.4	117.2	16.3	0.2	21.4	38.0	4.9	0.1	0.2	65.1	225.9	147.7	373.7
1999	0.5	129.1	18.9	0.3	25.3	44.5	5.1	0.1	0.2	66.5	246.2	152.2	398.4
2000	0.5	136.4	17.6	0.3	23.8	41.6	5.5	0.1	0.2	68.0	252.4	154.7	407.2
2001	0.5	126.4	19.5	0.2	22.5	42.2	7.4	0.1	0.2	69.7	246.5	^R 156.7	^R 403.2
2002	0.4	138.0	16.6	0.2	26.9	43.7	7.5	0.2	0.2	73.6	263.6	164.9	428.5
2003	0.5	143.3	17.1	0.2	25.0	42.2	7.9	0.2	0.2	72.9	267.2	161.9	429.1
2004	0.4	135.8	17.0	0.2	24.2	41.4	8.1	0.2	0.2	72.3	258.4	160.9	419.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wisconsin

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
1960	1,127	11	1,817	101	472	295	556	3,239	0	--	--	3,059	--	7,565	--
1965	870	24	1,911	54	652	309	407	3,332	0	--	--	4,160	--	9,935	--
1970	569	55	1,900	132	989	56	244	3,321	0	--	--	6,180	--	14,957	--
1975	404	67	1,786	43	954	52	168	3,004	0	--	--	8,342	--	20,060	--
1980	40	77	1,682	57	526	76	30	2,371	0	--	--	10,019	--	24,157	--
1985	20	73	3,294	18	537	283	106	4,238	0	--	--	12,087	--	27,845	--
1990	4	66	2,128	9	739	320	217	3,412	^g 11	--	--	13,408	--	31,015	--
1995	113	85	982	10	981	51	108	2,133	4	--	--	15,642	--	35,532	--
1996	92	94	978	12	1,317	80	131	2,517	10	--	--	16,188	--	36,821	--
1997	144	89	1,257	7	1,164	51	132	2,611	8	--	--	16,480	--	37,348	--
1998	114	81	1,386	10	1,046	52	234	2,727	9	--	--	16,934	--	38,414	--
1999	138	82	1,447	7	1,234	85	167	2,941	5	--	--	18,381	--	42,055	--
2000	144	81	1,344	10	1,163	79	180	2,775	4	--	--	19,055	--	43,354	--
2001	169	76	1,433	21	1,100	79	199	2,832	4	--	--	19,430	--	^R 43,699	--
2002	112	86	1,210	13	1,314	80	367	2,984	0	--	--	19,890	--	44,559	--
2003	135	87	1,416	27	1,214	83	393	3,133	5	--	--	20,056	--	44,552	--
2004	136	82	1,323	32	1,179	86	250	2,869	2	--	--	19,349	--	43,067	--
Trillion Btu															
1960	24.7	11.3	10.6	0.6	1.9	1.5	3.5	18.1	0.0	0.4	0.0	10.4	64.9	25.8	90.7
1965	19.0	24.0	11.1	0.3	2.6	1.6	2.6	18.2	0.0	0.3	0.0	14.2	75.6	33.9	109.5
1970	12.0	55.6	11.1	0.7	3.7	0.3	1.5	17.4	0.0	0.2	0.0	21.1	106.3	51.0	157.3
1975	7.7	68.9	10.4	0.2	3.5	0.3	1.1	15.5	0.0	0.2	0.0	28.5	120.7	68.4	189.2
1980	1.0	77.7	9.8	0.3	1.9	0.4	0.2	12.6	0.0	0.5	0.0	34.2	126.1	82.4	208.5
1985	0.5	73.5	19.2	0.1	1.9	1.5	0.7	23.4	0.0	0.6	0.0	41.2	139.2	95.0	234.2
1990	0.1	66.7	12.4	(s)	2.7	1.7	1.4	18.2	^g 0.1	^g 1.9	^g 0.0	45.7	^g 132.8	105.8	^g 238.6
1995	2.8	85.8	5.7	0.1	3.6	0.3	0.7	10.3	(s)	1.3	0.0	53.4	153.6	121.2	274.8
1996	2.3	95.0	5.7	0.1	4.8	0.4	0.8	11.8	0.1	1.7	0.0	55.2	166.1	125.6	291.7
1997	3.6	89.7	7.3	(s)	4.2	0.3	0.8	12.7	0.1	1.3	0.0	56.2	163.6	127.4	291.0
1998	3.1	82.2	8.1	0.1	3.8	0.3	1.5	13.6	0.1	1.2	0.0	57.8	158.1	131.1	289.2
1999	3.7	82.6	8.4	(s)	4.5	0.4	1.1	14.4	0.1	1.0	0.0	62.7	164.6	143.5	308.1
2000	4.0	81.9	7.8	0.1	4.2	0.4	1.1	13.6	(s)	1.5	0.0	65.0	166.1	147.9	314.1
2001	4.1	76.8	8.3	0.1	4.0	0.4	1.2	14.1	(s)	1.9	0.0	66.3	163.2	^R 149.1	^R 312.3
2002	2.7	86.3	7.0	0.1	4.7	0.4	2.3	14.6	0.0	1.9	0.0	67.9	173.4	152.0	325.4
2003	3.3	87.9	8.2	0.2	4.4	0.4	2.5	15.7	0.1	1.9	0.0	68.4	177.3	152.0	329.3
2004	3.3	82.3	7.7	0.2	4.3	0.4	1.6	14.2	(s)	2.0	0.0	66.0	167.8	146.9	314.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wisconsin

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh			Million kWh		Million kWh	
1960	4,710	30	2,847	6,950	1,636	1,088	345	2,774	3,416	530	19,585	338	--	--	4,230	--	10,460	--
1965	5,789	82	2,806	7,654	535	866	405	2,541	2,371	1,240	18,419	306	--	--	6,153	--	14,693	--
1970	5,147	141	4,671	7,917	1,262	1,009	440	2,471	1,554	1,299	20,623	306	--	--	8,570	--	20,742	--
1975	2,439	152	3,019	7,150	401	1,996	426	2,027	1,105	1,942	18,065	318	--	--	10,823	--	26,027	--
1980	2,364	130	3,016	3,589	41	2,444	497	1,633	1,439	2,043	14,701	258	--	--	13,290	--	32,044	--
1985	2,132	115	1,690	3,192	21	1,611	452	1,137	158	2,348	10,610	258	--	--	17,195	--	39,611	--
1990	1,960	122	3,685	4,178	11	1,619	508	780	891	2,322	13,994	^g 201	--	--	19,405	--	44,889	--
1995	1,949	146	4,154	4,111	15	2,089	485	934	699	3,591	16,078	266	--	--	23,690	--	53,815	--
1996	1,678	150	4,126	4,721	20	2,253	471	921	858	14,016	27,385	272	--	--	23,871	--	54,297	--
1997	1,757	156	5,155	4,615	15	2,077	497	914	921	15,000	29,194	280	--	--	25,103	--	56,890	--
1998	1,687	142	6,012	4,591	16	1,312	521	669	674	15,023	28,818	220	--	--	26,040	--	59,072	--
1999	1,651	146	6,192	6,962	49	2,727	526	753	835	15,319	33,364	246	--	--	25,665	--	58,720	--
2000	1,693	152	5,783	8,360	57	3,332	518	780	921	14,810	34,562	227	--	--	26,162	--	59,522	--
2001	1,651	133	5,971	9,726	50	2,662	475	1,186	714	4,612	25,396	152	--	--	25,370	--	^R 57,060	--
2002	1,716	138	5,267	8,941	31	3,462	469	1,285	679	4,880	25,013	218	--	--	25,534	--	57,202	--
2003	1,723	138	6,645	5,037	25	2,439	434	1,323	535	4,862	21,298	185	--	--	25,821	--	^R 57,358	--
2004	1,766	141	6,598	5,578	32	3,579	439	1,679	901	4,930	23,737	195	--	--	27,435	--	61,065	--
Trillion Btu																		
1960	116.6	30.8	18.9	40.5	9.3	4.4	2.1	14.6	21.5	3.1	114.2	3.6	19.3	0.0	14.4	299.0	35.7	334.7
1965	142.4	83.0	18.6	44.6	3.0	3.5	2.5	13.3	14.9	6.9	107.3	3.2	24.2	0.0	21.0	381.1	50.1	431.3
1970	119.6	143.6	31.0	46.1	7.2	3.8	2.7	13.0	9.8	7.3	120.8	3.2	26.1	0.0	29.2	442.6	70.8	513.3
1975	54.7	155.5	20.0	41.6	2.3	7.4	2.6	10.6	6.9	11.0	102.5	3.3	32.9	0.0	36.9	385.9	88.8	474.7
1980	54.6	130.6	20.0	20.9	0.2	9.0	3.0	8.6	9.0	11.4	82.2	2.7	142.1	0.0	45.3	457.4	109.3	566.8
1985	49.7	116.4	11.2	18.6	0.1	5.8	2.7	6.0	1.0	12.9	58.4	2.7	166.5	0.0	58.7	452.4	135.2	587.5
1990	47.3	122.6	24.5	24.3	0.1	5.9	3.1	4.1	5.6	13.0	80.5	^g 2.1	^g 61.3	^g 0.0	66.2	^g 380.1	153.2	^g 533.3
1995	47.2	147.7	27.6	23.9	0.1	7.6	2.9	4.9	4.4	20.2	91.5	2.7	72.0	0.0	80.8	441.9	183.6	625.5
1996	40.1	151.5	27.4	27.5	0.1	8.1	2.9	4.8	5.4	76.0	152.1	2.8	79.8	0.0	81.4	507.7	185.3	693.0
1997	42.4	157.4	34.2	26.9	0.1	7.5	3.0	4.8	5.8	81.7	164.0	2.9	84.0	0.0	85.7	536.3	194.1	730.4
1998	41.0	143.5	39.9	26.7	0.1	4.7	3.2	3.5	4.2	81.8	164.2	2.2	76.6	0.0	88.8	516.4	201.6	717.9
1999	40.1	147.4	41.1	40.6	0.3	9.9	3.2	3.9	5.3	83.1	187.2	2.5	81.3	0.0	87.6	546.1	200.4	746.4
2000	40.1	153.4	38.4	48.7	0.3	12.0	3.1	4.1	5.8	80.0	192.4	2.3	80.0	0.0	89.3	557.6	203.1	760.7
2001	38.9	134.1	39.6	56.7	0.3	9.6	2.9	6.2	4.5	25.7	145.5	1.6	^R 85.9	0.0	86.6	^R 492.5	^R 194.7	^R 687.2
2002	40.2	138.5	34.9	52.1	0.2	12.5	2.8	6.7	4.3	27.2	140.8	2.2	^R 58.1	0.0	87.1	^R 467.0	195.2	^R 662.1
2003	40.0	138.8	44.1	29.3	0.1	8.8	2.6	6.9	3.4	27.2	122.5	1.9	^R 69.7	0.0	88.1	^R 460.9	195.7	^R 656.6
2004	40.9	142.0	43.8	32.5	0.2	12.9	2.7	8.8	5.7	27.5	134.0	2.0	54.9	0.0	93.6	467.4	208.4	675.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wisconsin

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours		Million Kilowatthours	
1960	81	1	427	1,773	245	23	527	30,056	378	33,430	0	0	--	0	--
1965	19	2	636	2,148	629	36	493	33,446	378	37,765	0	0	--	0	--
1970	8	7	332	4,179	1,603	74	552	42,956	6	49,703	0	0	--	0	--
1975	(s)	5	173	6,064	2,169	93	497	49,469	285	58,751	0	0	--	0	--
1980	0	8	124	8,570	2,397	84	523	47,897	235	59,829	0	0	--	0	--
1985	0	3	102	9,749	1,663	184	476	45,136	138	57,447	^f 28	0	--	0	--
1990	0	4	122	12,388	1,424	118	535	47,890	2	62,478	196	0	--	0	--
1995	0	4	374	14,524	2,044	123	511	54,068	22	71,666	861	(s)	--	(s)	--
1996	0	4	367	15,179	1,530	106	495	55,313	32	73,023	1,362	(s)	--	(s)	--
1997	0	5	486	15,625	1,949	99	523	54,731	12	73,425	1,594	(s)	--	(s)	--
1998	0	4	454	16,092	1,864	176	548	58,019	14	77,167	824	(s)	--	(s)	--
1999	0	4	134	16,622	3,407	52	554	58,138	7	78,912	697	(s)	--	(s)	--
2000	0	4	112	16,286	3,139	45	545	57,334	7	77,468	781	(s)	--	(s)	--
2001	0	3	236	16,993	2,590	98	500	57,605	3	78,025	1,993	(s)	--	(s)	--
2002	0	4	126	16,910	2,293	81	494	58,986	4	78,894	3,188	(s)	--	(s)	--
2003	0	4	54	15,975	1,336	126	456	59,496	2	77,446	2,641	(s)	--	(s)	--
2004	0	4	164	18,147	2,641	119	462	59,363	3	80,899	2,512	(s)	--	(s)	--

Trillion Btu															
1960	2.0	0.6	2.2	10.3	1.3	0.1	3.2	157.9	2.4	177.4	0.0	0.0	179.9	0.0	179.9
1965	0.5	1.6	3.2	12.5	3.5	0.1	3.0	175.7	2.4	200.4	0.0	0.0	202.5	0.0	202.5
1970	0.2	6.7	1.7	24.3	9.0	0.3	3.3	225.7	(s)	264.4	0.0	0.0	271.3	0.0	271.3
1975	(s)	5.1	0.9	35.3	12.3	0.3	3.0	259.9	1.8	313.5	0.0	0.0	318.5	0.0	318.5
1980	0.0	8.3	0.6	49.9	13.5	0.3	3.2	251.6	1.5	320.6	0.0	0.0	328.9	0.0	328.9
1985	0.0	2.8	0.5	56.8	9.3	0.7	2.9	237.1	0.9	308.2	^f 0.1	0.0	^f 311.1	0.0	^f 311.1
1990	0.0	4.4	0.6	72.2	8.0	0.4	3.2	251.6	(s)	336.0	0.7	0.0	341.2	0.0	341.2
1995	0.0	4.3	1.9	84.6	11.6	0.4	3.1	282.0	0.1	383.7	3.0	(s)	388.0	(s)	388.0
1996	0.0	4.3	1.9	88.4	8.7	0.4	3.0	288.5	0.2	391.0	4.8	(s)	395.4	(s)	395.4
1997	0.0	4.6	2.5	91.0	11.1	0.4	3.2	285.3	0.1	393.4	5.6	(s)	398.0	(s)	398.0
1998	0.0	4.5	2.3	93.7	10.6	0.6	3.3	302.4	0.1	413.0	2.9	(s)	417.5	(s)	417.5
1999	0.0	4.4	0.7	96.8	19.3	0.2	3.4	303.0	(s)	423.4	2.5	(s)	427.7	(s)	427.7
2000	0.0	4.3	0.6	94.9	17.8	0.2	3.3	298.7	(s)	415.5	2.8	(s)	419.7	(s)	419.7
2001	0.0	3.1	1.2	99.0	14.7	0.4	3.0	300.1	(s)	418.4	7.1	(s)	421.5	(s)	421.5
2002	0.0	4.0	0.6	98.5	13.0	0.3	3.0	307.2	(s)	422.6	11.3	(s)	426.7	(s)	426.7
2003	0.0	3.8	0.3	93.1	7.6	0.5	2.8	309.8	(s)	413.9	9.3	(s)	417.8	(s)	417.8
2004	0.0	3.6	0.8	105.7	15.0	0.4	2.8	309.6	(s)	434.3	8.9	(s)	437.9	(s)	437.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Wisconsin

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	5,195	2	45	5	0	50	0	2,061	--	0	0	0	0	--
1965	6,697	14	53	6	0	59	0	1,825	--	0	0	0	0	--
1970	10,450	31	1,132	124	240	1,497	157	1,597	--	0	0	0	0	--
1975	9,716	20	548	578	37	1,163	10,293	1,719	--	0	0	0	0	--
1980	13,229	14	68	499	9	576	9,911	1,857	--	0	0	0	0	--
1985	15,876	1	0	251	24	274	10,979	2,288	--	0	0	(s)	0	--
1990	18,158	3	0	114	0	114	11,226	1,802	--	ⁱ 0	ⁱ 0	ⁱ (s)	0	--
1995	21,072	10	0	194	144	337	10,970	2,109	--	0	0	0	0	--
1996	22,293	7	0	161	133	293	10,121	2,414	--	0	0	0	163	--
1997	23,568	16	0	263	178	441	3,916	2,195	--	0	0	0	878	--
1998	22,925	24	1	328	181	511	9,397	1,518	--	0	0	0	807	--
1999	23,468	21	2	351	201	553	11,495	1,734	--	0	0	0	399	--
2000	24,072	21	2	284	192	478	11,512	1,754	--	0	0	3	0	--
2001	24,081	22	2	200	198	400	11,507	1,900	--	0	0	72	0	--
2002	23,331	21	0	135	231	366	12,449	2,297	--	0	0	46	0	--
2003	24,319	24	0	218	284	501	12,215	1,653	--	0	0	98	1	--
2004	24,777	21	0	273	856	1,129	11,888	1,783	--	0	0	104	0	--
Trillion Btu														
1960	125.8	2.1	0.3	(s)	0.0	0.3	0.0	22.2	0.0	0.0	0.0	0.0	0.0	150.4
1965	161.0	14.7	0.3	(s)	0.0	0.4	0.0	19.1	(s)	0.0	0.0	0.0	0.0	195.1
1970	234.6	31.2	7.1	0.7	1.4	9.3	1.7	16.8	0.1	0.0	0.0	0.0	0.0	293.6
1975	206.3	20.3	3.4	3.4	0.2	7.0	113.4	17.9	0.0	0.0	0.0	0.0	0.0	364.8
1980	271.5	13.8	0.4	2.9	0.1	3.4	108.1	19.3	0.6	0.0	0.0	0.0	0.0	416.8
1985	310.3	1.3	0.0	1.5	0.1	1.6	116.6	23.9	0.9	0.0	0.0	(s)	0.0	454.7
1990	347.0	2.7	0.0	0.7	0.0	0.7	118.8	18.7	ⁱ 3.4	ⁱ 0.0	ⁱ 0.0	ⁱ (s)	0.0	ⁱ 491.4
1995	391.2	10.1	0.0	1.1	0.9	2.0	115.3	21.7	4.9	0.0	0.0	0.0	0.0	545.1
1996	411.9	7.5	0.0	0.9	0.8	1.7	106.3	25.0	5.3	0.0	0.0	0.0	0.6	558.2
1997	440.2	16.0	0.0	1.5	1.1	2.6	41.1	22.4	6.0	0.0	0.0	0.0	3.0	531.4
1998	427.6	24.7	(s)	1.9	1.1	3.0	98.6	15.5	6.7	0.0	0.0	0.0	2.8	578.7
1999	436.4	21.6	(s)	2.0	1.2	3.3	120.1	17.7	5.7	0.0	0.0	0.0	1.4	606.2
2000	454.6	21.5	(s)	1.7	1.2	2.8	120.1	17.9	5.2	0.0	0.0	(s)	0.0	622.1
2001	^R 450.5	22.7	(s)	1.2	1.2	2.4	120.2	19.6	5.8	0.0	0.0	0.7	0.0	^R 622.0
2002	448.7	20.0	0.0	0.8	1.4	2.2	130.0	23.4	6.6	0.0	0.0	0.5	0.0	631.3
2003	444.5	23.8	0.0	1.3	1.7	3.0	127.3	16.9	7.2	0.0	0.0	1.0	(s)	623.7
2004	454.6	21.2	0.0	1.6	5.2	6.7	124.0	17.9	9.2	0.0	0.0	1.0	0.0	634.6

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2004, Wyoming

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Bio-mass ^{a,f}	Other ^{a,g}	Net Inter-state Flow of Electric-ity/Losses ^h	Total ⁱ
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh				Million kWh	
1960	993	51	734	132	3,278	56	91	1,114	93	4,431	1,749	1,824	13,502	0	609	--	--	-3,197	--
1965	2,109	59	743	217	3,696	74	206	1,171	84	4,739	2,171	2,301	15,401	0	884	--	--	-4,048	--
1970	3,802	110	1,099	256	5,059	128	341	1,848	114	5,900	1,487	2,327	18,558	0	1,006	--	--	-10,357	--
1975	7,628	87	606	218	7,656	124	172	1,815	154	7,354	2,076	3,147	23,321	0	1,120	--	--	-21,959	--
1980	15,208	69	1,160	108	13,247	162	62	2,030	208	8,501	2,171	3,309	30,959	0	1,108	--	--	-48,772	--
1985	23,155	82	1,676	51	7,216	154	21	1,942	189	7,671	211	2,150	21,280	0	1,068	--	--	-78,034	--
1990	25,514	92	955	35	9,308	143	4	1,263	213	7,105	39	2,961	22,026	0	645	--	--	-85,081	--
1995	25,933	98	665	179	10,323	160	24	1,979	203	7,936	20	2,203	23,693	0	799	--	--	-88,653	--
1996	26,647	101	835	213	10,552	151	27	1,651	197	7,905	6	2,692	24,229	0	1,232	--	--	-91,506	--
1997	26,096	101	972	151	11,306	121	25	308	208	7,603	4	2,698	23,397	0	1,381	--	--	-89,977	--
1998	28,773	109	857	151	11,103	116	10	253	218	7,888	6	2,409	23,010	0	1,342	--	--	-104,087	--
1999	27,677	97	1,227	234	13,668	174	6	480	220	7,879	8	2,398	26,294	0	1,170	--	--	-97,371	--
2000	28,416	101	1,467	277	12,600	286	6	1,217	217	7,799	23	2,295	26,188	0	1,011	--	--	-100,175	--
2001	27,984	99	1,096	209	14,020	331	4	1,238	199	8,102	68	3,631	28,898	0	879	--	--	^R -98,671	--
2002	27,305	113	438	241	13,814	210	6	1,114	196	8,041	151	3,605	27,817	0	584	--	--	-93,756	--
2003	27,575	115	907	216	14,305	166	2	1,093	182	8,009	143	3,890	28,911	0	594	--	--	^R -95,872	--
2004	28,156	107	571	227	14,112	242	2	993	184	7,968	107	3,997	28,403	0	593	--	--	-96,793	--
Trillion Btu																			
1960	15.8	52.8	4.9	0.7	19.1	0.3	0.5	4.5	0.6	23.3	11.0	11.0	75.7	0.0	6.6	1.6	0.0	-10.9	141.6
1965	34.5	54.8	4.9	1.1	21.5	0.4	1.2	4.7	0.5	24.9	13.6	13.8	86.7	0.0	9.2	1.6	0.0	-13.8	172.9
1970	63.5	112.5	7.3	1.3	29.5	0.7	1.9	7.0	0.7	31.0	9.3	14.0	102.7	0.0	10.6	1.6	0.0	-35.3	255.5
1975	128.0	81.4	4.0	1.1	44.6	0.7	1.0	6.7	0.9	38.6	13.1	18.9	129.6	0.0	11.7	1.6	0.0	-74.9	277.4
1980	268.1	73.1	7.7	0.5	77.2	0.9	0.4	7.5	1.3	44.7	13.6	19.9	173.6	0.0	11.5	2.7	0.0	-166.4	362.6
1985	405.5	86.4	11.1	0.3	42.0	0.9	0.1	7.0	1.1	40.3	1.3	13.3	117.5	0.0	11.2	3.8	(s)	-266.3	358.1
1990	459.8	101.3	6.3	0.2	54.2	0.8	(s)	4.6	1.3	37.3	0.2	17.8	122.8	0.0	6.7	^j 2.1	^j 0.7	-290.3	^j 403.1
1995	463.5	103.8	4.4	0.9	60.1	0.9	0.1	7.2	1.2	41.4	0.1	13.3	129.7	0.0	8.2	1.5	0.7	-302.5	405.0
1996	474.1	107.6	5.5	1.1	61.5	0.9	0.2	6.0	1.2	41.2	(s)	16.1	133.6	0.0	12.7	1.3	0.7	-312.2	417.8
1997	468.3	107.9	6.4	0.8	65.9	0.7	0.1	1.1	1.3	39.6	(s)	16.1	132.1	0.0	14.1	1.4	0.7	-307.0	417.5
1998	516.3	116.5	5.7	0.8	64.7	0.7	0.1	0.9	1.3	41.1	(s)	14.5	129.7	0.0	13.7	1.2	0.7	-355.1	422.9
1999	496.2	101.7	8.1	1.2	79.6	1.0	(s)	1.7	1.3	41.1	0.1	14.4	148.5	0.0	12.0	1.3	0.8	-332.2	428.2
2000	506.1	106.0	9.7	1.4	73.4	1.6	(s)	4.4	1.3	40.6	0.1	13.8	146.5	0.0	10.3	1.4	3.2	-341.8	431.7
2001	499.8	104.0	7.3	1.1	81.7	1.9	(s)	4.5	1.2	42.2	0.4	21.3	161.5	0.0	9.1	0.9	4.4	^R -336.7	^R 443.1
2002	480.4	117.8	2.9	1.2	80.5	1.2	(s)	4.0	1.2	41.9	0.9	21.1	155.0	0.0	5.9	^R 0.9	5.3	-319.9	445.4
2003	493.9	120.9	6.0	1.1	83.3	0.9	(s)	4.0	1.1	41.7	0.9	22.8	161.8	0.0	6.1	0.9	4.7	-327.1	461.2
2004	500.5	111.6	3.8	1.1	82.2	1.4	(s)	3.6	1.1	41.6	0.7	23.4	158.8	0.0	5.9	0.9	6.9	-330.3	454.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.

^f Wood and waste.

^g "Other" is geothermal, wind, photovoltaic, solar thermal energy, and net imports of electricity.

^h Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including

associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

ⁱ From 1981 through 1992, "Total" includes ethanol blended into motor gasoline but not shown in the other columns.

^j There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh = Kilowatthours. R = Revised data. -- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar/PV ^d	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total				Million Kilowatthours		Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours		Million Kilowatthours	
1960	34	9	4	8	561	573	61	--	--	275	--	681	--
1965	25	11	7	32	532	570	51	--	--	442	--	1,055	--
1970	12	18	12	39	1,001	1,053	49	--	--	604	--	1,461	--
1975	15	12	26	11	960	997	55	--	--	891	--	2,142	--
1980	22	10	23	0	644	667	73	--	--	1,410	--	3,400	--
1985	24	14	45	8	496	550	115	--	--	1,815	--	4,180	--
1990	26	11	24	1	487	513	50	--	--	1,720	--	3,979	--
1995	19	12	47	1	592	640	48	--	--	1,939	--	4,405	--
1996	46	14	27	1	458	487	50	--	--	2,022	--	4,599	--
1997	15	13	45	2	119	165	53	--	--	2,007	--	4,549	--
1998	17	13	25	2	64	91	47	--	--	2,013	--	4,566	--
1999	12	12	28	1	239	268	49	--	--	2,025	--	4,633	--
2000	15	12	26	1	507	534	53	--	--	2,103	--	4,784	--
2001	15	11	25	2	709	736	28	--	--	2,146	--	^R 4,825	--
2002	11	13	30	1	698	729	29	--	--	2,232	--	5,001	--
2003	13	12	28	1	692	722	30	--	--	2,286	--	5,078	--
2004	11	12	34	1	699	734	31	--	--	2,262	--	5,034	--
Trillion Btu													
1960	0.7	9.1	(s)	(s)	2.3	2.3	1.2	0.0	0.0	0.9	14.3	2.3	16.6
1965	0.5	9.9	(s)	0.2	2.1	2.4	1.0	0.0	0.0	1.5	15.3	3.6	18.9
1970	0.2	18.4	0.1	0.2	3.8	4.1	1.0	0.0	0.0	2.1	25.7	5.0	30.7
1975	0.3	11.3	0.2	0.1	3.6	3.8	1.1	0.0	0.0	3.0	19.5	7.3	26.8
1980	0.4	10.3	0.1	0.0	2.4	2.5	1.5	0.0	0.0	4.8	19.5	11.6	31.1
1985	0.4	15.1	0.3	(s)	1.8	2.1	2.3	0.0	0.0	6.2	26.1	14.3	40.3
1990	0.5	12.6	0.1	(s)	1.8	1.9	1.0	^f 0.0	^f (s)	5.9	^f 21.9	13.6	^f 35.5
1995	0.3	12.9	0.3	(s)	2.1	2.4	1.0	0.0	(s)	6.6	23.3	15.0	38.3
1996	0.8	14.4	0.2	(s)	1.7	1.8	1.0	0.0	(s)	6.9	24.9	15.7	40.6
1997	0.3	13.9	0.3	(s)	0.4	0.7	1.1	0.0	(s)	6.8	22.8	15.5	38.3
1998	0.4	13.6	0.1	(s)	0.2	0.4	0.9	0.0	(s)	6.9	22.1	15.6	37.7
1999	0.3	12.7	0.2	(s)	0.9	1.0	1.0	(s)	(s)	6.9	21.9	15.8	37.7
2000	0.3	12.7	0.2	(s)	1.8	2.0	1.1	(s)	(s)	7.2	23.3	16.3	39.6
2001	0.3	11.6	0.1	(s)	2.6	2.7	0.6	(s)	(s)	7.3	22.5	^R 16.5	38.9
2002	0.2	14.0	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.6	25.1	17.1	42.1
2003	0.2	12.8	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.8	24.1	17.3	41.4
2004	0.2	12.6	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.7	23.9	17.2	41.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Solar thermal and photovoltaic energy. Includes small amounts consumed by the commercial sector that cannot be separately identified. See Section 5 of the Technical Notes for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year	Coal ^a	Natural Gas ^b	Petroleum						Hydro-electric Power ^d	Biomass ^a	Geothermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^e	Total ^f
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours			Million Kilowatthours		Million Kilowatthours	
Trillion Btu															
1960	23	5	9	29	99	73	37	246	0	--	--	174	--	430	--
1965	19	8	16	119	94	73	40	341	0	--	--	594	--	1,419	--
1970	9	14	30	147	177	85	48	487	0	--	--	657	--	1,589	--
1975	35	10	63	43	169	72	83	431	0	--	--	775	--	1,864	--
1980	83	5	428	23	114	103	27	694	0	--	--	1,138	--	2,744	--
1985	83	9	394	6	88	67	69	624	0	--	--	2,321	--	5,347	--
1990	104	8	218	1	86	74	1	380	^g 0	--	--	2,319	--	5,365	--
1995	127	10	265	2	104	8	(s)	379	0	--	--	2,443	--	5,549	--
1996	336	10	264	1	81	36	(s)	383	0	--	--	2,562	--	5,828	--
1997	125	11	219	1	21	8	(s)	249	0	--	--	2,568	--	5,820	--
1998	142	10	148	2	11	8	(s)	168	0	--	--	2,678	--	6,075	--
1999	92	10	364	(s)	42	8	0	415	0	--	--	2,693	--	6,161	--
2000	123	10	401	(s)	89	8	(s)	498	0	--	--	2,945	--	6,699	--
2001	124	10	415	1	125	47	0	588	0	--	--	3,104	--	^R 6,981	--
2002	83	10	283	1	123	118	0	525	0	--	--	3,189	--	7,145	--
2003	87	10	152	(s)	122	148	0	423	0	--	--	3,282	--	7,291	--
2004	91	10	102	(s)	123	240	0	465	0	--	--	3,393	--	7,553	--
Trillion Btu															
1960	0.5	5.1	0.1	0.2	0.4	0.4	0.2	1.2	0.0	(s)	0.0	0.6	7.4	1.5	8.9
1965	0.4	7.4	0.1	0.7	0.4	0.4	0.2	1.8	0.0	(s)	0.0	2.0	11.7	4.8	16.5
1970	0.2	14.3	0.2	0.8	0.7	0.4	0.3	2.4	0.0	(s)	0.0	2.2	19.2	5.4	24.6
1975	0.6	9.6	0.4	0.2	0.6	0.4	0.5	2.1	0.0	(s)	0.0	2.6	15.0	6.4	21.4
1980	1.5	5.3	2.5	0.1	0.4	0.5	0.2	3.7	0.0	(s)	0.0	3.9	14.4	9.4	23.8
1985	1.4	9.6	2.3	(s)	0.3	0.4	0.4	3.4	0.0	0.1	0.0	7.9	22.5	18.2	40.7
1990	2.1	9.3	1.3	(s)	0.3	0.4	(s)	2.0	^g 0.0	^g 0.1	^g 0.6	7.9	^g 22.0	18.3	^g 40.3
1995	2.3	10.5	1.5	(s)	0.4	(s)	(s)	2.0	0.0	0.1	0.6	8.3	23.8	18.9	42.8
1996	6.1	10.3	1.5	(s)	0.3	0.2	(s)	2.0	0.0	0.1	0.6	8.7	28.0	19.9	47.8
1997	2.3	11.5	1.3	(s)	0.1	(s)	(s)	1.4	0.0	0.2	0.6	8.8	24.7	19.9	44.6
1998	2.9	11.1	0.9	(s)	(s)	(s)	(s)	0.9	0.0	0.2	0.6	9.1	24.8	20.7	45.6
1999	1.8	10.3	2.1	(s)	0.2	(s)	0.0	2.3	0.0	0.2	0.6	9.2	24.5	21.0	45.5
2000	2.5	10.2	2.3	(s)	0.3	(s)	(s)	2.7	0.0	0.2	0.6	10.0	26.2	22.9	49.1
2001	2.2	10.1	2.4	(s)	0.5	0.2	0.0	3.1	0.0	0.1	0.6	10.6	26.7	23.8	50.5
2002	1.5	10.9	1.6	(s)	0.4	0.6	0.0	2.7	0.0	0.1	0.7	10.9	26.7	24.4	51.1
2003	1.6	^R 10.5	0.9	(s)	0.4	0.8	0.0	2.1	0.0	0.1	0.8	11.2	^R 26.3	24.9	^R 51.1
2004	1.6	10.3	0.6	(s)	0.4	1.2	0.0	2.3	0.0	0.1	0.9	11.6	26.8	25.8	52.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately

identified and are included in residential consumption.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year	Coal ^a	Natural Gas ^b	Petroleum								Hydro-electric Power ^e	Biomass ^a	Geo-thermal	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^f	Total
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million kWh			Million kWh		Million kWh	
1960	119	35	734	1,458	55	384	2	320	756	1,824	5,534	0	--	--	270	--	667
1965	124	38	743	1,790	55	496	3	510	942	2,301	6,841	0	--	--	1,285	--	3,067
1970	210	70	1,099	1,931	155	578	30	552	960	2,327	7,631	0	--	--	1,896	--	4,590
1975	640	59	606	3,596	117	569	45	591	1,881	3,147	10,552	0	--	--	2,918	--	7,017
1980	1,605	48	1,160	6,255	39	1,199	57	365	2,144	3,309	14,529	0	--	--	4,621	--	11,142
1985	1,875	54	1,676	2,463	7	1,312	52	530	142	2,150	8,331	0	--	--	6,212	--	14,311
1990	1,857	67	955	2,296	2	663	59	417	39	2,961	7,391	9	--	--	7,729	--	17,880
1995	1,937	68	665	1,898	22	1,265	56	443	20	2,203	6,572	0	--	--	6,817	--	15,485
1996	1,835	70	835	2,281	25	1,095	54	451	6	2,692	7,439	0	--	--	6,891	--	15,674
1997	1,959	67	972	2,811	22	160	57	470	4	2,698	7,195	0	--	--	7,211	--	16,341
1998	1,939	74	857	2,840	7	154	60	249	6	2,409	6,581	0	--	--	6,950	--	15,766
1999	1,934	61	1,227	3,219	5	195	61	237	8	2,398	7,349	0	--	--	7,065	--	16,164
2000	1,913	63	1,467	3,370	4	611	60	240	23	2,295	8,070	0	--	--	7,321	--	16,655
2001	1,660	62	1,096	4,341	2	400	55	426	68	3,631	10,018	0	--	--	7,700	--	17,318
2002	1,535	72	438	4,138	4	291	54	451	151	3,605	9,132	0	--	--	7,453	--	16,696
2003	1,614	R 76	907	3,218	(s)	272	50	477	143	3,890	8,956	0	--	--	7,685	--	17,072
2004	1,627	72	571	3,360	(s)	149	51	532	107	3,997	8,769	0	--	--	7,884	--	17,549

Trillion Btu																	
1960	2.4	36.1	4.9	8.5	0.3	1.5	(s)	1.7	4.8	11.0	32.6	0.0	0.4	0.0	0.9	72.5	2.3
1965	2.5	35.2	4.9	10.4	0.3	2.0	(s)	2.7	5.9	13.8	40.1	0.0	0.5	0.0	4.4	82.7	10.5
1970	4.0	71.3	7.3	11.2	0.9	2.2	0.2	2.9	6.0	14.0	44.7	0.0	0.6	0.0	6.5	127.1	15.7
1975	11.8	55.2	4.0	20.9	0.7	2.1	0.3	3.1	11.8	18.9	61.8	0.0	0.4	0.0	10.0	139.2	23.9
1980	28.8	51.1	7.7	36.4	0.2	4.4	0.3	1.9	13.5	19.9	84.4	0.0	1.2	0.0	15.8	181.3	38.0
1985	32.9	56.3	11.1	14.3	(s)	4.7	0.3	2.8	0.9	13.3	47.6	0.0	1.5	0.0	21.2	159.4	48.8
1990	41.2	73.8	6.3	13.4	(s)	2.4	0.4	2.2	0.2	17.8	42.7	9 0.0	9 1.0	9 (s)	26.4	9 185.1	61.0
1995	42.5	72.6	4.4	11.1	0.1	4.6	0.3	2.3	0.1	13.3	36.3	0.0	0.4	(s)	23.3	175.0	52.8
1996	40.2	74.2	5.5	13.3	0.1	4.0	0.3	2.4	(s)	16.1	41.8	0.0	0.2	(s)	23.5	179.8	53.5
1997	42.3	71.2	6.4	16.4	0.1	0.6	0.3	2.5	(s)	16.1	42.5	0.0	0.2	(s)	24.6	180.8	55.8
1998	42.5	79.2	5.7	16.5	(s)	0.6	0.4	1.3	(s)	14.5	39.0	0.0	0.1	(s)	23.7	184.6	53.8
1999	42.4	64.0	8.1	18.8	(s)	0.7	0.4	1.2	0.1	14.4	43.7	0.0	0.1	(s)	24.1	174.3	55.2
2000	38.5	66.4	9.7	19.6	(s)	2.2	0.4	1.3	0.1	13.8	47.2	0.0	0.1	(s)	25.0	177.1	56.8
2001	33.2	65.6	7.3	25.3	(s)	1.4	0.3	2.2	0.4	21.3	58.2	0.0	0.3	(s)	26.3	183.6	59.1
2002	30.9	75.7	2.9	24.1	(s)	1.1	0.3	2.3	0.9	21.1	52.8	0.0	0.2	(s)	25.4	185.1	57.0
2003	32.0	R 80.3	6.0	18.7	(s)	1.0	0.3	2.5	0.9	22.8	52.2	0.0	0.2	(s)	26.2	R 191.0	58.3
2004	32.4	75.0	3.8	19.6	(s)	0.5	0.3	2.8	0.7	23.4	51.0	0.0	0.2	(s)	26.9	185.5	59.9

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system

energy losses.

⁹ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R = Revised data.

kWh = Kilowatthours. -- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year			Petroleum								Ethanol	Retail Electricity Sales	Net Energy	Electrical System Energy Losses ^d	Total ^e
	Coal ^a	Natural Gas ^b	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total				Electrical System Energy Losses ^d	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Thousand Barrels		Million Kilowatthours	
1960	2	2	132	1,801	56	70	91	4,038	951	7,138	0	0	--	0	--
1965	(s)	2	217	1,864	74	49	81	4,157	1,173	7,615	0	0	--	0	--
1970	(s)	6	256	3,072	128	91	85	5,262	469	9,363	0	0	--	0	--
1975	(s)	5	218	3,965	124	116	108	6,691	0	11,223	0	0	--	0	--
1980	0	6	108	6,419	162	73	151	8,034	0	14,946	0	0	--	0	--
1985	0	5	51	4,172	154	45	137	7,073	(s)	11,632	^f 1	0	--	0	--
1990	0	5	35	6,671	143	27	154	6,613	0	13,643	22	0	--	0	--
1995	0	7	179	7,985	160	17	147	7,486	0	15,974	135	0	--	0	--
1996	0	8	213	7,869	151	16	143	7,418	0	15,810	49	0	--	0	--
1997	0	10	151	8,126	121	8	151	7,125	0	15,683	3	0	--	0	--
1998	0	12	151	8,010	116	25	158	7,631	0	16,090	0	0	--	0	--
1999	0	14	234	9,971	174	4	160	7,634	0	18,177	0	0	--	0	--
2000	0	14	277	8,737	286	10	157	7,551	0	17,019	0	0	--	0	--
2001	0	13	209	9,173	331	4	144	7,629	0	17,490	0	0	--	0	--
2002	0	13	241	9,287	210	3	142	7,473	0	17,356	0	0	--	0	--
2003	0	14	216	10,825	166	6	132	7,384	0	18,729	0	0	--	0	--
2004	0	13	227	10,524	242	21	133	7,196	0	18,343	0	0	--	0	--
Trillion Btu															
1960	(s)	1.8	0.7	10.5	0.3	0.3	0.5	21.2	6.0	39.5	0.0	0.0	41.3	0.0	41.3
1965	(s)	2.0	1.1	10.9	0.4	0.2	0.5	21.8	7.4	42.3	0.0	0.0	44.3	0.0	44.3
1970	(s)	6.0	1.3	17.9	0.7	0.3	0.5	27.6	2.9	51.3	0.0	0.0	57.4	0.0	57.4
1975	(s)	4.9	1.1	23.1	0.7	0.4	0.7	35.2	0.0	61.1	0.0	0.0	66.1	0.0	66.1
1980	0.0	6.2	0.5	37.4	0.9	0.3	0.9	42.2	0.0	82.2	0.0	0.0	88.4	0.0	88.4
1985	0.0	5.2	0.3	24.3	0.9	0.2	0.8	37.2	(s)	63.6	^f (s)	0.0	^f 68.8	0.0	^f 68.8
1990	0.0	5.6	0.2	38.9	0.8	0.1	0.9	34.7	0.0	75.6	0.1	0.0	81.2	0.0	81.2
1995	0.0	7.7	0.9	46.5	0.9	0.1	0.9	39.0	0.0	88.3	0.5	0.0	96.0	0.0	96.0
1996	0.0	8.6	1.1	45.8	0.9	0.1	0.9	38.7	0.0	87.4	0.2	0.0	96.0	0.0	96.0
1997	0.0	11.2	0.8	47.3	0.7	(s)	0.9	37.1	0.0	86.9	(s)	0.0	98.1	0.0	98.1
1998	0.0	12.3	0.8	46.7	0.7	0.1	1.0	39.8	0.0	88.9	0.0	0.0	101.2	0.0	101.2
1999	0.0	14.4	1.2	58.1	1.0	(s)	1.0	39.8	0.0	101.0	0.0	0.0	115.5	0.0	115.5
2000	0.0	14.8	1.4	50.9	1.6	(s)	1.0	39.3	0.0	94.2	0.0	0.0	109.0	0.0	109.0
2001	0.0	13.9	1.1	53.4	1.9	(s)	0.9	39.7	0.0	97.0	0.0	0.0	110.9	0.0	110.9
2002	0.0	13.7	1.2	54.1	1.2	(s)	0.9	38.9	0.0	96.3	0.0	0.0	110.0	0.0	110.0
2003	0.0	15.0	1.1	63.1	0.9	(s)	0.8	38.5	0.0	104.4	0.0	0.0	119.4	0.0	119.4
2004	0.0	13.1	1.1	61.3	1.4	0.1	0.8	37.5	0.0	102.2	0.0	0.0	115.3	0.0	115.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also natural gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Beginning in 1993, ethanol blended into motor gasoline is included in both "Motor Gasoline" and "Ethanol," but is

counted once in the "Total."

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

-- = Not applicable.

(s) = Btu value less than 0.05 or physical unit value less than 0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2004, Wyoming

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Biomass ^f	Geothermal	Solar/PV ^g	Wind	Electricity Net Imports ^h	Total
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours			Million Kilowatthours				
1960	815	1	5	6	0	12	0	609	--	0	0	0	0	--
1965	1,941	(s)	15	19	0	34	0	884	--	0	0	0	0	--
1970	3,571	2	11	13	0	25	0	1,006	--	0	0	0	0	--
1975	6,938	1	112	6	0	118	0	1,120	--	0	0	0	0	--
1980	13,498	(s)	0	123	0	123	0	1,108	--	0	0	0	0	--
1985	21,173	(s)	0	143	0	143	0	1,068	--	0	0	3	0	--
1990	23,526	(s)	0	99	0	99	0	645	--	0	0	0	0	--
1995	23,850	(s)	0	128	0	128	0	799	--	0	0	0	0	--
1996	24,430	(s)	0	110	0	110	0	1,232	--	0	0	0	0	--
1997	23,996	(s)	0	105	0	105	0	1,381	--	0	0	0	0	--
1998	26,674	(s)	0	80	0	80	0	1,342	--	0	0	2	0	--
1999	25,639	(s)	0	85	0	85	0	1,170	--	0	0	11	0	--
2000	26,365	2	0	66	0	66	0	1,011	--	0	0	246	0	--
2001	26,184	3	0	66	0	66	0	879	--	0	0	365	0	--
2002	25,675	4	0	76	0	76	0	584	--	0	0	447	21	--
2003	25,861	2	0	81	0	81	0	594	--	0	0	366	29	--
2004	26,428	1	0	92	0	92	0	593	--	0	0	617	-56	--
Trillion Btu														
1960	12.1	0.7	(s)	(s)	0.0	0.1	0.0	6.6	0.0	0.0	0.0	0.0	0.0	19.4
1965	31.0	0.2	0.1	0.1	0.0	0.2	0.0	9.2	0.0	0.0	0.0	0.0	0.0	40.6
1970	59.0	2.4	0.1	0.1	0.0	0.1	0.0	10.6	0.0	0.0	0.0	0.0	0.0	72.2
1975	115.4	0.4	0.7	(s)	0.0	0.7	0.0	11.7	0.0	0.0	0.0	0.0	0.0	128.2
1980	237.4	0.2	0.0	0.7	0.0	0.7	0.0	11.5	0.0	0.0	0.0	0.0	0.0	249.8
1985	370.7	0.1	0.0	0.8	0.0	0.8	0.0	11.2	0.0	0.0	0.0	(s)	0.0	382.9
1990	416.0	0.1	0.0	0.6	0.0	0.6	0.0	6.7	0.0	0.0	0.0	0.0	0.0	423.3
1995	418.4	0.1	0.0	0.7	0.0	0.7	0.0	8.2	0.0	0.0	0.0	0.0	0.0	427.5
1996	427.0	0.1	0.0	0.6	0.0	0.6	0.0	12.7	0.0	0.0	0.0	0.0	0.0	440.4
1997	423.5	0.1	0.0	0.6	0.0	0.6	0.0	14.1	0.0	0.0	0.0	0.0	0.0	438.4
1998	470.5	0.3	0.0	0.5	0.0	0.5	0.0	13.7	0.0	0.0	0.0	(s)	0.0	485.0
1999	451.7	0.2	0.0	0.5	0.0	0.5	0.0	12.0	0.0	0.0	0.0	0.1	0.0	464.4
2000	464.9	1.9	0.0	0.4	0.0	0.4	0.0	10.3	0.0	0.0	0.0	2.5	0.0	480.0
2001	464.2	2.8	0.0	0.4	0.0	0.4	0.0	9.1	0.0	0.0	0.0	3.8	0.0	480.2
2002	447.7	3.5	0.0	0.4	0.0	0.4	0.0	5.9	0.0	0.0	0.0	4.6	0.1	462.2
2003	460.1	2.3	0.0	0.5	0.0	0.5	0.0	6.1	0.0	0.0	0.0	3.8	0.1	472.8
2004	466.3	0.5	0.0	0.5	0.0	0.5	0.0	5.9	0.0	0.0	0.0	6.2	-0.2	479.3

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e Conventional hydroelectric power. Includes pumped-storage hydroelectricity, which cannot be separately identified, from 1960 through 1989.^f Wood and waste.^g Solar thermal and photovoltaic energy.^h Electricity traded with Canada and Mexico.ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

-- = Not applicable.

(s) = Btu value less than +0.05 and greater than -0.05 or physical unit value less than +0.5 and greater than -0.5.

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

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

State Energy Data System 2004: Consumption

Introduction to the Technical Notes

The State Energy Data System (SEDS) consumption tables provide annual time series estimates of State-level energy use by major economic sectors. The tables formerly comprised the *State Energy Data Report (SEDR)*. These tables are available on Energy Information Administration's (EIA) Web site at <http://www.eia.doe.gov/emeu/states/seds.html>. Companion tables containing State-level price and expenditure data (formerly called the *State Energy Price and Expenditure Report*, or *SEPER*) also can be found at the same Web site. In addition, tables showing State-level consumption, price and expenditure estimates by energy source as they are updated for the most current year can be found at http://www.eia.doe.gov/emeu/states/seds_updates.html.

This document contains information on the data sources, estimation procedures and assumptions for the State-level consumption estimates. Technical notes for State-level prices and expenditures are also available at http://www.eia.doe.gov/emeu/states/seds_tech_notes.html.

Purpose

All of the estimates contained in the State energy consumption data tables are developed using SEDS, which is maintained and operated by EIA. The goal in maintaining SEDS is to create historical time series of energy consumption, prices, and expenditures by State that are defined as consistently as possible over time and across sectors. SEDS exists for two principal reasons: (1) to provide State energy consumption, price and expenditure estimates to Members of Congress, Federal and State

agencies, and the general public and (2) to provide the historical series necessary for EIA's energy models.

System and Report

Efforts are made to ensure that the sums of the State data equal the national totals as closely as possible for each energy type and end-use sector as published in other EIA publications. SEDS State energy consumption estimates are generally comparable to the statistics in the EIA *Annual Energy Review* and the *Monthly Energy Review* consumption tables.

Due to page-size constraints, tables of the State energy consumption in PDF show data for selected years from 1960 through 1995; thereafter, data are shown consecutively through 2004. However, data for all years from 1960 forward are maintained in SEDS, and are included in the HTML versions of the tables and in the CSV data files available via EIA's Web site. All years are covered by the documentation in this report.

Extensive documentation is included in the following Technical Notes. The Technical Notes describe how the estimates were derived for each individual energy source and lists the sources of all data series. Appendix A lists alphabetically all of the variable names and formulas used. Appendix B lists the conversion factors used to convert physical units into British thermal units and cites the sources for those factors. Appendix C provides the State resident population statistics that are used in per capita calculations. Appendix D provides metric and other physical conversion factors

for measures used in energy analyses. Appendix E summarizes the changes made since the last release of data, which was in October 2006.

Collected Data and Estimated Values in SEDS

Coal. U.S. total coal consumption data by sector are taken directly from EIA's *Annual Coal Report (ACR)* and predecessor publications. Total coal consumption by State and for most sectors is from the *ACR*, except where values are withheld and must be estimated. The State-level disaggregation of the *ACR*'s combined residential and commercial sector are estimates. Data on electric power industry coal consumption by State and coal type are from the EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms.

Natural Gas. Natural gas consumption by State and sector is taken directly from the EIA's *Natural Gas Annual (NGA)*. Natural gas consumed as lease fuel and plant fuel and natural gas delivered to industrial consumers in the *NGA* are combined in SEDS as industrial sector consumption. Natural gas consumed as vehicle fuel and pipeline fuel are combined in SEDS as transportation sector consumption.

Petroleum. U.S. total consumption for each petroleum product is the "product supplied" data from EIA's *Petroleum Supply Annual*. State values for distillate fuel, residual fuel, and petroleum coke consumption by the electric power industry are unpublished data from the EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. All other State and sector values for consumption of petroleum products are estimates based on sales data from several sources.

Renewable Energy. **Solar thermal and photovoltaic energy** consumption in the residential and commercial sectors is estimated. Solar energy use in the electric power sector is collected on the EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. The use of **Wind** energy in the electric power sector is also collected on those forms. **Geothermal**

energy direct use and by heat pumps in the residential, commercial, and industrial sectors are estimates based on a survey from the Oregon Institute of Technology Geo-Heat Center. Electricity generated from geothermal energy by the electric power sector is collected on the EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. **Hydroelectricity** generation by cogenerators in the commercial and industrial sectors is collected on the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms; and generation by the electric power sector is collected on the EIA-906, "Power Plant Report," and predecessor forms. **Wood** consumption in the residential and commercial sectors are estimates based on data collected on the EIA Form EIA-457 "Residential Energy Consumption Survey" and Form EIA-871 "Commercial Buildings Energy Consumption Survey". Additional **wood and waste** use for electricity generation by cogenerators in the commercial and industrial sectors and by the electric power sector is collected on the EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. State-level transportation use of **ethanol** is estimated, although the U.S. data are collected on several forms and reported in EIA's *Renewable Energy Annual*.

Nuclear Electric Power. Nuclear electricity generation by State is collected on the EIA-906, "Power Plant Report," and predecessor forms.

Electricity. Electricity consumption is sales data by sector and State from the *EPA* with one exception. The *EPA* "Other" category is allocated to the transportation and commercial sectors in each State is estimated from 1960 through 2002.

Electrical System Energy Losses and Net Interstate Flow of Electricity. These series are estimated in SEDS.

Data Revisions and Methodology Improvements

Appendix E gives detailed information about all data revisions in this release of consumption estimates, regardless of how small. All data with revisions since the last edition of SEDS that are large enough to be seen in the published tables' level of rounding are preceded with an "R" in the data tables prepared for the Web site.

Data

Estimation Methodologies. Using SEDS, EIA develops estimates of energy consumption by principal energy sources and major end-use sectors, by State, for a 45-year period. Energy consumption is estimated by using data from existing surveys of energy suppliers that report consumption, sales, or distribution of energy at the State level. Most of the SEDS estimates rely directly on collected State-level consumption data (See "Collected Data and Estimated Values in CSEDs" on page 2, which summarizes the status of current data sources used). Some consumption estimates in SEDS are based on a variety of surrogate measures. The measures were

Energy Consumption Measures—Total and Site

Sources of energy can be categorized as primary and secondary. Primary sources of energy, such as coal, petroleum, and natural gas are consumed directly. Electricity is a secondary form of energy that is created from primary energy sources. The amount of electricity actually consumed by the end user (site consumption) does not include the energy lost in the generation and delivery of the electricity to the point of use.

Primary sources of energy are measured in applicable physical units. Coal is measured by the short ton (equal to 2,000 pounds); petroleum, by the barrel (equivalent to 42 gallons); and natural gas, by the cubic foot. Energy sources are also measured by their heat content, generally expressed in British thermal units (Btu). For example, in 2004, the average short ton of coal consumed by the electric power sector contained 19.980 million Btu (Appendix B Table B13), the average barrel of distillate fuel contained 5.825 million Btu (page 156 of Appendix B), and the average cubic foot of natural gas consumed by the electric power sector contained 1,034 Btu (Appendix B Table B3).

Electricity, a secondary form of energy, can also be measured in physical units, commonly kilowatthours, and by heat content. The

conventional thermal conversion factor for electricity consumed by the end user (site consumption) is 3,412 Btu per kilowatthour.

In 2004 the electric power sector consumed 39.1 quadrillion Btu of primary energy in order to provide 12.1 quadrillion Btu of electricity for sale. These data indicate that 69 percent of the primary (embodied) energy in the fuels consumed to generate the electricity was used (or "lost") in converting the primary energy to electricity and transmitting and distributing the electricity to the consumers, and 31 percent was used as site (point-of-use) electricity by consumers.

In evaluating these energy consumption tables, the tables titled "Total Energy Consumption" include all primary energy sources, including those used to generate electricity; the electricity generated is not included. Tables showing "Total End-Use Sector Consumption" include columns for the primary sources and electricity that are consumed by the sector, as well as a column for the estimated energy lost in the electrical system processes. The "Total" column in those tables includes all energy consumed by the sector and the associated energy lost in the generation and transmission of electricity. The column titled "Net" is site energy consumption—that is, the sum of the primary sources and electricity, excluding the electrical system energy losses.

selected principally on the basis of applicability as an indicator of consumption, availability, continuity over time, and consistency. For instance, for petroleum, “product supplied” is a surrogate for consumption and is derived by summing field and refinery production, plus imports, minus exports, plus or minus changes in stocks. State-level sales survey data are used to disaggregate the national petroleum product supplied totals to the States. The measures of consumption and estimation methodologies are explained in detail under each energy source in the Technical Notes.

Methods are also applied to estimate State electrical system energy losses that are not available from any survey. See “Energy Consumption Measures--Total and Site” on page 3 for a discussion about losses and how they are reflected in the SEDS tables. U.S. total electrical system energy losses are allocated to each individual State’s end-use sectors in proportion to the sectors’ electricity sales. The estimation method does not separately identify electrical system energy losses from interstate flow of electricity. Therefore, specific estimates are developed for Alaska and Hawaii and for the 48 contiguous States.

Data Sources. The original source documents cited in the Technical Notes include descriptions of the data collection methodologies, universes, imputation or adjustment techniques (if any), and errors associated with the processes. Due to the numerous collection forms and procedures associated with those reports, it is not possible to develop a meaningful numerical estimate of the overall errors of the integrated data published here.

Reliable, consistent series for long periods of time—especially in the earlier years—are difficult to develop, and estimates and assumptions must be applied to fill data gaps and to maintain definitional consistency. Although SEDS incorporates the most consistent series and procedures possible, users of this report should recognize the limitations of the data that are due to changing and inadequate data sources.

For example, in reports prepared by the Bureau of Mines in the late 1960’s and early 1970’s, petroleum consumption was equated to demand. Later, consumption was equated to apparent demand and, more recently, to product supplied. Changes in surveys and reduction of data collections, especially after 1978, disturbed the continuity of some petroleum consumption series, most notably for distillate fuel, residual fuel, kerosene, and liquefied petroleum gases. These and other data inconsistencies are explained in detail for each energy source in the Technical Notes.

Comparison with Other Energy Consumption Reports

EIA conducts numerous energy-related surveys. In general, the surveys can be divided into two broad groups. One group of surveys, called supply surveys, is directed to the suppliers and marketers of specific energy sources. Those surveys measure the quantities of specific fuels supplied to the market. The results of supply surveys are combined and published in a number of EIA data products, including the Monthly Energy Review and SEDS. The second group of surveys, called energy consumption surveys, gather information directly from end users of energy. Although there are some elements in common, the supply survey data and the consumption survey data have substantially different approaches, capabilities, and objectives. Thus, care must be taken in analyzing SEDS consumption estimates in conjunction with consumption survey data for the following reasons:

- SEDS data are designed to be a broad accounting of energy consumption, covering all energy use and splitting it into major sectors as clearly as possible. The energy consumption surveys are designed to be comprehensive and representative within individual sectors. However, the sectors are restricted for purposes of creating relatively homogeneous, well-defined populations and for aiding in sampling and data collection. For example, the Commercial Buildings Energy Consumption Survey covers only energy consumption in commercial buildings, while SEDS includes other commercial consumption, such as street lighting and public services; and the Manufacturing Energy Consumption Survey covers only manufacturing establishments, while SEDS includes other industrial energy consumption (i.e., mining, construction, agriculture, fisheries, and forestry). Further, the consumption surveys do not cover all energy-using sectors. Therefore, energy consumption surveys cannot be summed together to account for all energy use.
- Energy consumption surveys provide user characteristics that allow for both macro-level (for major sectoral sub-populations) and micro-level (at the unit of data collection) interpretive analysis. The surveys of energy consumption by residential households from the Residential Energy Consumption Survey (Form EIA-457 series) and by commercial buildings from the Commercial Buildings Energy Consumption Survey (Form EIA-871 series) provide detailed information about the energy end users, their size, their stock of energy-consuming equipment and appliances, and their total energy consumption and

expenditures. The Manufacturing Energy Consumption Survey (Form EIA-846 series) collects consumption by type of use and fuel switching capability from manufacturing establishments grouped by manufacturing classification. SEDS, on the other hand, provides limited characterization of the end users of energy but greater geographic and energy product detail, as well as annual historical time series.

- Sectoral classification in SEDS is generally based on supplier classifications of customer accounts, by whatever means suppliers choose to use. (See discussion in next section.) Sectoral classification for the energy consumption surveys is based upon a categorization, verified by end user, of the primary economic activity of the data collection unit (household, building, or establishment).
- The energy consumption surveys provide data at national and Census region and/or Census division levels, whereas the estimates in SEDS are on national and State levels.
- The reference periods are also different in that SEDS covers calendar years from 1960 through 2004, while the consumption surveys are for selected years, and the residential end-use surveys taken prior to 1987 cover a heating season year (i.e., April through March). Beginning with the 1987 residential end-use survey, the reference period is a calendar year.

For a more detailed description of the differences between SEDS and the energy consumption surveys, see the EIA analysis report *Energy Consumption by End-Use Sector: A Comparison of Measures by Consumption and Supply Surveys*, DOE/EIA-0533, April 1990.

Energy Consuming Sectors

The consumption estimates in SEDS are based on data collected by various surveys that do not necessarily define the consuming sectors exactly the same way. The Technical Notes of this report describes in detail for each energy source how the collected data series are combined and assigned to SEDS consuming sectors. To the degree possible, energy consumption in this report has been assigned to the five sectors according to the following general definitions:

- **Residential Sector:** An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.
- **Commercial Sector:** An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.
- **Industrial Sector:** An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31–33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.
- **Transportation Sector:** An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. In this

report, natural gas used in the operation of natural gas pipelines is included in the transportation sector.

- **Electric Power Sector:** An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public. *Note:* This sector includes electric utilities and independent power producers.

Sector Definition Discrepancies. Although the end-use allocations are made according to these aggregations as closely as possible, some data are collected by using different classifications. For example, electric utilities may classify commercial and industrial users by the quantity of electricity purchased rather than by the business activity of the purchaser. Natural gas used in agriculture, forestry, and fisheries was collected and reported in the

commercial sector through 1995. Beginning with 1996 data, deliveries of natural gas for agriculture, forestry, and fisheries are reported in the industrial sector instead. Another example is master-metered condominiums and apartments and buildings with a combination of residential and commercial units. In many cases, the metering and billing practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. No adjustments for these discrepancies were made.

SEDS does not provide further disaggregated end-use consumption estimates. For example, the industrial sector cannot be broken down into the chemical or rubber industries, all manufacturing, or agriculture. The input series for the system are provided in broad end-use categories from the data collection forms and are not available by the individual components. Additional disaggregated regional information, such as counties or cities, are also not available from SEDS.

Section 1. Documentation Guide

The following Technical Notes describe how consumption estimates contained in the State Energy Data System (SEDS) are derived. The following six sections, one for each energy source and total energy, provide: descriptions of all the data series that are entered into SEDS; the formulas applied in SEDS for creating additional data series; and notes on special circumstances for any series.

Appendix A is an alphabetical listing of the variable names and formulas used in the system; Appendix B lists the conversion factors used in SEDS to convert physical units into British thermal units and gives the sources for those factors; Appendix C provides the U.S. Department of Commerce, Bureau of the Census, resident population data used in per capita calculations; Appendix D presents metric and other physical conversion factors for information, although they are not currently used in SEDS; and Appendix E is a summary of the changes made in SEDS since the last report, which was released in October 2006.

There are over 400 variables used in SEDS to create the estimates in this report. All of the variables are identified by seven-letter names, such as MGTCPAL. In the following example, MGTCPAL is the identifying code for data on motor gasoline total consumption in physical units in Alabama

The type of energy categories in SEDS, which are represented by the first two letters of the variable name, are:

Characters:	MG	TC	P	AL
Positions:	1 and 2	3 and 4	5	6 and 7
Identity:	Type of Energy	Energy activity or consumption end-use sector	Type of data	Geographic

AB	= aviation gasoline blending components
AI	= aluminum ingot
AR	= asphalt and road oil
AS	= asphalt
AV	= aviation gasoline
CC	= coal coke
CG	= corrugated and solid fiber boxes
CL	= coal
CO	= crude oil, including lease condensate
CT	= catalytic cracking
DF	= distillate fuel
DK	= distillate fuel, including kerosene-type jet fuel
EL	= electricity
EN	= ethanol
ES	= electricity sales
FF	= fossil fuels
FN	= petrochemical feedstocks, naphtha less than 401° F
FO	= petrochemical feedstocks, other oils equal to or greater than 401° F
FS	= petrochemical feedstocks, still gas
GE	= geothermal energy
GO	= geothermal, wind, photovoltaic, and solar thermal energy
HV	= conventional hydroelectric power
HY	= hydroelectric power, all types
JF	= jet fuel
JK	= jet fuel, kerosene-type
JN	= jet fuel, naphtha-type
KS	= kerosene
LG	= liquefied petroleum gases
LO	= electrical system energy losses
LU	= lubricants
MB	= motor gasoline blending components
MG	= motor gasoline
MS	= miscellaneous petroleum products

NA	= natural gasoline (including isopentane)
NG	= natural gas
NU	= nuclear electric power
OC	= organic chemicals
PA	= all petroleum products
PC	= petroleum coke
PI	= paints and allied products
PL	= plant condensate
PO	= other petroleum products
PP	= pentanes plus
RD	= road oil
RE	= renewable energy
RF	= residual fuel
SG	= still gas
SN	= special naphtha
SO	= photovoltaic and solar thermal energy
TE	= total energy
TN	= total net energy
TP	= resident population
UO	= unfinished oils
US	= unfractionated stream
WD	= wood
WN	= wind, photovoltaic, and solar thermal energy
WS	= waste
WW	= wood and waste
WX	= waxes
WY	= wind

The consumption end-use sectors, identified by characters three and four of each variable name, such as:

AC	= transportation sector consumption
CC	= commercial sector consumption
EG	= electric power sector generation (also consumption)
EI	= electric power sector consumption
IC	= industrial sector consumption
RC	= residential sector consumption
TC	= total consumption of all sectors

Many other characters occur in the third and fourth positions of the variable names for the sales, deliveries, and distribution data series used in the

intermediate calculations in SEDS to derive the end-use consumption estimates. Examples of these codes are:

BK	= sales for use in vessel bunkering
LP	= lease and plant fuel
IN	= deliveries to the industrial sector
OD	= distribution to other industrial users

Combining the first two components (the first four letters) produces variable names, such as:

RFBK	= residual fuel sold for vessel bunkering
RFAC	= residual fuel consumed by the transportation sector
NGIN	= natural gas delivered to the industrial sector
NGIC	= natural gas consumed by the industrial sector

The fifth character of the variable names in SEDS identifies the type of data by using one of the following letters:

B	= data in British thermal units (Btu)
K	= factor for converting data from physical units to Btu
M	= data in alternative physical units
P	= data in standardized physical units
S	= share or ratio expressed as a fraction
V	= value added in manufacture

Data entered into SEDS are in physical units, represented by a “P” in the fifth character; for example, coal data are in thousand short tons, petroleum data are in thousand barrels, and natural gas data are in million cubic feet. In a few cases, data are obtained from the source documents in different units, such as thousand gallons instead of thousand barrels, and are represented by an “M” until converted in SEDS to the unit that is consistent with other variables. Conversion factors, represented by a “K” in the fifth character, are applied to the physical unit data to convert the data to British thermal units, a common unit for all forms of energy. The derived data series in thousand British thermal units are represented by “B” in the fifth character. In a few cases, consumption estimates are derived by calculating shares of aggregated consumption data. The fractions used to calculate the consumption shares are identified by an “S” in the fifth character. The consumption estimates for some petroleum products are based on the value added in the manufacturing process by related

industries in each State. The data series for those industry activities are in dollars, and the variable names contain “V” in the fifth character.

The last two characters of each variable name are for geographic identification. Geographic areas used in SEDS are the 50 States and the District of Columbia (represented by the U.S. Postal Service State abbreviations) and the United States as a whole. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia, and the variables used in those calculations are identified by “48” in the last two characters of the names. The geographic area codes used in SEDS are shown in Table TN1.

Throughout this report, the term “State” includes the District of Columbia. Throughout this documentation, “ZZ” is used as a geographic identifier to represent the different State abbreviations that would be interchanged in that position of the variable name.

Table TN1. Geographic Area Codes Used in the State Energy Data System

Code	State	Code	State
AK	Alaska	NC	North Carolina
AL	Alabama	ND	North Dakota
AR	Arkansas	NE	Nebraska
AZ	Arizona	NH	New Hampshire
CA	California	NJ	New Jersey
CO	Colorado	NM	New Mexico
CT	Connecticut	NV	Nevada
DC	District of Columbia	NY	New York
DE	Delaware	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
HI	Hawaii	PA	Pennsylvania
IA	Iowa	RI	Rhode Island
ID	Idaho	SC	South Carolina
IL	Illinois	SD	South Dakota
IN	Indiana	TN	Tennessee
KS	Kansas	TX	Texas
KY	Kentucky	UT	Utah
LA	Louisiana	VA	Virginia
MA	Massachusetts	VT	Vermont
MD	Maryland	WA	Washington
ME	Maine	WI	Wisconsin
MI	Michigan	WV	West Virginia
MN	Minnesota	WY	Wyoming
MO	Missouri	US	United States
MS	Mississippi	48	The contiguous 48 States and the District of Columbia
MT	Montana		

Section 2. Coal

Coal Consumption

Physical Units

Nine data series are used to estimate State coal consumption. Most are U.S.-level consumption and comparable State-level distribution data, and are in units of thousand short tons. "ZZ" in the variable names is used to represent the two-letter State code that differs for each State:

- CLACPUS = coal consumed by the transportation sector in the United States;
- CLEIPZZ = coal consumed by the electric power sector in each State;
- CLHCPUS = coal consumed by the residential and commercial sectors in the United States;
- CLHDPZZ = coal distributed to the residential and commercial sectors in each State;
- CLKCPUS = coal consumed by coke plants in the United States;
- CLKDPZZ = coal distributed to coke plants in each State;
- CLOCPUS = coal consumed by other industrial users in the United States;
- CLODPZZ = coal distributed to other industrial users in each State; and
- CLRCSUS = the residential share of combined residential and commercial coal consumption.

The U.S. totals for the four State-level series are calculated by summing the State data.

State estimates of coal consumed by the residential and commercial sectors combined are made by assuming that coal is consumed in proportion to the amount of coal distributed to the residential and commercial sectors in each State:

$$\text{CLHCPZZ} = (\text{CLHDPZZ}/\text{CLHDPUS}) * \text{CLHCPUS}$$

Coal consumed by the residential and commercial sectors is reported combined and little information exists for disaggregating the combined sectors' data. The Energy Information Administration (EIA) estimates that a decreasing percentage of the combined total is consumed in the residential sector as shown in Table TN2. This estimated percentage is applied to the residential and commercial sectors' total to estimate residential consumption and the remaining quantity is assumed to be commercial use:

$$\text{CLRCPZZ} = \text{CLHCPZZ} * \text{CLRCSUS}$$

$$\text{CLRCPUS} = \Sigma \text{CLRCPZZ}$$

$$\text{CLCCPZZ} = \text{CLHCPZZ} - \text{CLRCPZZ}$$

$$\text{CLCCPUS} = \Sigma \text{CLCCPZZ}$$

Table TN2. Residential Sector Share of Combined Residential and Commercial Coal Consumption, 1960 Forward

Years	CLRCSUS	Years	CLRCSUS	Years	CLRCSUS
1960–1962	0.59	1978	0.23	1990	0.20
1963, 1964	0.58	1979	0.20	1991–1993	0.18
1965–1967	0.57	1980	0.21	1994	0.15
1968–1970	0.56	1981	0.18	1995	0.13
1971	0.49	1982	0.17	1996	0.12
1972	0.43	1983	0.16	1997, 1998	0.11
1973	0.37	1984	0.19	1999	0.12
1974	0.32	1985	0.22	2000, 2001	0.11
1975	0.30	1986, 1987	0.23	2002	0.12
1976	0.29	1988	0.22	2003	0.13
1977	0.28	1989	0.21	2004	0.11

To gain a perspective on these estimates: coal consumed by residential and commercial users combined in 2004 accounted for only 0.46 percent of all coal consumed—that is, 4.6 million short tons out of the 1,107 million short tons consumed in 2004.

Consumption in the industrial sector is reported for the U.S. and estimated by State. An assumption is made that coal is consumed by coke plants in proportion to the amount of coal distributed to coke plants in each State. It also is assumed that the consumption of coal by industrial users other than coke plants is in proportion to the amount of coal delivered to the other industrial users in each State. The industrial sector consumption is the sum of coal consumed by coke plants and other industrial users in each State:

$$\begin{aligned}\text{CLKCPZZ} &= (\text{CLKDPZZ}/\text{CLKDPUS}) * \text{CLKCPUS} \\ \text{CLOCPZZ} &= (\text{CLODPZZ}/\text{CLODPUS}) * \text{CLOCPUS} \\ \text{CLICPZZ} &= \text{CLKCPZZ} + \text{CLOCPZZ}\end{aligned}$$

There are no data available for estimating the transportation sector's consumption of coal by State. The quantity would be very small. The transportation sector accounted for only 1 percent of the national total consumption in 1960 and none since 1978. An assumption is made that when transportation sector consumption exists, the consumption by State, CLACPZZ, is in proportion to the share of the U.S. industrial sector attributed to each State:

$$\text{CLACPZZ} = (\text{CLICPZZ} / \text{CLICPUS}) * \text{CLACPUS}$$

Total consumption in each State, CLTCPZZ, is the sum of the sectors' consumption:

$$\text{CLTCPZZ} = \text{CLRCPPZZ} + \text{CLCCPZZ} + \text{CLICPZZ} + \text{CLACPZZ} + \text{CLEIPZZ}$$

The U.S. total consumption estimates for each of the sectors and the total are calculated as the sum of the States' values.

British Thermal Units (Btu)

Five factors are used to convert coal from physical units to Btu:

- CLACKZZ = the factor for converting coal consumed by transportation sector in each State from short tons to Btu;
- CLEIKZZ = the factor for converting coal consumed by the electric power sector in each State from short tons to Btu;
- CLHCKZZ = the factor for converting coal consumed by the residential and commercial sectors in each State from short tons to Btu; and
- CLKCKZZ = the factor for converting coal consumed at coke plants in each State from short tons to Btu; and
- CLOCKZZ = the factor for converting coal consumed by other industrial users in each State from short tons to Btu.

The electric power sector conversion factor for each State is applied to the physical unit value to estimate coal consumed in Btu:

$$\text{CLEIBZZ} = \text{CLEIPZZ} * \text{CLEIKZZ}$$

The residential and commercial sectors' State conversion factor is applied to the physical unit values to estimate coal consumed by the two sectors in Btu:

$$\begin{aligned}\text{CLRCBZZ} &= \text{CLRCPPZZ} * \text{CLHCKZZ} \\ \text{CLCCBZZ} &= \text{CLCCPZZ} * \text{CLHCKZZ}\end{aligned}$$

The industrial sector Btu consumption is estimated in three steps. Coal consumed at coke plants and by all industrial users other than coke plants are converted to Btu using their individual State conversion factors. The industrial sector consumption in Btu is then calculated as the sum of the two industrial components:

$$\begin{aligned}\text{CLKCBZZ} &= \text{CLKCPZZ} * \text{CLKCKZZ} \\ \text{CLOCBZZ} &= \text{CLOCPZZ} * \text{CLOCKZZ} \\ \text{CLICBZZ} &= \text{CLKCBZZ} + \text{CLOCBZZ}\end{aligned}$$

The transportation sector conversion factor for each State is applied to the physical unit value to estimate coal consumed in Btu:

$$\text{CLACBZZ} = \text{CLACPZZ} * \text{CLACKZZ}$$

Total consumption for each State is the sum of the sectors' consumption:

$$\text{CLTCBZZ} = \text{CLRCBZZ} + \text{CLCCBZZ} + \text{CLICBZZ} + \text{CLACBZZ} + \text{CLEIBZZ}$$

The U.S. consumption estimates in Btu are calculated by summing the State values for each of the data series. The U.S. average conversion factor for each of the five factors is calculated as the U.S. consumption in Btu divided by the U.S. consumption in physical units for each of the factors.

Additional Notes for Coal

1. The national-level coal consumption data series for the residential and commercial sectors (CLHCPUS), coke plants (CLKCPUS), and industries other than coke plants (CLOCPUS) are from a continuous data source. However, the data series used to develop State-level estimates by end-use sector (CLHDPZZ, CLKDPZZ and CLODPZZ) vary for different time periods.

For 1960 through 1979, U.S. coal consumption is allocated by State based on the proportion of coal distributed to each State. Beginning with 1980, State-level total coal consumption data are available, however, many of these data are withheld at the sector level. Withheld data are estimated by substituting residential and commercial coal distributed for residential and commercial coal consumed. In many States, this leaves only one sector withheld, which is derived by subtracting the other known or imputed sectors from the State total. These derived consumption series are used as the allocating data series to develop coal consumption estimates at a State and sector level that are consistent with State-level coal consumption data published in other EIA reports.

Beginning with 2001, additional State coal consumption values are withheld, making it no longer possible to back out known or imputed sectors to derive State-level coal volumes distributed to coke plants (CLKDP). From 2001 forward, withheld State-level coke plant consumption is estimated by calculating the State's percentage of its Census division quantity for the previous 3 years and averaging those percentages. That average percentage is applied to the current year's Census division value to estimate the current year consumption for the State.

2. Total coal consumption by State for 1980 through 1989 published in the EIA *Quarterly Coal Report* do not sum to the U.S. totals due to a quantity called "Unknown" in the source tables. This unknown coal consumption is added to the residential, commercial, and "other industrial" sectors of Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia in proportion to their total distribution of all coal.
3. Prior to 1974, data for distribution of bituminous coal and lignite by State include several groupings of States for which separate State data are not available. These groupings are: (1) Maine, New Hampshire, Vermont, and Rhode Island; (2) North Dakota and South Dakota; (3) Delaware and Maryland; (4) Georgia and Florida; (5) Alabama and Mississippi; (6) Arkansas, Louisiana, Oklahoma, and Texas; (7) Montana and Idaho; (8) Arizona and Nevada; and (9) Washington and Oregon. Beginning with 1974, individual State distribution data became available. To estimate the 1960 through 1973 State distribution data, the States are disaggregated in proportion to the individual States' shares of each similar State grouping in 1974.
4. The sources used to develop thermal conversion factors for bituminous coal and lignite consumed by the electric power sector—the National Coal Association report and the Federal Power Commission's (FPC) Form 423 and FERC Form 423 published in the *Cost and Quality of Fuels at Electric Utility Plants*—exclude Alaska. However, Alaska reported consumption of bituminous coal and lignite at electric utilities for all years, 1960 forward. Unpublished FPC heat rates for coal at electric utilities in Alaska were used for 1960 through 1972. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1973 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 through 1997. For 1998 forward, the Alaska factor is calculated using the same methodology as is used for other States described on page 15.

Data Sources for Coal

CLACKZZ — Factor for converting coal consumed by the transportation sector from physical units to Btu by State.

- 1960 through 1977: Assumed by EIA to be equal to the Btu conversion factor for bituminous coal and lignite consumption by industrial users other than coke plants:
 - 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average.
 - 1974 through 1977: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.
- 1978 forward: Transportation sector coal is included in the other industrial category. Zero is entered for this variable.

CLACPUS — Coal consumed by the transportation sector in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, chapter "Coal-Bituminous and Lignite," table titled, "Consumption of bituminous coal and lignite, by consumer class, and retail deliveries in the United States," column "Bunker, lake vessel and foreign."
- 1976 and 1977: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite," table titled, "Consumption of bituminous coal and lignite, by consumer class, and retail deliveries in the United States," column "Bunker, lake vessel and foreign."
- 1978 forward: Small amounts of bituminous coal and lignite consumed by the transportation sector are included in the other industrial category (see CLOCPUS). Zero is entered for this variable.

CLEIKZZ — Factor for converting coal consumed by the electric power sector from physical units to Btu by State.

- 1960 through 1988: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS.

Anthracite conversion factors:

- 1960 through 1972: EIA assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17,500 million Btu per short ton.
- 1973 through 1988: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. These data are reported on the FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and predecessor forms.

Bituminous coal and lignite conversion factors:

- 1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from FPC Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. The specific tables are:
 - 1960 and 1961: Table 1.
 - 1962 through 1972: Table 2.
- 1973 through 1982: The average heat content of coal received at steam electric plant 25 megawatts or greater from FPC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, tables titled "Destination and Origin of Coal 'Delivered to' (1973–1979) 'Receipts to' (1980) 'Received at' (1981–1982) Steam-Electric Plants 25-MW or Greater."
- 1983 through 1988: The average heat content of coal received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in the EIA, *Cost and Quality of Fuels for Electric Utility Plants*. The specific tables are:
 - 1983 and 1984: Table 58.
 - 1985 through 1988: Table 48.

Notes: The State conversion factors for 1960 through 1972 are derived from actual consumption data, while the conversion factors for 1973 to 1988 are based on receipts of coal. The factors for 1960 through 1972 also may include some quantities of anthracite. These breaks in the series create some data discrepancies. In

instances where a State had no receipts for a particular year but did report consumption, it is assumed that the coal received in one year is consumed during the following year and the Btu value of the previous year's receipts is used. See Additional Note 4 on page 13 for Alaska calculations.

- 1989 forward: Calculated by dividing the total heat content of coal received at electric power plants (including electric utilities, nonutility power plants and combined heat-and-power plants) by the total quantity consumed in physical units collected on Forms EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html. See Additional Note 4 on page 13 for Alaska factors.

CLEIPZZ — Coal consumed by the electric power sector by State.

- EIA, Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html.

CLHCKZZ — Factor for converting coal consumed by the residential and commercial sectors from physical units to Btu by State.

- 1960 through 1997: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS.

Anthracite conversion factors:

- Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and "unaccounted for."

Bituminous coal and lignite conversion factors:

- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average.
- 1974 through 1997: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to

those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on the FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.

- 1998 through 2000: Calculated by EIA from the average heat content of coal received for the residential and commercial sectors combined as reported on Form EIA-860, "Annual Electric Generator Report." For States that are not represented in data on the Form EIA-860, it is assumed that the heat content of the coal receipts in residential and commercial sectors are equivalent to the heat content of coal received in the other industrial sector as reported on Form EIA-3A, "Annual Coal Quality Report—Manufacturing." For States that are not represented in either Form EIA-3A data or Form EIA-860 data (CT, NH, RI, VT and DC), the heat content of coal receipts in MA is used for CT, NH, RI and VT and the heat content of coal receipts in MD is used for DC, since the origin of the coal receipts are similar.
- 2001 forward: Calculated by EIA from the coal distribution data reported on Form EIA-6A, "Coal Distribution Report - Annual," and the average heat content of coal reported on FERC Form 423 and Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants." Form EIA-6A provides distribution data for the combined residential and commercial sectors by State of origin to the destination State. FERC Form 423 and Form EIA-423 provide the average heat content of coal produced in the State of origin.

CLHCPUS — Coal consumed by the residential and commercial sectors in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, Chapter "Coal—Pennsylvania Anthracite Annual" and Chapter "Coal—Bituminous and Lignite," Table titled, "Consumption of bituminous coal and lignite, by consumer class, with retail deliveries in the United States" column titled "Retail deliveries to other consumers" or "Retail sales."

- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 7.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 6.
- 1988 through 1990, 1992 through 1995: EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1988 final data are published in the *Quarterly Coal Report, October–December 1989*. The specific tables are:
 - 1988 through 1990: Table 29.
 - 1992 through 1994: Table 51.
 - 1995: Table 43.
- 1991, 1996 through 1999: EIA, *Coal Industry Annual 2000*, Table 75.
- 2000: EIA, *Annual Coal Report 2001*, Table 27.
- 2001 forward: EIA, *Annual Energy Review 2005*, Table 7.3 “Coal Consumption by Sector 1949-2005,” <http://www.eia.doe.gov/emeu/aer/txt/stb0703.xls>. Data also are available rounded to thousand short tons in the EIA *Annual Coal Report*, Table 26, <http://www.eia.doe.gov/cneaf/coal/page/acr/backissues.html>. Data are from the report of the following year, i.e., 2004 final data are published in the *Annual Coal Report 2005*.

CLHDPZZ — Coal distributed to the residential and commercial sectors by State.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: The distribution data are published in:
 - 1980 through 1984: EIA, *Coal Distribution, January–December 1984*, Table 21.
 - 1985 through 1989: EIA, *Coal Distribution, January–December 1989*, Table 15.
 - 1990 and 1991: EIA, *Coal Distribution, January–December* for each year, Table 16.
 - 1992 through 1994: EIA, *Quarterly Coal Report, October–December* for the following year, Table 10.
 - 1995 through 1997: Unpublished data from Form EIA-6.
 - 1998 through 2000: EIA, *Coal Industry Annual* for each year, Table 64.
 - 2001: EIA, <http://tonto.eia.doe.gov/Ftproot/coal/coaldistrib/distables.pdf>.
 - 2002: EIA, <http://tonto.eia.doe.gov/FTPROOT/coal/coaldistrib/coaldest.html>

- 2003: EIA, <http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/distable4.pdf>
- 2004: EIA, http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/by_destin_st.html

CLKCKZZ — Factor for converting coal carbonized at coke plants from physical units to Btu by State.

- 1960 through 1997: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS.

Anthracite conversion factors:

- Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and “unaccounted for.”

Bituminous coal and lignite conversion factors:

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal-Bituminous and Lignite,” sum of columns “Beehive coke plants” and “Oven coke plants.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 through 1997: EIA, Unpublished data from Form EIA-5, “Coke Plant Report, Quarterly.”
- 1998 through 2000: Calculated by EIA for 1998 using unpublished data from Form EIA-5, “Coke Plant Report, Quarterly.” The 1998 State factors are used for 1999 and 2000.
- 2001 forward: Calculated by EIA from data reported on Form EIA-5, “Quarterly Coal Consumption and Quality Report, Coke Plants.” Coke plant data on tons of coal carbonized to create coke, the volatilities of the coal carbonized, and conversion factors based on coal volatility are used to calculate average conversion factors by State.

CLKCPUS — Coal carbonized by coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, chapter “Coal–Pennsylvania Anthracite Annual,” and chapter “Coal–Bituminous and Lignite,” table titled, “Consumption of Bituminous coal and lignite, by consumer class, and retail deliveries in the United States,” sum of columns titled “Beehive coke plants” and “Oven coke plants.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 7.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 6.
- 1988 through 1995: EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1988 final data are published in the *Quarterly Coal Report, October–December 1989*. The specific tables are:
 - 1988 through 1990: Table 27.
 - 1991 through 1994: Table 48.
 - 1995: Table 40.
- 1996 through 1999: EIA, *Coal Industry Annual 2000*, Table 73.
- 2000: EIA, *Annual Coal Report 2001*, Table 27.
- 2001 forward: EIA, *Annual Energy Review 2004*, Table 7.3 “Coal Consumption by Sector 1949–2004,” <http://www.eia.doe.gov/emeu/aer/txt/stb0703.xls>. Data are also available rounded to thousand short tons in the EIA *Annual Coal Report*, Table 26, <http://www.eia.doe.gov/cneaf/coal/page/acr/backissues.html>. Data are from the report of the following year, i.e., 2004 final data are published in the *Annual Coal Report 2005*.

CLKDPZZ — Coal distributed to coke plants by State.

- 1960 through 1979: Series is the sum of an anthracite data series and a bituminous coal and lignite data series:
 - Anthracite:
 - No data available. The 1980 State data are used for years 1960 through 1979.
 - Bituminous coal and lignite:
 - 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal–Bituminous and Lignite.”
 - 1977 through 1979: EIA, *Energy Data Reports*, “Coal–Bituminous and Lignite.” The specific tables are:
 - 1977: “Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the

First Nine Months of 1977” and “Distribution of Bituminous Coal and Lignite Produced in the United States During October–December 1977, by Geographic Division and State Destination.”

- 1978: “Distribution of Bituminous Coal and Lignite Produced in the United States.”
- 1979: “Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States.”
- 1980 through 2000: Consumption data became available for some States and are used instead of this distribution series when available. When consumption values for a State are withheld, distribution data are used to estimate the withheld consumption values. After withheld residential and commercial coal consumption values have been estimated (see CLHDPZZ on page 16), withheld coke plant consumption is estimated as the difference between the sum of the published and estimated end-use sectors’ consumption and the published State total consumption. For States where both coke plant and other industrial coal use are withheld, it is assumed that a State not listed in the consumption table has no coke plant consumption.
 - 1980 through 1995: EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October–December 1983*. The specific tables are:
 - 1980: Unpublished data.
 - 1981 through 1983: Table 25.
 - 1984, 1985, and 1987: Table 27.
 - 1986, 1988, and 1989: Unpublished State revisions that are components of the U.S. revisions published in the *Quarterly Coal Report, October–December 1991*, Table 45.
 - 1990: Table 27.
 - 1991 through 1994: Table 48.
 - 1995: Table 40.
 - 1996 through 1999: EIA, unpublished data in short tons as published rounded to thousand short tons in EIA, *Coal Industry Annual 2000*, Table 73.
 - 2000: EIA, unpublished data in short tons as published rounded to thousand short tons in EIA, *Annual Coal Report 2001*, Table 27.
- 2001 forward: Beginning with 2001, total consumption values for some States are withheld, making it no longer possible to back out known or imputed sectors to derive State-level coal volumes

distributed to coke plants. From 2001 forward, withheld State-level coke plant consumption is estimated by calculating the State's percentage of it's Census division quantity for the previous 3 years and averaging those percentages. That average percentage is applied to the current year's Census division value to estimate the current year consumption for the State.

- 2001: EIA, <http://tonto.eia.doe.gov/Ftproot/coal/coaldistrib/distables.pdf>, <http://www.eia.doe.gov/cneaf/coal/cia/html/t64p01p1.html>, <http://tonto.eia.doe.gov/FTPROOT/coal/058499.pdf>.
- 2002: EIA, <http://tonto.eia.doe.gov/FTPROOT/coal/coaldistrib/coaldest.html>
- 2003: EIA, <http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/distable4.pdf>
- 2004: EIA, http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/by_destin_st.html

CLOCKZZ — Factor for converting coal consumed by industrial users other than coke plants from physical units to Btu by State.

- 1960 through 1997: Calculated by EIA as the consumption-weighted average of national level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS.

Anthracite conversion factors:

- Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and “unaccounted for.”

Bituminous coal and lignite conversion factors:

- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average.
- 1974 through 1997: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities

in each State from identified coal-producing districts as reported on FERC Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants.” The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, “Coal Distribution Report,” and predecessor Bureau of Mines Form 6-1419-Q.

- 1998 through 2000: Calculated by EIA from unpublished data as the average heat content of coal received at manufacturing plants (other than coke plants) consuming more than 1,000 short tons of coal reported on Form EIA-3A, “Annual Coal Quality Report—Manufacturing Plants.”
- 2001 forward: Calculated by EIA using unpublished data as the average heat content of (1) coal received at manufacturing plants (other than coke plants) consuming more than 1,000 short tons of coal annually from Form EIA-3, “Quarterly Coal Consumption and Quality Report, Manufacturing Plants,” and predecessor forms; (2) coal distributed to agricultural, mining, and construction sectors reported on Form EIA-6A, “Coal Distribution Report - Annual” with heat contents for the coal producing State reported on FERC Form 423 and Form EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants;” and (3) coal consumed by coal mining facilities reported on Form EIA-7A, “Coal Production Report,” with heat contents for the coal producing State reported on FERC Form 423 and Form EIA-423.

CLOCPUS — Coal consumed by industrial users other than coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, Chapter “Coal—Pennsylvania Anthracite, Annual” and chapter “Coal—Bituminous and Lignite,” table titled “Consumption of bituminous coal and lignite, by consumer class, and retail deliveries in the United States.” Sum of columns titled “Steel and rolling mills,” “Cement mills,” and “Other manufacturing and mining industries.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 7.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 6.

- 1988 through 1999: EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1988 final data are published in the *Quarterly Coal Report, October–December 1989*. The specific tables are:
 - 1988 through 1990: Table 28.
 - 1991 through 1994: Table 49.
 - 1995: Table 41.
 - 1996 through 1999: Table 42.
- 2000: EIA, *Annual Coal Report 2001*, Table 27.
- 2001 forward: EIA, *Annual Energy Review 2004*, Table 7.3 “Coal Consumption by Sector 1949-2004,” <http://www.eia.doe.gov/emeu/aer/txt/stb0703.xls>. Data are also available rounded to thousand short tons in the EIA *Annual Coal Report*, Table 26, <http://www.eia.doe.gov/cneaf/coal/page/acr/backissues.html>. Data are from the report of the following year, i.e., 2004 final data are published in the *Annual Coal Report 2005*.

CLODPZZ — Coal distributed to industrial plants (other than coke plants) by State.

- 1960 through 1979: Series is the sum of an anthracite data series and a bituminous coal and lignite data series:
 - Anthracite:
 - No data available. The 1980 State data are used for years 1960 through 1979.
 - Bituminous coal and lignite:
 - 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal–Bituminous and Lignite.”
 - 1977 through 1979: EIA, *Energy Data Reports*, “Coal–Bituminous and Lignite.” The specific tables are:
 - 1977: “Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977” and “Distribution of Bituminous Coal and Lignite Produced in the United States During October–December 1977, by Geographic Division and State Destination.”
 - 1978: “Distribution of Bituminous Coal and Lignite Produced in the United States.”
 - 1979: “Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States.”

- 1980 forward: Consumption data became available for some States and are used instead of this distribution series when available. When consumption values for a State are withheld, distribution data are used to estimate the withheld consumption values. After withheld residential and commercial coal consumption values have been estimated (see CLHDPZZ on page 16), withheld consumption by other industrial users is the difference between the sum of the published and estimated end-use sectors’ consumption and the published State total consumption.
 - 1980 through 1995: EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October–December 1983*. The specific tables are:
 - 1980: Unpublished data.
 - 1981 through 1983: Table 26.
 - 1984 through 1990: Table 28.
 - 1991 through 1994: Table 49.
 - 1995: Table 41.
 - 1996 through 1999: EIA, unpublished data in short tons as published rounded to thousand short tons in EIA, *Coal Industry Annual 2000*, Table 71.
 - 2000: EIA, unpublished data in short tons as published rounded to thousand short tons in EIA, *Annual Coal Report 2001*, Table 27.
 - 2001 forward: EIA, unpublished data in short tons as published rounded to thousand short tons in EIA, *Annual Coal Report*, Table 26, <http://www.eia.doe.gov/cneaf/coal/page/acr/backissues.html>. Data are from the report of the following year, i.e., 2004 final data are published in the *Annual Coal Report 2005*.

CLRCSUS — Residential sector share of coal consumed by the residential and commercial sectors combined.

- 1960 forward: Calculated by EIA. 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 (1960, 1970, 1973 through 1981, and subsequent odd-numbered years), 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 distillate fuel 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 missing years' shares are interpolated.

Net Imports of Coal Coke

Physical Units

Net imports of coal coke is a component of total U.S. energy consumption. There is no attempt to estimate State allocations of this energy source and all of it is considered to be used by the industrial sector. Net imports of coal coke are included in the U.S. data but not in the State-level data in all tables of total energy consumption and industrial sector energy consumption. Variables for net imports of coal coke into the United States are:

CCIMPUS = coal coke imported into the United States, in thousand short tons; and

CCEXPUS = coal coke exported from the United States, in thousand short tons.

Net imports is calculated:

CCNIPUS = CCIMPUS – CCEXPUS

British Thermal Units (Btu)

The factor for converting coal coke from short tons to Btu is 24.80 million Btu per short ton:

CCIMBUS = CCIMPUS * 24.80

CCEXBUS = CCEXPUS * 24.80

CCNIBUS = CCIMBUS – CCEXBUS

Data Sources for Net Imports of Coal

CCEXPUS — Coal coke exported from the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coke and Coal Chemicals Annual.”

- 1976 through 1979: EIA, *Energy Data Reports*, “Coke and Coal Chemicals Monthly.”
- 1980 through 1990: EIA, *Quarterly Coal Report* (October–December of the following year). The specific tables are:
 - 1980: Table 7.
 - 1981 through 1984: Table A10.
 - 1985 through 1990: Table A9.
- 1991 and 1992: Unpublished revisions from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System.
- 1993 through 1997: Unpublished revisions from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System, as published rounded in the EIA, *Quarterly Coal Report October–December 1999*, Table 2.
- 1998 forward: EIA, *Quarterly Coal Report* (October–December of the following year), Table 15 (1998 and 1999), Table 16 (2000), and Table 17 (2001 forward), <http://tonto.eia.doe.gov/FTPROOT/coal/qcrhistory.htm>.

CCIMPUS — Coal coke imported into the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coke and Coal Chemicals Annual.”
- 1976 through 1979: EIA, *Energy Data Reports*, “Coke and Coal Chemicals Monthly.”
- 1980 through 1990: EIA, *Quarterly Coal Report* (October–December of the following year). The specific tables are:
 - 1980: Table 8.
 - 1981 through 1984: Table A12.
 - 1985 through 1987: Table A11.
 - 1988 through 1990: Table A10.
- 1991 and 1992: Unpublished revisions from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System.
- 1993 through 1997: Unpublished revisions from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System, as published rounded in the EIA, *Quarterly Coal Report October–December 1999*, Table 2.
- 1998 forward: EIA, *Quarterly Coal Report* (October–December of the following year), Table 19 (1998 and 1999), Table 20 (2000), and Table 21 (2001 forward), <http://tonto.eia.doe.gov/FTPROOT/coal/qcrhistory.htm>.

Section 3. Natural Gas

Physical Units

Eight natural gas data series are used to derive the natural gas consumption estimates in the State Energy Data System (SEDS). Four of these data series are deliveries of natural gas to the end user by State and are used as consumption because actual consumption data at these levels are not available. The sources for the natural gas data are the reports in the *Natural Gas Annual* series published by the Energy Information Administration (EIA) and its predecessors. For 1989 forward these data are available via EIA's Natural Gas Navigator on the Internet. These series, in million cubic feet, for each State are as follows (the two-letter State code is represented by "ZZ" in the following variable names):

- NGCCPZZ = natural gas delivered to the commercial sector (includes gas used by nonmanufacturing organizations, such as hotels, restaurants, retail stores, laundries, and other service enterprises) plus natural gas delivered to other consumers (includes deliveries to municipalities and public authorities for institutional heating and street lighting). Prior to 1996, includes gas used in agriculture, forestry, and fisheries;
- NGEIPZZ = natural gas consumed by the electric power sector;
- NGINPZZ = a portion of the natural gas delivered to the industrial sector (includes gas used as fuel and feedstock in chemical plants and to produce carbon black). Beginning in 1996, includes gas used in agriculture, forestry, and fisheries;
- NGLEPZZ = natural gas consumed as lease fuel;
- NGPLPZZ = natural gas consumed as plant fuel;
- NGPZPZZ = natural gas consumed as pipeline fuel;
- NGRCPZZ = natural gas delivered to the residential sector; and
- NGVHPZZ = natural gas consumed as vehicle fuel.

The U.S. totals of these independent variables are calculated as the sum of the States' values.

The data are combined into the four major end-use sectors used in SEDS as closely as possible. However, natural gas data are collected using different aggregations of users. The industrial sector in SEDS is intended to contain energy used in agriculture, forestry, and fisheries. For natural gas, these categories were reported with commercial use of natural gas through 1995 and in the industrial sector for 1996 forward. These data cannot be separately identified and no adjustment for this end-use inconsistency could be made in SEDS.

The residential sector's consumption of natural gas is represented by the variable for deliveries to the residential sector, NGRCPZZ.

The commercial sector's consumption of natural gas is represented by the variable for deliveries to the commercial sector, NGCCPZZ.

The industrial sector's consumption of natural gas in SEDS, NGICPZZ, is estimated to be the sum of natural gas delivered to the industrial sector, NGINPZZ, natural gas consumed as lease fuel, NGLEPZZ, and natural gas consumed as plant fuel, NGPLPZZ. SEDS contains lease and plant fuel combined for 1960 through 1982; the combined data series is stored as NGLEPZZ. Beginning in 2001, Federal Offshore natural gas lease fuel for Alabama, Louisiana, and Texas are reported combined. See "Additional Notes" for the method of estimating the individual State values.

$$\text{NGICPZZ} = \text{NGINPZZ} + \text{NGLEPZZ} + \text{NGPLPZZ}$$

The transportation sector's consumption of natural gas, NGACPZZ, is the sum of natural gas consumed in pipeline operations, primarily in compressors, NGPZPZZ, and natural gas consumed as vehicle fuel, NGVHPZZ. Prior to 1990, the small amounts of natural gas consumed as vehicle fuel are included in the commercial sector consumption and cannot be identified separately; therefore, NGVHPZZ is zero prior to 1990.

$$\text{NGACPZZ} = \text{NGPZPZZ} + \text{NGVHPZZ}$$

Electric power sector's consumption of natural gas is represented by the data series NGEIPZZ.

The total consumption of natural gas, estimated for each State, is the sum of the consumption by the end-use sectors and for electricity generation:

$$\text{NGTCPZZ} = \text{NGRCPZZ} + \text{NGCCPZZ} + \text{NGICPZZ} + \text{NGACPZZ} + \text{NGEIPZZ}$$

The U.S. consumption estimates for each of the sectors and the U.S. total are calculated as the sum of the States' values.

British Thermal Units (Btu)

Three factors for each State are used for converting the consumption of natural gas from its physical units of million cubic feet into thousand Btu per cubic foot. Two of these State-level factors are:

$$\begin{aligned} \text{NGEIKZZ} &= \text{The factor for converting natural gas consumed by the electric power sector from physical units to Btu; and} \\ \text{NGTCKZZ} &= \text{The factor for converting natural gas consumed by all sectors from physical units to Btu.} \end{aligned}$$

These two factors are used to derive a third factor, NGTXKZZ, for converting natural gas used by all sectors other than electric power from physical units to Btu:

$$\begin{aligned} \text{NGTCBZZ} &= \text{NGTCPZZ} * \text{NGTCKZZ} \\ \text{NGEIBZZ} &= \text{NGEIPZZ} * \text{NGEIKZZ} \\ \text{NGTXKZZ} &= (\text{NGTCBZZ} - \text{NGEIBZZ}) / (\text{NGTCPZZ} - \text{NGEIPZZ}) \end{aligned}$$

Natural gas consumption in Btu for the residential, commercial, industrial, and transportation sectors in each State is calculated by multiplying the physical unit data by the factor NGTXKZZ, such as:

$$\begin{aligned} \text{NGACBZZ} &= \text{NGACPZZ} * \text{NGTXKZZ} \\ \text{NGCCBZZ} &= \text{NGCCPZZ} * \text{NGTXKZZ} \end{aligned}$$

The U.S. consumption estimates in Btu for each of the sectors and the U.S. total are calculated as the sum of the States' Btu values, such as:

$$\begin{aligned} \text{NGTCBUS} &= \Sigma \text{NGTCBZZ} \\ \text{NGEIBUS} &= \Sigma \text{NGEIBZZ} \\ \text{NGACBUS} &= \Sigma \text{NGACBZZ} \\ \text{NGCCBUS} &= \Sigma \text{NGCCBZZ} \end{aligned}$$

Prior to 1972, conversion factors for natural gas consumed for electricity generation were not collected; therefore, the factor for all natural gas consumed (NGTCKZZ) is used for electric power (NGEIKZZ) and for the other sectors (NGTXKZZ) for 1963 through 1971. Prior to 1963, State-level conversion factors for natural gas consumption were not collected and a standard factor of 1.035 thousand Btu per cubic foot is used for all sectors in all States for 1960 through 1962. The factor for converting natural gas consumption by the electric power sector from cubic feet to Btu in North Dakota for 2003 is not available in the source data and the 2002 North Dakota value is assigned.

Additional Calculations

Although SEDS does not use U.S.-level conversion factors for calculating natural gas consumption, these factors are calculated by SEDS for reference and are shown in the natural gas tables in Appendix B, http://www.eia.doe.gov/emeu/states/sep_use/notes/use_b.pdf.

$$\begin{aligned} \text{NGEIKUS} &= \text{NGEIBUS} / \text{NGEIPUS} \\ \text{NGTCKUS} &= \text{NGTCBUS} / \text{NGTCPUS} \\ \text{NGTXKUS} &= (\text{NGTCBUS} - \text{NGEIBUS}) / (\text{NGTCPUS} - \text{NGEIPUS}) \end{aligned}$$

To produce price and expenditure data, SEDS differentiates between natural gas used in the transportation sector as pipeline fuel, which is not sold and has no price, and natural gas purchased and consumed as vehicle fuel. SEDS also differentiates between natural gas used as lease and plant fuel by the natural gas industry, which is not costed, and natural gas purchased by industrial consumers. Btu values for the price and expenditure tables are calculated in SEDS as follows:

$$\begin{aligned} \text{NGPZBZZ} &= \text{NGPZPZZ} * \text{NGTXKZZ} \\ \text{NGVHBZZ} &= \text{NGVHPZZ} * \text{NGTXKZZ} \\ \text{NGLPPZZ} &= \text{NGLEPZZ} + \text{NGPLPZZ} \\ \text{NGLPBZZ} &= \text{NGLPPZZ} * \text{NGTXKZZ} \end{aligned}$$

The U.S. totals for each series are calculated as the sum of the States' values.

Additional Notes

Beginning with 2001 data, Federal Offshore natural gas lease fuel consumption for Alabama, Louisiana, and Texas is reported combined under "Gulf of Mexico" in the source publication. To estimate each State's portion, data from the U.S. Minerals Management Service on natural gas production for the Eastern Gulf, Central Gulf, and Western Gulf areas are totaled. Alabama's share of the Gulf of Mexico lease fuel consumption is calculated in proportion to the Eastern Gulf's share of the production total; Louisiana's share is the same proportion as the Central Gulf share, and the Texas share is in proportion to the Western Gulf share.

Data Sources

NGCCPZZ — Natural gas delivered to the commercial sector and to other consumers (municipalities and public authorities for institutional heating and street lighting), including natural gas consumed as vehicle fuel through 1989 and natural gas used in agriculture, forestry, and fisheries through 1995, by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Commercial."
- 1967 through 1988: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga_historical.html.
- 1989 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on "Downloadable Spreadsheet"). Also published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGEIKZZ — Factor for converting natural gas consumed by the electric power sector from physical units to Btu by State.

- 1960 through 1971: Assumed by the EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users (NGTCKZZ).
 - 1972 through 1982: Calculated annually by EIA by dividing the total heat content of natural gas received at steam electric plants 25 megawatts or greater by the total quantity received at those electric plants. The heat contents and quantities received are from the FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
 - 1983 through 1988: The average heat content of natural gas received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published from 1993 forward in Btu per cubic foot in the EIA, *Cost and Quality of Fuels for Electric Utility Plants*, Table 14, http://www.eia.doe.gov/cneaf/electricity/cq/cq_sum.html. Note: For States that reported consumption on EIA-759 but were not large enough to report on FERC Form 423, factors were estimated by using previous years' factors or the factor for total natural gas consumption in the State.
 - 1989 forward: Calculated by dividing the total heat content of natural gas received at electric power plants (including electric utilities, nonutility power plants and combined heat-and-power plants) by the total quantity consumed in physical units collected by the EIA on Forms EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html.
- NGEIPZZ — Natural gas consumed by the electric power sector by State.
- 1960 through 1975: Federal Power Commission, News Release, "Power Production, Fuel Consumption, and Installed Capacity Data," table titled "Consumption of Fuel by Electric Utilities for Production of Electric Energy by State, Kind of Fuel, and Type of Prime Mover," sum of columns, "steam and gas turbine" and "internal combustion" under column heading "gas."
 - 1976 through 1981: EIA, *Electric Power Annual* (1981), Table 67.
 - 1982 through 1986: Unrounded data as published in rounded form in EIA, *Electric Power Annual*, 1986, Table 14.
 - 1987: Unrounded data as published in rounded form in EIA, *Electric Power Annual 1988*, Table 13.
 - 1988: Unrounded data as published in rounded form in EIA, *Electric Power Annual 1989*, Table 19.

- 1989 forward: EIA, Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html.

NGINPZZ — A portion of the natural gas delivered to the industrial sector, including natural gas used in agriculture, forestry, and fisheries beginning in 1996, by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Natural Gas Production and Consumption,” table titled “Number of consumers and volume of natural gas consumed by principal users in the United States.” Sum of data in columns “Carbon black,” “Refinery fuel,” and “Other industrial fuel” (which includes electric utility fuel) minus data in column “Fuel used at electric utility plants.”
- 1967 through 1992: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga_historical.html.
- 1993 through 1996: Unpublished revisions comparable to data contained in the *Natural Gas Annual 2001*, Tables 26 through 76.
- 1997 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGLEPZZ — Natural gas consumed as lease fuel by State (includes natural gas consumed as plant fuel in 1960 through 1990).

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, Natural Gas chapter. State data are not available from 1960 through 1966, although U.S. totals are available. State estimates were calculated by apportioning the U.S. totals to the States on the basis of each State’s share of the U.S. total in 1967.
- 1967 through 1982: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1983 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGPLPZZ — Natural gas consumed as plant fuel by State.

- 1960 through 1982: Included with natural gas consumed as lease fuel (see NGLEPZZ).
- 1983 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGPZPZZ — Natural gas consumed as pipeline fuel by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Natural Gas Production and Consumption,” table titled “Number of consumers and volume of natural gas consumed by principal users in the United States,” column “Used as pipeline fuel.”
- 1967 through 1992: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1993 through 1996: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 15, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga.html.
- 1997 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGRCPZZ — Natural gas delivered to the residential sector, used as consumption, by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Natural Gas Production and Consumption,” table titled “Number of consumers and volume of natural gas consumed by principal users in the United States,” column “Residential.”
- 1967 through 1988: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga_historical.html.
- 1989 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also

published from 2000 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGVHPZZ — Natural gas delivered for use as vehicle fuel by State.

- 1960 through 1989: Included in natural gas consumed by the commercial sector (See NGCCPZZ).
- 1990 through 1991: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga.html.
- 1992 through 2000: EIA, unpublished data from the Office of Coal, Nuclear, Electric and Alternate Fuels (U.S. totals for 1992 forward and State values for 1997 forward) and from the Office of Energy Markets and End Use (State values for 1992 through 1996).
- 2001 forward: EIA, Natural Gas Navigator, http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm (use the drop-down menu to select area, then click on “Downloadable Spreadsheet”). Also published from 1999 forward in the EIA, *Natural Gas Annual 2004*, Tables 26 through 76.

NGTCKZZ — Factor for converting natural gas consumed by all users from physical units to Btu by State.

- 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.
- 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual.
- 1980 through 1996: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga.html.
- 1997 through 2001: EIA, *Natural Gas Annual 2001*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga_historical.html and unpublished revisions.
- 2002 forward: EIA, *Natural Gas Annual 2004*, Table 16, http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga.html and unpublished revisions.

Section 4. Petroleum

Petroleum Overview

The 27 petroleum products included in the State Energy Data System (SEDS) are explained in this section. For 12 of these products, the means of estimating their individual consumption by State is described in individual sections. The 12 petroleum products are:

- asphalt (AS)
- aviation gasoline (AV)
- distillate fuel (DF)
- jet fuel, kerosene-type (JK)
- jet fuel, naphtha-type (JN)
- kerosene (KS)
- liquefied petroleum gases (LG)
- lubricants (LU)
- motor gasoline (MG)
- petroleum coke (PC)
- residual fuel (RF)
- road oil (RD)

The remaining 15 products are described in the section “Other Petroleum Products” and include the following:

- crude oil, including lease condensate (CO)
- miscellaneous petroleum products (MS)
- natural gasoline (NA) (including isopentane)
- petroleum feedstocks, naphtha less than 401° F (FN)
- petroleum feedstocks, other oils equal to or greater than 401° F (FO)
- petroleum feedstocks, still gas (FS)
- plant condensate (PL)
- pentanes plus (PP)
- special naphthas (SN)

- still gas (SG)
- unfractionated stream (US)
- waxes (WX)
- unfinished oils (UO)
- motor gasoline blending components (MB)
- aviation gasoline blending components (AB)

The last petroleum documentation section, “Petroleum Summaries,” describes how the 27 petroleum products are combined for each major end-use sector’s estimated consumption.

Table TN3 summarizes the petroleum products’ end-use assignments in SEDS. Shown in this table are the first four letters of the seven-letter variable names used to identify all energy sources. The first two letters identify the petroleum product and the next two letters identify the end-use sector. For example, the table shows that the aviation gasoline estimated to be consumed by the transportation sector is all aviation gasoline consumed, and that there is some estimated consumption of lubricants in the industrial and transportation sectors, while distillate fuel is consumed in every sector.

Asphalt and Road Oil

Physical Units

There are no State-level consumption data for asphalt and road oil available. Therefore, the State-level sales data are used to apportion the national consumption numbers to the States.

The asphalt and road oil sales data are in short tons, while the consumption data are in thousand barrels. Because the sales data are used only for

Table TN3. Summary of Petroleum Products in the State Energy Data System

Petroleum Products	Residential Sector Estimated Consumption (RC)		Commercial Sector Estimated Consumption (CC)		Industrial Sector Estimated Consumption (IC)		Transportation Sector Estimated Consumption (AC)		Electric Power Sector Estimated Consumption (EI)		Total Estimated Consumption (TC)
Asphalt and Road Oil (AR)					ARIC				=		ARTC +
Aviation Gasoline (AV)					+		AVAC +		=		AVTC +
Distillate Fuel (DF)	DFRC +	+	DFCC +	+	DFIC +	+	DFAC +	+	DFEI +	=	DFTC +
Jet Fuel, Kerosene (JK)							JKAC +		JKEU	=	JKTC +
Jet Fuel, Naphtha (JN)							JNAC +			=	JNTC +
Kerosene (KS)	KSRC +	+	KSCC +	+	KSIC +					=	KSTC +
Liquefied Petroleum Gases (LG)	LGRC	+	LGCC	+	LGIC +	+	LGAC +			=	LGTC +
Lubricants (LU)			+		LUIC +		LUAC +			=	LUTC +
Motor Gasoline (MG)			MGCC +		MGIC +		MGAC +			=	MGTC +
Residual Fuel (RF)			RFCC		RFIC +	+	RFAC	+	RFEI +	=	RFTC +
Other Petroleum Products (PO)			PCCC ¹	+	POIC ²			+	PCEI ¹	=	POTC
Total Petroleum (PA)	PARC	+	PACC	+	PAIC	+	PAAC	+	PAEI	=	PATC

¹ "Other petroleum products" are consumed in the industrial sector with the exception of petroleum coke consumed by the commercial and electric power sectors.

²“Other petroleum products” consumed by the industrial sector comprises crude oil, including lease condensate; unfinished oils; plant condensate; aviation gasoline and motor gasoline blending components;

natural gasoline; petroleum feedstocks (naphtha less than 401° F, other oils equal to or greater than 401° F, and still gas); pentanes plus; special naphthas; still gas; unfractionated stream; waxes; miscellaneous petroleum products; and petroleum coke for industrial use.

apportioning the U.S. consumption data to the States, they do not need to be converted into thousand barrels.

The four data series that are used to estimate consumption of asphalt and road oil are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

ASINPZZ = asphalt sold for use in the industrial sector of each State, in short tons;
 ASTCPUS = asphalt total consumed in the United States, in thousand barrels;
 RDINPZZ = road oil sold for use in the industrial sector of each State, in short tons; and
 RDTCPUS = road oil total consumed in the United States, in thousand barrels.

All asphalt and road oil consumption are assigned to the industrial sector because they are used in construction activity. ASTCPUS represents total U.S. consumption of asphalt, and RDTCPUS represents total U.S. consumption of road oil. Both are the "product supplied" data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA). Beginning in 1983, asphalt product supplied includes road oil, and RDTCPUS is entered as zero in SEDS.

ASINPZZ represents all asphalt sold as paving products, as roofing products, and for all other uses. RDINPZZ represents all sales of road oil. These data are collected and published by The Asphalt Institute. Values for RDINPZZ for 1981 and 1982 are estimated as described under "Additional Notes" in this section. Beginning with 1983 data, when road oil is included in asphalt product supplied data in the source publication, RDINPZZ is entered as zero in SEDS.

To calculate State consumption estimates of asphalt, total sales of asphalt and road oil in the United States to the industrial sector are first calculated as the sum of the State data:

ASINPUS = Σ ASINPZZ
 RDINPUS = Σ RDINPZZ

Each State's consumption of asphalt in the industrial sector (ASICPZZ) is calculated to be in proportion to each State's sales:

ASICPZZ = $(\text{ASINPZZ} / \text{ASINPUS}) * \text{ASTCPUS}$
 ASICPUS = Σ ASICPZZ

RDICPZZ = $(\text{RDINPZZ} / \text{RDINPUS}) * \text{RDTCPUS}$
 RDICPUS = Σ RDICPZZ

Since all consumption of asphalt and road oil are assumed to be in the industrial sector, their total consumption in each State equals the industrial sector consumption:

ASTCPZZ = ASICPZZ
 RDTCPZZ = RDICPZZ

Asphalt and road oil consumption are added together:

ARICPZZ = ASICPZZ + RDICPZZ
 ARICPUS = Σ ARICPZZ
 ARTCPZZ = ASTCPZZ + RDTCPZZ
 ARTCPUS = Σ ARTCPZZ

British Thermal Units (Btu)

Asphalt and road oil have a heat content value of approximately 6.636 million Btu per barrel. This factor is applied to convert asphalt and road oil estimated consumption from physical units to Btu:

ARICBZZ = ARICPZZ * 6.636
 ARICBUS = Σ ARICBZZ

Because all asphalt and road oil are assumed to be used by the industrial sector, total asphalt and road oil consumption in each State and in the United States is assumed to equal the industrial sector consumption:

ARTCBZZ = ARICBZZ
 ARTCBUS = ARICBUS

Additional Notes on Asphalt and Road Oil

The Federal Government stopped collecting asphalt and road oil sales data in 1980 and the source for these numbers in recent years has been reports

published by the Asphalt Institute. When companies do not respond to the voluntary survey, the Asphalt Institute does not estimate quantities to compensate for the nonresponse. This can cause large fluctuation in sales from year to year for some States. There is an inherent problem in the methodology of using sales to estimate consumption because asphalt and road oil sold by a producer in one State may be easily transported across State lines and consumed in a neighboring State. The Asphalt Institute acknowledges this problem and estimates that, in any one year, about 15 States may have consumption estimates as much as 20 percent too high or too low.

Asphalt and road oil data for Maryland and the District of Columbia are published combined to avoid disclosure of proprietary data. Prior to being entered into SEDS, the combined data are allocated to each State based on their reported sales in 1974 (99.4 percent to Maryland and 0.6 percent to the District of Columbia) and the assumption that their relative proportions do not change significantly over time.

The EIA report series “Sales of Asphalt,” and predecessor reports, which are the source for road oil sales by State (RDINPZZ) in SEDS for 1960 through 1980, was discontinued after the 1980 report. For 1981 and 1982, State estimates of road oil sales were created by first converting the annual total U.S. road oil product supplied data into short tons (one short ton contains 5.5 barrels of road oil). Then, the U.S. total road oil product supplied, in short tons, was disaggregated to each State in proportion to the State’s share of total U.S. asphalt sales as reported in the Asphalt Institute’s *Report on Sales of Asphalt in the U.S.*

Data Sources for Asphalt and Road Oil

ASINPZZ — Asphalt sold to the industrial sector by State.

- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Asphalt,” the specific tables are:
 - 1960 through 1962: Table 6.
 - 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, “Sales of Asphalt,” Table 2.
- 1981 through 1986: The Asphalt Institute, *Asphalt Usage 1987 United States and Canada*, Table B.

- 1987 and 1988: The Asphalt Institute, *Asphalt Usage 1988 United States and Canada*, Tables A and B for State data. *Asphalt Usage 1989 United States and Canada*, page 2 for revised U.S. totals. The Asphalt Institute did not publish corresponding revised State data but did advise EIA on an estimation procedure to adjust 19 State values to sum to the revised U.S. totals.
- 1989 through 1997: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled “U.S. Asphalt Usage.”
- 1998 and 1999: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled “1998 vs. 1999 U.S. Asphalt Usage.” 1998 data for Delaware, New Hampshire, Rhode Island, and Vermont are repeated for 1999 because nonresponse to the survey caused those States data for 1999 to be more than 75 percent lower than their 1998 values.
- 2000 forward: The Asphalt Institute, <http://www.asphaltinstitute.org/>, *Asphalt Usage Survey for the United States and Canada*, table titled “U.S. Asphalt Usage.”

ASTCPUS — Asphalt total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled “Products Supplied.” (Beginning in 1983, this variable includes road oil.)

RDINPZZ — Road oil sold to the industrial sector by State.

- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Asphalt.” The specific tables are:
 - 1960 through 1962: Table 6.
 - 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, “Sales of Asphalt,” Table 2.
- 1981 and 1982: EIA estimates. (See explanation in “Additional Notes” on page 30.)

- 1983 forward: Road oil is included in asphalt data (see ASINPZZ).

RDTCBUS — Road oil total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 2.
- 1983 forward: Road Oil is included in asphalt data (see ASTCPUS).

Aviation Gasoline

Physical Units

The three data series used to estimate consumption of aviation gasoline are:

AVMIPZZ = aviation gasoline issued to the military in each State, in thousand barrels;
 AVNMMZZ = aviation gasoline sold to nonmilitary users in each State, in thousand gallons; and
 AVTCPUS = aviation gasoline total consumed in the United States, in thousand barrels.

The U.S. Department of Transportation, Federal Highway Administration publishes the nonmilitary aviation gasoline sales data by State (AVNMMZZ) in *Highway Statistics*.

AVMIPZZ is the issues of aviation gasoline to the military in each State and is obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

Total U.S. consumption of aviation gasoline (AVTCPUS) is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA).

The State-level data series are summed to provide totals for the United States:

$$\begin{aligned} \text{AVMIPUS} &= \Sigma \text{AVMIPZZ} \\ \text{AVNMMUS} &= \Sigma \text{AVNMMZZ} \end{aligned}$$

The State sales of nonmilitary aviation gasoline data are converted from thousand gallons to thousand barrels (42 gallons = 1 barrel):

$$\text{AVNMPZZ} = \text{AVNMMZZ} / 42$$

The U.S. nonmilitary sales is the sum of the States' sales:

$$\text{AVNMPUS} = \Sigma \text{AVNMPZZ}$$

The total sales of aviation gasoline is estimated as the sum of nonmilitary sales and military issues:

$$\begin{aligned} \text{AVTTPZZ} &= \text{AVNMPZZ} + \text{AVMIPZZ} \\ \text{AVTTPUS} &= \Sigma \text{AVTTPZZ} \end{aligned}$$

All aviation gasoline is assumed to be used by the transportation sector. An estimate of aviation gasoline consumption by the transportation sector by State (AVACPZZ) is calculated by assuming that each State consumes aviation gasoline in proportion to the amount sold to that State:

$$\begin{aligned} \text{AVACPZZ} &= (\text{AVTTPZZ} / \text{AVTTPUS}) * \text{AVTCPUS} \\ \text{AVACPUS} &= \Sigma \text{AVACPZZ} \end{aligned}$$

Total aviation gasoline consumption in each State, AVTCPZZ, equals the transportation sector consumption in each State:

$$\text{AVTCPZZ} = \text{AVACPZZ}$$

British Thermal Units (Btu)

Aviation gasoline has a heat content value of approximately 5.048 million Btu per barrel. This factor is applied to convert aviation gasoline estimated consumption from physical units to Btu:

$$\begin{aligned} \text{AVACBZZ} &= \text{AVACPZZ} * 5.048 \\ \text{AVACBUS} &= \Sigma \text{AVACBZZ} \end{aligned}$$

Because all aviation gasoline is assumed to be used for transportation, aviation gasoline total consumption in each State and in the United States equals the transportation sector consumption:

$$\begin{aligned} \text{AVTCBZZ} &= \text{AVACBZZ} \\ \text{AVTCBUS} &= \Sigma \text{AVTCBZZ} \end{aligned}$$

Additional Notes on Aviation Gasoline

Aviation gasoline issues to the military for each State (AVMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for 1960 through 1976 in SEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 forward, data from the same two databases, reported by calendar year, are used.

Data Sources for Aviation Gasoline

AVMIPZZ — Aviation fuel issued to the military in the United States by State.

- 1960 through 1974: No data are available. The 1977 data are used for each year.
- 1975 and 1976: No consistent data series are available. The 1977 data are used for both years.
- 1977 through 1988: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data. The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1989 and 1990: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. State data for the fiscal year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia.

- 1991 forward: U.S. Department of Defense, Defense Logistics Agency, Defense Energy Supply Center. State data for the calendar year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia. In 2004, data for 2003 are used pending availability of the actual 2004 data, except for Colorado and Texas. For these States, the averages of the 2001 through 2003 data are used instead.

AVNMMZZ — Aviation gasoline sold to nonmilitary users by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-24 in 1965 and Table MF-24 in 1966 forward.

AVTCPUS — Aviation gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

Distillate Fuel

Physical Units

Since State-level and end-use consumption data for distillate fuel (except for that consumed by the electric power sector) are not available, sales of distillate fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA) in the *Fuel Oil and Kerosene Sales Report*, are used to estimate distillate fuel consumption. The

following variable names have been assigned to the sales series (“ZZ” in the variable names represents the two-letter State code that differs for each State):

DFBKPZZ	= distillate fuel sales for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding that sold to the Armed Forces;
DFCMPZZ	= distillate fuel sales to commercial establishments for space heating, water heating, and cooking;
DFIBPZZ	= distillate fuel sales to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufactured products, in processing goods, and in assembling), including farm use;
DFMIPZZ	= distillate fuel sales to the Armed Forces, for all uses;
DFOCPZZ	= distillate fuel sales for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations;
DFOFPZZ	= distillate fuel sales as diesel fuel for off-highway use in construction (i.e., earthmoving equipment, cranes, stationary generators, air compressors, etc.) and for off-highway uses other than construction (i.e., logging);
DFONPZZ	= distillate fuel sales as diesel fuel for on-highway use (i.e., as engine fuel for trucks, buses, and automobiles);
DFOTPZZ	= distillate fuel sales for all other uses not identified in other sales categories;
DFRRPZZ	= distillate fuel sales to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations; and
DFRSPZZ	= distillate fuel sales to the residential sector for space heating, water heating, and cooking, excluding farm houses.

Three consumption data series are used in SEDS:

DKEIPZZ	= distillate fuel (including kerosene-type jet fuel) consumed by the electric power sector, in thousand barrels;
JKEUPZZ	= kerosene-type jet fuel consumed by electric utilities, in thousand barrels; and

DFTCPUS = distillate fuel total consumed in the United States, in thousand barrels.

Distillate fuel consumed by the electric power sector (DKEIPZZ) is collected by EIA on Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms. (See Note 4 at the end of this distillate fuel section for further information on changes in this series’ data definitions.) The series DKEIPZZ includes kerosene-type jet fuel consumed at electric utilities that is identified as JKEUPZZ. The kerosene-type jet fuel is subtracted from the distillate fuel data and accounted for in the jet fuel data described in a following section of this documentation. Kerosene-type jet fuel data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero.

Total consumption of distillate fuel in the United States, DFTCPUS, is the product supplied series in the EIA publication *Petroleum Supply Annual*.

To begin calculating distillate fuel State and end-use consumption, all of the State-level data series are summed to provide totals for the United States.

Next, the variables are combined as closely as possible into the major end-use sectors used in SEDS. The residential sector sales and the commercial sector sales contain only DFRSPZZ and DFCMPZZ, respectively.

The sales of distillate fuel to the industrial sector for each State, DFINPZZ, is the sum of the distillate fuel sales for industrial use, including industrial space heating and farm use (DFIBPZZ), for oil company use (DFOCPZZ), for off-highway use (DFOFPZZ), and for all other uses (DFOTPZZ). Data for DFOTPZZ are available through 1994. Starting in 1995, consumption is assumed to be zero:

$$\begin{aligned} \text{DFINPZZ} &= \text{DFIBPZZ} + \text{DFOCPZZ} + \text{DFOFPZZ} + \text{DFOTPZZ} \\ \text{DFINPUS} &= \Sigma \text{DFINPZZ} \end{aligned}$$

The sales of distillate fuel to the transportation sector for each State, DFTRPZZ, is the sum of the distillate fuel sales for vessel bunkering, military use, railroad use, and the diesel fuel used on-highway:

$$\begin{aligned} \text{DFTRPZZ} &= \text{DFBKPZZ} + \text{DFMIPZZ} + \text{DFRRPZZ} + \text{DFONPZZ} \\ \text{DFTRPUS} &= \Sigma \text{DFTRPZZ} \end{aligned}$$

Adjusted sales of distillate fuel oil to the residential, commercial, industrial, and transportation sectors are added to create a subtotal of sales to all sectors other than the electric utility sector, DFNDPZZ:

$$\begin{aligned} \text{DFNDPZZ} &= \text{DFRSPZZ} + \text{DFCMPZZ} + \text{DFINPZZ} + \text{DFTRPZZ} \\ \text{DFNDPUS} &= \Sigma \text{DFNDPZZ} \end{aligned}$$

Consumption of distillate fuel by the electric power sector (DFEIPZZ) is calculated by subtracting the kerosene-type jet fuel consumed by electric utilities from the input series DKEIPZZ:

$$\begin{aligned} \text{DFEIPZZ} &= \text{DKEIPZZ} - \text{JKEUPZZ} \\ \text{DFEIPUS} &= \Sigma \text{DFEIPZZ} \end{aligned}$$

The estimated U.S. distillate fuel consumption by all sectors other than the electric power sector, DFNCPUS, is calculated by subtracting the distillate fuel consumption by the electric power sector from the total U.S. distillate fuel consumption:

$$\text{DFNCPUS} = \text{DFTCPUS} - \text{DFEIPUS}$$

This U.S. subtotal of distillate fuel consumption by the four end-use sectors, DFNCPUS, is apportioned to the States by use of the end-use sectors' State-level sales data. The assumption is made that each State consumes distillate fuel in proportion to the amount of sales to that State:

$$\text{DFNCPZZ} = (\text{DFNDPZZ} / \text{DFNDPUS}) * \text{DFNCPUS}$$

The end-use sectors' subtotal for each State, DFNCPZZ, is further divided into estimates for the four end-use sectors in proportion to each sector's sales. The estimated residential sector consumption in each State, DFRCPZZ, is calculated:

$$\begin{aligned} \text{DFRCPZZ} &= (\text{DFRSPZZ} / \text{DFNDPZZ}) * \text{DFNCPZZ} \\ \text{DFRCPUS} &= \Sigma \text{DFRCPZZ} \end{aligned}$$

The commercial sector's estimated consumption in each State, DFCCPZZ, is calculated:

$$\begin{aligned} \text{DFCCPZZ} &= (\text{DFCMPZZ} / \text{DFNDPZZ}) * \text{DFNCPZZ} \\ \text{DFCCPUS} &= \Sigma \text{DFCCPZZ} \end{aligned}$$

The industrial sector's estimated consumption in each State, DFICPZZ, is calculated:

$$\begin{aligned} \text{DFICPZZ} &= (\text{DFINPZZ} / \text{DFNDPZZ}) * \text{DFNCPZZ} \\ \text{DFICPUS} &= \Sigma \text{DFICPZZ} \end{aligned}$$

The transportation sector's estimated consumption in each State, DFACPZZ, is calculated:

$$\begin{aligned} \text{DFACPZZ} &= (\text{DFTRPZZ} / \text{DFNDPZZ}) * \text{DFNCPZZ} \\ \text{DFACPUS} &= \Sigma \text{DFACPZZ} \end{aligned}$$

Total State distillate fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric power sector consumption:

$$\text{DFTCPZZ} = \text{DFNCPZZ} + \text{DFEIPZZ}$$

British Thermal Units (Btu)

Distillate fuel has a heat content value of approximately 5.825 million Btu per barrel. This factor is applied to convert distillate fuel estimated consumption for the five consuming sectors from physical units to Btu as shown in the following examples:

$$\begin{aligned} \text{DFRCBZZ} &= \text{DFRCPZZ} * 5.825 \\ \text{DFCCBZZ} &= \text{DFCCPZZ} * 5.825 \\ \text{DFTCBZZ} &= \text{DFRCBZZ} + \text{DFCCBZZ} + \text{DFICBZZ} + \text{DFACBZZ} + \text{DFEIBZZ} \end{aligned}$$

The U.S. Btu consumption estimates are calculated as the sum of all the States' data.

In the State Energy Data consumption tables, "Estimates of Energy Consumption by the Electric Power Sector," the data used in the column headed "Distillate" is the variable DKEIP (distillate fuel plus jet kerosene) in physical units. The Btu variable, DKEIB, is calculated as follows (See page 40 for description of JFEUB):

$$\begin{aligned} \text{DKEIBZZ} &= \text{DFEIBZZ} + \text{JKEUBZZ} \\ \text{DKEIBUS} &= \Sigma \text{DKEIBZZ} \end{aligned}$$

Additional Notes on Distillate Fuel

1. “Deliveries” data are actually called “shipments” in the source document for 1960 and 1961; “consumption” for 1962 through 1966; “shipments” for 1967; “sales” from 1968 through 1978; “deliveries” for 1979 through 1987; and “sales” for 1988 forward.
2. State data for the variables DFONPZZ (on-highway use), DFOFPZZ (off-highway use), and DFOTPZZ (other) for 1967 are unavailable from published sources. These three variables compose the miscellaneous use category for distillate fuel, which is known for all years by State. State estimates of DFONPZZ and DFOFPZZ for 1967 were developed by dividing the 1966 values for DFONPZZ and DFOFPZZ by the 1966 total miscellaneous use for each State and applying these percentages to the 1967 total miscellaneous use for each State. The 1967 State estimates for DFOTPZZ are the remainder of the 1967 miscellaneous category after DFONPZZ and DFOFPZZ have been subtracted.
3. In 1979, EIA implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979.”) In the new survey form, certain end-use categories were redefined—in many cases to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in the State Energy Data System (SEDS) to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report, but are used in SEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For distillate fuel deliveries in 1979, the end-use categories called “residential,” “commercial,” “industrial,” and “farm” are available. The pre-1979 deliveries categories are called “heating” and “industrial” (which included farm use). While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of residential, commercial, industrial, and farm deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979

years. Therefore, the following method was applied to present a comparable series for distillate fuel delivered to the residential, commercial, and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State’s heating and industrial deliveries categories. A comparable 1979 subtotal was created by adding each State’s residential, commercial, industrial, and farm deliveries categories.
- Residential, commercial, and industrial (including farm) shares of the subtotal in 1979 were calculated for each State.
- These 1979 end-use shares were then applied to each pre-1979 subtotal of distillate fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 distillate fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, “Annual Fuel Oil and Kerosene Sales Report.” EIA did not conduct a fuel oil and kerosene deliveries survey for 1983. The 1983 estimates in SEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the deliveries data for 1983 forward are reported in thousand gallons. These data are first converted to thousand barrels before being entered into SEDS.)

Some of the No. 2 diesel fuel reported as sold to the commercial and industrial sectors, DFCMPZZ and DFINPZZ, on the EIA forms may also be included in the on-highway data, DFONPZZ, obtained from the Federal Highway Administration. Included in the commercial sector is some diesel fuel consumed by government vehicles and school buses, and included in the industrial sector is some diesel fuel consumed by fleets of trucks. Because the specific quantities involved are unknown, SEDS reflects the diesel fuel consumption as

reported in the EIA *Petroleum Marketing Monthly* and no attempt has been made to adjust the end-use reporting.

4. The data on fuel oil consumed by the electric power sector for all years and States are actual fuel oil consumption numbers collected from electric power plants on Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. Due to changes in fuel oil reporting classifications on the predecessor forms over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only data on total fuel oil consumed at electric utilities by State are available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, data on consumption of distillate fuel oil at all plant types combined and consumption of residual fuel oil at all plant types combined are available by State. In SEDS, the following assumptions have been made:
 - 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State in 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
 - 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.
 - 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for SEDS for residual fuel and distillate fuel plus jet kerosene consumption by the electric power sector is

considered to be actual consumption by the electric power for each State and each year.

Data Sources for Distillate Fuel

DFBKPZZ — Distillate fuel sales for vessel bunkering use by State, excluding that sold to the Armed Forces.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 17.
 - 1962 and 1963: Table 16.
 - 1964 and 1965: Table 15.
 - 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons/821dst_a/EPD0_VVB_Mgal_a.htm, select Excel file labeled "Download Series History."

DFCMPZZ — Distillate fuel sales to the commercial sector for space heating, water heating, and cooking.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1. State ratios based on 1979 commercial sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 35.)
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VCS_Mgal_a.htm, select Excel file labeled "Download Series History."

DFIBPZZ — Distillate fuel sales to industrial establishments for space heating and for other industrial use, including farm use by State.

- 1960 through 1978: EIA estimates based on statistics of industrial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1. State ratios based on 1979 industrial sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 35.)
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_vin_Mgal_a.htm, and http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VFM_Mgal_a.htm, select Excel file labeled "Download Series History."

DFMIPZZ — Distillate fuel sales to the Armed Forces for all uses by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 18.
 - 1962 and 1963: Table 17.
 - 1964 and 1965: Table 16.
 - 1966 through 1975: Table 12.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 12.

- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VMI_Mgal_a.htm, select Excel file labeled "Download Series History."

DFOCPZZ — Distillate fuel sales for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 14.
 - 1962 and 1963: Table 13.
 - 1964 and 1965: Table 12.
 - 1966 through 1975: Table 9.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOC_Mgal_a.htm, select Excel file labeled "Download Series History."

DFOFPZZ — Distillate fuel sales as diesel fuel for off-highway use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 through 1962: Table 19.
 - 1963 and 1964: Table 18.
 - 1965 through 1967: Table 17.

— 1968 through 1975: Table 14.

- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHF_Mgal_a.htm, select Excel file labeled "Download Series History."

DFONPZZ — Distillate fuel sales as diesel fuel for on-highway use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
 - 1960 through 1962: Table 19.
 - 1963 and 1964: Table 18.
 - 1965 through 1967: Table 17.
 - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHN_Mgal_a.htm, select Excel file labeled "Download Series History."

DFOTPZZ — Distillate fuel sales for all other uses not identified in other sales categories.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:

- 1960 through 1962: Table 19.
- 1963 and 1964: Table 18.
- 1965 through 1967: Table 17.
- 1968 through 1975: Table 14.

- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 through 1994: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOE_Mgal_a.htm, select Excel file labeled "Download Series History."
- 1995 forward: Series discontinued; no data available. Values are assumed to be zero.

DFRRPZZ — Distillate fuel sales for use by railroads by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
 - 1960 and 1961: Table 16.
 - 1962 and 1963: Table 15.
 - 1964 and 1965: Table 14.
 - 1966 through 1975: Table 10.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 10.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.

- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRR_Mgal_a.htm, select Excel file labeled "Download Series History."

DFRSPZZ — Distillate fuel sales to the residential sector for space heating, water heating, and cooking.

- 1960 through 1978: EIA estimates based on statistics of residential sector deliveries of distillate fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1. State ratios based on 1979 residential sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 35.)
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRS_Mgal_a.htm, select Excel file labeled "Download Series History."

DFTCPUS — Distillate fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

DKEIPZZ — Distillate fuel consumed by the electric power sector, including kerosene-type jet fuel.

- EIA, Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. The following assumptions have been made:

- 1960 through 1969: Only total fuel oil consumed at electric utilities by State is available. State estimates of distillate fuel consumption were created for each year by applying the shares of internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State from 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
- 1970 through 1979: Fuel oil consumed by plant type by State is available. Fuel oil consumed by internal combustion and gas turbine plants combined is assumed to equal distillate and jet kerosene consumption.
- 1980 forward: Consumption of light and residual at all plant types by State is available. Total distillate consumption at all plant types is assumed to equal distillate and jet kerosene consumption.

JKEUPZZ — Kerosene-type jet fuel consumed by the electric utility sector. (See data sources for JKEUPZZ under "Jet Fuel" on page 41.)

Jet Fuel

There are two types of jet fuel with different heat contents, kerosene-type jet fuel (JK) and naphtha-type jet fuel (JN), which are added in the State Energy Data System (SEDS) to give total jet fuel (JF). Jet fuel is used primarily for transportation, although, for 1972 through 1982, small amounts of the kerosene-type jet fuel were reported as used in the electric utility sector.

Kerosene-Type Jet Fuel

Physical Units

Data series used to calculate kerosene-type jet fuel consumption estimates are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

JKTCPUS = kerosene-type jet fuel total consumed, in thousand barrels;

JKEUPZZ = the electric utility sector consumption of kerosene-type jet fuel in each State, in thousand barrels; and
 JKTPPZZ = kerosene-type jet fuel total sold, in thousand gallons.

Total U.S. consumption of kerosene-type jet fuel, JKTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA).

Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published by EIA in the *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero.

Kerosene-type jet fuel total sold, JKTPPZZ, was collected by the Ethyl Corporation, Petroleum Chemicals Division, for 1960 through 1983, and is collected by the EIA for 1984 forward. The Ethyl Corporation data are sales to commercial users and are used to represent total sales based on the assumption that there is little military use of kerosene-type jet fuel during 1960 through 1983. (See Note 1 in the “Additional Notes” section for the source reference for this assumption.) The EIA data for 1984 forward include commercial and military sales.

U.S. totals for the two State series are calculated as the sum of the State data.

Most kerosene-type jet fuel is used by the transportation sector. The transportation sector consumption for the United States (JKACPUS) is estimated as the difference between the total kerosene-type jet fuel consumed and the electric utility consumption:

$$JKACPUS = JKTCPUS - JKEUPUS$$

It is assumed that kerosene-type jet fuel consumption in each State is in proportion to the amount sold in each State:

$$JKACPZZ = (JKTPPZZ / JKTPPUS) * JKACPUS$$

Total kerosene-type jet fuel by State is estimated as:

$$JKTCPZZ = JKACPZZ + JKEUPZZ$$

British Thermal Units (Btu)

Kerosene-type jet fuel has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene-type jet fuel from physical units to Btu:

$$JKACBZZ = JKACPZZ * 5.670$$

$$JKACBUS = \Sigma JKACBZZ$$

$$JKEUBZZ = JKEUPZZ * 5.670$$

$$JKEUBUS = \Sigma JKEUBZZ$$

$$JKTCBZZ = JKTCPZZ * 5.670$$

$$JKTCBUS = \Sigma JKTCBZZ$$

Additional Notes on Kerosene-Type Jet Fuel

1. An assumption is made that kerosene-type jet fuel use by the military in 1960 through 1983 is negligible. This assumption is based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that kerosene-type jet fuel is used primarily by commercial aircraft engines.
2. Ethyl Corporation jet fuel sales to commercial users by State include some sales data that were improperly allocated between the States of Illinois and Indiana for 1960 through 1973. To adjust for this error, the average relative proportions of Illinois and Indiana sales from 1974 through 1978 were applied to the sum of the Illinois and Indiana sales in 1960 through 1973. From 1974 through 1983, sales data were correctly allocated.
3. Jet fuel sales in Illinois decreased sharply from 1984 forward, while sales in Indiana increased by about the same amount. It is possible that jet fuel for use at Chicago, Illinois, airports may have been purchased in Indiana. The same anomaly may have happened between New York and New Jersey beginning in 1981, when jet fuel for consumption at New York City airports may have been purchased in New Jersey. This is an inherent problem when using sales data as an indication of consumption, and no attempt has been made to adjust the numbers.

4. Prior to 1964, kerosene-type jet fuel was included in the total kerosene product supplied data in the source, the U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 2, "Salient Statistics of the Major Refined Petroleum Products in the United States." Table TN4 summarizes the derivation of kerosene and jet fuel consumption estimates (columns 4 and 5) from data published in the source (columns 1, 2, and 3) for 1960 through 1963. For 1964 and years following, kerosene and kerosene-type jet fuel are reported separately in the source documents.
5. Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published in the EIA *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero. State-level data for 1972 through 1974 are not available. The percentage of each State's consumption of the total U.S. consumption in 1975 was used to apportion the 1972 through 1974 national data to the States.

Data Sources for Kerosene-type Jet Fuel

JKEUPZZ — Kerosene-type jet fuel consumed by electric utilities by State.

- 1960 through 1971: No data available. Values are assumed to be zero.
- 1972 through 1974: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Fuel Oil and Kerosene,"

Table 15 footnote for U.S. value. These data were apportioned to the States by using the 1975 State proportions of the 1975 U.S. total from the source below.

- 1975 through 1979: Office of Electric Power Regulation, Federal Energy Regulatory Commission, *Annual Summary of Cost and Quality of Electric Utility Plant Fuels*, "Fuel Oil Deliveries for Combustion Turbine and Internal Combustion Units."
- 1980 through 1982: EIA, *Cost and Quality of Fuel for Electric Utility Plants*, Table 30.
- 1983 forward: Series discontinued; no data available. Values are assumed to be zero.

JKTTPZZ — Kerosene-type jet fuel total sold by State.

- 1960 through 1983: Ethyl Corporation, Petroleum Chemicals Division, *Yearly Report of Gasoline Sales by States*, "Aviation Turbine Fuel Sales."
- 1984 and 1985: EIA, *Petroleum Marketing Annual 1985*, Volume 2.
— 1984: Table A6.
— 1985: Table 34.
- 1986 through 1988: EIA, *Petroleum Marketing Annual*, Table 46.
- 1989 through 1993: EIA, *Petroleum Marketing Annual*, Table 48.
- 1994 forward: Unpublished data in thousand gallons from Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption." Data published in thousand gallons per day in EIA, *Petroleum Marketing Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/

Table TN4. Estimate of U.S. Consumption of Kerosene and Jet Fuel for 1960 through 1963
(Thousand barrels)

Year	(1) Kerosene Demand, Including Commercial Jet Fuel	(2) Jet Fuel Demand, Military Use Only	(3) Sales of Kerosene for Commercial Jet Fuel Use	(4) Estimated Kerosene Consumption (1) – (3)	(5) Estimated Total Jet Fuel Consumption (2) + (3)
1960	132,499	102,803	33,159	99,340	135,962
1961	144,435	104,436	47,187	97,248	151,623
1962	164,167	112,401	66,134	98,033	178,535
1963	172,212	115,237	75,236	96,976	190,473

[petroleum marketing annual/ pma historical.html](#), Table 49. Withheld data are estimated by using averages of published months to fill in withheld months; subtracting published States from published PAD District totals; and assigning values based on previous years' quantities.

JKTCPUS — Kerosene-type jet fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

Naphtha-Type Jet Fuel

Physical Units

Two data series are used to estimate naphtha-type jet fuel consumption:

JNTCPUS = naphtha-type jet fuel total consumed, in thousand barrels;
and
JNMIPZZ = naphtha-type jet fuel issued to the military in each State,
in thousand barrels.

Total U.S. consumption of naphtha-type jet fuel, JNTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual*, published by the EIA.

It is assumed that all naphtha-type jet fuel is used in military aircraft engines. (See the Additional Notes at the end of this section for the source reference for this assumption.) Data on naphtha-type jet fuel issued to the military in each State, JNMIPZZ, are from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

The total U.S. military issues is the sum of the State data:

$$\text{JNMIPUS} = \Sigma \text{JNMIPZZ}$$

An estimate of naphtha-type jet fuel consumption by State, JNTCPZZ, is calculated by assuming that each State consumes naphtha-type jet fuel in proportion to the amount issued to the military in that State:

$$\text{JNTCPZZ} = (\text{JNMIPZZ} / \text{JNMIPUS}) * \text{JNTCPUS}$$

All naphtha-type jet fuel is assumed to be used for transportation purposes so the transportation consumption equals the estimated total consumption for each State and for the United States:

$$\text{JNACPZZ} = \text{JNTCPZZ}$$

$$\text{JNACPUS} = \text{JNTCPUS}$$

British Thermal Units (Btu)

Naphtha-type jet fuel has a heat content value of approximately 5.355 million Btu per barrel. This factor is applied to convert naphtha-type jet fuel from physical units to Btu:

$$\text{JNTCBZZ} = \text{JNTCPZZ} * 5.355$$

$$\text{JNTCBUS} = \Sigma \text{JNTCBZZ}$$

$$\text{JNACBZZ} = \text{JNTCBZZ}$$

$$\text{JNACBUS} = \text{JNTCBUS}$$

Additional Notes on Naphtha-Type Jet Fuel

1. An assumption is made that the naphtha-type jet fuel is for military use only. This assumption is based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that naphtha-type jet fuel is used primarily by military aircraft engines.
2. Data on naphtha-type jet fuel issued to the military for each State (JNMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for

1960 through 1976 in SEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 and 1992, data from the same two databases, reported by calendar year, are used.

Data Sources for Naphtha-type Jet Fuel

JNMIPZZ — Naphtha-type jet fuel issued to the military in the United States.

- 1960 through 1974: No data are available. The 1977 data are used for each year.
- 1975 and 1976: No consistent data series are available. The 1977 data are used for both years.
- 1977 through 1987: The U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data. The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1988: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, average of 1987 data (see source above) and 1989 data (see source below).
- 1989 and 1990: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Fuel Automated Management System, military wholesale issues based on fiscal year data.
- 1991 forward: U.S. Department of Defense, Defense Logistics Agency, Defense Energy Supply Center. State data for the calendar year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia. Data for 2003 are repeated for 2004 pending availability of the actual 2004 data.

JNTCPUS — Naphtha-type jet fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

Jet Fuel Totals

Physical Unit

The following calculations are used to provide total jet fuel consumption estimates by end use in physical units:

$$\begin{aligned} \text{JFACPZZ} &= \text{JKACPZZ} + \text{JNACPZZ} \\ \text{JFACPUS} &= \Sigma \text{JFACPZZ} \\ \text{JFEUPZZ} &= \text{JKEUPZZ} \\ \text{JFEUPUS} &= \text{JKEUPUS} \\ \text{JFTCPZZ} &= \text{JFACPZZ} + \text{JFEUPZZ} \\ \text{JFTCPUS} &= \Sigma \text{JFTCPZZ} \end{aligned}$$

British Thermal Units (Btu)

The following calculations are used to provide total jet fuel consumption estimates by end use in Btu:

$$\begin{aligned} \text{JFACBZZ} &= \text{JKACBZZ} + \text{JNACBZZ} \\ \text{JFACBUS} &= \Sigma \text{JFACBZZ} \\ \text{JFEUBZZ} &= \text{JKEUBZZ} \\ \text{JFEUBUS} &= \text{JKEUBUS} \\ \text{JFTCBZZ} &= \text{JFACBZZ} + \text{JFEUBZZ} \\ \text{JFTCBUS} &= \Sigma \text{JFTCBZZ} \end{aligned}$$

Kerosene

Physical Units

Because State-level and end-use consumption data for kerosene are not available, four data series published by Energy Information Administration (EIA) representing sales of kerosene into or within each State are used to estimate kerosene consumption. The fifth data series, the U.S. total consumption, is the product supplied series from the EIA *Petroleum Supply Annual*. The sales series are used to apportion the known U.S. total consumption into State-level estimates of end-use consumption. The following variable names have been assigned to the five data series ("ZZ" in the variable names represents the two-letter State code that differs for each State):

KSCMPZZ	= kerosene sold to the commercial sector for heating, in thousand barrels;
KSIHPZZ	= kerosene sold to the industrial sector for heating, in thousand barrels;
KSOTPZZ	= kerosene sold for all other uses, including farm use, in thousand barrels;
KSRSPZZ	= kerosene sold to the residential sector for heating, in thousand barrels; and
KSTCPUS	= kerosene total consumed in the United States, in thousand barrels.

U.S. sales totals for each of the four State-level series are created by summing the State values.

The variables are combined as closely as possible into the major end-use sectors used in SEDS. The residential and commercial sectors contain only KSRSPZZ and KSCMPZZ, respectively.

The sales of kerosene to the industrial sector, KSINPZZ, for each State is the sum of kerosene sold for industrial space heating (KSIHPZZ) and kerosene sold for all other uses (KSOTPZZ), including farm use. Sales of kerosene to the industrial sector are calculated:

$$\begin{aligned}\text{KSINPZZ} &= \text{KSOTPZZ} + \text{KSIHPZZ} \\ \text{KSINPUS} &= \sum \text{KSINPZZ}\end{aligned}$$

Total sales of kerosene in each State is the sum of these three sectors' sales:

$$\begin{aligned}\text{KSTTPZZ} &= \text{KSRSPZZ} + \text{KSCMPZZ} + \text{KSINPZZ} \\ \text{KSTTPUS} &= \sum \text{KSTTPZZ}\end{aligned}$$

An estimate of each State's total consumption of kerosene is made by disaggregating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

$$\text{KSTCPZZ} = (\text{KSTTPZZ} / \text{KSTTPUS}) * \text{KSTCPUS}$$

Each State's residential sector sales percentage of total sales is applied to the State's estimated total consumption to create estimated residential sector consumption for the State, KSRCPZZ:

$$\text{KSRCPZZ} = (\text{KSRSPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

The commercial sector's estimated consumption in each State, KSCCPZZ, is calculated:

$$\text{KSCCPZZ} = (\text{KSCMPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

The industrial sector's estimated consumption in each State, KSICPZZ, is calculated:

$$\text{KSICPZZ} = (\text{KSINPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

U.S. totals for the three sectors' consumption estimates are the sums of the States' estimated consumption.

British Thermal Units (Btu)

Kerosene has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene estimated consumption from physical units to Btu:

$$\begin{aligned}\text{KSRCBZZ} &= \text{KSRCPZZ} * 5.670 \\ \text{KSCCBZZ} &= \text{KSCCPZZ} * 5.670 \\ \text{KSICBZZ} &= \text{KSICPZZ} * 5.670\end{aligned}$$

Total estimated consumption of kerosene in Btu is the sum of the end-use consumption estimates.

$$\text{KSTCBZZ} = \text{KSRCBZZ} + \text{KSCCBZZ} + \text{KSICBZZ}$$

The U.S. Btu consumption estimates for the three consuming sectors and the U.S. total are calculated as the sum of the State-level data.

Additional Notes on Kerosene

1. See Note 4 at the end of the “Kerosene-Type Jet Fuel” section on page 41 for comments concerning the inclusion of kerosene-type jet fuel with the kerosene total product supplied prior to 1964 in the source documents.
2. “Sales” data are actually called “shipments” in the source documents for 1960 and 1961; “consumption” for 1962 through 1966; “shipments” for 1967; “sales” from 1968 through 1978; “deliveries” for 1979 through 1983; and “sales” for 1984 forward.
3. In 1979, the Energy Information Administration (EIA) implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report* “Deliveries of Fuel Oil and Kerosene in 1979.”) In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in SEDS to conform with the 1979 kerosene deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in SEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For kerosene deliveries in 1979, the end-use categories called “residential,” “commercial,” and “industrial” are available. The pre-1979 deliveries category called “heating” is related to the sum of “residential,” “commercial,” and “industrial” in 1979. Therefore, the following method was applied to present a comparable series for kerosene delivered to the residential, commercial, and industrial sectors:

- A 1979 subtotal for heating was created by summing each State’s residential, commercial, and industrial deliveries categories, thereby creating a comparable deliveries subtotal for all years.
- Residential, commercial, and industrial shares of the heating subtotal in 1979 were calculated for each State.
- These 1979 end-use shares were then applied to each pre-1979 heating subtotal in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 kerosene deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, “Annual Fuel Oil and Kerosene Sales Report.” EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in SEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into SEDS.)

4. In 1975 through 1977, the industrial sector consumption of kerosene includes small quantities of kerosene-type jet fuel that were produced as jet fuel and sold as kerosene.

Data Sources for Kerosene

KSCMPZZ — Kerosene sold to the commercial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of kerosene from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene, in 1979,” Table 3. State ratios based on 1979 commercial sector deliveries were applied to each State’s heating deliveries category from the fuel oil deliveries reports

for each year 1960 through 1978. (See explanation in Note 3, on page 45.)

- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
 - 1983: July 1985 issue, Table A14.
 - 1984: July 1986 issue, Table A4.
 - 1985 and 1986: July 1987 issue, Table A6.
 - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VCS_Mgal_a.htm, select Excel file labeled "Download Series History."

KSIHPZZ — Kerosene sold to the industrial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of industrial sector deliveries of kerosene from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 3. State ratios based on 1979 industrial sector deliveries were applied to each State’s heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 45.)
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
 - 1983: July 1985 issue, Table A14.
 - 1984: July 1986 issue, Table A4.
 - 1985 and 1986: July 1987 issue, Table A6.
 - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_vin_Mgal_a.htm, select Excel file labeled "Download Series History."

KSOTPPZZ — Kerosene sold for all other uses, including farm use.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
 - 1960 and 1961: Table 10.
 - 1962 and 1963: Table 9.
 - 1964 and 1965: Table 8.
 - 1966 through 1975: Table 5.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 5.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene.” Calculated as the sum of kerosene delivered for farm and other use from Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
 - 1983: July 1985 issue, Table A14.
 - 1984: July 1986 issue, Table A4.
 - 1985 and 1986: July 1987 issue, Table A6.
 - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VOE_Mgal_a.htm and http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VFM_Mgal_a.htm, select Excel file labeled "Download Series History."

KSRSPZZ — Kerosene sold to the residential sector for heating.

- 1960 through 1978: EIA, *Energy Data Report* “Deliveries of Fuel Oil and Kerosene in 1979,” Table 3. State ratios based on 1979 residential sector deliveries were applied to each State’s heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 45.)
- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
 - 1983: July 1985 issue, Table A14.
 - 1984: July 1986 issue, Table A4.
 - 1985 and 1986: July 1987 issue, Table A6.
 - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VRS_Mgal_a.htm, select Excel file labeled "Download Series History."

KSTCPUS — Kerosene total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1988 forward: EIA, *Petroleum Supply Annual*, http://tonto.eia.doe.gov/dnav/pet/pet_sum_snd_d_nus_vpp_mbbbl_a.htm, select Excel file labeled "Download Series History."

Liquefied Petroleum Gases

Liquefied petroleum gases (LPG) in the State Energy Data System (SEDS) include: ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane.

Physical Units

The following data series used in SEDS to estimate LPG consumption represent sales or estimated sales by State in thousand gallons.

- LGCBMZZ = LPG sold for internal combustion engine fuel use. Included are sales for use in all kinds of highway vehicles, forklifts, industrial tractors, and for use in oil field drilling and production;
- LGHCMZZ = LPG sold for residential and commercial use. Included are sales for nonfarm private households for space heat-

ing, cooking, water heating, and other household uses, such as clothes drying and incineration. Also included are sales to nonmanufacturing organizations, such as motels, restaurants, retail stores, laundries, and other service enterprises, primarily for use in space heating, water heating, and cooking; and

LGTPZZ = LPG total sales for all uses.

The U.S. totals for each of these State-level LPG sales data series are calculated as the sum of the State values.

Total U.S. consumption of LPG is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA):

LGTCPU = LPG total consumed in the United States, in thousand barrels.

Another variable is used in SEDS to estimate LPG consumption by the transportation sector. It is described in detail in Note 2 on page 48.

LGTRSUS = the transportation sector share of LPG internal combustion engine sales.

Since the LPG sales data are in gallons, they must be converted to barrels (42 U.S. gallons per U.S. barrel) to be comparable to total consumption estimates. The formulas for calculating State sales data are:

$$LGCBPZZ = LGCBMZZ / 42$$

$$LGCBPUS = \Sigma LGCBPZZ$$

$$LGHCPZZ = LGHCMZZ / 42$$

$$LGHCPUS = \Sigma LGHCPZZ$$

An assumption is made that 85 percent of the LPG sold for residential and commercial use (LGHCPZZ) is sold to the residential sector (LGRCPZZ), and 15 percent is sold to the commercial sector (LGCCPZZ) for all States and years. (See Note 3 on page 49.) It is also assumed that LPG sales to the residential and commercial sectors are equal to the consumption in those sectors. The formulas used are:

$$LGRCPZZ = LGHCPZZ * 0.85$$

$$\text{LGCCPZZ} = \text{LGHCPZZ} * 0.15$$

The LPG consumption by the transportation sector is estimated to be the transportation share of the sales for internal combustion engine fuel:

$$\text{LGACPZZ} = \text{LGCBPZZ} * \text{LGTRSUS}$$

An estimate of each State's total LPG consumption (LGTCPPZZ) is made by allocating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

$$\text{LGTCPPZZ} = (\text{LGTPPZZ} / \text{LGTPPUS}) * \text{LGTCPPUS}$$

The industrial (LGICPZZ) sector consumption of each State is the difference between the State's total LPG consumption and the sum of its residential, commercial, and transportation sectors' consumption:

$$\text{LGICPZZ} = \text{LGTCPPZZ} - (\text{LGRCPZZ} + \text{LGCCPZZ} + \text{LGACPZZ})$$

U.S. totals for the four end-use sector consumption estimates are calculated as the sums of the State estimates.

British Thermal Units (Btu)

The factor for converting LPG from physical unit values to British thermal units, LGTCCKUS, is calculated annually for 1967 forward by EIA as a consumption-weighted average of the heat contents of the component products (ethane, propane, butane, butane-propane, ethane-propane, and isobutane) as shown in Appendix B. LGTCCKUS is shown in Table B1 on page 143 and the individual product heat contents are listed beginning on page 156. For 1960 through 1966, EIA adopted the Bureau of Mines thermal conversion factor of 4.011 million Btu per barrel.

This factor is used to estimate consumption in Btu for all States and end uses:

$$\begin{aligned}\text{LGRCPZZ} &= \text{LGRCPZZ} * \text{LGTCCKUS} \\ \text{LGCCBZZ} &= \text{LGCCPZZ} * \text{LGTCCKUS} \\ \text{LGICBZZ} &= \text{LGICPZZ} * \text{LGTCCKUS} \\ \text{LGACBZZ} &= \text{LGACPZZ} * \text{LGTCCKUS}\end{aligned}$$

Total estimated consumption of LPG in Btu is the sum of the end-use consumption estimates:

$$\text{LGTCBZZ} = \text{LGRCPZZ} + \text{LGCCBZZ} + \text{LGICBZZ} + \text{LGACBZZ}$$

The U.S. Btu consumption estimates for the four sectors and total LPG are calculated as the sum of the State data.

Additional Notes on Liquefied Petroleum Gases

1. Sales data for Maryland and the District of Columbia are combined in the source documents. Sales data are published in six categories. The percentages shown in Table TN5 are applied to disaggregate the State data in each of the sectors for all years.
2. The sales of LPG for internal combustion engine fuel use are divided between the transportation sector and the industrial sector by using LGTRSUS, the transportation sector's share of internal combustion engine use. LGTRSUS is estimated from data on "special fuels used on highways," a category that includes only LPG and diesel fuel. The special fuels data are published by the U.S. Department of Transportation, Federal Highway Administration (see MGSFPZZ on page 56). The quantity of LPG included in special fuels is estimated each year (the LPG portion ranges from 8.4 percent in 1960 to 0.4 percent in 2000). LGTRSUS is then derived by dividing the quantity of LPG included in special fuels used on highways by the quantity of LPG sold for internal combustion engine use. This U.S. factor is applied to the internal combustion engine use of each State.

Table TN5. Percentages Used to Disaggregate Maryland and D.C. Combined LPG Sales Data

Sales Category	Maryland	D.C.
Residential and Commercial	99.9%	0.1%
Internal combustion engine fuel	98.9	1.1
Industrial	99.4	0.6
Chemical	100.0	0.0
Utility gas	100.0	0.0
Miscellaneous	100.0	0.0

LGTRSUS values are shown in Table TN6.

3. Little information exists for allocating the residential and commercial use of LPG to the individual sectors. SEDS applies an 85 percent residential and 15 percent commercial split for all States and years based on figures published in the Federal Energy Administration Project Independence Blueprint Task Force Report, "Residential and Commercial Energy Use Patterns, 1970–1990," November 1974, Table 1.A.1.
4. LPG sales data by State and end-use categories for 1960 through 1982 are from EIA's "Sales of Liquefied Petroleum Gases and Ethane." In 1979, EIA modified the LPG sales survey, Form EIA-174, and changed the list of respondents. Because of the updated sampling frame, the 1979 through 1982 sales data may not be directly comparable to the pre-1979 sales when a different estimation procedure was used. Explanation of the discontinuities caused by the change in the 1979 sampling frame are provided in EIA's *Energy Data Report*, "Sales of Liquefied Petroleum Gases and Ethane in 1979."

Table TN6. Transportation Sector Share of LPG Internal Combustion Engine Use, 1960 Forward

Year	LGTRSUS	Year	LGTRSUS	Year	LGTRSUS
1960	0.229	1975	0.406	1990	0.471
1961	0.258	1976	0.440	1991	0.426
1962	0.266	1977	0.478	1992	0.425
1963	0.273	1978	0.594	1993	0.443
1964	0.259	1979	0.536	1994	0.734
1965	0.290	1980	0.380	1995	0.416
1966	0.325	1981	0.671	1996	0.337
1967	0.368	1982	0.579	1997	0.278
1968	0.389	1983	0.578	1998	0.592
1969	0.341	1984	0.631	1999	0.364
1970	0.363	1985	0.440	2000	0.215
1971	0.423	1986	0.456	2001	0.204
1972	0.392	1987	0.375	2002	0.325
1973	0.384	1988	0.437	2003	0.373
1974	0.381	1989	0.428	2004	0.365

Because of the change in survey techniques used for measuring LPG sales, many States' data were withheld from publication in the 1979 through 1982 LPG sales reports to avoid disclosure of company-level data. The consumption estimates in SEDS use all data published in the 1979 through 1982 LPG sales reports and estimates prepared by EIA's Office of Oil and Gas for data that were withheld from publication. (See Note 5 following for estimation procedures.)

Some end-use categories changed in 1979 due to redefinition of the classifications. One of these changes, for example, occurred with LPG sold to farms for household heating and cooking. Prior to 1979 these sales were reported as part of the residential and commercial category, while in 1979 they were counted in the farm use category that goes into the industrial sector in SEDS. No attempt has been made to adjust for this type of inconsistency.

The Form EIA-174 was cancelled after collection of 1982 data. The 1983 LPG consumption estimates are based on the assumption that LPG end-use sector demand in 1983 occurred in the same proportion as 1982 sector demand within each State; i.e., the 1983 LPG product supplied figure was allocated to the States by using the distribution of volumes consumed for 1982.

5. The following procedures were used to estimate the State end-use sales that were withheld from publication in the 1979-1982 LPG sales reports:
 - For each year, missing State total sales were estimated by allocating the sum of the missing State sales within each Petroleum Administration for Defense (PAD) District to the individual States, in proportion to the sum of the known end-use sales for those States.
 - Missing PAD District end-use totals for 1979 and 1980 were obtained by using the 1980 and 1981 sales reports. Missing PAD District chemical sales were estimated by allocating the total missing volume of chemical sales to the PAD District in proportion to the number of chemical plants in each PAD District. The remaining PAD District end-use totals were obtained by subtraction. For 1981 and 1982, no PAD District estimations

were necessary because all PAD District end-use totals are known.

- The published data and the estimated State and PAD District end-use totals were used to estimate missing State end-use sales volumes within a PAD District: missing State end-use sector values were estimated by allocating the missing volume for the State approximately proportional to the PAD District end-use sector totals.
6. Prior to 1979, State data for chemical use of LPG were withheld from publication, although they were included in the U.S. total in the tables in EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports. Beginning in 1979, State-level chemical use data were published in the LPG sales reports, but data for several States were withheld. Estimates for the withheld data for chemical use sales for 1979 and 1980 were created by using the estimation procedure described in Note 5 above. Then the published and the estimated State data for 1979 were used to create State shares of the total U.S. chemical use sales. These percentage shares (shown in Table TN7) were applied to the total U.S. LPG chemical use sales in 1960 through 1978 to create State chemical use estimates. The chemical use estimates were added to the States' total LPG sales series, LGTTPZZ.
 7. Beginning in 1984, the American Petroleum Institute (API), the Gas Processors Association, and the National LP-Gas Association jointly sponsored an LPG sales survey. The results are published in the API's report *Sales of Natural Gas Liquids and Liquefied Refinery Gases*. These data include sales of pentanes plus; the pentanes plus data were removed by EIA prior to use in SEDS.

Beginning in 1997, API incorporated additional imports and exports data in their estimates. Those trade data are also removed by EIA prior to use in SEDS.

Data Sources for Liquefied Petroleum Gases

LGCBMZZ — LPG sold for internal combustion engine use by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page 48.

Table TN7. State Shares of the Total U.S. LPG Sold for Chemical Use, 1960 Through 1978

State	Percent	State	Percent
Alabama	0.000	Montana	0.000
Alaska	0.589	Nebraska	0.000
Arizona	0.000	Nevada	0.000
Arkansas	0.000	New Hampshire	0.000
California	2.667	New Jersey	2.040
Colorado	0.232	New Mexico	0.603
Connecticut	0.053	New York	0.000
Delaware	0.811	North Carolina	0.327
District of Columbia	0.000	North Dakota	0.000
Florida	0.000	Ohio	1.103
Georgia	0.699	Oklahoma	0.309
Hawaii	0.000	Oregon	0.000
Idaho	0.000	Pennsylvania	0.354
Illinois	7.066	Rhode Island	0.000
Indiana	0.243	South Carolina	0.021
Iowa	0.900	South Dakota	0.000
Kansas	0.451	Tennessee	0.000
Kentucky	2.548	Texas	57.425
Louisiana	20.566	Utah	0.000
Maine	0.012	Vermont	0.000
Maryland	0.050	Virginia	0.025
Massachusetts	0.009	Washington	0.000
Michigan	0.151	West Virginia	0.286
Minnesota	0.000	Wisconsin	0.000
Mississippi	0.315	Wyoming	0.091
Missouri	0.054	United States	100.000

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Liquefied Petroleum Gases and Ethane." The specific tables are:
 - 1960 and 1961: Table 5 (data called "Shipments").
 - 1962 through 1966: Table 2 (data called "Consumption").
 - 1967: Table 2 (data called "Shipments").

- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 50.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, <http://api-ec.api.org>, *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, Table 3. Final data for each year is published in the report for the next year.

LGHCMZZ — LPG sold for residential and commercial use by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page 48.

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Liquefied Petroleum Gases and Ethane.” The specific tables are:
 - 1960 and 1961: Table 5 (data called “Shipments”).
 - 1962 through 1966: Table 2 (data called “Consumption”).
 - 1967: Table 2 (data called “Shipments”).
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 50.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.

- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, <http://api-ec.api.org>, Table 3. Final data for each year is published in the report for the next year.

LGTCBUS — Factor for converting LPG from physical units to Btu.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Crude Petroleum and Petroleum Products, 1956,” Table 4 footnote, constant value of 4.011 million Btu per barrel.
- 1967 forward: Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product’s conversion factor and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Their heat content conversion factors are listed in Appendix B beginning on page 156. Quantities consumed are from:
 - 1967 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
 - 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled “Products Supplied.”

LGTCBUS — LPG total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled “Products Supplied.”

LGTRSUS — The transportation sector share of LPG internal combustion engine sales.

- EIA estimates based on the LPG portion of the special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration (variable MGSFPUS in SEDS), as a percentage of the LPG sold for internal combustion engine use published by the American Petroleum Institute (variable LGCBMUS in SEDS). For an explanation of the estimation method, see Note 2, on page 48.

LGTTTPZZ — LPG total sales for all uses by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page .

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Liquefied Petroleum Gases and Ethane.” The specific tables are:
 - 1960 and 1961: Table 5 (data called “Shipments”).
 - 1962 through 1966: Table 2 (data called “Consumption”).
 - 1967: Table 2 (data called “Shipments”).
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 50.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, [http:// api-ec.api.org](http://api-ec.api.org), *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, Table 3. Final data for each year are published in the report for the next year.

Lubricants

Physical Units

Three data series are used to estimate State consumption of lubricants. The two State-level sales data series are used to apportion the U.S. total consumption data to the States and the end-use sectors within the States. “ZZ” in the variable names represents the two-letter State code that differs for each State:

- LUINPZZ = lubricants sold to the industrial sector, in thousand barrels;
- LUTRPZZ = lubricants sold to the transportation sector, in thousand barrels; and
- LUTCPUS = lubricants total consumed in the United States, in thousand barrels.

Data for the first two variables are developed from the Bureau of the Census reports “Sales of Lubricating and Industrial Oils and Greases” in the *Current Industrial Reports* series. These series were discontinued in 1977 and the method of estimation for 1978 forward is explained in Note 1 at the end of this “Lubricants” section. The third variable for lubricants is the product supplied data series in the Energy Information Administration's (EIA) *Petroleum Supply Annual*. The first two variables are used for apportioning the third into State total consumption and State end-use consumption estimates.

Total sales of lubricants for each State, LUTTPZZ, is created by adding the industrial and transportation sales:

$$\text{LUTTPZZ} = \text{LUINPZZ} + \text{LUTRPZZ}$$

U.S. sales totals are calculated by summing the State sales data.

Each State's proportion of total U.S. sales is used to calculate each State's estimated consumption of lubricants:

$$\text{LUTCPZZ} = (\text{LUTTPZZ} / \text{LUTTPUS}) * \text{LUTCPUS}$$

Each State's estimated total consumption of lubricants is further divided into end-use estimates in proportion to that State's sales by sector as a portion of total sales in the State. Lubricants consumed by State for industrial use, LUICPZZ, and for transportation use, LUACPZZ, are calculated:

$$\begin{aligned}\text{LUICPZZ} &= (\text{LUINPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ} \\ \text{LUACPZZ} &= (\text{LUTRPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ}\end{aligned}$$

The consumption of lubricants in the United States by these two end-use sectors is created by summing the State estimates.

British Thermal Units (Btu)

Lubricants have a heat content value of approximately 6.065 million Btu per barrel. This factor is applied to convert lubricants estimated consumption from physical units to Btu:

$$\begin{aligned}\text{LUICBZZ} &= \text{LUICPZZ} * 6.065 \\ \text{LUACBZZ} &= \text{LUACPZZ} * 6.065\end{aligned}$$

The State total consumption in Btu is the sum of the two sectors' consumption in Btu:

$$\text{LUTCBZZ} = \text{LUICBZZ} + \text{LUACBZZ}$$

The U.S. sector and total consumption estimates in Btu are calculated as the sum of the State data.

Additional Notes on Lubricants

1. The lubricants sales data (LUINPZZ and LUTRPZZ) were published approximately every other year by the Bureau of the Census until the discontinuation of the series after 1977. Each year's sales data have been used to calculate that year's and at least one other year's consumption estimates. Table TN8 specifies which years of consumption estimates depend on which years of the sales data.
2. The sales data from the source document for LUINPZZ and LUTRPZZ are available in incompatible units. The industrial series, LUINPZZ, is oils and greases sold for industrial lubricating and

other uses measured in thousand gallons. The transportation series, LUTRPZZ, is oils and greases sold for automotive and aviation uses measured in thousand pounds. Prior to use in SEDS, these were converted to thousand barrels by dividing the oil data by 42 gallons per barrel and dividing the greases data by 300 pounds per barrel. In the source document, some State data are not published to avoid disclosing figures for individual companies. The undisclosed data were entered as zero in SEDS.

Data Sources for Lubricants

LUINPZZ — Lubricants sold to the industrial sector by State. Calculated from:

- U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases," for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Notes 1 and 2 above.)

LUTCPUS — Lubricants total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.

Table TN8. Lubricants Sales Data Used in Consumption Estimates

Year of Sales Data	Year of Consumption Estimates
1960	1960 and 1961
1962	1962, 1963, and 1964
1965	1965 and 1966
1967	1967 and 1968
1969	1969 and 1970
1971	1971 and 1972
1973	1973 and 1974
1975	1975 and 1976
1977	1977 forward

- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

LUTRPZZ — Lubricants sold to the transportation sector by State. Calculated from:

- U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases," for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Notes 1 and 2 on page 53.)

Motor Gasoline

Physical Units

Nine data series are used to estimate the State end-use consumption of motor gasoline. Eight of the series are from the U.S. Department of Transportation, Federal Highway Administration publication, *Highway Statistics*, and represent sales of motor gasoline. The sales data are categorized as sales for highway and nonhighway use:

- **Highway Use** sales data (MGMFP) are from the *Highway Statistics* Table MF-21; however, they are reduced by the amount of highway "special fuels" (MGSFP) used in each State each year as reported on Table MF-25 (prior to 1994) and Table MF-21 (1994 forward). Special fuels are primarily diesel fuels, not motor gasoline, and are included in the transportation sector of distillate fuel.
- **Nonhighway Use** sales are further subdivided into sales for: (1) public use by States, counties, and municipalities (MGPNP) from Table MF-21, and (2) private and commercial use as reported on MF-24. The private and commercial nonhighway use of motor gasoline has the following components: agricultural use (MGAGP), industrial and commercial use (MGIYP), construction use (MGCUP), marine use (MGMRP), and miscellaneous and unclassified uses (MGMSPP). Another component of the private and commercial nonhighway series is aviation gasoline (AVNMM), which is discussed under the "Aviation Gasoline" section of this documentation.

The ninth motor gasoline data series (MGTCBUS) is the total U.S. consumption of motor gasoline published in the product supplied series in the EIA publication *Petroleum Supply Annual*.

The nine motor gasoline data series are ("ZZ" in the variable names represent the two-letter State code that differs for each State):

- MGAGPZZ = motor gasoline sold for agricultural use in each State, in thousand gallons;
- MGCUPZZ = motor gasoline sold for construction use in each State, in thousand gallons;
- MGIYPZZ = motor gasoline sold for industrial and commercial use in each State, in thousand gallons;
- MGMFPZZ = motor fuel sold for highway use in each State, in thousand gallons;
- MGMRPZZ = motor gasoline sold for marine use in each State, in thousand gallons;
- MGMSPPZZ = motor gasoline sold for miscellaneous and unclassified uses in each State, in thousand gallons;
- MGPNPZZ = motor fuel sold for public nonhighway use in each State, in thousand gallons;
- MGSFPZZ = special fuels (primarily diesel fuel with small amounts of liquefied petroleum gases) sold in each State, in thousand gallons; and
- MGTCBUS = motor gasoline total consumed in the United States, in thousand barrels.

U.S. totals for the eight State series named above are calculated as the sum of the State data.

The transportation sector accounts for most of the motor gasoline sales. Sales to the transportation sector is estimated to be the sum of motor fuel sales for marine use and for highway use (minus the sales of special fuels, which are primarily diesel fuels and are accounted for in the transportation sector of distillate fuel). Sales of motor gasoline to the transportation sector in each State (MGTRPZZ) is calculated:

$$\text{MGTRPZZ} = \text{MGMFPZZ} + \text{MGMRPZZ} - \text{MGSFPZZ}$$

Two sales data series are added to estimate motor gasoline sales to the commercial sector: miscellaneous (including unclassified) and public

nonhighway sales. Sales of motor gasoline to the commercial sector in each State (MGCMPZZ) is calculated:

$$\text{MGCMPZZ} = \text{MGMSPPZZ} + \text{MGPNPZZ}$$

Sales of motor gasoline for use in the industrial sector in each State (MGINPZZ) is calculated as the sum of the sales for agricultural use, for construction use, and for industrial and commercial use:

$$\text{MGINPZZ} = \text{MGAGPZZ} + \text{MGCUPZZ} + \text{MGIYPZZ}$$

Total sales of motor gasoline in each State (MGTPPZZ) is calculated as the sum of the sales to the major sectors:

$$\text{MGTPPZZ} = \text{MGCMPZZ} + \text{MGINPZZ} + \text{MGTRPZZ}$$

U.S. totals for the three end-use sectors' sales and for total sales are calculated as the sum of the States' sales.

The motor gasoline sales data for the three end-use sectors in each State are used to apportion the U.S. total consumption of motor gasoline to the States and to the major end-use sectors within each State.

The estimated consumption of motor gasoline in each State is calculated according to each State's share of the total sales. Estimated consumption of motor gasoline in each State (MGTCPZZ) is calculated:

$$\text{MGTCPZZ} = (\text{MGTPPZZ} / \text{MGTPPUS}) * \text{MGTCPUS}$$

The commercial sector estimated consumption of motor gasoline (MGCCPZZ) is calculated:

$$\text{MGCCPZZ} = (\text{MGCMPZZ} / \text{MGTPPZZ}) * \text{MGTCPZZ}$$

The industrial sector estimated consumption (MGICPZZ) is calculated:

$$\text{MGICPZZ} = (\text{MGINPZZ} / \text{MGTPPZZ}) * \text{MGTCPZZ}$$

The transportation sector estimated consumption (MGACPZZ) is calculated:

$$\text{MGACPZZ} = (\text{MGTRPZZ} / \text{MGTPPZZ}) * \text{MGTCPZZ}$$

The consumption of motor gasoline by major end-use sector in the United States is estimated by summing the States' estimated consumption.

British Thermal Units (Btu)

A national factor, MGTCCKUS, is used to convert motor gasoline consumption from physical units to British thermal units for each State. A constant heat content of 5.253 million Btu per barrel is used for 1960 through 1993. Beginning in 1994, an annual quantity-weighted average factor for conventional, reformulated, and oxygenated motor gasoline is calculated by EIA. The factors, listed in Table B1 on page 143, are used for each State:

$$\text{MGCCBZZ} = \text{MGCCPZZ} * \text{MGTCCKUS}$$

$$\text{MGICBZZ} = \text{MGICPZZ} * \text{MGTCCKUS}$$

$$\text{MGACBZZ} = \text{MGACPZZ} * \text{MGTCCKUS}$$

$$\text{MGTCBZZ} = \text{MGCCBZZ} + \text{MGICBZZ} + \text{MGACBZZ}$$

The U.S. level Btu consumption estimates are calculated by summing the State data.

Data Sources for Motor Gasoline

MGAGPZZ — Motor gasoline sold for agricultural use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGCUPZZ — Motor gasoline sold for construction use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGYPPZZ — Motor gasoline sold for industrial and commercial use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMFPZZ — Motor fuel sold for highway use by State.

- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995*, Table MF-221 gives revised U.S. totals. State revisions can be calculated by adding data from Tables MF-225 and MF-226.
- 1996 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table MF-21.

MGMRPZZ — Motor gasoline sold for marine use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMSPZZ — Motor gasoline sold for miscellaneous uses by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24. Sum of the “Miscellaneous” column plus the “Unclassified” column minus the “Total Classified” column.
- 1965: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24. Sum of the “Miscellaneous” column plus the “Unclassified” column minus the “Total Classified” column.
- 1966 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table MF-24. The specific columns are:

- 1966 through 1981: Sum of the “Miscellaneous” and “Unclassified” columns.
- 1982 forward: The “Miscellaneous” column.

MGPNPZZ — Motor fuel sold for public nonhighway use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-21.
- 1985, 1987, and 1992: Unpublished revised State data comparable to the U.S. values published in *Highway Statistics Summary to 1995*, Table 221.
- 1965 through 1984, 1986, 1988 through 1991, and 1993 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table G-21 in 1965 and Table MF-21 in 1966 forward.

MGSFPZZ — Motor gasoline special fuels sales by State (primarily diesel fuel with small amounts of liquefied petroleum gases).

- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-225.
- 1996 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, <http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>, Table MF-21.

MGTCUS — Factor for converting motor gasoline from physical units to Btu.

- 1960 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for “Gasoline, Motor Fuel” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.
- 1994 forward: EIA calculates national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in Appendix B Table B1 on page 143). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions

Laboratory report EPA 420-F-95-003, *Fuel Economy Impact Analysis of Reformulated Gasoline*, <http://www.epa.gov/otaq/rfgecon.htm>.

MGTCPU — Motor gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
For 1960 through 1963, motor gasoline was combined with aviation gasoline and published as “gasoline” in the source table. Table 19 in the “Petroleum Statement, Annual” titled “Salient Statistics of Aviation Gasoline” provided separate data for aviation gasoline for those years. The aviation gasoline data from the second table were subtracted from the gasoline data in the first table to derive the motor gasoline consumption series used in SEDS.
- 1976 through 1980: EIA, *Energy Data Reports*. “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled “Products Supplied.”

Petroleum Coke

Physical Units

Seven data series are used to estimate the consumption of petroleum coke. Five are measures of petroleum coke consumption and two are indicators of industrial activity used to apportion U.S. industrial petroleum coke consumption to the States. “ZZ” in the variable name represents the two-letter State code that differs for each State:

- PCTCPUS = petroleum coke total consumed in the United States, in thousand barrels;
- PCEIMZZ = petroleum coke consumed by the electric power sector in each State, in thousand short tons;
- PCC3MZZ = petroleum coke consumed for combined heat and power in the commercial sector in each State, in thousand short tons;

- PCI3MZZ = petroleum coke consumed for combined heat and power in the industrial sector in each State, in thousand short tons;
- PCRFPZZ = petroleum coke used at refineries as both catalytic and marketable coke in each State, or group of States, or Petroleum Administration for Defense (PAD) district, in thousand barrels;
- CTCAPZZ = catalytic cracking charge capacity of petroleum refineries in each State, in barrels per calendar day (1960 through 1979) and barrels per stream day (1980 forward); and
- AICAPZZ = aluminum ingot production capacity in each State, in short tons.

The total consumption of petroleum coke in the United States (PCTCPUS) is the product supplied series from the Energy Information Administration (EIA) *Petroleum Supply Annual*.

Information on the amount of petroleum coke consumed for the purpose of generating electricity is available from the EIA, Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms. For the electric power sector (PCEIM), these data are available for 1970 forward. Prior to 1970, consumption is assumed to be zero. For 1989 forward, the electric power sector includes petroleum coke consumed by electric utilities and nonutility power producers whose primary business is to sell electricity or electricity and heat. Quantities of petroleum coke used by commercial (PCC3M) and industrial (PCI3M) facilities in combined-heat-and-power units are also available from Form EIA-920, and are included in the commercial and industrial sectors, respectively.

The data for petroleum coke used to generate electricity are in thousand short tons and are converted into thousand barrels in the State Energy Data System (SEDS) by applying a conversion factor of 5 barrels per short ton, and the U.S. value is the sum of the State data:

- PCEIPZZ = PCEIMZZ * 5
- PCEIPUS = Σ PCEIPZZ
- PCCCPZZ = PCC3MZZ * 5
- PCCCPUS = Σ PCCCPZZ

$$\begin{aligned}\text{PCI3PZZ} &= \text{PCI3MZZ} * 5 \\ \text{PCI3PUS} &= \Sigma \text{PCI3PZZ}\end{aligned}$$

To estimate U.S. industrial consumption of petroleum coke, U.S. electric power and commercial consumption are subtracted from the total U.S. petroleum coke product supplied:

$$\text{PCICPUS} = \text{PCTCPUS} - \text{PCEIPUS} - \text{PCCCPUS}$$

In addition to combined-heat-and-power generation, petroleum coke is used in the industrial sector as catalyst coke at refineries in a process for increasing the yield of gasoline from crude oil (catalytic cracking) and for other industrial uses (mainly for conversion into electrodes that are consumed in the production of aluminum).

State-level estimates of the refinery consumption of petroleum coke are calculated by assuming that each State consumes petroleum coke in proportion to the catalytic cracking charge capacity (CTCAPZZ) of the refineries in the State. The U.S. total for the State-level data allocating series is calculated by summing the State data.

$$\text{CTCAPUS} = \Sigma \text{CTCAPZZ}$$

Petroleum coke consumed by refineries for 1960 through 1980 is available for some States while quantities for other States are grouped (G1 through G7 as indicated by GZ in the following formulas). The group quantities are allocated to the States within each group in proportion to each State's portion of the group's catalytic cracking charge capacity. For 1981 forward, PAD district data (P1 through P5 as indicated by PZ in the following formulas) are allocated in the same way to the States within each district:

$$\begin{aligned}\text{PCRFPZZ} &= \text{PCRFPZZ}, \text{ or} \\ \text{PCRFPZZ} &= (\text{CTCAPZZ} / \text{CTCAPGZ}) * \text{PCRFPGZ} \text{ (1 through 7), or} \\ \text{PCRFPZZ} &= (\text{CTCAPZZ} / \text{CTCAPPZ}) * \text{PCRFPZ} \text{ (1 through 5)} \\ \text{PCRFPUS} &= \Sigma \text{PCRFPZZ}\end{aligned}$$

U.S. petroleum coke used at combined-heat-and-power plants (PCI3PUS) and at refineries (PCRFPUS) are subtracted from the U.S. industrial sector consumption to derive U.S. consumption of petroleum coke for all other industrial uses:

$$\text{PCOCPUS} = \text{PCICPUS} - \text{PCI3PUS} - \text{PCRFPUS}$$

State-level estimates of petroleum coke consumed by other industrial users, mainly aluminum production, are assumed to be in proportion to each State's aluminum ingot production capacity (AICAPZZ). Although AICAPZZ is measured in short tons, it is not converted to thousand barrels because it is used only as a State-level allocator. The U.S. total is calculated as the sum of the State data and other industrial use of petroleum coke is allocated to the States as follows:

$$\begin{aligned}\text{AICAPUS} &= \Sigma \text{AICAPZZ} \\ \text{PCOCPZZ} &= (\text{AICAPZZ} / \text{AICAPUS}) * \text{PCOCPUS}\end{aligned}$$

Industrial sector petroleum coke consumption by State is the sum of combined-heat-and-power industrial use, consumption at refineries, and all other industrial uses:

$$\text{PCICPZZ} = \text{PCI3PZZ} + \text{PCRFPZZ} + \text{PCOCPZZ}$$

Total petroleum coke consumption by State is the sum of commercial, industrial, and electric power sector use:

$$\text{PCTCPZZ} = \text{PCCCPZZ} + \text{PCICPZZ} + \text{PCEIPZZ}$$

British Thermal Units (Btu)

Petroleum coke has a heat content value of approximately 6.024 million Btu per barrel. This factor is applied to convert estimated petroleum coke consumption from physical units to Btu by State; and the U.S. totals are the sum of the States' values:

$$\begin{aligned}\text{PCCCBZZ} &= \text{PCCCPZZ} * 6.024 \\ \text{PCCCBUS} &= \Sigma \text{PCCCBZZ}\end{aligned}$$

$$\begin{aligned}\text{PCICBZZ} &= \text{PCICPZZ} * 6.024 \\ \text{PCICBUS} &= \Sigma \text{PCICBZZ}\end{aligned}$$

$$\begin{aligned}\text{PCEIBZZ} &= \text{PCEIPZZ} * 6.024 \\ \text{PCEIBUS} &= \Sigma \text{PCEIBZZ}\end{aligned}$$

$$\text{PCTCBZZ} = \text{PCCCBZZ} + \text{PCICBZZ} + \text{PCEIBZZ}$$

PCTCBUS = Σ PCTCBZZ

Additional Calculations

Additional calculations are performed in SEDS to provide petroleum coke consumption estimates for the price and expenditure calculations. The Btu equivalents of petroleum coke used at refineries (PCRFB), consumed for combined-heat-and-power generation (PCI3B), and consumed by all other industrial users (PCOCB) are calculated at the State and U.S. levels:

PCI3BZZ = PCI3PZZ * 6.024
PCI3BUS = Σ PCI3BZZ

PCOCBZZ = PCOCBZZ * 6.024
PCOCBUS = Σ PCOCBZZ

PCRFBZZ = PCRFPZZ * 6.024
PCRFBUS = Σ PCRFBZZ

Additional Notes on Petroleum Coke

The source for petroleum coke used at refineries, PCRFPUS and PCRFPZG, is the EIA *Petroleum Supply Annual* and predecessor reports. For 1960 through 1980, the data are provided in thousand short tons. For consistency with later years' data, the 1960 through 1980 data are first converted into thousand barrels before being used in SEDS. For 1960 through 1967, the data are published for Texas and New Mexico and for groups of other States. For 1968 through 1980, the data are given for 19 individual States with the remaining States are combined into 7 groups. The data for 1960 through 1967 are disaggregated into the 19 States and 7 groups used for the later years, prior to being entered into SEDS, by using the proportions of the 1968 data, which was published in both formats. For 1981 forward, the data are published by PAD districts only.

Data Sources for Petroleum Coke

AICAPZZ — Aluminum ingot production capacity in each State.

- 1960 through 1973: American Bureau of Metal Statistics, *Year Book*.

- 1974 through 1994: American Bureau of Metal Statistics, *Non-Ferrous Metal Data*, table titled "Aluminum Ingot Production Capacity."
Note: Capacities for individual plants owned by one company have been withheld since 1986. The company's total capacity has been apportioned to the individual plants on the basis of their proportional capacities in 1985.
- 1995 forward: Data series is discontinued. 1994 data are used for all years.

CTCAPZZ — Catalytic cracking charge capacity of petroleum refineries by State.

- 1960: Data are unavailable from published reports. The 1961 values are used for 1960.
- 1961 through 1963: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States." The specific tables are:
 - 1961 and 1962: Table 7, under "Cracking Capacity" column heading "Charge."
 - 1963: Table 6, under "Catalytic-Cracking Capacity" column heading "Charge."
- 1964 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1977: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1978: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories," Table 2, all entries next to "Cat. Ck." summed by State.
- 1979 and 1980: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S Territories." The specific tables are:
 - 1979: Table 2, sum of "Catalytic Cracking" columns, "Fresh" and "Recycle."
 - 1980: Table 1, sum of "Catalytic Cracking (fresh)" and "Catalytic Cracking (recycle)" columns.
- 1981 forward: EIA, *Petroleum Supply Annual*, sum of "Catalytic Cracking (Fresh)" and "Catalytic Cracking (Recycled)" columns in the following tables:
 - 1981 through 1983: Table 1.
 - 1984: Table 30.

- 1985 through 1989: Table 29.
- 1989 through 1994: Table 36.
- 1995: Data series became biannual. 1994 data used for 1995.
- 1996: Table 36.
- 1997: 1996 data used for 1997.
- 1998 forward: Table 36, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html.

PCC3MZZ — Petroleum coke consumed by the commercial sector by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA, Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

PCEIMZZ — Petroleum coke consumed by the electric power sector by State.

- 1960 through 1969: No data available. Values are assumed to be zero.
- 1970 forward: EIA, Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

PCI3MZZ — Petroleum coke consumed by the industrial sector by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA, Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

PCRFPZZ, PCRFPZGZ, or PCRFPZ — Petroleum coke consumed at refineries (both catalyst and marketable) by State or groups of States.

- 1960: No data available. The 1961 value is used for 1960.
- 1961 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual.” The specific tables are:
 - 1961 and 1962: Table 18.
 - 1962 through 1966: Table 19.
 - 1967: Table 18.
 - 1968: Table 19.

- 1969 through 1972: Table 18.
- 1973 and 1974: Table 21.
- 1975: Table 22.

- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual.” The specific tables are:
 - 1976: Table 22.
 - 1977: Table 21.
 - 1978 through 1980: Table 20.
- 1981 forward: EIA, *Petroleum Supply Annual*. The specific tables are:
 - 1981 and 1982: Table 17.
 - 1983: Table 15.
 - 1984: Table 44.
 - 1985: Table 43.
 - 1986 through 1988: Table 38.
 - 1989 through 1992: Table 45.
 - 1995 and 1997: Table 36.
 - 1993 and 1994, 1996, and 1998 forward: http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 47.

PCTCPUS — Petroleum coke total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Report*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled “Products Supplied.”

Residual Fuel

Physical Units

Since State-level end-use consumption data for residual fuel (with the exception of electric power sector data) are not available, sales of residual fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA) in the *Fuel Oil and Kerosene Sales Report*,

are used to estimate residual fuel consumption. The following variable names have been assigned to the adjusted sales series ("ZZ" in the following variable names represents the two-letter State code that differs for each State):

RFBKPZZ	= residual fuel sold for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding sales to the Armed Forces;
RFCMPZZ	= residual fuel sold to the commercial sector for heating;
RFIBPZZ	= residual fuel sold to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufactured products, in processing goods, and in assembling);
RFMIPZZ	= residual fuel sold to the Armed Forces, regardless of use;
RFMSPZZ	= residual fuel sold for all other uses not identified in other sales categories;
RFOCPZZ	= residual fuel sold for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations; and
RFRRPZZ	= residual fuel sold to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations.

Two other data series that represent consumption of residual fuel are:

RFEIPZZ	= residual fuel consumed by the electric power sector in each State, in thousand barrels.
RFTCPUS	= residual fuel total supplied in the United States, in thousand barrels.

Residual fuel oil consumed by the electric power sector (RFEIPZZ) is collected by EIA on Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. (See Note 3 at the end of this residual fuel section for further information on changes in this series' data definitions.)

Total U.S. consumption of residual fuel, RFTCPUS, is the product supplied series in EIA's publication *Petroleum Supply Annual*.

To begin calculating residual fuel State and end-use consumption estimates, all State-level data series are summed to provide totals for the United States.

Then the data series are combined as closely as possible into the major end-use sectors used in the State Energy Data System (SEDS). No residual fuel is sold to the residential sector. Residual fuel sales to the commercial sector is the RFCMPZZ series.

The sales of residual fuel to the industrial sector in each State, RFINPZZ, is the sum of the residual fuel sold for industrial use, including industrial space heating (RFIBPZZ), for oil company use (RFOCPZZ), and for all other uses (RFMSPZZ):

$$\begin{aligned}\text{RFINPZZ} &= \text{RFIBPZZ} + \text{RFOCPZZ} + \text{RFMSPZZ} \\ \text{RFINPUS} &= \Sigma \text{RFINPZZ}\end{aligned}$$

The sales of residual fuel to the transportation sector in each State, RFTRPZZ, is the sum of the residual fuel sales for vessel bunkering (RFBKPZZ), military use (RFMIPZZ), and railroad use (RFRRPZZ):

$$\begin{aligned}\text{RFTRPZZ} &= \text{RFBKPZZ} + \text{RFMIPZZ} + \text{RFRRPZZ} \\ \text{RFTRPUS} &= \Sigma \text{RFTRPZZ}\end{aligned}$$

Sales of residual fuel oil to the commercial, industrial, and transportation sectors are added to create a subtotal of sales to all sectors other than the electric power sector (RFNDPZZ):

$$\begin{aligned}\text{RFNDPZZ} &= \text{RFCMPZZ} + \text{RFINPZZ} + \text{RFTRPZZ} \\ \text{RFNDPUS} &= \Sigma \text{RFNDPZZ}\end{aligned}$$

The estimated residual fuel consumption for the United States by all sectors other than the electric power sector (RFNCPUS) is calculated by subtracting the total residual fuel consumption for the electric power sector from the total U.S. residual fuel consumption:

$$\text{RFNCPUS} = \text{RFTCPUS} - \text{RFEIPUS}$$

This U.S. subtotal of residual fuel consumption by the end-use sectors combined (RFNCPUS) is apportioned to the States by using the States'

end-use sector sales data. The assumption is made that each State consumes residual fuel in proportion to the amount sold in that State:

$$\text{RFNCPZZ} = (\text{RFNDPZZ} / \text{RFNDPUS}) * \text{RFNCPUS}$$

The end-use sectors' subtotal for each State is further divided into estimates for each sector in proportion to each sector's sales. The estimated commercial sector consumption in each State, RFCCPZZ, is calculated:

$$\text{RFCCPZZ} = (\text{RFCMPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The industrial sector's estimated consumption in each State, RFICPZZ, is calculated:

$$\text{RFICPZZ} = (\text{RFINPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The transportation sector's estimated consumption in each State, RFACPZZ, is calculated:

$$\text{RFACPZZ} = (\text{RFTRPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The consumption of residual fuel in the United States by the major end-use sectors is estimated by adding the States' estimated consumption.

Total State residual fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric power sector consumption:

$$\text{RFTCPZZ} = \text{RFNCPZZ} + \text{RFEIPZZ}$$

British Thermal Units (Btu)

Residual fuel has a heat content value of approximately 6.287 million Btu per barrel. This factor is applied to convert residual fuel estimated consumption from physical units to Btu as shown in the following examples:

$$\text{RFCCBZZ} = \text{RFCCPZZ} * 6.287$$

$$\text{RFICBZZ} = \text{RFICPZZ} * 6.287$$

$$\text{RFTCBZZ} = \text{RFCCBZZ} + \text{RFICBZZ} + \text{RFACBZZ} + \text{RFEIBZZ}$$

The U.S. level Btu consumption estimates are calculated as the sum of the States' Btu consumption.

Additional Notes on Residual Fuel

1. "Sales" data are actually called "shipments" in the source documents for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1983; and "sales" for 1984 forward.
2. In 1979, the EIA implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in SEDS to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in SEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For residual fuel deliveries in 1979, the end-use categories "commercial" and "industrial" are available. The pre-1979 deliveries categories are called "heating" and "industrial." While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of commercial and industrial deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979 years. Therefore, the following method was applied to present a comparable series for residual fuel delivered to the commercial and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State's heating and industrial deliveries categories. A comparable 1979 subtotal was created by adding each State's commercial and industrial deliveries categories.
- Commercial and industrial shares of the subtotal in 1979 were calculated for each State.

- These 1979 end-use shares were then applied to each pre-1979 subtotal of residual fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 residual fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, “Annual Fuel Oil and Kerosene Sales Report.” EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in SEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into SEDS.)

3. The data on fuel oil consumed by the electric power sector for all years and States are actual fuel oil consumption numbers collected from electric power plants on Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms. Due to changes in fuel oil reporting classifications on the predecessor forms over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only data on total fuel oil consumed at electric utilities by State are available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, data on consumption of distillate fuel oil at all plant types combined and consumption of residual fuel oil at all plant types combined are available by State. In SEDS, the following assumptions have been made:
 - 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus

small amounts of jet kerosene) by State in 1970 to each year’s total fuel oil consumption at electric utilities for 1960 through 1969.

- 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.
- 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total distillate consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for SEDS for residual fuel and distillate fuel plus jet kerosene consumption by the electric power sector is considered to be actual consumption by the electric power sector for each State and each year.

Data Sources for Residual Fuel

RFBKPZZ — Residual fuel sold for vessel bunkering use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
 - 1960 and 1961: Table 17.
 - 1962 and 1963: Table 16.
 - 1964 and 1965: Table 15.
 - 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.

- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VVB_Mgal_a.htm, select Excel file labeled "Download Series History."

RFCMPZZ — Residual fuel sold to the commercial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of residual fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 2. State ratios based on 1979 commercial sector deliveries were applied to each State's sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 2, on page 62.)
- 1979 and 1980: EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Notes: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS. Data for Hawaii in 1986 through 1990 reflect unpublished revisions from an EIA internal memorandum from the Office of Oil and Gas to the Office of Energy Markets and End Use, "Revising Historical Petroleum Data," February 26, 1993.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VCS_Mgal_a.htm, select Excel file labeled "Download Series History."

RFEIPZZ — Residual fuel consumed by the electric power sector.

- EIA, Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms. The following assumptions have been made:
 - 1960 through 1969: Only total fuel oil consumed at electric utilities by State is available. State estimates of residual fuel consumption were created for each year by applying the shares of steam plants (primarily residual fuel) by State from 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
 - 1970 through 1979: Fuel oil consumed by plant type by State is available. Fuel oil consumed by steam plants is assumed to equal residual fuel consumption.

- 1980 forward: Consumption of light and heavy fuel at all plant types by State is available. Total heavy oil consumption at all plant types is assumed to equal residual fuel consumption.

RFIBPZZ — Residual fuel sold to industrial establishments for heating and for other industrial use.

- 1960 through 1978: EIA, estimates based on statistics of industrial sector deliveries of residual fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 2. State ratios based on 1979 industrial sector deliveries were applied to each State's sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 2, on page 62.)
- 1979 and 1980: EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_vin_Mgal_a.htm, select Excel file labeled "Download Series History."

RFMIPZZ — Residual fuel sold to the Armed Forces regardless of use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 18.
 - 1962 and 1963: Table 17.
 - 1964 and 1965: Table 16.
 - 1966 through 1975: Table 12.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 12.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VMI_Mgal_a.htm, select Excel file labeled "Download Series History."

RFMSPZZ — Residual fuel sold for miscellaneous uses by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 through 1962: Table 19.
 - 1963 and 1964: Table 18.
 - 1965 through 1967: Table 17.
 - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2, column "Other."
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5, column "All Other."

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS. The data series is titled "All Other."

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOE_Mgal_a.htm, select Excel file labeled "Download Series History."

RFOCPZZ — Residual fuel sold for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 14.
 - 1962 and 1963: Table 13.
 - 1964 and 1965: Table 12.
 - 1966 through 1975: Table 9.

- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A13.
- 1984 forward: EIA, Petroleum Navigator, http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOC_Mgal_a.htm, select Excel file labeled "Download Series History."

RFRRPZZ — Residual fuel sold for use by railroads by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
 - 1960 and 1961: Table 16.
 - 1962 and 1963: Table 15.
 - 1964 and 1965: Table 14.
 - 1966 through 1975: Table 10.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 10.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward are published in thousand gallons. They are converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
 - 1983: July 1985 issue, Table A13.
 - 1984 and 1985: July 1986 issue, Table A3.
 - 1986 and 1987: June 1988 issue, Table A5.
- 1988 and 1989: EIA, *Fuel Oil and Kerosene Sales 1989*, Table 5.
- 1990 forward: Series discontinued. Volumes are included with "All Other" data (in SEDS).

RFTCPUS — Residual fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

Other Petroleum Products

There are 16 petroleum products that are summed and called "other petroleum products" in the State Energy Data System (SEDS). These products, in thousand barrels, are:

ABTCPUS	= aviation gasoline blending components total consumed in the United States;
COTCPZZ	= crude oil (including lease condensate) total consumed in each State;
FNTCPUS	= petroleum feedstocks, naphtha less than 401° F, total consumed in the United States;
FOTCPUS	= petroleum feedstocks, other oils equal to or greater than 401° F, total consumed in the United States;
FSTCPUS	= petroleum feedstocks, still gas, total consumed in the United States;
MBTCPUS	= motor gasoline blending components total consumed in the United States;
MSTCPUS	= miscellaneous petroleum products total consumed in the United States;
NATCPUS	= natural gasoline (including isopentane) total consumed in the United States;
PCTCPUS	= petroleum coke total consumed in the United States;
PLTCPUS	= plant condensate total consumed in the United States;
PPTCPUS	= pentanes plus total consumed in the United States;
SGTCPUS	= still gas total consumed in the United States;
SNTCPUS	= special naphthas total consumed in the United States;
UOTCPUS	= unfinished oils total consumed in the United States;

USTCPUS = unfractionated stream total consumed in the United States; and
 WXTCPUS = waxes total consumed in the United States.

The methods used to create State estimates for each of these products (except petroleum coke, which is described earlier in the petroleum coke section beginning on page 57) are explained in the following sections. It is assumed that all of these products are used by the industrial sector, except for the small portion of petroleum coke consumed by the electric power and commercial sectors. State estimates are created for other petroleum products by using the following four variables to allocate the products to the States:

COCAPZZ = crude oil operating capacity at refineries in each State, in barrels per calendar day;
 OCVAVZZ = value added in the manufacture of industrial organic chemicals in each State, in million dollars;
 PIVAVZZ = value added in the manufacture of paints and allied products in each State, in million dollars; and
 CGVAVZZ = value added in the manufacture of corrugated and solid fiber boxes, in million dollars.

Value added by manufacture is a measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-process between the beginning and end-of-year inventories. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas. The value added data are from the Department of Commerce *Economic Census* (previously, *Census of Manufactures*) reports.

Crude Oil

Physical Units

State estimates for crude oil consumed in petroleum industry operations are the data series COTCPZZ. The U.S. total for this data series is summed:

$$\text{COTCPUS} = \Sigma \text{COTCPZZ}$$

Industrial consumption equals total consumption of crude oil:

$$\text{COICPZZ} = \text{COTCPZZ}$$

$$\text{COICPUS} = \text{COTCPUS}$$

British Thermal Units (Btu)

Crude oil has a heat content value of approximately 5.800 million Btu per barrel. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

$$\text{COTCBZZ} = \text{COTCPZZ} * 5.800$$

$$\text{COTCBUS} = \Sigma \text{COTCBZZ}$$

$$\text{COICBZZ} = \text{COTCBZZ}$$

$$\text{COICBUS} = \text{COTCBUS}$$

Data Source

COTCPZZ — Crude oil consumed in petroleum industry operations by State.

- 1960 through 1982: Crude oil used directly was included in distillate and residual fuel product supplied when reported to EIA. Zeros are entered for all years.
- 1983 forward: Data are available for Petroleum Administration for Defense (PAD) districts, not by State. State estimates are calculated by allocating all crude oil consumption to the six States (Alaska, California, Colorado, Louisiana, Texas, and Utah) that reported distillate and residual fuels consumed by pipeline and leases in 1982. (Data on pipeline and lease consumption of fuels are not available after 1982.) Each State's 1982 ratio of distillate and residual fuels consumed by pipeline and leases to its respective 1982 PAD District total consumption of those fuels is calculated. This ratio is then applied to the 1983 forward PAD district totals of crude oil product supplied. The 1982 ratios are taken from the Form EIA-90, "Crude Oil Stocks Report," and the crude oil product supplied data are taken from the EIA *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html. The specific tables are:

— 1983 through 1988: Tables 2 and 4 through 8.

— 1989 forward: Tables 2, 4, 6, 8, 10, and 12.

Aviation Gasoline Blending Components; Petroleum Feedstocks, Still Gas; Motor Gasoline Blending Components; Still Gas; and Unfinished Oils

Physical Units

The five petroleum products in this category are consumed as refinery fuels. Beginning in 1986, still gas for petrochemical feedstocks and still gas for other uses are reported together in the source document. State consumption estimates of these products are created in proportion to each State's crude oil operating capacity at refineries (COCAPZZ). The U.S. total for this variable is summed:

$$\text{COCAPUS} = \Sigma \text{COCAPZZ}$$

Aviation gasoline blending components State and U.S. consumption are estimated:

$$\text{ABTCPZZ} = (\text{COCAPZZ} / \text{COCAPUS}) * \text{ABTCPUS}$$

$$\text{ABICPZZ} = \text{ABTCPZZ}$$

$$\text{ABICPUS} = \text{ABTCPUS}$$

Petroleum feedstocks, still gas, State and U.S. consumption are estimated:

$$\text{FSTCPZZ} = (\text{COCAPZZ} / \text{COCAPUS}) * \text{FSTCPUS}$$

$$\text{FSICPZZ} = \text{FSTCPZZ}$$

$$\text{FSICPUS} = \text{FSTCPUS}$$

Motor gasoline blending components State and U.S. consumption are estimated:

$$\text{MBTCPZZ} = (\text{COCAPZZ} / \text{COCAPUS}) * \text{MBTCPUS}$$

$$\text{MBICPZZ} = \text{MBTCPZZ}$$

$$\text{MBICPUS} = \text{MBTCPUS}$$

Still gas State and U.S. consumption are estimated:

SGTCPZZ = (COCAPZZ / COCAPUS) * SGTCBUS
 SGICPZZ = SGTCPZZ
 SGICBUS = SGTCBUS

Unfinished oils State and U.S. consumption are estimated:

UOTCPZZ = (COCAPZZ / COCAPUS) * UOTCBUS
 UOICPZZ = UOTCPZZ
 UOICBUS = UOTCBUS

British Thermal Units (Btu)

Btu estimates for the five products in this group are developed by multiplying the estimated consumption of each individual product in physical units by its respective heat content conversion factor. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

ABTCBZZ = ABTCPZZ * 5.048
 ABTCBUS = Σ ABTCBZZ
 ABICBZZ = ABTCBZZ
 ABICBUS = ABTCBUS

FSTCBZZ = FSTCPZZ * 6.000
 FSTCBUS = Σ FSTCBZZ
 FSICBZZ = FSTCBZZ
 FSICBUS = FSTCBUS

MBTCBZZ = MBTCPZZ * 5.253
 MBTCBUS = Σ MBTCBZZ
 MBICBZZ = MBTCBZZ
 MBICBUS = MBTCBUS

SGTCBZZ = SGTCPZZ * 6.000
 SGTCBUS = Σ SGTCBZZ
 SGICBZZ = SGTCBZZ
 SGICBUS = SGTCBUS

UOTCBZZ = UOTCPZZ * 5.825
 UOTCBUS = Σ UOTCBZZ
 UOICBZZ = UOTCBZZ

UOICBUS = UOTCBUS

Data Sources

ABTCBUS — Aviation gasoline blending components total consumed in the United States.

- 1960 through 1980: No data available. Values are assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

COCAPZZ — Crude oil operating capacity at refineries by State.

- 1960: U.S. Department of the Interior, Bureau of Mines, *Petroleum Refineries, Including Cracking Plants, in the United States*, Table 3.
- 1961 through 1963: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States." The specific tables are:
 - 1961 and 1962: Table 3.
 - 1963: Table 1.
- 1964 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States and Puerto Rico," Table 1.
- 1977: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and Puerto Rico," Table 1.
- 1978 through 1980: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html. The specific tables are:
 - 1981 through 1983: Table 1.
 - 1984: Table 30.
 - 1985 through 1988: Table 29.
 - 1989 through 1994: Table 36.
 - 1995: Unpublished data based on Form EIA-810.
 - 1996 forward: Table 36.

FSTCPUS — Petrochemical feedstocks, still gas, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, included in "Still Gas."

MBTCPUS — Motor gasoline blending components total consumed in the United States.

- 1960 through 1980: No data available. Values are assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, column titled "Products Supplied."

SGTCPUS — Still gas total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

UOTCPUS — Unfinished oils total consumed in the United States.

- 1960 through 1980: No data available. Values assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html, Table 2, column titled "Products Supplied."

Petroleum Feedstocks, Naphtha Less Than 401° F; Petroleum Feedstocks, Other Oils Equal to or Greater Than 401° F; Miscellaneous Petroleum Products; Natural Gasoline (Including Isopentane); Plant Condensate; Pentanes Plus; and Unfractionated Stream.

Physical Units

The seven petroleum products in this category are allocated to the States in proportion to the value added in the manufacture of industrial organic chemicals in each State (OCVAVZZ).

The two petroleum feedstocks are consumed by the chemical industry in producing petrochemical "building blocks" that, in turn, are converted to such products as synthetic fibers, synthetic rubber, and plastics.

Miscellaneous products include such products as petrolatum, synthetic natural gas feedstocks, and specialty oils (e.g., hydraulic oils, insulating oils, medicinal oils, rust preventatives, and spray oils). Finished petrochemicals usually constitute the largest volume of miscellaneous product, and it is assumed that the chief consuming industry for this product line is the chemical industry.

Natural gasoline (including isopentane), plant condensate, pentanes plus, and unfractionated stream are included in this group because the chemical industry is the only one that could readily utilize these lighter liquid hydrocarbons (as petrochemical feedstocks). Beginning in 1984, in the source document, natural gasoline (including isopentane) and plant condensate are reported together as a new product, pentanes plus. At the same time, unfractionated stream was dropped because its components were reported separately as liquefied petroleum gases.

The U.S. total for the data series used to apportion these products to the States is summed:

$$\text{OCVAVUS} = \Sigma \text{OCVAVZZ}$$

Total petroleum feedstocks, naphtha less than 401° F, State and U.S. consumption are estimated:

FNTCPZZ = (OCVAVZZ / OCVAVUS) * FNTCPUS
 FNICPZZ = FNTCPZZ
 FNICPUS = FNTCPUS

Petroleum feedstocks, other oils equal to or greater than 401° F, State and U.S. consumption are estimated:

FOTCPZZ = (OCVAVZZ / OCVAVUS) * FOTCPUS
 FOICPZZ = FOTCPZZ
 FOICPUS = FOTCPUS

Miscellaneous petroleum products State and U.S. consumption are estimated:

MSTCPZZ = (OCVAVZZ / OCVAVUS) * MSTCPUS
 MSICPZZ = MSTCPZZ
 MSICPUS = MSTCPUS

Natural gasoline (including isopentane) State and U.S. consumption are estimated:

NATCPZZ = (OCVAVZZ / OCVAVUS) * NATCPUS
 NAICPZZ = NATCPZZ
 NAICPUS = NATCPUS

Plant condensate State and U.S. consumption are estimated:

PLTCPZZ = (OCVAVZZ / OCVAVUS) * PLTCPUS
 PLICPZZ = PLTCPZZ
 PLICPUS = PLTCPUS

Pentane plus State and U.S. consumption are estimated:

PPTCPZZ = (OCVAVZZ / OCVAVUS) * PPTCPUS
 PPICPZZ = PPTCPZZ
 PPICPUS = PPTCPUS

Unfractionated stream State and U.S. consumption are estimated:

USTCPZZ = (OCVAVZZ / OCVAVUS) * USTCPUS
 USICPZZ = USTCPZZ
 USICPUS = USTCPUS

British Thermal Units (Btu)

Btu estimates for the seven petroleum products in this group are developed by multiplying each individual product's estimated consumption in physical units by its respective approximate heat content conversion factor. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

FNTCBZZ = FNTCPZZ * 5.248
 FNTCBUS = ΣFNTCBZZ
 FNICBZZ = FNTCBZZ
 FNICBUS = FNTCBUS

FOTCBZZ = FOTCPZZ * 5.825
 FOTCBUS = ΣFOTCBZZ
 FOICBZZ = FOTCBZZ
 FOICBUS = FOTCBUS

MSTCBZZ = MSTCPZZ * 5.796
 MSTCBUS = ΣMSTCBZZ
 MSICBZZ = MSTCBZZ
 MSICBUS = MSTCBUS

NATCBZZ = NATCPZZ * 4.620
 NATCBUS = ΣNATCBZZ
 NAICBZZ = NATCBZZ
 NAICBUS = NATCBUS

PLTCBZZ = PLTCPZZ * 5.418
 PLTCBUS = ΣPLTCBZZ
 PLICBZZ = PLTCBZZ
 PLICBUS = PLTCBUS

PPTCBZZ = PPTCPZZ * 4.620
 PPTCBUS = ΣPPTCBZZ
 PPICBZZ = PPTCBZZ
 PPICBUS = PPTCBUS

USTCBZZ = USTCPZZ * 5.418
 USTCBUS = ΣUSTCBZZ
 USICBZZ = USTCBZZ
 USICBUS = USTCBUS

Data Sources

FNTCPUS — Petrochemical feedstocks, naphtha, less than 401° F, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, column titled “Products Supplied.”

FOTCPUS — Petrochemical feedstocks, other oils, equal to or greater than 401° F, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, column titled “Products Supplied.”

MSTCPUS — Miscellaneous petroleum products consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2.

NATCPUS — Natural gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, included in “Pentanes Plus.”

OCVAVZZ — Value added by the manufacture of industrial organic chemicals by State.

- 1960 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, Standard Industrial Classification (SIC) 2818. The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2869. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1985: U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1982 State data are used for 1981 through 1985.
- 1986 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1987 State data are used for 1986 through 1990, and the 1992 State data are used for 1991 through 1995.
- 1996 through 2000: U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3251A for North American Industry Classification System (NAICS) 325110 “Petrochemical Manufacturing” and EC97M-3251G for NAICS 325119 “All Other Basic Inorganic Chemical Manufacturing.” The value added by manufacture for both categories are summed to create a data series generally comparable to the SIC 2869 used previously. <http://www.census.gov/prod/www/abs/97ecmani.html>
- 2001 forward: U.S. Department of Commerce, *2002 Economic Census, Manufacturing, Industry Series*, Table 2, column titled “Value added” data for NAICS series 325110, 325199, and 325210 shown in the reports at <http://www.census.gov/econ/census02/guide/>

[INDRPT31.HTM](#). See Additional Note 2 on page 75 for the methodology used to estimate withheld values.

PLTCPUS — Plant condensate total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, included in “Pentanes Plus.”

PPTCPUS — Pentanes plus total consumed in the United States.

- 1960 through 1983: Data were reported separately as natural gasoline, isopentane, and plant condensate.
- 1984 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, column titled “Products Supplied.”

USTCPUS — Unfractionated stream total consumed in the United States.

- 1960 through 1978: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1, included in “Plant Condensate.”
- 1979 and 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2, column titled “Products Supplied.”
- 1984 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2, individual components are reported separately.

Special Naphthas

Physical Units

Special naphthas are used as paint and varnish thinners and dry cleaning liquids or solvents. This petroleum product is allocated to the States in proportion to the value added in the manufacture of paints and allied products in each State (PIVAVZZ).

The U.S. total for the apportioning data series is calculated:

$$\text{PIVAVUS} = \Sigma \text{PIVAVZZ}$$

Special naphthas State and U.S. consumption are estimated:

$$\text{SNTCPZZ} = (\text{PIVAVZZ} / \text{PIVAVUS}) * \text{SNTCPUS}$$

$$\text{SNICPZZ} = \text{SNTCPZZ}$$

$$\text{SNICPUS} = \text{SNTCPUS}$$

British Thermal Units (Btu)

Special naphthas have a heat content value of approximately 5.248 million Btu per barrel. This factor is applied to convert special naphthas estimated consumption from physical units to Btu by State and the United States is the sum of the States:

$$\text{SNTCBZZ} = \text{SNTCPZZ} * 5.248$$

$$\text{SNTCBUS} = \Sigma \text{SNTCBZZ}$$

$$\text{SNICBZZ} = \text{SNTCBZZ}$$

$$\text{SNICBUS} = \text{SNTCBUS}$$

Data Sources

PIVAVZZ — Value added by the manufacture of paints and allied products by State.

- 1960 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2851. The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.

- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2851. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1985: U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2851. The 1982 State data are used for the years 1981 through 1985.
- 1986 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2851. The 1987 State data are used for the years 1986 through 1990, and the 1992 State data are used for 1991 through 1995.
- 1996 through 2000: U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3255A for NAICS 325510 "Paint and Coating Manufacturing." <http://www.census.gov/prod/www/abs/97ecmani.html>.
- 2001 forward: U.S. Department of Commerce, *2002 Economic Census, Manufacturing, Industry Series*, Table 2, column titled "Value added" data for NAICS series 325510 shown in the reports at <http://www.census.gov/econ/census02/guide/INDRPT31.HTM>. See Additional Note 2 on page 75 for the methodology used to estimate withheld values.

SNTCPUS — Special naphthas total consumed in the United States.

- 1960 through 1963: Data included in motor gasoline.
- 1964 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2.

Waxes

Physical Units

Because petroleum waxes are very cost-effective moisture and gas barriers, food packaging is the largest market for petroleum waxes in the United

States, accounting for more than 50 percent of petroleum wax consumption. Therefore, waxes are allocated to the States in proportion to the value added in the manufacture of corrugated and solid fiber boxes (CGVAVZZ).

The U.S. total for this variable is summed:

$$\text{CGVAVUS} = \Sigma \text{CGVAVZZ}$$

State and U.S. consumption are estimated:

$$\text{WXTCPZZ} = (\text{CGVAVZZ} / \text{CGVAVUS}) * \text{WXTCPUS}$$

$$\text{WXICPZZ} = \text{WXTCPZZ}$$

$$\text{WXICPUS} = \text{WXTCPUS}$$

British Thermal Units (Btu)

Waxes have a heat content value of approximately 5.537 million Btu per barrel. This factor is applied to convert the estimated consumption of waxes from physical units to Btu by State and the United States is the sum of the States:

$$\text{WXTCBZZ} = \text{WXTCPZZ} * 5.537$$

$$\text{WXTCBUS} = \Sigma \text{WXTCBZZ}$$

$$\text{WXICBZZ} = \text{WXTCBZZ}$$

$$\text{WXICBUS} = \text{WXTCBUS}$$

Data Sources

CGVAVZZ — Value added by the manufacture of sanitary food containers by State. Beginning with 1992 data, this series became value added by the manufacture of corrugated and solid fiber boards by State.

- 1960 through 1965: U.S. Department of Commerce, *1963 Census of Manufactures*, Volume II, Part 1, SIC 2654. The 1963 State data are used for the years 1960 through 1965.
- 1966 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2654. The 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2654. The 1972 State data are used

for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.

- 1981 through 1990: U.S. Department of Commerce, *1982 Census of Manufactures* (Final Report), Industry Series, SIC 2654. The 1982 State data are used for 1981 through 1990.
- 1991 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2653. The 1992 State data are used for 1991 through 1995.
- 1996 forward: U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3222A for NAICS 322211 “Corrugated and Solid Fiber Box Manufacturing.” <http://www.census.gov/prod/www/abs/97ecmani.html>.
- 2001 forward: U.S. Department of Commerce, *2002 Economic Census, Manufacturing, Industry Series*, Table 2, column titled “Value added” data for NAICS series 32221 shown in the reports at <http://www.census.gov/econ/census02/guide/INDRPT31.HTM>. See Additional Note 2 on page 75 for the methodology used to estimate withheld values.

WXTCPUS — Waxes total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html, Table 2.

Total Other Petroleum Products

Physical Units

Total other petroleum products is the sum of the 16 “other petroleum products.” All of these products are consumed by the industrial sector except for some petroleum coke consumed by the electric power sector (PCEIP), which is calculated in SEDS with electric power fuel consumption, and the commercial sector (PCCCP), which is included with commercial

consumption. State and U.S. industrial use of these other petroleum products are calculated:

$$\text{POICPZZ} = \text{ABICPZZ} + \text{COICPZZ} + \text{FNICPZZ} + \text{FOICPZZ} + \text{FSICPZZ} + \text{MBICPZZ} + \text{MSICPZZ} + \text{NAICPZZ} + \text{PCICPZZ} + \text{PLICPZZ} + \text{PPICPZZ} + \text{SGICPZZ} + \text{SNICPZZ} + \text{UOICPZZ} + \text{USICPZZ} + \text{WXICPZZ}$$

$$\text{POICPUS} = \Sigma \text{POICPZZ}$$

Total consumption of these products (including petroleum coke consumption in the commercial and electric power sectors) is calculated:

$$\text{POTCPZZ} = \text{ABTCPZZ} + \text{COTCPZZ} + \text{FNTCPZZ} + \text{FOTCPZZ} + \text{FSTCPZZ} + \text{MBTCPZZ} + \text{MSTCPZZ} + \text{NATCPZZ} + \text{PCTCPZZ} + \text{PLTCPZZ} + \text{PPTCPZZ} + \text{SGTCPZZ} + \text{SNTCPZZ} + \text{UOTCPZZ} + \text{USTCPZZ} + \text{WXTCPZZ}$$

$$\text{POTCPUS} = \Sigma \text{POTCPZZ}$$

British Thermal Units (Btu)

Estimated consumption of all 16 “other petroleum products” in Btu is the sum of the Btu consumption of each product by the industrial sector. The State and U.S. totals are calculated:

$$\text{POICBZZ} = \text{ABICBZZ} + \text{COICBZZ} + \text{FNICBZZ} + \text{FOICBZZ} + \text{FSICBZZ} + \text{MBICBZZ} + \text{MSICBZZ} + \text{NAICBZZ} + \text{PCICBZZ} + \text{PLICBZZ} + \text{PPICBZZ} + \text{SGICBZZ} + \text{SNICBZZ} + \text{UOICBZZ} + \text{USICBZZ} + \text{WXICBZZ}$$

$$\text{POICBUS} = \Sigma \text{POICBZZ}$$

State and U.S. total consumption of these products, which includes petroleum coke consumption in the commercial and electric power sectors, is calculated:

$$\text{POTCBZZ} = \text{ABTCBZZ} + \text{COTCBZZ} + \text{FNTCBZZ} + \text{FOTCBZZ} + \text{FSTCBZZ} + \text{MBTCBZZ} + \text{MSTCBZZ} + \text{NATCBZZ} + \text{PCTCBZZ} + \text{PLTCBZZ} + \text{PPTCBZZ} + \text{SGTCBZZ} + \text{SNTCBZZ} + \text{UOTCBZZ} + \text{USTCBZZ} + \text{WXTCBZZ}$$

$$\text{POTCBUS} = \Sigma \text{POTCBZZ}$$

Additional Notes on Other Petroleum Products

1. In the “Energy Consumption Estimates by Source” tables in this report, a petroleum column called “Other” comprises the other products, including petroleum coke consumed by the commercial and electric power sectors (POTCB and POTCP). In the “Industrial Energy Consumption Estimates” tables, the petroleum “Other” column is the other petroleum products consumption total for industrial use (POICB and POICP).
2. The data for “value added by manufacture” that are used to allocate many of the other petroleum products are from the Department of Commerce, Bureau of the Census, *Census of Manufactures* or *Economic Census* reports. For all years, several States’ data were withheld from publication to avoid disclosing operations of individual companies. The total withheld data was apportioned to the withheld States on the basis of those States’ proportional values in the previous census. Beginning with the 1992 Census, the total withheld value was apportioned to States with withheld data in proportion to the number of employees in that industry in each State. Beginning with the 1997 Census, the published report tables do not list any States that have withheld data. Detail data tables from "American FactFinder" on the Bureau of the Census Web site, http://factfinder.census.gov/servlet/EconSectorServlet?_lang=en&ds_name=EC0200A1&SectorId=31, are used to obtain the list of States with data withheld and the number of employees.

In 1982, all respondents to the Census of Manufactures survey were requested to report their inventories at cost or market prior to accounting adjustments for “last in, first out” cost. This is a change from prior years in which respondents were permitted to value their inventories by using any generally accepted accounting valuation method. Consequently, data for value added by manufacture after 1982 are not comparable to the prior years’ data.

Petroleum Summaries

This section describes the method of estimating consumption by the major end-use sectors within the States for all petroleum data series. Table A3 on page 28 of this section indicates which petroleum products are consumed

in each of the five major end-use sectors. In the preceding portions of this section, end-use consumption estimates have been derived for each petroleum product. These petroleum product subtotals are now summed, in physical units of thousand barrels and in Btu, to create estimated end-use consumption for all petroleum products.

Residential Sector

Petroleum products consumed by the residential sector are: distillate fuel (DF), kerosene (KS), and liquefied petroleum gas (LG). For the residential sector, the State and U.S. totals in physical units are:

$$\begin{aligned}\text{PARCPZZ} &= \text{DFRCPZZ} + \text{KSRCPPZZ} + \text{LGRCPZZ} \\ \text{PARCPUS} &= \Sigma \text{PARCPZZ}\end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}\text{PARCBZZ} &= \text{DFRCBZZ} + \text{KSRCBZZ} + \text{LGRCBZZ} \\ \text{PARCBUS} &= \Sigma \text{PARCBZZ}\end{aligned}$$

Commercial Sector

The commercial sector’s use of petroleum products includes: distillate fuel (DF), kerosene (KS), liquefied petroleum gases (LG), motor gasoline (MG), and residual fuel (RF). In physical units, the State and the U.S. totals for the commercial sector are calculated:

$$\begin{aligned}\text{PACCPZZ} &= \text{DFCCPZZ} + \text{KSCCPZZ} + \text{LGCCPZZ} + \text{MGCCPZZ} + \\ &\quad \text{RFCCPZZ} + \text{PCCCPZZ} \\ \text{PACCPUS} &= \Sigma \text{PACCPZZ}\end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}\text{PACCBZZ} &= \text{DFCCBZZ} + \text{KSCCBZZ} + \text{LGCCBZZ} + \text{MGCCBZZ} + \\ &\quad \text{RFCCBZZ} + \text{PCCCBZZ} \\ \text{PACCBUS} &= \Sigma \text{PACCBZZ}\end{aligned}$$

The conversion factor for all petroleum products consumed by the residential sector is calculated:

$$\text{PARCKUS} = \text{PARCBUS} / \text{PARCPUS}$$

The conversion factor for all petroleum products consumed by the commercial sector is calculated:

$$\text{PACCKUS} = \text{PACCBUS} / \text{PACCPUS}$$

Consumption of all petroleum products by the residential and commercial sectors combined, in physical units, in Btu, and the average conversion factor are calculated:

$$\text{PAHCPUS} = \text{PARCPUS} + \text{PACCPUS}$$

$$\text{PAHCBUS} = \text{PARCBUS} + \text{PACCBUS}$$

$$\text{PAHCKUS} = \text{PAHCBUS} / \text{PAHCPUS}$$

The conversion factor for all petroleum products consumed by the industrial sector is calculated:

$$\text{PAICKUS} = \text{PAICBUS} / \text{PAICPUS}$$

The conversion factor for all petroleum products consumed by the transportation sector is calculated:

$$\text{PAACKUS} = \text{PAACBUS} / \text{PAACPUS}$$

The conversion factor for all petroleum products consumed by the electric power sector is calculated:

$$\text{PAEIKUS} = \text{PAEIBUS} / \text{PAEIPUS}$$

The conversion factor for all petroleum products consumed by all sectors is calculated:

$$\text{PATCKUS} = \text{PATCBUS} / \text{PATCPUS}$$

Section 5. Renewable Energy

Renewable energy sources included in the State Energy Data System (SEDS) comprise ethanol, wood, waste, hydroelectric, geothermal, wind, photovoltaic, and solar thermal energy. Renewable energy consumption estimates for all sectors are available for 1960 forward.

Ethanol

Ethanol is used as an additive to motor gasoline. A small amount of ethanol is used as an alternative fuel called E85. Ethanol can be derived from sugar cane, sugar beets, corn, sweet sorghum, wheat, and other grains. The U.S. total in SEDS is a series developed by the Energy Information Administration (EIA) from annual reports of field production of oxygenated gasoline (prior to 2005), finished motor gasoline and motor gasoline blending components adjustments (2005), and refinery and blender net inputs of ethanol (all years). The State data series, used to allocate the U.S. total to the States, is based on the U.S. Department of Transportation Federal Highway Administration (FHWA) data series on gasohol or ethanol.

For 1981 forward, ethanol estimates are maintained separately from motor gasoline in SEDS and shown in the State energy consumption data tables to illustrate renewable energy use. The ethanol data series are identified in SEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

ENACPUS = ethanol consumed in the transportation sector in the United States, in thousand barrels.

ENTRPZZ = ethanol blended into motor gasoline (1993 forward) or total gasohol sales (1981 through 1992) by State, in thousand gallons.

The U.S. total of the State series, ENTRPZZ, is calculated as the sum of the State data. The U.S. value, ENACPUS, is allocated to the States in proportion the State estimates, ENTRPZZ:

$$\begin{aligned}\text{ENTRPUS} &= \Sigma \text{ENTRPZZ} \\ \text{ENACPZZ} &= (\text{ENTRPZZ} / \text{ENTRPUS}) * \text{ENACPUS}\end{aligned}$$

Ethanol is converted to equivalent British thermal units (Btu) by using a conversion factor of 3.539 million Btu per barrel.

$$\begin{aligned}\text{ENACBZZ} &= \text{ENACPZZ} * 3.539 \\ \text{ENACBUS} &= \Sigma \text{ENACBZZ}\end{aligned}$$

Additional Notes

Ethanol data blended into motor gasoline (ENTRPZZ) are published in FHWA *Highway Statistics* from 1993 through 2001, 2003, and 2004.

In 2002, ethanol blended into motor gasoline is not available from *Highway Statistics*. The ratio of each State's ethanol in gasohol to total gasohol consumption is calculated for 2001 and 2003. The two ratios for each State are averaged and the average is applied to each State's 2002 total gasohol consumption to derive the amount of ethanol consumed in gasohol in 2002. Ethanol and gasohol data for Florida, Massachusetts, and Rhode Island are available for only 2001 or 2003; in these instances, the ratio of only the available year is used.

In 2005, FHWA discontinued publishing estimates of ethanol blended into motor gasoline. To compute the 2005 estimates for the States, two sources of data are used: gasohol consumption data reported by about half of the States to FHWA; and refinery and blender net inputs of fuel ethanol for the Petroleum Administration for Defense (PAD) districts and subdistricts from the EIA *Petroleum Supply Annual*. For States with FHWA gasohol

data, the 2004 percentage of ethanol contained in gasohol is applied to the 2005 gasohol estimate. For the other States, the year-to-year change from 2004 to 2005 in net inputs of fuel ethanol for the corresponding PAD districts or subdistrict is applied to the 2004 State ethanol estimate.

Data Sources

ENACPUS — Ethanol consumed by the transportation sector in the United States.

- 1960 through 1980: No data are available. Values are assumed to be zero.
- 1981 through 1992:
 - 1981, 1984, 1987, and 1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.
 - 1982 and 1983: EIA, Office of Coal, Nuclear, Electric, and Alternate Fuels estimates.
 - 1985, 1986, 1988, and 1991: Values interpolated.
 - 1990 and 1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
- 1993 through 2004: EIA estimates based on data in the EIA *Petroleum Supply Annual*, (PSA) Tables 2 and 16. Ten percent of the "Field Production" of "Oxygenated Finished Motor Gasoline" from the PSA Table 2 is added to the "Refinery Input of Fuel Ethanol" from the PSA Table 16.
- 2005: EIA estimates based on data in the EIA PSA, Tables 1 and 15. Motor gasoline blending components adjustments and finished motor gasoline adjustments from PSA, Table 1, are added to fuel ethanol refinery and blender net inputs from PSA, Table 15.

ENTRPZZ — Ethanol blended into motor gasoline by State.

- 1960 through 1980: Values are set to be zero.
- 1981 through 1992: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-233GLA.
- 1993 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-233E, column titled "Total Ethanol Used in Gasohol."
- 1996 through 2001, 2003, and 2004: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-33E, column titled "Total Ethanol Used in Gasohol."

- 2002: EIA estimates based on the 2001 and 2003 data from *Highway Statistics*. For an explanation of the estimation methodology, see the "Additional Notes" on page 79.
- 2005: EIA estimates based on U.S. Department of Transportation, Federal Highway Administration, unpublished data from Form FHWA-551M, and the EIA PSA, Table 15, fuel ethanol refinery and blender net inputs for 2004 and 2005. For an explanation of the estimation methodology, see the "Additional Notes" on page 79.

Geothermal

Geothermal energy used as direct heat or from heat pumps in the residential, commercial, and industrial sectors is included in the State Energy Data System (SEDS) for 1989 forward. Electric power sector consumption in SEDS includes geothermal energy input at electric utilities for all years, 1960 forward, and includes geothermal energy used to generate electricity by nonutility power producers for 1989 forward. These data series are identified in SEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

- GECCBZZ = direct use of geothermal energy and heat pumps in the commercial sector by State, in billion British thermal units (Btu);
- GEEGPZZ = electricity produced from geothermal energy by the electric power sector by State, in million kilowatthours;
- GEICBZZ = direct use of geothermal energy and heat pumps in the industrial sector by State, in billion Btu; and
- GERCBZZ = direct use of geothermal energy and heat pumps in the residential sector by State, in billion Btu.

The U.S. totals for the State-level series are calculated by summing the State data:

$$\begin{aligned} \text{GECCBUS} &= \sum \text{GECCBZZ} & \text{GEICBUS} &= \sum \text{GEICBZZ} \\ \text{GEEGPUS} &= \sum \text{GEEGPZZ} & \text{GERCBUS} &= \sum \text{GERCBZZ} \end{aligned}$$

To convert electricity produced from geothermal energy from kilowatthours into comparable Btu, a U.S. average factor that varies by year is used. The values for the factor, GEETKUS, are shown in

Appendix B, Table B1, http://www.eia.doe.gov/emeu/states/sep_fuel/notes/use_b.pdf.

GEETKUS = factor for converting electricity produced from geothermal energy from kilowatthours to Btu.

The values for the electric power sector in each State are converted to Btu and the U.S. total is the sum of the State data:

GEEGBZZ = GEEGPZZ * GEETKUS
GEEGBUS = Σ GEEGBZZ

The State totals for geothermal energy are the sum of the residential, commercial, and industrial sectors' use and the electric power sector's geothermal-based generation. The U.S. total is the sum of the State data.

GETCBZZ = GERCBZZ + GECCBZZ + GEICBZZ + GEEGBZZ
GETCBUS = Σ GETCBZZ

Additional Notes

Consumption estimates of geothermal energy from direct use and heat pumps in the residential, commercial, and industrial sectors are from the Oregon Institute of Technology Geo-Heat Center. State data for 1989 and 1994 are based on surveys of geothermal equipment producers, distributors, and installers and State energy offices. State estimates from 1998 through 2002 are developed by the Geo-Heat Center from discussions with industry sources.

The State data for 1989, 1994, and 1998 are used by the Energy Information Administration (EIA) to estimate the State values for intervening years. States with the same value in two survey years are assigned that value for each intervening year. For States with increases or decreases in the survey data, the difference is allocated evenly over the intervening years. If a State went from zero to a value or from a value to zero, it was given zero in the intervening years. The State data for each intervening year are summed and States with increasing or decreasing values are adjusted until the U.S. total equals the U.S. total estimated by the Oregon Institute of Technology Geo-Heat Center.

State data for 2003 forward are estimated by EIA by calculating the ratios of the 2002 State values for each sector to the 2002 U.S. sector totals and applying those State ratios to the 2003 U.S. sector totals.

Data Sources

GECCBZZ — Direct use and heat pump geothermal energy in the commercial sector.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 81.
- 1994: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 81.
- 1998 through 2002: Lund, John W., Oregon Institute of Technology Geo-Heat Center, Klamath Falls, Oregon, unpublished tables based on informal surveys and estimations.
- 2003 forward: U.S. total is from the Oregon Institute of Technology Geo-Heat Center, unpublished table. State data are estimated by EIA using the ratios of the 2002 State values to the 2002 U.S. total.

GEETKUS — Factor for converting electricity produced from geothermal energy from physical units to Btu.

- 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Federal Power Commission Form 12.
- 1982 forward: Estimated annually by the EIA on the basis of an informal survey of relevant plants.

GEEGPZZ — Electricity produced from geothermal energy by the electric power sector for each State.

- 1960 forward: EIA, Forms EIA-920, “Combined Heat and Power Plant Report,” and EIA-906, “Power Plant Report,” and predecessor forms.

GEICBZZ — Direct use and heat pump geothermal energy in the industrial sector.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the “Additional Note” on page 81.
- 1994: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the “Additional Note” on page 81.
- 1998 through 2002: Lund, John W., Oregon Institute of Technology Geo-Heat Center, Klamath Falls, Oregon, unpublished tables based on informal surveys and estimations.
- 2003 forward: U.S. total is from the Oregon Institute of Technology Geo-Heat Center, unpublished table. State data are estimated by EIA using the ratios of the 2002 State values to the 2002 U.S. total.

GERCBZZ — Direct use and heat pump geothermal energy in the residential sector.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State

data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the “Additional Note” on page 81.

- 1994: Lund, John W., Oregon Institute of Technology Geo-Heat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geo-Heat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the “Additional Note” on page 81.
- 1998 through 2002: Lund, John W., Oregon Institute of Technology Geo-Heat Center, Klamath Falls, Oregon, unpublished tables based on informal surveys and estimations.
- 2003 forward: U.S. total is from the Oregon Institute of Technology Geo-Heat Center, unpublished table. State data are estimated by EIA using the ratios of the 2002 State values to the 2002 U.S. total.

Hydroelectric Power

Electricity produced from hydropower is included in the State Energy Data System (SEDS) in the industrial and electric power sectors for all years, 1960 forward, and in the commercial sector for 1989 forward. In the electric power sector, there are two types of hydroelectric power: conventional hydroelectric power and pumped storage hydroelectricity. Conventional hydroelectric power uses falling water to drive turbines to produce electricity. Pumped storage hydroelectricity is generated by releasing water that had been pumped into an elevated storage reservoir during off-peak periods to drive the turbines during times of peak demand. Electricity produced from pumped storage, when it can be identified separately, is not included in energy consumption estimates because the energy that was used to pump the water is included. The hydroelectric power data series included in SEDS are identified by the following names (“ZZ” in the name represents the two-letter State code that differs for each State):

HVEGPZZ = electricity produced by conventional hydroelectric power in the electric power sector by State, in million kilowatt-hours;

HVC5PZZ = electricity produced by conventional hydroelectric power at commercial facilities by State, in million kilowatthours;

HVI5PZZ = electricity produced by conventional hydroelectric power at industrial facilities by State, in million kilowatthours;

The U.S. value for each of the series is the sum of the State data.

Total use of hydroelectric power in the commercial, industrial, and electric power sectors is assumed to be the electricity produced by conventional hydroelectric power. The U.S. total for each sector is the sum of the State values:

HYCCPZZ = HVC5PZZ
HYCCPUS = Σ HYCCPZZ

HYICPZZ = HVI5PZZ
HYICPUS = Σ HYICPZZ

HYEGPZZ = HVEGPZZ
HYEGPUS = Σ HYEGPZZ

Electricity produced from hydroelectric power is converted from kilowatthours to British thermal units (Btu) by using the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFETKUS, as a conversion factor. The annual values for this factor are shown in the Consumption Technical Notes, Appendix B, Table B1, http://www.eia.doe.gov/emeu/states/sep_fuel/notes/use_b.pdf.

FFETKUS = factor for converting hydroelectric power from kilowatthours to Btu.

HYCCBZZ = HYCCPZZ * FFETKUS
HYICBZZ = HYICPZZ * FFETKUS
HYGBZZ = HYEGPZZ * FFETKUS

The U.S. value for each of the series is the sum of the State data.

Total hydroelectricity consumption for each State is the sum of the commercial, industrial, and electric power sectors' generation.

HYTCPZZ = HYCCPZZ + HYICPZZ + HYEGPZZ
HYTCPUS = Σ HYTCPZZ

HYTCBZZ = HYCCBZZ + HYICBZZ + HYGBZZ
HYTCBUS = Σ HYTCBZZ

Data Sources

FFETKUS — Fossil fuel steam-electric power plant conversion factor.

- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 through 2000: Calculated annually by EIA by using heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels.
- 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-906, "Power Plant Report." The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

HVC5PZZ — Electricity produced from conventional hydroelectric power at the commercial facilities by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA, Forms EIA-920, "Combined Heat and Power Plant Report," and EIA-906, "Power Plant Report," and predecessor forms.

HVI5PZZ — Electricity produced from conventional hydroelectric power at industrial facilities by State.

- 1960 through 1978: Federal Power Commission, Form 4, "Monthly Power Plant Report."
- 1979 and 1980: EIA estimates based on previous years' data.
- 1981 through 1988: No data available. The 1980 data are repeated for each year.

- 1989 forward: EIA, Forms EIA-920, “Combined Heat and Power Plant Report,” and EIA-906, “Power Plant Report,” and predecessor forms.

HVEGPZZ — Electricity produced from conventional hydroelectric power by the electric power sector (includes pumped storage hydroelectric power through 1989) by State.

- 1960 through 1977: Federal Power Commission, News Release, “Power Production, Fuel Consumption, and Installed Capacity Data.”
- 1978 through 1980: EIA, *Energy Data Reports*, “Power Production, Fuel Consumption and Installed Capacity Data.”
- 1981 through 1988: EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms. The data rounded to gigawatthours are published in the following reports:
 - 1981 through 1985: EIA, *Electric Power Annual 1985*, Table 6.
 - 1986 and 1987: EIA, *Electric Power Annual 1987*, Table 18.
 - 1988: EIA, *Electric Power Annual 1989*, Table 14.
- 1989 forward: EIA, Forms EIA-920, “Combined Heat and Power Plant Report,” and EIA-906, “Power Plant Report,” and predecessor forms.

Solar

Estimates of solar energy use for the residential and commercial sectors combined and the industrial sector are included in the State Energy Data System (SEDS) for 1989 forward. Generation of electricity by the electric power sector from solar energy sources is included in SEDS for 1984 forward.

Residential/Commercial Sector

Solar thermal energy use in the residential and commercial sectors combined in the United States is estimated by the Energy Information Administration (EIA) in billion British thermal units (Btu) and published in the *EIA Annual Energy Review* for 1989 forward. A State-level series for allocating the U.S. total to the States is developed by EIA from accumulated data on shipments of solar thermal collectors to States, measured in square

feet, as collected on the EIA Form EIA-63A, “Annual Solar Thermal Collector Manufacturers Survey,” and predecessor surveys. The data are published for recent years in the *EIA Renewable Energy Annual*. The assumption is made that the retirement/replacement period for solar thermal collectors is 20 years. The data series are identified in SEDS by the following names (“ZZ” in the variable name represents the two-letter State code that differs for each State):

SOHCBUS = energy produced by solar thermal and photovoltaic energy collectors in the residential and commercial sectors combined in the United States, in billion Btu; and
 SOTTPZZ = rolling 20-year accumulation of shipments of solar thermal energy collectors by State, in square feet.

The U.S. total of shipments of solar thermal energy collectors is calculated as the sum of the State data, and the U.S. total residential/commercial solar energy is allocated to the States as follows:

SOTTPUS = $\sum SOTTPZZ$
 SOHCBZZ = $(SOTTPZZ / SOTTPUS) * SOHCBUS$

Electric Power Sector

The electric power sector includes estimates of electricity produced from photovoltaic and solar thermal energy sources by electric utilities from 1984 forward, and by both electric utilities and nonutility power producers from 1989 forward. The data series is identified in SEDS by the following name (“ZZ” in the variable name represents the two-letter State code that differs for each State):

SOEGPZZ = electricity produced from photovoltaic and solar thermal energy sources by the electric power sector, for each State, in million kilowatthours.

The U.S. total for this series is calculated as the sum of the State data:

SOEGPUS = $\sum SOEGPZZ$

Electricity produced from photovoltaic and solar thermal energy in the electric power sector is converted from kilowatthours to Btu by using a

conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFETKUS. The annual values for this factor are shown in Appendix B, Table B1, http://www.eia.doe.gov/emeu/states/sep_fuel/notes/use_b.pdf.

FFETKUS = factor for converting hydroelectric power from kilowatthours to Btu.

The values for the electric power sector in each State are converted to Btu and the U.S. total is the sum of the State data:

SOEGBZZ = SOEGPZZ * FFETKUS

SOEGBUS = Σ SOEGBZZ

Each State's total use of photovoltaic and solar thermal energy sources is the sum of the sectors' values, and the U.S. total is the sum of the States' totals:

SOTCBZZ = SOHCBZZ + SOEGBZZ

SOTCBUS = Σ SOTCBZZ

Data Sources

FFETKUS — Fossil fuel steam-electric power plant conversion factor.

- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 through 2000: Calculated annually by EIA by using heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels.
- 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-906, "Power Plant Report." The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

SOEGPZZ — Electricity produced from solar thermal energy sources by the electric power sector by State.

- 1960 through 1983: No data available. Values are assumed to be zero.
- 1984 through 1988: EIA, Form EIA-759, "Monthly Power Plant Report."
- 1989 forward: EIA, Forms EIA-920, "Combined Heat and Power Plant Report," and EIA-906, "Power Plant Report," and predecessor forms.

SOHCBUS — Electricity produced from solar thermal energy sources in the residential and commercial sectors combined in the United States.

- 1960 through 1988: No data available. Values are zero.
- 1989 forward: EIA, *Annual Energy Review 2005*, Table 10.2a.

SOTTPZZ — Rolling 20-year accumulation of shipments of solar thermal energy collectors by State.

- 1960 through 1988: Values are set to zero in SEDS for consistency with SOHCBUS.
- 1989 forward: Shipments of solar thermal collectors in the United States, in thousand square feet, for 1974 forward are collected on the EIA Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," (and predecessor forms) and used to develop this series for 1989 forward. The data are accumulated year to year on the assumption that the replacement/retirement period for solar thermal collectors is 20 years. Data for 1974 through 1985 are available for the U.S. total only and are allocated to the States by using an allocating series that is the average of the 1986 and 1987 shipments (the first years State-level data were collected). The ratios of the average 1986 and 1987 State values to the average 1986 and 1987 U.S. value are applied to the national annual values for each year, 1974 through 1985. Beginning in 1986, the U.S. data are adjusted to remove Puerto Rico and the Virgin Islands. The sources for these data series are:
 - 1986 through 1993: EIA, *Solar Collector Manufacturing Activity* for each year. The specific table numbers are:
 - 1986 through 1988, 1990: Table 5.
 - 1989: Table 4.
 - 1991 and 1992: Table 13.
 - 1993: Table 12.
 - 1994 forward: EIA, *Renewable Energy Annual*. Data are from the report of the following year (i.e., 1994 data are published in the

Renewable Energy Annual 1995) for 1994 through 2000. Beginning in 2001, data are from the report of the same year. The specific tables are:

- 1994: Table 13.
- 1995: Table F9.
- 1996: Table 16.
- 1997: Table 15.
- 1998 and 1999: Table 12.
- 2000: Unpublished data.
- 2001 through 2003: Table 14.
- 2004 and 2005: Table 34.

Note: California data for 1986 forward are reduced by the number of high-temperature solar thermal collectors used in the electric power sector as shown in the following tables:

- 1986 through 1993: EIA, *Renewable Energy Annual 1995*, Table 13.
- 1994 forward: EIA, *Renewable Energy Annual*. Data are from the report of the following year (i.e., 1994 data are published in the *Renewable Energy Annual 1995*) for 1994 through 2000. Beginning in 2001, data are from the report of the same year. The specific tables are:
 - 1994: Table H3.
 - 1995: Table F10.
 - 1996: Table 17.
 - 1997: Table 19.
 - 1998 and 1999: Table 16.
 - 2000: Unpublished data.
 - 2001 through 2003: Table 18.
 - 2004 and 2005: Table 38.

Wind

Wind energy used to produce electricity by the electric power sector is included in the State Energy Data System (SEDS) for 1983 forward. The data are identified in SEDS by the following name ("ZZ" in the variable name represents the two-letter State code that differs for each State):

WYEGPZZ = electricity produced from wind energy by the electric power sector, by State, in million kilowatthours; and

The U.S. total is calculated as the sum of the State data:

$$\text{WYEGPUS} = \Sigma \text{WYEGPZZ}$$

Electricity produced from wind energy by the electric power sector is converted from kilowatthours to British thermal units (Btu) by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFETKUS. The annual values for this factor are shown in Appendix B, Table B1, http://www.eia.doe.gov/emeu/states/sep_fuel/notes/use_b.pdf.

FFETKUS = factor for converting hydroelectric power from kilowatthours to Btu.

The values for the electric power sector in each State are converted to Btu and the U.S. total is the sum of the State data:

$$\begin{aligned} \text{WYEGBZZ} &= \text{WYEGPZZ} * \text{FFETKUS} \\ \text{WYEGBUS} &= \Sigma \text{WYEGBZZ} \end{aligned}$$

The State and U.S. totals for wind energy are calculated:

$$\begin{aligned} \text{WYTCBZZ} &= \text{WYEGBZZ} \\ \text{WYTCBUS} &= \Sigma \text{WYTCBZZ} \end{aligned}$$

Data Sources

FFETKUS — Fossil fuel steam-electric power plant conversion factor.

- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 through 2000: Calculated annually by EIA by using heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels.

- 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-906, "Power Plant Report." The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

WYEGPZZ — Electricity produced from wind by the electric power sector by State.

- 1960 through 1982: No data available. Values are assumed to be zero.
- 1983 through 1988: EIA, Form EIA-759, "Monthly Power Plant Report."
- 1989 forward: EIA, Forms EIA-920, "Combined Heat and Power Plant Report," and EIA-906, "Power Plant Report," and predecessor forms.

Wood and Waste

Different forms of wood and waste are used by each consuming sector. The residential sector burns wood for space heating. The commercial sector uses wood for space heating, and wood, municipal waste and land fill gas for steam heat and electricity generation. The industrial sector uses combustible industrial by-products and wood chips for electricity generation and process steam. The electric power sector uses wood, industrial wood waste and waste gas, and municipal waste as cofiring or primary fuels to produce electricity. Consumption of wood and waste in all sectors is included in the State Energy Data System (SEDS) for 1960 forward.

Residential Sector

Physical Units

Estimates of wood consumed in the residential sector by State for 1960 through 1979 are from the Energy Information Administration (EIA) *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. For 1980 forward, State estimates are developed from U.S. totals published in the EIA *Annual Energy Review (AER)*, from Census division data collected on the EIA triennial survey, *Residential Energy Consumption Survey (RECS)* for 1981, 1984,

1987, 1990, 1993, 1997, and 2001 and from U.S. Department of Commerce, Bureau of the Census, annual estimates of number of housing units per State. The 1981 *RECS* provides wood consumption data for the national total and Census Regions. For all other years, *RECS* provides data for the national total and Census Divisions. In addition, the survey sample size of the 1993, 1997, and 2001 *RECS* were large enough to provide data for California, Florida, New York, and Texas. Estimates for the other States in 1993, 1997, and 2001, and for all States in the other years are developed by allocating the U.S. total from the *AER* to the Census Divisions or Regions in proportion to *RECS* data. The regional values are then allocated to the States within the regions in proportion to the Census Bureau housing units per State. Estimates for the years intervening the *RECS* surveys are based on the annual U.S. totals from the *AER* and the State proportions of the preceding available *RECS*, i.e., 1982 and 1983 estimates are based on the State proportions of the 1981 data. On the basis of *RECS* data, the assumption is made that no wood is consumed in the residential sector in Hawaii.

The State data derived above are used in SEDS as wood consumption in the residential sector, identified in the system as WDRCPZZ. "ZZ" in the following variable name represents the two-letter State code that differs for each State.

WDRCPZZ = wood consumed in the residential sector of each State, in thousand cords.

The State-level data are summed to a U.S. total:

WDRCPUS = Σ WDRCPZZ

British Thermal Units (Btu)

The residential sector data in cords are converted to Btu by using the conversion factor of 20 million Btu per cord:

WDRCBZZ = WDRCPZZ * 20

WDRCBUS = Σ WDRCBZZ

Data Sources

WDRCPPZZ — Wood energy consumed by the residential sector by State.

- 1960 through 1979: EIA, *Estimates of U.S. Wood Consumption from 1949 to 1981*, Table A4. Data published in thousand short tons are converted to thousand cords by using the factors of one short ton equals 17.2 million Btu (as published in the footnote of Table A4) and 20 million Btu equal one cord of wood, (as published in EIA, *Household Energy Consumption and Expenditures 1993*, page 314.
- 1980 forward: U.S. totals published in the EIA *Annual Energy Review 1999*, Table 10.4 are converted from trillion Btu to thousand cords (by using the factor of 20 million Btu per cord) and allocated to the States as described below. Hawaii residential wood consumption is assumed to be zero for all years.
 - 1980 through 1983: U.S. Census Region wood consumption in thousand cords from Form EIA-457, “1981 Residential Energy Consumption Survey” is allocated to the States within each Region in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, “Total Housing Units for States, July 1, 1981.” This derived 1981 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1980 through 1983.
 - 1984 through 1986: U.S. Census Division wood consumption in thousand cords from Form EIA-457, “1984 Residential Energy Consumption Survey” is allocated to the States within each Division in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, “Total Housing Units for States, July 1, 1984.” This derived 1984 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1984 through 1986.
 - 1987 through 1989: U.S. Census Division wood consumption in thousand cords from Form EIA-457, “1987 Residential Energy Consumption Survey” is allocated to the States within each Division in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, “Total Housing Units for States, July 1, 1987.” This derived 1987 series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1987 through 1989.
 - 1990 through 1992: U.S. Census Division wood consumption in thousand cords are from Form EIA-457, “1990 Residential Energy Consumption Survey.” State-level estimates are available

for 1993 for California, Florida, New York, and Texas from the Form EIA-457, “1993 Residential Energy Consumption Survey.” Those four States’ percentages of their respective Division totals in the 1993 survey are applied to the 1990 Census Division data to derive their 1990 values. Wood consumption by the other States in each Division is estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file (ST-98-51) “Estimates of Housing Units,...Annual Time Series,...(includes revised April 1, 1990 census housing...)” column titled “4/1/90 Census” at <http://www.census.gov/population/estimates/housing/sthuhh6.txt>. This derived 1990 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1990 through 1992.

- 1993 through 1996: Residential wood consumption data for U.S. Census Divisions and for California, Florida, New York, and Texas are from Form EIA-457, “1993 Residential Energy Consumption Survey.” Data for the other States in each Division are estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file (ST-98-51) “Estimates of Housing Units,...Annual Time Series, July 1, 1991 to July 1, 1998...,” column titled “7/1/93” at <http://www.census.gov/population/estimates/housing/sthuhh6.txt>. This derived 1993 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1993 through 1996.
- 1997 through 2000: Residential wood consumption data for U.S. Census Divisions and for California, Florida, New York, and Texas are from Form EIA-457, “1997 Residential Energy Consumption Survey.” Data for the other States in each Division are estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file (ST-98-51) “Estimates of Housing Units,...Annual Time Series, July 1, 1991 to July 1, 1998...,” column titled “7/1/97” at <http://www.census.gov/population/estimates/housing/sthuhh6.txt>. This derived 1997 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1997 through 2000.
- 2001 forward: Residential wood consumption data for U.S. Census Divisions and for California, Florida, New York, and Texas are from Form EIA-457, “2001 Residential Energy Consumption

Survey.” Data for the other States in each Division are estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file “Table 1. Annual Estimates of Housing Units for the United States and States: April 1, 2000 to July 1, 2004,” column titled “July 1, 2001” at <http://www.census.gov/popest/housing/tables/HU-EST2004-01.xls>. This derived 2001 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 2001 forward.

Commercial Sector

Estimates of wood consumed in the commercial sector by State for 1960 through 1979 are from the EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. The data published in thousand short tons are converted to billion Btu by using the conversion factor of one short ton equals 17.2 million Btu. The assumption was made in that report that wood is consumed in the commercial sector in proportion to consumption in the residential sector each year. For 1980 through 1988, national level commercial wood consumption estimates in trillion Btu are from the EIA, *Annual Energy Review*. Using the same methodology as for previous years, the national data are allocated to the States in proportion to residential sector wood use each year.

For 1989 forward, State-level data on wood and waste consumption by commercial combined heat and power (CHP) plants are available from the Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms. All commercial consumption of waste occurs at CHP plants; however, some wood consumption occurs at other types of commercial establishments. The U.S. total wood consumption in the commercial sector is published in the *AER*. The U.S. total of the State commercial CHP plant wood consumption is subtracted from the *AER* national commercial sector total, and the remainder is allocated to the States in proportion to each State's residential sector wood use each year from 1989 forward.

The data series described above, used to estimate SEDS wood and waste consumption in the commercial sector, are identified as follows (“ZZ” in the variable names represents the two-letter State code that differs for each State):

WDRCPZZ = wood consumed in the residential sector of each State, in thousand cords;
 WDCCBUS = wood consumed by the commercial sector in the United States, in billion Btu;
 WDC3BZZ = wood consumed by CHP facilities in the commercial sector of each State, in billion Btu; and
 WSC3BZZ = waste consumed by CHP facilities in the commercial sector of each State, in billion Btu.

The U.S. totals for the State-level series are calculated as the sum of the State data:

WDRCPUS = Σ WDRCPZZ
 WDC3BUS = Σ WDC3BZZ
 WSC3BUS = Σ WSC3BZZ

The national total wood consumed by commercial entities other than CHP facilities are calculated as shown below, and those volumes are allocated to the States in proportion to the residential wood consumption series as follows:

WDC4BUS = WDCCBUS – WDC3BUS
 WDC4BZZ = (WDRCPZZ / WDRCPUS) * WDC4BUS

State totals of commercial wood consumption is calculated as the sum of consumption by CHP facilities and the remaining commercial sector:

WDCCBZZ = WDC3BZZ + WDC4BZZ

Total commercial consumption of waste is set equal to the commercial consumption of waste by CHP facilities, which are the only commercial facilities with waste consumption, and the U.S. total is calculated as the sum of the State values.

WSCCBZZ = WSC3BZZ
 WSCCBUS = Σ WSCCBZZ

The total wood and waste consumption in the commercial sector is calculated as the sum of wood consumption and waste consumption, and the U.S. total is calculated as the sum of the State data:

WWCCBZZ = WDCCBZZ + WSCCBZZ

WWCCBUS = ΣWWCCBZZ

Data Sources

WDC3BZZ — Wood energy consumed by CHP facilities in the commercial sector of each State.

- 1989 forward: EIA, Forms EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

WDCCBUS — Wood consumed by the commercial sector in the United States.

- 1960 through 1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A7. Data published in thousand short tons are converted to Btu using the factor of one short ton equals 17.2 million Btu (as stated in the footnote of Table A7).
- 1980 forward: EIA, data in billion Btu shown in trillion Btu in the *Annual Energy Review 2005*, Table 10.2a.

WSC3BZZ — Waste energy consumed by CHP facilities in the commercial sector of each State.

- 1989 forward: EIA, Forms EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

WDRCPZZ — Wood energy consumed by the residential sector by State. See sources on page 88.

Industrial Sector

Industrial sector wood and waste consumption estimates by State for 1960 through 1979 are from the EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. The data, published in thousand short tons, are converted to billion Btu using the factor 1 short ton equals 17.2 million Btu.

Estimates for 1980 through 1995 are based on a national-level data series published for 1949 forward in the EIA *Annual Energy Review (AER)*. National wood and waste consumption by type is collected by Standard Industrial Classification (SIC) on the EIA triennial survey Form EIA-846, “Manufacturing Energy Consumption Survey” (MECS) for 1985, 1988,

1991, and 1994. The assumption is made that wood and waste use in the manufacturing sector occurs primarily in the industries included in SIC series 2421 (sawmills and planing mills), 2511 (wood household furniture), 2621 (paper mills), 2046 (wet corn milling), and 2061 (raw cane sugar). The amount of wood and waste consumed by each of the SIC groups of industries is estimated from the MECS data, and the MECS proportions are used to allocate the U.S. totals from the *AER* to SIC groups for each year. The SIC annual subtotals are allocated to the States using State-level data on the value added in manufacturing processes for each of the SIC series listed above, as published in the U.S. Department of Commerce, Bureau of the Census, *Census of Manufacturers, Industry Series*, for 1982, 1987, and 1992.

Estimates for 1996 forward use the same methodology used for 1980 through 1995 with the exception that the Bureau of the Census *Economic Census* for 1997 and 2002 use North American Industry Classification System (NAICS) instead of Standard Industrial Classifications. Some categories used in the two classification systems are directly comparable (NAICS 311221 to SIC 2046, NAICS 311311 to SIC 2061, and NAICS 322130 to SIC 2631), some are closely (over 97 percent) comparable (NAICS 337122 to SIC 2511 and the sum of NAICS 321113 and 321912 to SIC 2421), and one is roughly (74 percent) comparable (NAICS 322121 to SIC 2621). The EIA survey Form EIA-846, MECS, also uses NAICS codes in the surveys for 1998 and 2002. The discontinuity in these State allocating series caused by the change from SIC to NAICS categories is not significant in light of the broad assumptions of the estimation methodology.

For 1989 forward, State-level data on wood and waste consumption by industrial combined heat and power (CHP) facilities are available from the Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms. These data are used with the manufacturing data to estimate total industrial sector wood and waste consumption for each State.

Industrial wood and waste consumption is expressed in Btu because its components are physically measured in a variety of units (e.g., tons, cubic feet, and kilowatthours). Industrial wood and waste data series are identified in SEDS by the following names (“ZZ” in the variable name represents the two-letter State code that differs for each State):

WDI3BZZ = wood consumed by CHP facilities in the industrial sector in each State, in billion Btu;

WDI4BZZ = wood consumed by the manufacturing portion of the industrial sector of each State, in billion Btu;
 WSI3BZZ = waste consumed by CHP facilities in the industrial sector in each State, in billion Btu; and
 WSI4BZZ = waste consumed by the manufacturing portion of the industrial sector of each State, in billion Btu.

The U.S. totals of the State series are calculated as the sum of the State data:

WDI3BUS = Σ WDI3BZZ
 WDI4BUS = Σ WDI4BZZ
 WSI3BUS = Σ WSI3BZZ
 WSI4BUS = Σ WSI4BZZ

The U.S. total for wood consumed by the industrial sector is calculated as the sum of consumption by CHP facilities and the manufacturing sector, and the U.S. total is calculated as the sum of the State data:

WDICBZZ = WDI3BZZ + WDI4BZZ
 WDICBUS = Σ WDICBZZ

The U.S. total for waste consumed by the industrial sector is calculated as the sum of consumption by CHP facilities and the manufacturing sector, and the U.S. total is calculated as the sum of the State data:

WSICBZZ = WSI3BZZ + WSI4BZZ
 WSICBUS = Σ WSICBZZ

The total manufacturing sector is calculated as the sum of wood consumption and the sum of waste consumption, and the U.S. total is calculated as the sum of the State data:

WWI4BZZ = WDI4BZZ + WSI4BZZ
 WWI4BUS = Σ WWI4BZZ

The total industrial sector is calculated as the sum of wood consumption and the sum of waste consumption, and the U.S. total is calculated as the sum of the State data:

WWICBZZ = WDICBZZ + WSICBZZ

WWICBUS = Σ WWICBZZ

Data Sources

WDI3BZZ — Wood consumed by CHP facilities in the industrial sector by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA, Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

WDI4BZZ — Wood consumed by the manufacturing sector by State.

- 1960 through 1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A10. Data published in thousand short tons are converted to Btu by using the factor of one short ton equals 17.2 million Btu (as published in the footnote of Table A10).
- 1980 forward: EIA estimates developed by using three data sources. U.S. totals for each year are as published for selected years in the EIA, *Annual Energy Review 2005 (AER)*, Table 10.2a.
 - 1980 through 1985: U.S. totals from the *AER* are allocated to Standard Industrial Classification (SIC) groups 20, 24, 25, and 26 based on data from the Form EIA-846, “Manufacturing Energy Consumption Survey 1985,” Table 3, Columns “Major Byproducts” and “Other.” These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1982 Census of Manufacturers*, Table 2, column titled “Value Added by Manufacturer,” from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total wood and waste industrial consumption estimates.
 - 1986 through 1989: U.S. totals from the *AER* are allocated to SIC groups 20, 24, 25, and 26 based on data from the Form EIA-846, “Manufacturing Energy Consumption Survey 1988,” Tables 2 and 18, columns “Pulping Liquor,” “Roundwood,” and “Wood Chips.” These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1987 Census of Manufacturers*, Table 2,

column titled "Value Added by Manufacturer," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total industrial wood consumption estimates.

For 1989 only, State-level data on wood consumption by combined heat and power (CHP) facilities are available from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu. These CHP State data are summed and subtracted from the *AER* U.S. total. The remaining value is assumed to be the manufacturing sector and is allocated to the States using the method above. The State values for each of the four SIC groups and the CHP facilities are summed to derive State total industrial wood consumption estimates.

- 1990 through 1993: State-level data on wood consumption by CHP facilities from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, and 26 based on unpublished data on pulping liquor, roundwood, and wood chips from the Form EIA-846, "Manufacturing Energy Consumption Survey 1991 (MECS)." SIC groups 20 and 26 are grouped as "Other" in MECS. The proportions of those two groups in the 1988 and 1994 MECS are averaged and used to estimate the breakout for 1991. These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufacturers*, Table 2, column titled "Value Added by Manufacturer," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2541 Wood Partitions and Fixtures, and Industry 2621 Paper Mills. The State values for each of the four SIC groups and the CHP facilities are summed to derive State total industrial wood consumption estimates.
- 1994 and 1995: State-level data on wood consumption by CHP facilities from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, 26, and "Other" based on data from the Form

EIA-846, "1994 Manufacturing Energy Consumption Survey," Table A7, columns "Pulping or Black Liquor," "Wood from Trees," and "Wood from Mills." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufacturers*, Table 2, column titled "Value Added by Manufacturer," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the five SIC groups and the CHP facilities are summed to derive State total industrial wood consumption estimates.

- 1996 and 1997: State-level data on wood consumption by CHP facilities from the Form EIA-867, "Annual Nonutility Power Producer Report," in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, 26, and "Other" based on data from the Form EIA-846, "1994 Manufacturing Energy Consumption Survey," Table A7, columns "Pulping or Black Liquor," "Wood from Trees," and "Wood from Mills." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1997 Economic Census*. In the *Economic Census* the SIC groupings for the State data are replaced by North American Industry Classification System (NAICS) industry groups. The two industry classification systems are not identical, but NAICS groups are chosen that compare with SIC categories as closely as possible. The State series are from Table 2, column titled "Value Added by Manufacturer," from the publications for NAICS Industry 311221 Wet corn milling (for SIC 20 Food), Industry 321113 Sawmills and Industry 3212 Engineered wood product manufacturing (for SIC 24 Wood), Industry 3372 Office furniture manufacturing (for SIC 25 Furniture), Industry 322121 Paper mills, and Industry 322130 Paperboard mills (for SIC 26 Paper), and Industry 313 Textile mills (for Other SIC). The State values for each of the five NAICS group subtotals and the CHP facilities are summed to derive State total industrial wood consumption estimates.
- 1998 forward: State-level data on wood consumption by CHP facilities from the Form EIA-920, "Combined Heat and Power Plant Report," and predecessor forms, in billion Btu are summed

and subtracted from the *AER* U.S. total. The remaining national value is allocated to NAICS industry groups 311, 321, 337, and 322, and "Other" based on data from the Form EIA-846, "Manufacturing Energy Consumption Survey," 1998 (for 1998–2001) and 2002 (for 2002 forward), Table A7, columns "Pulping or Black Liquor," "Wood from Trees," and "Wood from Mills." These NAICS subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *Economic Census* for 1997 (1998–2000) and 2002 (2001 forward). The State series are from Table 2, column titled "Value Added by Manufacturer," from the publications for NAICS Industry 311221 Wet corn milling (for NAICS 311 Food), Industry 321113 Sawmills and Industry 3212 Engineered wood product manufacturing (for NAICS 321 Wood products), Industry 3372 Office furniture manufacturing (for NAICS 337 Furniture), Industry 322121 Paper mills, and Industry 322130 Paperboard mills (for NAICS 322 Paper), and Industry 313 Textile mills (for Other NAICS). The State values for each of the five NAICS group subtotals and the CHP facilities are summed to derive State total industrial wood consumption estimates.

WSI3BZZ — Waste consumed by CHP facilities in the industrial sector by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA, Form EIA-920, "Combined Heat and Power Plant Report," and predecessor forms.

WSI4BZZ — Waste consumed by the manufacturing sector by State.

- 1960 through 1980: No data available. Values assumed to be zero.
- 1981 forward: EIA estimates developed by using three data sources. U.S. totals for each year are as published for selected years in the EIA, *Annual Energy Review 2005 (AER)*, Table 10.2a.
- 1981 through 1985: U.S. totals from the *AER* are allocated to Standard Industrial Classifications (SIC) groups 20, 24, 25, and 26 based on data from the EIA "Manufacturing Energy Consumption Survey 1985 (MECS)," Table 3, columns "Major By-products" and "Other." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1982 Census of Manufacturers*, Table 2, column titled "Value Added by Manufacturer," from the

publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total industrial waste consumption estimates.

- 1986 through 1989: U.S. totals from the *AER* are allocated to SIC groups 20, 24, 25, and 26 based on data from the Form EIA-846, "Manufacturing Energy Consumption Survey 1988," Tables 2 and 18, columns "Waste," and "Biomass." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1987 Census of Manufacturers*, Table 2, column titled "Value Added by Manufacturer," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total industrial waste consumption estimates.

For 1989 only, State-level data on waste consumption by CHP facilities are available from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu. These CHP State data are summed and subtracted from the *AER* U.S. total. The remaining value is assumed to be the manufacturing sector and is allocated to the States using the method above. The State values for each of the four SIC groups and the CHP facilities are summed to derive State total industrial waste consumption estimates.

- 1990 through 1993: State-level data on waste consumption by CHP facilities from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, and 26 based on unpublished data on waste and biomass from the Form EIA-846, "Manufacturing Energy Consumption Survey 1991 (MECS)." SIC groups 20 and 26 are grouped as "Other" in MECS 1991. The proportions of those two groups in the 1988 and 1994 MECS are averaged and used to estimate the breakout for 1991. These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992*

Census of Manufacturers, Table 2, column titled “Value Added by Manufacturer,” from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2541 Wood Partitions and Fixtures, and Industry 2621 Paper Mills. The State values for each of the four SIC groups and the CHP facilities are summed to derive State total industrial waste consumption estimates.

- 1994 and 1995: State-level data on waste consumption by CHP facilities from the Form EIA-867, “Annual Nonutility Power Producer Report” in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, 26, and “Other” based on data from the Form EIA-846, “1994 Manufacturing Energy Consumption Survey,” Table A7, columns “Agricultural Waste” and “Wood and Paper Refuse.” These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufacturers*, Table 2, column titled “Value Added by Manufacturer,” from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the five SIC groups and the CHP facilities are summed to derive State total industrial waste consumption estimates.
- 1996 and 1997: State-level data on waste consumption by CHP facilities from the Form EIA-867, “Annual Nonutility Power Producer Report” or Form EIA-860, “Annual Electric Generator Report” in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to SIC groups 20, 24, 25, 26, and “Other” based on data from the Form EIA-846, “1994 Manufacturing Energy Consumption Survey,” Table A7, columns “Agricultural Waste” and “Wood and Paper Refuse.” These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1997 Economic Census*. In the *Economic Census* the SIC groupings for the State data are replaced by North American Industry Classification System (NAICS) industry groups. The two industry classification systems are not identical, but NAICS groups are chosen that compare with SIC categories as closely as possible. The State series are from Table 2, column titled “Value Added by Manufacturer,” from the publications for NAICS Industry 311311 Sugar cane mills, and Industry 311221 Wet corn milling (for SIC 20 Food), Industry 321912 Cut stock, resawing lumber, and planing (for SIC 24 Wood), Industry 3372 Office furniture manufacturing (for SIC 25 Furniture), Industry 322122 Newsprint mills, and Industry 322130 Paperboard mills (for SIC 26 Paper), and Industry 313 Textile mills (for Other SIC). The State values for each of the five NAICS group subtotals and the CHP facilities are summed to derive State total industrial waste consumption estimates.
- 1998 forward: State-level data on waste consumption by CHP facilities from the Form EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms, in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to NAICS industry groups 311, 321, 337, and 322, and “Other” based on data from the Form EIA-846, “Manufacturing Energy Consumption Survey,” 1998 (for 1998–2001) and 2002 (for 2002 forward), Table A7, columns “Agricultural Waste” and “Wood and Paper Refuse.” These NAICS subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *Economic Census* for 1997 (1998–2000) and 2002 (2001 forward). The State series are from Table 2, column titled “Value Added by Manufacturer,” from the publications for NAICS Industry 311311 Sugar cane mills, and Industry 311221 Wet corn milling (for SIC 20 Food), Industry 321912 Cut stock, resawing lumber, and planing (for SIC 24 Wood), Industry 3372 Office furniture manufacturing (for SIC 25 Furniture), Industry 322122 Newsprint mills, and Industry 322130 Paperboard mills (for SIC 26 Paper), and Industry 313 Textile mills (for Other SIC). The State values for each of the five NAICS group subtotals and the CHP facilities are summed to derive State total industrial waste consumption estimates.

Electric Power Sector

Electric power sector generation of electricity from wood and waste energy, by State, are available combined from 1960 through 1981 and separately from 1982 forward from Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

The data series are identified in SEDS by the following names (“ZZ” in the variable name represents the two-letter State code that differs for each State):

WDEIBZZ = wood consumed by the electric power sector in each State (included in waste energy for 1960 through 1981), in million Btu; and
WSEIBZZ = waste consumed by the electric power sector in each State (includes wood energy for 1960 through 1981), in million Btu.

The U.S. totals are calculated as the sum of the State data, and wood and waste are summed to provide a total (WW) value:

WDEIBUS = Σ WDEIBZZ
WSEIBUS = Σ WSEIBZZ

WWEIBZZ = WDEIBZZ + WSEIBZZ
WWEIBUS = Σ WWEIBZZ

Data Sources

WDEIBZZ — Wood consumed by the electric power sector by State.

- 1960 through 1981: Data included in waste energy sources, see WSEIBZZ.
- 1982 forward: EIA, Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms.

WSEIBZZ — Waste consumed by the electric power sector by State.

- 1960 forward: EIA, Forms EIA-906, “Power Plant Report,” and EIA-920, “Combined Heat and Power Plant Report,” and predecessor forms (includes wood energy sources from 1960 through 1981).

Totals

State total consumption of wood and waste is calculated as the sum of the consumption in the residential, commercial, and industrial sectors as well

as consumption by the electric power sector. The U.S. total is the sum of the State data:

WDTCBZZ = WDRCBZZ + WDCCBZZ + WDICBZZ + WDEIBZZ
WDTCBUS = Σ WDTCBZZ

WSTCBZZ = WSCCBZZ + WSICBZZ + WSEIBZZ
WSTCBUS = Σ WSTCBZZ

WWTCBZZ = WDTCBZZ + WSTCBZZ
WWTCBUS = Σ WWTCBZZ

Additional Calculations

Additional calculations are made in SEDS to aggregate some data series to be shown in the tables of this report. Geothermal, wind, photovoltaic, solar thermal energy sources, and net imports of electricity are combined to be shown in the “Other” column in tables titled “Energy Consumption Estimates by Source.” The variables are calculated for each State and the United States in billion Btu as follows:

GOTCBZZ = GETCBZZ + SOTCBZZ + WYTCBZZ + ELNIBZZ
GOTCBUS = Σ GOTCBZZ

Renewable Energy Total

Renewable energy subtotals for each consuming sector in thousand Btu can be calculated for 1990 forward by using the same formulas for each State and the U.S. totals.

REACB = ENACB
RECCB = GECCB + HYCCB + WWCCB
REEIB = HYEGB + GEEGB + SOEGB + WWEIB + WYEGB
REICB = GEICB + HYICB + WWICB
RERCB = WDRCB + GERCB + SOHCB
RETCB = RERCB + RECCB + REICB + REACB + REEIB

Section 6. Electricity

This section describes electrical energy sources; electricity consumed by end users (i.e., electricity sold to end users); estimates of the electrical system energy losses incurred in the generation, transmission, and distribution of electricity; and estimates of net interstate sales of electricity.

Electrical Energy Sources

Physical Units

Electricity is produced from a number of energy sources. In the State Energy Data System (SEDS), coal, natural gas, and petroleum are measured in physical units of thousand short tons, million cubic feet, and thousand barrels, respectively, as they are consumed by the electric power sector. Since wood and waste are measured in a variety of physical units, they are converted to the equivalent heat content and entered into SEDS measured in British thermal units. Because comparable measures in physical units for nuclear power, hydroelectric, wood, waste, geothermal, wind, photovoltaic, and solar thermal energy sources are not available, energy output in the form of electricity produced from these energy sources, in million kilowatthours, is used instead. The variable names for these data are as follows ("ZZ" in the variable name represents the two-letter State code that differs for each State):

CLEIPZZ	= coal consumed by the electric power sector (described in Section 2 of this report), in thousand short tons;
ELEXPZZ	= electricity exported from the United States, in million kilowatthours;
ELIMPZZ	= electricity imported into the United States, in million kilowatthours;

GEEGPZZ	= electricity produced from geothermal energy by the electric power sector (described in Section 5), in million kilowatthours;
HYEGPZZ	= electricity produced from hydroelectric power in the electric power sector (described in Section 5), in million kilowatthours;
NGEIPZZ	= natural gas consumed by the electric power sector (described in Section 3), in million cubic feet;
NUEGPZZ	= electricity produced from nuclear power in the electric power sector, in million kilowatthours;
PAEIPZZ	= petroleum consumed by the electric power sector (described in Section 4), in thousand barrels;
SOEGPZZ	= electricity produced from photovoltaic and solar thermal energy sources in the electric power sector (described in Section 5), in million kilowatthours;
WDEIBZZ	= wood energy sources consumed by the electric power sector (described in Section 5), in billion Btu;
WSEIBZZ	= waste energy sources consumed by the electric power sector (described in Section 5), in billion Btu; and
WYEGPZZ	= electricity produced from wind energy by the electric power sector (described in Section 5), in million kilowatthours.

The U.S. totals for these series are calculated as the sum of the State data.

British Thermal Units (Btu)

In order to total all the energy that is used to produce electricity, the energy sources are converted to the common unit of Btu. The methods for calculating the Btu content of coal, natural gas, petroleum, and renewable energy sources consumed for generating electric power are explained in their respective sections of this documentation. Nuclear electric power is described in the following section.

A total of all energy consumed by the electric power sector, including net imports of electricity across U.S. borders (ELNIBZZ, see page 99), is calculated by the following formulas for each State and for the United States:

$$\begin{aligned}\text{TEEIBZZ} &= \text{PAEIBZZ} + \text{NGEIBZZ} + \text{CLEIBZZ} + \text{HYEGBZZ} + \\ &\quad \text{NUEGBZZ} + \text{GEEGBZZ} + \text{WWEIBZZ} + \text{WNEGBZZ} \\ &\quad + \text{ELNIBZZ} \\ \text{TEEIBUS} &= \Sigma \text{TEEIBZZ}\end{aligned}$$

Nuclear Electric Power

Electricity generated from nuclear power, in million kilowatthours, by both regulated electric utilities and nonutility power producers are included in the State Energy Data System (SEDS) electric power sector. In the following formulas, “ZZ” in the variable name represents the two-letter State code that differs for each State:

NUEGPZZ = electricity produced from nuclear power in the electric power sector, in million kilowatthours;

The U.S. total is calculated as the sum of the State data:

$$\text{NUEGPUS} = \Sigma \text{NUEGPZZ}$$

Nuclear power used for generating electricity is the total nuclear energy, NUETP, included in EIA consumption data:

$$\begin{aligned}\text{NUETPZZ} &= \text{NUEGPZZ} \\ \text{NUETPUS} &= \text{NUEGPUS}\end{aligned}$$

The factor for converting electricity produced from nuclear energy (NUETKUS) is developed from data collected from nuclear steam-electric power plants. These U.S. average factors, which vary from year to year, can be found in Appendix B, Table B1, http://www.eia.doe.gov/emeu/states/seds/updates/tech_notes.html.

NUETKUS = factor for converting nuclear electricity from kilowatthours to Btu.

The formulas for applying the nuclear factor are:

$$\begin{aligned}\text{NUEGBZZ} &= \text{NUEGPZZ} * \text{NUETKUS} \\ \text{NUEGBUS} &= \Sigma \text{NUEGBZZ}\end{aligned}$$

$$\begin{aligned}\text{NUETBZZ} &= \text{NUEGBZZ} \\ \text{NUETBUS} &= \text{NUEGBUS}\end{aligned}$$

Data Sources

NUEGPZZ — Electricity produced from nuclear power in the electric power sector by State.

- 1960 through 1977: Federal Power Commission, News Release, “Power Production, Fuel Consumption, and Installed Capacity Data,” table titled “Net Generation of Electric Utilities by State and Source.”
- 1978 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, “Power Production, Fuel Consumption and Installed Capacity Data,” table titled “Net Generation of Electric Utilities by State and Source” (1978) and Table 36 (1979 and 1980).
- 1981 through 1985: EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms. Data are published in the EIA, *Electric Power Annual 1985*, Table 6.
- 1986 forward: EIA, Form EIA-906, “Power Plant Report,” and predecessor forms, <http://www.eia.doe.gov/cneaf/electricity/page/data.html>.

NUETKUS — Factor for converting electricity produced from nuclear power from physical units to Btu.

- 1960 through 1984: Calculated annually by the EIA by dividing the total heat content consumed in reactors at nuclear plants by the total (net) electricity generated by nuclear plants. The heat content and electricity generation are reported on FERC Form 1, “Annual Report of Major Electric Utilities, Licensees, and Others” and Form EIA-412, “Annual Report of Public Electric Utilities,” and predecessor forms. The factors for 1982 through 1984 are published in the following:
 - 1982: EIA, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215.

— 1983 and 1984: EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 13.

- 1985 forward: Calculated annually by EIA using the heat rate reported on Form EIA-860, “Annual Electric Generator Report” (and predecessor forms), and the generation reported on Form EIA-906, “Power Plant Report” (and predecessor forms).

Electricity Imports and Exports

Electricity transmitted across U.S. borders with Canada and Mexico are included in the State Energy Data System (SEDS) electric power sector.

ELEXPZZ = electricity exported from the United States by State, in million kilowatthours;

ELIMPZZ = electricity imported into the United States by State, in million kilowatthours;

U.S. totals are calculated as the sum of the State data:

ELIMPUS = Σ ELIMPZZ

ELEXPUS = Σ ELEXPZZ

Net imports are derived by subtracting exports of electricity from imports:

ELNIPZZ = ELIMPZZ – ELEXPZZ

ELNIPUS = Σ ELNIPZZ

Imports and exports of electricity in million kilowatthours are converted to billion Btu by multiplying the physical unit data by the conversion factor of 3.412 thousand Btu per kilowatthour.

ELIMBZZ = ELIMPZZ * 3.412

ELIMBUS = Σ ELIMBZZ

ELEXBZZ = ELEXPZZ * 3.412

ELEXBUS = Σ ELEXBZZ

ELNIBZZ = ELIMBZZ – ELEXBZZ

ELNIBUS = Σ ELNIBZZ

Data Sources

ELEXPZZ — Electricity exported from the United States (assumed to be produced by hydroelectric power through 1988) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, “Report on Electric Energy Exchanges with Canada and Mexico.” Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.
- 1982 and 1983: Energy Information Administration (EIA) State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data.” State estimates are consistent with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders*.
- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data,” the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders*.
- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, “Annual Report of International Electrical Export/Import Data,” and predecessor forms, and the Canada National Energy Board report, “Electricity Exports and Imports, Monthly Statistics for December....”

ELIMPZZ — Electricity imported into the United States (assumed to be produced by hydroelectric power through 1988) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, “Report on Electric Energy Exchanges with Canada and Mexico.” Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.
- 1982 and 1983: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data.” State estimates are

consistent with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders*.

- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data,” the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders*.
- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, “Annual Report of International Electrical Export/Import Data,” and predecessor forms, and the Canada National Energy Board report, “Electricity Exports and Imports, Monthly Statistics for December...”

Electricity Consumed by the End User

Physical Units

The amount of electricity sold to end users is considered to be the amount of electricity consumed by the end-use sectors. Six electricity sales data series, in physical units of million kilowatthours, are used to estimate consumption of electricity by end-use sector:

- ESRCPZZ = electricity sold to the residential sector of each State;
 ESCMPZZ = a portion of the electricity sold to the commercial sector of each State;
 ESICPZZ = electricity sold to the industrial sector of each State;
 ESACPZZ = electricity sold to the transportation sector of each State (2003 forward);
 ESOTPZZ = electricity sold to “Other” users (i.e., public street and highway lighting, other public authorities, railroads and railways, and interdepartmental sales) in each State (1960 through 2002); and
 ESTRPZZ = electricity consumed by transit systems, in each State (1960 through 2002).

U.S. totals for the six State-level series are calculated as the sum of the State data.

Sales of electricity to the residential and industrial sectors contained in the Energy Information Administration (EIA) *Electric Sales and Revenues* database are used directly as consumption of electricity by these sectors.

Beginning in 2003, sales of electricity to the commercial sector contained in the *Electric Sales and Revenues* database are used directly as consumption of electricity by this sector. Prior to 2003, commercial electricity consumption is estimated as the sum of sales to the commercial sector and the portion of sales to the “Other” sector that is not used for transportation:

$$\begin{aligned} \text{ESCCPZZ} &= \text{ESCMPZZ} + \text{ESOTPZZ} - \text{ESTRPZZ} \\ \text{ESCCPUS} &= \Sigma \text{ESCCPZZ} \end{aligned}$$

From 2003 forward, transportation electricity sales data are taken directly from the *Electric Sales and Revenues* database. From 1960 through 2002, consumption of electricity for transportation, ESACPZZ, is equal to the electricity consumed by transit systems, ESTRPZZ, from the U.S. Department of Transportation, Federal Transit Administration.

Total electricity consumed is represented by ESTCPZZ and is calculated by adding the four end-use sector estimates:

$$\begin{aligned} \text{ESTCPZZ} &= \text{ESRCPZZ} + \text{ESCCPZZ} + \text{ESICPZZ} + \text{ESACPZZ} \\ \text{ESTCPUS} &= \Sigma \text{ESTCPZZ} \end{aligned}$$

British Thermal Units (Btu)

Electricity consumption estimates are converted into Btu by applying a constant factor of 3.412 thousand Btu per kilowatthour as illustrated in the formulas:

$$\begin{aligned} \text{ESRCBZZ} &= \text{ESRCPZZ} * 3.412 \\ \text{ESTCBZZ} &= \text{ESTCPZZ} * 3.412 \end{aligned}$$

U.S. totals for the Btu series are calculated as the sum of the State data.

Additional Calculations

Beginning in 2003, electricity sold for transportation use is available from the EIA *Electric Sales and Revenues* database. For years prior to 2003, additional calculations are performed in the State Energy Data System (SEDS) to provide data for the EIA *Monthly Energy Review* and *Annual Energy Review* to use in estimating transportation electricity use. The share of electricity sold to the “Other” category of consumers that is used for transportation is calculated:

$$\text{ESTRSUS} = \text{ESTRPUS} / \text{ESOTPUS}$$

Additional Notes on Electricity Sales

1. Beginning in 2003, the source for electricity consumed by the transportation sector is the EIA Form EIA-861, “Annual Electric Power Industry Report.” This is the first year that electricity sales data are collected separately for the transportation sector (previously these volumes were included in Commercial and “Other”). Information from the National Transit Data (NTD) System is used to supplement the EIA data for States with missing or incomplete volumes. Specifically, the following States did not report electricity consumed for battery recharging to EIA: Alabama, Iowa, Maine, Mississippi, and Tennessee. In addition, the following States did not report electricity consumed for propulsion: Missouri and Wisconsin. Finally, transportation electricity used was under-reported in Ohio in 2003 and Oregon in 2003 and 2004. The missing transit system data for these two States are obtained from the NTD System.
2. The source for the electricity sales data for 1960 through 1983 is the EIA Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Electricity sales data for 1984 forward are from Form EIA-861, “Annual Electric Utility Report.” At the national level, data from both forms correspond closely (within 3 percent) for all end-use sectors. However, differences in the number of survey respondents and the reporting of commercial and industrial sales caused inconsistencies between 1983 and 1984 data in those end-use sectors for some States. See EIA *Electric Power Annual*, 1991, DOE/EIA-0348(91), p. 130, and *An Assessment of the Quality of Selected EIA Data Series, Electric Power Data*, DOE/EIA-0292(87), pp. 17–28, for detailed discussions of the reporting differences.

3. The source for the electricity sales data for 1960 through 1983 is the EIA Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Electricity sales data for the District of Columbia and Maryland are combined on those forms. Estimates of separate sales for the District of Columbia and Maryland were created by using electricity sales data by end-use sector by communities from the FERC Form 1, “Annual Report of Major Electric Utilities, Licensees, and Others,” filed by the Potomac Electric Power Company (PEPCO). PEPCO sales to the District of Columbia were assumed to be total electricity sales in the District of Columbia. Electricity sales to the District of Columbia reported by PEPCO on the FERC Form 1 were subtracted from the EIA-826 District of Columbia and Maryland aggregate figures to obtain estimates of Maryland electricity sales by sector. Beginning with 1981 data, electric utilities were no longer required to report sales to specific communities. Therefore, sales data for the District of Columbia for 1981 through 1983 were obtained directly from PEPCO’s accounting department.

Data Sources

ESACPZZ — Electricity consumed by the transportation sector by State.

- 1960 through 2002: Equal to ESTRPZZ.
- 2003 forward: EIA, “Historical EPA Electric Sales and Revenue Spreadsheets”, http://www.eia.doe.gov/cneaf/electricity/epa/sales_state.xls, sector name “Total Electric Industry”, column “Transportation Sales.” Data from the U.S. Department of Transportation, National Transit Database, <http://www.ntdprogram.com>, (click on “Publications” and then “Data Tables”) is used for the following States: Alabama, Iowa, Maine, Missouri, Mississippi, Ohio, Oregon, Tennessee, and Wisconsin. See Additional Note 1 on page 101.

ESCMPZZ — A portion of the electricity sold to the commercial sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Additional Note 3 on page 101.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”

- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 125.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual 1988*, Table 19.
- 1988 and 1989: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual*, Table 27.
- 1990 forward: EIA, “Historical EPA Electric Sales and Revenue Spreadsheets”, http://www.eia.doe.gov/cneaf/electricity/epa/sales_state.xls, sector name “Total Electric Industry,” column “Commercial Sales.”

ESICPZZ — Electricity consumed by the industrial sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Additional Note 3 on page 101.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 126.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual 1988*, Table 19.
- 1988 and 1989: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual*, Table 27.
- 1990 forward: EIA, “Historical EPA Electric Sales and Revenue Spreadsheets”, http://www.eia.doe.gov/cneaf/electricity/epa/sales_state.xls, sector name “Total Electric Industry,” column “Industrial Sales.”

ESOTPZZ — Electricity sold to the “Other” sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales) by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Additional Note 3 on page 101.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 127.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual 1988*, Table 19.
- 1988 and 1989: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual*, Table 27.
- 1990 through 2002: EIA, “Historical EPA Electric Sales and Revenue Spreadsheets”, http://www.eia.doe.gov/cneaf/electricity/epa/sales_state.xls, sector name “Total Electric Industry,” column “Other Sales.”
- 2003 forward: Series discontinued. Values are assumed to be zero.

ESRCPZZ — Electricity consumed by the residential sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Additional Note 3 on page 101.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 124.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual 1988*, Table 19.

- 1988 and 1989: EIA, Form EIA-861, “Annual Electric Utility Report.” Published in the EIA, *Electric Power Annual*, Table 27.
- 1990 forward: EIA, “Historical EPA Electric Sales and Revenue Spreadsheets”, http://www.eia.doe.gov/cneaf/electricity/epa/sales_state.xls, sector name “Total Electric Industry,” column “Residential Sales.”

ESTRPZZ — Electricity consumed by transit systems by State.

Notes: The transit system data include electricity used to operate commuter rail, rapid rail, streetcars or light rail, cable cars, trolley-buses, motorbuses, automated guideways, inclined plane railways, and aerial tramways. These data do not include electricity used by Amtrak. These data are available on a fiscal year basis (July 1 through June 30) for 1979 through 1982 and for calendar years 1983 forward. Some data for 1979 through 1983 were adjusted by EIA on the basis of an analysis of historical trends. Electricity consumption for the District of Columbia for 1976 through 2002 is partially apportioned to Maryland and Virginia on the basis of electricity consumption data from the Washington Metropolitan Area Transit Authority.

- 1960 through 1978: EIA estimates are based on data from:
 - The American Public Transit Association (formerly the American Transit Association) annual operating reports.
 - Pushkarev, Boris S. and others, *Urban Rail in America*. (Bloomington, IN: Indiana University Press, 1982.)
 - U.S. Department of Transportation, *A Directory of Regularly Scheduled, Fixed Route, Local Public Transportation Service in Urbanized Areas Over 50,000 Population*, 1980 and 1981.
- 1979 through 1989: U.S. Department of Transportation, Urban Mass Transportation Administration, *National Urban Mass Transportation Statistics, Section 15 Annual Report*, table titled “Energy Consumption: Details by Transit System.”
 - 1979 and 1980: Table 2.13.1.
 - 1981 and 1982: Table 3.13.1.
 - 1983 through 1989: Table 3.12.
- 1990 through 2002: U.S. Department of Transportation, Federal Transit Administration, *Data Tables for the Section 15 Report Year*, <http://www.ntdprogram.com>, (click on “Publications” and then “Data Tables.”):
 - 1990: Table 2.12.
 - 1991: Table 13.
 - 1992 through 1997: Table 15.

— 1998: Table 16.

— 1999 through 2002: Table 17.

- 2003 forward: Series replaced by ESACPZZ. Values are zero.

Estimates of Electrical System Energy Losses

British Thermal Units (Btu)

Electrical system energy losses, identified by “LO,” include all losses incurred in the generation, transmission, and distribution of electricity, including plant use and unaccounted for quantities. Total losses for the United States, LOTCBUS, is assumed to be the difference between the total of all energy consumed by the electric power sector (TEEIBUS) and the total electricity sold to end users (ESTCBUS). Total losses for the United States is calculated in billion Btu as follows:

$$\text{LOTCBUS} = \text{TEEIBUS} - \text{ESTCBUS}$$

Because Alaska and Hawaii have no exchanges of electricity with other States, their electrical system energy losses are estimated as the difference between the sum of all energy consumed by the State’s electric power sector and the electricity sold within the State:

$$\text{LOTGBAK} = \text{TEEIBAK} - \text{ESTGBAK}$$

$$\text{LOTGBHI} = \text{TEEIBHI} - \text{ESTGBHI}$$

Individual State electrical system energy losses for the remaining States are estimated by a different method. The difference between each of the contiguous 48 States’ (including the District of Columbia) TEEIB series and ESTCB is not only the losses but also any net interstate flow of electricity that may occur between States. In some cases these net interstate flows are substantial. Therefore, an effort is made to estimate separately each State’s losses and net interstate flow. The methodology is to calculate the contiguous-48-State subtotal of losses and subtotal of sales; to create annual losses-to-sales ratios for the aggregate of the 48 States; and to apply the annual losses-to-sales ratios from the total 48 States to the individual 48 States’ sales to estimate their losses.

The following steps are performed to complete the losses estimates. A subtotal of losses in the contiguous 48 States, LOTCB48, is created by subtracting the Alaska and Hawaii losses from the total United States' losses:

$$\text{LOTCB48} = \text{LOTCBUS} - (\text{LOTGBAK} + \text{LOTGBHI})$$

A similar subtotal of electricity sales in the 48 States only, ESTCB48, is calculated:

$$\text{ESTCB48} = \text{ESTCBUS} - (\text{ESTGBAK} + \text{ESTGBHI})$$

The losses-to-sales ratio for the contiguous 48 States only, ELLSS48, is calculated:

$$\text{ELLSS48} = \text{LOTCB48} / \text{ESTCB48}$$

Over the 42-year period now covered in the State Energy Data System (SEDS), the ratio is fairly constant, with a slight downward trend. For 1960, the ratio is 2.5; for 1961 through 1983 the ratio is 2.4; for 1987 and 1988 the ratio is 2.2; and for 1984 through 1986 and 1989 forward the losses-to-sales ratio is 2.3.

The U.S. ratios are applied to each State's sales to the major end-use sectors and total sales (temporarily including Alaska, Hawaii, and the 48-State subtotal for processing convenience):

$$\begin{aligned}\text{LORCBZZ} &= \text{ESRCBZZ} * \text{ELLSS48} \\ \text{LOCCBZZ} &= \text{ESCCBZZ} * \text{ELLSS48} \\ \text{LOICBZZ} &= \text{ESICBZZ} * \text{ELLSS48} \\ \text{LOACBZZ} &= \text{ESACBZZ} * \text{ELLSS48} \\ \text{LOTGBZZ} &= \text{ESTGBZZ} * \text{ELLSS48}\end{aligned}$$

Alaska, Hawaii, and the contiguous 48-State subtotal are recalculated to their original estimates. The end-use losses for Alaska and Hawaii are created in proportion to each sector's share of the State's total electricity sales:

$$\begin{aligned}\text{LOTGBAK} &= \text{TEEIBAK} - \text{ESTGBAK} \\ \text{LOTGBHI} &= \text{TEEIBHI} - \text{ESTGBHI} \\ \text{LOTGB48} &= \text{LOTGBUS} - (\text{LOTGBAK} + \text{LOTGBHI})\end{aligned}$$

$$\text{LORGBAK(HI)} = (\text{ESRCBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)}$$

$$\text{LOCCBAK(HI)} = (\text{ESCCBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)}$$

$$\text{LOICBAK(HI)} = (\text{ESICBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)}$$

$$\text{LOACBAK(HI)} = (\text{ESACBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)}$$

Losses for the United States, including Alaska and Hawaii, are the sums of all the States' losses.

Physical Units

Estimates of losses in physical units of million kilowatthours are made by dividing the Btu estimate by the constant 3.412 thousand Btu per kilowatt-hour as illustrated in the following formulas:

$$\begin{aligned}\text{LORCPZZ} &= \text{LORCBZZ} / 3.412 & \text{LORCPUS} &= \text{LORCBUS} / 3.412 \\ \text{LOTCPZZ} &= \text{LOTGBZZ} / 3.412 & \text{LOTCPUS} &= \text{LOTGBUS} / 3.412\end{aligned}$$

Net Interstate Flow of Electricity

British Thermal Units (Btu)

An estimate of the net interstate flow of electricity is calculated as the difference between the total electricity sales and attributed losses and the total energy consumption by the electric power sector within each State. The estimated net interstate flow of electricity (ELISB) for each State and the United States is calculated:

$$\begin{aligned}\text{ELISBZZ} &= (\text{ESTGBZZ} + \text{LOTGBZZ}) - \text{TEEIBZZ} \\ \text{ELISBUS} &= \sum \text{ELISBZZ}\end{aligned}$$

Physical Units

Estimates of net interstate flow of electricity in physical units of million kilowatthours are calculated by dividing the Btu value by the constant 3.412 thousand Btu per kilowatt-hour:

ELISPZZ = ELISBZZ / 3.412
ELISPUS = ΣELISPZZ

Positive net interstate flow for a State means that the amount consumed within the State (including attributed losses) is greater than the amount of energy consumed by the electric power sector in the State. That is, the

State is using more electricity than it generates and, therefore, is a net buyer from other States.

A negative number indicates that the State's consumption by the electric power sector is greater than the requirements for electricity within its own borders, and, therefore, it is a net seller of electricity to other States.

Section 7. Total Energy

Total Energy Consumed

The preceding sections of this documentation describe how State end-use consumption estimates are made by individual energy source. This section describes how all energy sources are added in Btu to create end-use sector and total energy consumption estimates.

Energy consumption estimates for the residential sector include solar energy consumed in the commercial sector that cannot be identified separately. The code “RC” in the data identifier indicates residential sector and “HC” indicates residential and commercial sectors combined in the following calculation used for each State and the United States:

$$\text{TERCB} = \text{CLRCB} + \text{NGRCB} + \text{PARCB} + \text{WDRCB} + \text{GERCB} + \text{SOHCB} + \text{ESRCB} + \text{LORCB}$$

The commercial sector calculations for each State and the U.S. total are:

$$\text{TECCB} = \text{CLCCB} + \text{NGCCB} + \text{PACCB} + \text{HYCCB} + \text{WWCCB} + \text{GECCB} + \text{ESCCB} + \text{LOCCB}$$

For the industrial sector, the State calculations are slightly different from the U.S. calculation (“ZZ” in the variable name represents the two-letter State code that differs for each State). The industrial sector includes net imports of coal coke (CCNIBUS) in the U.S. total but not in the individual State estimates because no reliable means of allocating the U.S. amount to the States has been developed.

$$\text{TEICBZZ} = \text{CLICBZZ} + \text{NGICBZZ} + \text{PAICBZZ} + \text{HYICBZZ} + \text{WWICBZZ} + \text{GEICBZZ} + \text{ESICBZZ} + \text{LOICBZZ}$$

$$\text{TEICBUS} = \text{CLICBUS} + \text{CCNIBUS} + \text{NGICBUS} + \text{PAICBUS} + \text{HYICBUS} + \text{WWICBUS} + \text{GEICBUS} + \text{ESICBUS} + \text{LOICBUS}$$

For the transportation sector, the same calculations are used for the individual States and the U.S. total. From 1960 through 1992, ethanol blended into motor gasoline is not included in the motor gasoline (and total petroleum product) volumes and is added separately. From 1993 forward ethanol is included in the motor gasoline data:

From 1960 through 1992:

$$\text{TEACB} = \text{CLACB} + \text{NGACB} + \text{PAACB} + \text{ENACB} + \text{ESACB} + \text{LOACB}$$

From 1993 forward:

$$\text{TEACB} = \text{CLACB} + \text{NGACB} + \text{PAACB} + \text{ESACB} + \text{LOACB}$$

Total energy consumed is calculated as the sum of all energy sources. The US and State calculations differ slightly. The States’ calculations include net interstate flow of electricity and associated electricity system losses, and the U.S. calculation includes net imports of coal coke. Also, for years prior to 1993, ethanol used as an additive to motor gasoline is not included in motor gasoline (and total petroleum product) volumes and is added separately. From 1993 forward the ethanol is included in the motor gasoline volumes:

From 1960 through 1992:

$$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{ENACBZZ} + \text{NUETBZZ} + \text{HYTCBZZ} + \text{WWTCBZZ} + \text{GOTCBZZ} + \text{ELISBZZ}$$

$$\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{ENACBUS} + \text{NUETBUS} + \text{HYTCBUS} + \text{WWTCBUS} + \text{GOTCBUS}$$

From 1993 forward:

$$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{NUETBZZ} + \text{HYTCBZZ} + \text{WWTCBZZ} + \text{GOTCBZZ} + \text{ELISBZZ}$$

$$\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{NUETBUS} + \text{HYTCBUS} + \text{WWTCBUS} + \text{GOTCBUS}$$

As a cross-check that is not used in the report tables, total energy consumed is also calculated in the State Energy Data System (SEDS) as the sum of the consumption by the four end-use sectors for each State and US total:

$$\text{TESSB} = \text{TERCB} + \text{TECCB} + \text{TEICB} + \text{TEACB}$$

Total Net Energy Consumed

A set of totals is calculated to estimate consumption in the four major end use sectors excluding each sector's share of all electrical system energy losses that are incurred in the generation, transmission, and distribution of electricity. This series is total net energy consumed and is represented by "TN."

Total net energy consumed by the residential, commercial, industrial, and transportation sectors are calculated:

$$\begin{aligned} \text{TNRCB} &= \text{TERCB} - \text{LORCB} & \text{TNICB} &= \text{TEICB} - \text{LOICB} \\ \text{TNCCB} &= \text{TECCB} - \text{LOCCB} & \text{TNACB} &= \text{TEACB} - \text{LOACB} \end{aligned}$$

Total Energy Consumed per Capita

The energy consumed per person residing in each State and in the United States is estimated by dividing the total energy series ("TE") by the resident population as published by the U.S. Department of Commerce,

Bureau of the Census. The U.S. total population published by the Bureau of the Census is based on unrounded numbers that are not available by State so that the sum of the States' population does not equal the U.S. total. Therefore, the U.S. total population is input to SEDS instead of being calculated as the sum of the States' values. The Bureau of the Census series are estimated, in thousands of people, as of July 1 of each year, except in 1960, 1970, 1980, 1990, and 2000, when the April 1 census data were used. The variable names for the series are:

TPOPPZZ = The resident population of each State; and
TPOPPUS = The resident population of the United States.

Estimated energy consumption per capita for each State and the United States, in million Btu, is represented by "TETP" and is calculated:

$$\text{TETPB} = \text{TETCB} / \text{TPOPP}$$

The residential, commercial, industrial, and transportation sectors' energy consumption per capita are estimated:

$$\begin{aligned} \text{TERPB} &= \text{TERCB} / \text{TPOPP} \\ \text{TECPB} &= \text{TECCB} / \text{TPOPP} \\ \text{TEIPB} &= \text{TEICB} / \text{TPOPP} \\ \text{TEAPB} &= \text{TEACB} / \text{TPOPP} \end{aligned}$$

Data Sources

TPOPPUS — Resident population of the United States. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25. Specific publication and table numbers:
 - 1960 through 1969: Number 990, Table 4.
 - 1970 through 1979: Number 957, Table 4.
 - 1980 through 1989: Number 1058, Table 3.
- 1990 through 1999: U.S. Department of Commerce, Bureau of the Census, Internet Release http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/
- 2000 forward: <http://www.census.gov/popest/states/NST-ann-est.html>

TPOPPZZ — Resident population by State. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, “Population Estimates and Projections,” Series P-25. Specific publication and table numbers:
 - 1960 through 1969: Number 460, Table 1.
 - 1970 through 1979: Number 957, Table 4.

— 1980 through 1989: Number 1058, Table 3.

- 1990 through 1999: U.S. Department of Commerce, Bureau of the Census, Internet Release http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/
- 2000 forward: <http://www.census.gov/popest/states/NST-ann-est.html>

Appendix A

State Energy Data System Variables

This is an alphabetical listing of all the variable names used in the State Energy Data System (SEDS). Provided for each variable on the system are: a brief description of the variable; units of the variable as found in SEDS; and the formulas used in SEDS to create the variable. If a variable is not one created by SEDS but is entered into the system, it is described as an independent variable. Formulas are provided for the State calculations (“ZZ” in the variable name would be replaced by the two-letter code for each State) and for the U.S. calculation (wherever appropriate).

Variables in SEDS have seven-letter names that consist of the following components:

Character Positions:	1 and 2	3 and 4	5	6 and 7
Identify:	Type of energy	Energy activity or consumption end-use sector	Type of data	Geographic area

Characters 1 through 4 are explained in the description of each variable.

Character 5 is always one of the following:

- B = Data in British thermal units (Btu)
- K = Factor for converting data from physical units to Btu
- M = Data in alternative physical units
- P = Data in standardized physical units
- S = Share or ratio expressed as a fraction
- V = Value added in manufacture.

Characters 6 and 7 are two-letter U.S. Postal Service codes for the 50 States and the District of Columbia (represented by “ZZ” in the following variable names) and the United States (“US”). In this system, the United States means the 50 States and the District of Columbia. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia. The variables used in those calculations are identified by “48” as characters 6 and 7 in the variable names.

ABICB	Aviation gasoline blending components total consumed by the industrial sector.	Billion Btu	ABICBZZ = ABTCBZZ ABICBUS = ABTCBUS
ABICP	Aviation gasoline blending components total consumed by the industrial sector.	Thousand barrels	ABICPZZ = ABTCPZZ ABICPUS = ABTCPUS
ABTCB	Aviation gasoline blending components total consumed.	Billion Btu	ABTCBZZ = ABTCPZZ * 5.048 ABTCBUS = Σ ABTCBZZ
ABTCP	Aviation gasoline blending components total consumed.	Thousand barrels	ABTCPZZ = (COCAPZZ / COCAPUS) * ABTCPUS ABTCPUS is independent.
AICAP	Aluminum ingot production capacity.	Short tons	AICAPZZ is independent. AICAPUS = Σ AICAPZZ
ARICB	Asphalt and road oil consumed by the industrial sector.	Billion Btu	ARICBZZ = ARICPZZ * 6.636 ARICBUS = Σ ARICBZZ
ARICP	Asphalt and road oil consumed by the industrial sector.	Thousand barrels	ARICPZZ = ASICPZZ + RDICPZZ ARICPUS = Σ ARICPZZ
ARTCB	Asphalt and road oil total consumed.	Billion Btu	ARTCBZZ = ARICBZZ ARTCBUS = ARICBUS
ARTCP	Asphalt and road oil total consumed.	Thousand barrels	ARTCPZZ = ASTCPZZ + RDTCPZZ ARTCPUS = Σ ARTCPZZ
ASICP	Asphalt consumed by the industrial sector.	Thousand barrels	ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS ASICPUS = Σ ASICPZZ
ASINP	Asphalt sold to the industrial sector.	Short tons	ASINPZZ is independent. ASINPUS = Σ ASINPZZ
ASTCP	Asphalt total consumed.	Thousand barrels	ASTCPZZ = ASICPZZ ASTCPUS is independent.
AVACB	Aviation gasoline consumed by the transportation sector.	Billion Btu	AVACBZZ = AVACPZZ * 5.048 AVACBUS = Σ AVACBZZ
AVACP	Aviation gasoline consumed by the transportation sector.	Thousand barrels	AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS AVACPUS = Σ AVACPZZ
AVMIP	Aviation gasoline issued to the military.	Thousand barrels	AVMIPZZ is independent. AVMIPUS = Σ AVMIPZZ

AVNMM	Aviation gasoline sold to nonmilitary users.	Thousand gallons	AVNMMZZ is independent. AVNMMUS = Σ AVNMMZZ
AVNMP	Aviation gasoline sold to nonmilitary users.	Thousand barrels	AVNMPZZ = AVNMMZZ / 42 AVNMPUS = Σ AVNMPZZ
AVTCB	Aviation gasoline total consumed.	Billion Btu	AVTCBZZ = AVACBZZ AVTCBUS = Σ AVTCBZZ
AVTCP	Aviation gasoline total consumed.	Thousand barrels	AVTCPZZ = AVACPZZ AVTCPUS is independent.
AVTTP	Aviation gasoline total sales to the transportation sector.	Thousand barrels	AVTTPZZ = AVNMPZZ + AVMIPZZ AVTTPUS = Σ AVTTPZZ
CCEXBUS	Coal coke exported from the United States.	Billion Btu	CCEXBUS = CCEXPUS * 24.80
CCEXPUS	Coal coke exported from the United States.	Thousand short tons	CCEXPUS is independent.
CCIMBUS	Coal coke imported into the United States.	Billion Btu	CCIMBUS = CCIMPUS * 24.80
CCIMPUS	Coal coke imported into the United States.	Thousand short tons	CCIMPUS is independent.
CCNIBUS	Coal coke net imports into the United States.	Billion Btu	CCNIBUS = CCIMBUS – CCEXBUS
CCNIPUS	Coal coke net imports into the United States.	Thousand short tons	CCNIPUS = CCIMPUS – CCEXPUS
CGVAV	Value added in the manufacture of corrugated and solid fiber boxes.	Million dollars	CGVAVZZ is independent. CGVAVUS = Σ CGVAVZZ
CLACB	Coal consumed by the transportation sector.	Billion Btu	CLACBZZ = CLACPZZ * CLACKZZ CLACBUS = Σ CLACBZZ
CLACK	Factor for converting coal consumed by the transportation sector from physical units to Btu.	Million Btu per short ton	CLACKZZ is independent. CLACKUS = CLACBUS / CLACPUS
CLACP	Coal consumed by the transportation sector.	Thousand short tons	CLACPZZ = (CLICPZZ / CLICPUS) * CLACPUS CLACPUS is independent.
CLCCB	Coal consumed by the commercial sector.	Billion Btu	CLCCBZZ = CLCCPZZ * CLHCKZZ CLCCBUS = Σ CLCCBZZ
CLCCP	Coal consumed by the commercial sector.	Thousand short tons	CLCCP = CLHCPZZ - CLRCPZZ CLCCPUS = Σ CLCCPZZ

CLEIB	Coal consumed by the electric power sector.	Billion Btu	CLEIBZZ = CLEIPZZ * CLEIKZZ CLEIBUS = Σ CLEIBZZ
CLEIK	Factor for converting coal consumed by the electric power sector from physical units to Btu.	Million Btu per short ton	CLEIKZZ is independent. CLEIKUS = CLEIBUS / CLEIPUS
CLEIP	Coal consumed by the electric power sector.	Thousand short tons	CLEIPZZ is independent CLEIPUS = Σ CLEIPZZ
CLHCK	The factor for converting coal consumed by the residential and commercial sectors from physical units to Btu.	Million Btu per short ton	CLHCKZZ is independent. CLHCKUS = CLHCBUS / CLHCPUS
CLHCP	Coal consumed by the residential and commercial sectors.	Thousand short tons	CLHCPZZ = (CLHDPZZ / CLHDPUS) * CLHCPUS CLHCPUS is independent.
CLHDP	Coal distributed to the residential and commercial sectors.	Thousand short tons	CLHDPZZ is independent. CLHDPUS = Σ CLHDPZZ
CLICB	Coal consumed by the industrial sector.	Billion Btu	CLICBZZ = CLKCBZZ + CLOCBZZ CLICBUS = Σ CLICBZZ
CLICP	Coal consumed by the industrial sector.	Thousand short tons	CLICPZZ = CLKCPZZ + CLOCPZZ CLICPUS = Σ CLICPZZ
CLKCB	Coal consumed at coke plants (coking coal).	Billion Btu	CLKCBZZ = CLKCPZZ * CLKCKZZ CLKCBUS = Σ CLKCBZZ
CLKCK	The factor for converting coal consumed at at coke plants from physical units to Btu.	Million Btu per short ton	CLKCKZZ is independent. CLKCKUS = CLKCBUS / CLKCPUS
CLKCP	Coal consumed by coke plants (coking coal).	Thousand short tons	CLKCPZZ = (CLKDPZZ / CLKDPUS) * CLKCPUS CLKCPUS is independent.
CLKDP	Coal distributed to coke plants (coking coal).	Thousand short tons	CLKDPZZ is independent. CLKDPUS = Σ CLKDPZZ
CLOCB	Coal consumed by other industrial users.	Billion Btu	CLOCBZZ = CLOCPZZ * CLOCKZZ CLOCBUS = Σ CLOCBZZ
CLOCK	The factor for converting coal consumed by other industrial users from physical units to Btu.	Million Btu per short ton	CLOCKZZ is independent. CLOCKUS = CLOCBUS / CLOCPUS
CLOCP	Coal consumed by other industrial users.	Thousand short tons	CLOCPZZ = (CLODPZZ / CLODPUS) * CLOCPUS CLOCPUS is independent.

CLODP	Coal distributed to other industrial users.	Thousand short tons	CLODPZZ is independent. $CLODPUS = \Sigma CLODPZZ$
CLRCB	Coal consumed by the residential sector.	Billion Btu	$CLRCBZZ = CLRCPZZ * CLHCKZZ$ $CLRCBUS = \Sigma CLRCBZZ$
CLRCP	Coal consumed by the residential sector.	Thousand short tons	$CLRCPZZ = CLHCPZZ * CLRCSUS$ $CLRCPUS = \Sigma CLRCPZZ$
CLRCSUS	The share of residential and commercial coal consumed by the residential sector.	Percent	CLRCSUS is independent.
CLTCB	Coal total consumed.	Billion Btu	$CLTCBZZ = CLRCBZZ + CLCCBZZ +$ $CLICBZZ + CLACBZZ + CLEIBZZ$ $CLTCBUS = \Sigma CLTCBZZ$
CLTCP	Coal total consumed.	Thousand short tons	$CLTCPZZ = CLRCPZZ + CLCCPZZ +$ $CLICPZZ + CLACPZZ + CLEIPZZ$ $CLTCPUS = \Sigma CLTCPZZ$
COCAP	Crude oil operating capacity at refineries.	Barrels per calendar day	COCAPZZ is independent. $COCAPUS = \Sigma COCAPZZ$
COICB	Crude oil consumed by the industrial sector.	Billion Btu	$COICBZZ = COTCBZZ$ $COICBUS = COTCBUS$
COICP	Crude oil consumed by the industrial sector.	Thousand barrels	$COICPZZ = COTCPZZ$ $COICPUS = COTCPUS$
COTCB	Crude oil consumed in petroleum industry operations.	Billion Btu	$COTCBZZ = COTCPZZ * 5.800$ $COTCBUS = \Sigma COTCBZZ$
COTCP	Crude oil consumed in petroleum industry operations.	Thousand barrels	COTCPZZ is independent. $COTCPUS = \Sigma COTCPZZ$
CTCAP	Catalytic cracking charge capacity of petroleum refineries.	1960 through 1979: Barrels per calendar day 1980 forward: Barrels per stream day	CTCAPZZ is independent. $CTCAPUS = \Sigma CTCAPZZ$
DFACB	Distillate fuel consumed by the transportation sector.	Billion Btu	$DFACBZZ = DFACPZZ * 5.825$ $DFACBUS = \Sigma DFACBZZ$
DFACP	Distillate fuel consumed by the transportation sector.	Thousand barrels	$DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ$ $DFACPUS = \Sigma DFACPZZ$

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DFBKP	Distillate fuel sales for vessel bunkering use, excluding that sold to the Armed Forces.	Thousand barrels	DFBKPZZ is independent. DFBKPUS = Σ DFBKPZZ
DFCCB	Distillate fuel consumed by the commercial sector.	Billion Btu	DFCCBZZ = DFCCPZZ * 5.825 DFCCBUS = Σ DFCCBZZ
DFCCP	Distillate fuel consumed by the commercial sector.	Thousand barrels	DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ DFCCPUS = Σ DFCCPZZ
DFCMP	Distillate fuel sales to the commercial sector.	Thousand barrels	DFCMPZZ is independent. DFCMPUS = Σ DFCMPZZ
DFEIB	Distillate fuel consumed by the electric power sector.	Billion Btu	DFEIBZZ = DFEIPZZ * 5.825 DFEIBUS = Σ DFEIBZZ
DFEIP	Distillate fuel (excluding kerosene-type jet fuel) consumed by the electric power sector.	Thousand barrels	DFEIPZZ = DKEIPZZ – JKEUPZZ DFEIPUS = Σ DFEIPZZ
DFIBP	Distillate fuel sales for industrial space heating and other industrial use, including farm use.	Thousand barrels	DFIBPZZ is independent. DFIBPUS = Σ DFIBPZZ
DFICB	Distillate fuel consumed by the industrial sector.	Billion Btu	DFICBZZ = DFICPZZ * 5.825 DFICBUS = Σ DFICBZZ
DFICP	Distillate fuel consumed by the industrial sector.	Thousand barrels	DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ DFICPUS = Σ DFICPZZ
DFINP	Distillate fuel sales to the industrial sector.	Thousand barrels	DFINPZZ = DFIBPZZ + DFOCPZZ + DFOFPZZ + DFOTPZZ DFINPUS = Σ DFINPZZ
DFMIP	Distillate fuel sales to the Armed Forces, regardless of use.	Thousand barrels	DFMIPZZ is independent. DFMIPUS = Σ DFMIPZZ
DFNCP	Distillate fuel consumption by all sectors other than the electric power sector.	Thousand barrels	DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS DFNCPUS = DFTCPUS – DFEIPUS
DFNDP	Distillate fuel sales to all sectors other than the electric power sector.	Thousand barrels	DFNDPZZ = DFRSPZZ + DFCMPZZ + DFINPZZ + DFTRPZZ DFNDPUS = Σ DFNDPZZ
DFOCP	Distillate fuel sales for use by oil companies.	Thousand barrels	DFOCPZZ is independent. DFOCPUS = Σ DFOCPZZ

DFOFP	Distillate fuel sales as diesel fuel for off-highway use.	Thousand barrels	DFOFPZZ is independent. DFOFPUS = Σ DFOFPZZ
DFONP	Distillate fuel sales as diesel fuel for on-highway use.	Thousand barrels	DFONPZZ is independent. DFONPUS = Σ DFONPZZ
DFOTP	Distillate fuel sales for all other uses not identified in other sales categories.	Thousand barrels	DFOTPZZ is independent. DFOTPUS = Σ DFOTPZZ
DFRCB	Distillate fuel consumed by the residential sector.	Billion Btu	DFRCBZZ = DFRCPZZ * 5.825 DFRCBUS = Σ DFRCBZZ
DFRCP	Distillate fuel consumed by the residential sector.	Thousand barrels	DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ DFRCBUS = Σ DFRCPZZ
DFRRP	Distillate fuel sales for use by railroads.	Thousand barrels	DFRRPZZ is independent. DFRRPUS = Σ DFRRPZZ
DFRSP	Distillate fuel sales to the residential sector.	Thousand barrels	DFRSPZZ is independent. DFRSPUS = Σ DFRSPZZ
DFTCB	Distillate fuel total consumed.	Billion Btu	DFTCBZZ = DFRCBZZ + DFCCBZZ + DFICBZZ + DFACBZZ + DFEIBZZ DFTCBUS = Σ DFTCBZZ
DFTCP	Distillate fuel total consumed.	Thousand barrels	DFTCPZZ = DFNCPZZ + DFEIPZZ DFTCPUS is independent.
DFTRP	Distillate fuel sales to the transportation sector.	Thousand barrels	DFTRPZZ = DFBKPZZ + DFMIPZZ + DFRRPZZ + DFONPZZ DFTRPUS = Σ DFTRPZZ
DKEIB	Distillate fuel and kerosene-type jet fuel consumed by the electric power sector.	Billion Btu	DKEIBZZ = DFEIBZZ + JKEUBZZ DKEIBUS = Σ DKEIBZZ
DKEIP	Distillate fuel and kerosene-type jet fuel consumed by the electric power sector.	Thousand barrels	DKEIPZZ is independent. DKEIPUS = Σ DKEIPZZ
ELEXB	Electricity exported from the United States.	Billion Btu	ELEXBZZ = ELEXPZZ * 3.412 ELEXBUS = Σ ELEXBZZ
ELEXP	Electricity exported from the United States.	Million kilowatthours	ELEXPZZ is independent. ELEXPUS = Σ ELEXPZZ

ELIMB	Electricity imported into the United States	Billion Btu	ELIMBZZ = ELIMPZZ * 3.412 ELIMBUS = Σ ELIMBZZ
ELIMP	Electricity imported into the United States	Million kilowatthours	ELIMPZZ is independent. ELIMPUS = Σ ELIMPZZ
ELISB	Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.)	Billion Btu	ELISBZZ = (ESTCBZZ + LOTCBZZ) – TEEIBZZ ELISBUS = Σ ELISBZZ
ELISP	Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.)	Million kilowatthours	ELISPZZ = ELISBZZ / 3.412 ELISPUS = Σ ELISPZZ
ELLSS48	The ratio of electrical system energy losses to electricity sold in the contiguous 48 States and the District of Columbia.	Fraction	ELLSS48 = LOTCB48 / ESTCB48
ELNIB	Net imports of electricity into the United States.	Billion Btu	ELNIBZZ = ELIMBZZ - ELEXBZZ ELNIBUS = Σ ELNIBZZ
ELNIP	Net imports of electricity into the United States.	Million kilowatthours	ELNIPZZ = ELIMPZZ - ELEXPZZ ELNIPUS = Σ ELNIPZZ
ENACB	Ethanol consumed by the transportation sector.	Billion Btu	ENACBZZ = ENACPZZ * 3.539 ENACBUS = Σ ENACBZZ
ENACP	Ethanol consumed by the transportation sector.	Thousand barrels	ENACPZZ = (ENTRPZZ / ENTRPUS) * ENACPUS ENACPUS is independent.
ENTRP	Ethanol blended into motor gasoline.	Thousand gallons	ENTRPZZ is independent. ENTRPUS = Σ ENTRPZZ
ESACB	Electricity consumed by (i.e., sold to) the transportation sector.	Billion Btu	ESACBZZ = ESACPZZ * 3.412 ESACBUS = Σ ESACBZZ
ESACP	Electricity consumed by (i.e., sold to) the transportation sector.	Million kilowatthours	ESACPZZ = ESTRPZZ ESACPUS = Σ ESACPZZ
ESCCB	Electricity consumed by (i.e., sold to) the commercial sector.	Billion Btu	ESCCBZZ = ESCCPZZ * 3.412 ESCCBUS = Σ ESCCBZZ
ESCCP	Electricity consumed by (i.e., sold to) the commercial sector.	Million kilowatthours	ESCCPZZ = ESCMPZZ + ESOTPZZ – ESACPZZ ESCCPUS = Σ ESCCPZZ

ESCMP	Electricity sold to a portion of the commercial sector.	Million kilowatthours	ESCMPZZ is independent. ESCMPUS = Σ ESCMPZZ
ESICB	Electricity consumed by (i.e., sold to) the industrial sector.	Billion Btu	ESICBZZ = ESICPZZ * 3.412 ESICBUS = Σ ESICBZZ
ESICP	Electricity consumed by (i.e., sold to) the industrial sector.	Million kilowatthours	ESICPZZ is independent. ESICPUS = Σ ESICPZZ
ESOTP	Electricity sold to the "Other" sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales).	Million kilowatthours	ESOTPZZ is independent. ESOTPUS = Σ ESOTPZZ
ESRCB	Electricity consumed by (i.e., sold to) the residential sector.	Billion Btu	ESRCBZZ = ESRCPZZ * 3.412 ESRCBUS = Σ ESRCBZZ
ESRCP	Electricity consumed by (i.e., sold to) the residential sector.	Million kilowatthours	ESRCPZZ is independent. ESRCPUS = Σ ESRCPZZ
ESTCB	Electricity total consumed (i.e., sold).	Billion Btu	ESTCBZZ = ESTCPZZ * 3.412 ESTCBUS = Σ ESTCBZZ ESTCB48 = ESTCBUS - (ESTCBAK + ESTCBHI)
ESTCP	Electricity total consumed (i.e., sold).	Million kilowatthours	ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ ESTCPUS = Σ ESTCPZZ
ESTRP	Electricity consumed by transit systems.	Million kilowatthours	ESTRPZZ is independent. ESTRPUS = Σ ESTRPZZ
ESTRSUS	The share of electricity sold to the "Other" sector (ESOTP) that is used for transportation.	Fraction	ESTRSUS = ESACPUS / ESOTPUS
FFETKUS	Fossil fuel steam-electric power plant conversion factor.	Thousand Btu per kilowatthour	FFETKUS is independent.
FNICB	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Billion Btu	FNICBZZ = FNTCBZZ FNICBUS = FNTCBUS
FNICP	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Thousand barrels	FNICPZZ = FNTCPZZ FNICPUS = FNTCPUS
FNTCB	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Billion Btu	FNTCBZZ = FNTCPZZ * 5.248 FNTCBUS = Σ FNTCBZZ

FNTCP	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Thousand barrels	$FNTCPZZ = (OCVAVZZ / OCVAVUS) * FNTCPUS$ FNTCPUS is independent.
FOICB	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Billion Btu	$FOICBZZ = FOTCBZZ$ $FOICBUS = FOTCBUS$
FOICP	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Thousand barrels	$FOICPZZ = FOTCPZZ$ $FOICPUS = FOTCPUS$
FOTCB	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Billion Btu	$FOTCBZZ = FOTCPZZ * 5.825$ $FOTCBUS = \Sigma FOTCBZZ$
FOTCP	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Thousand barrels	$FOTCPZZ = (OCVAVZZ / OCVAVUS) * FOTCPUS$ FOTCPUS is independent.
FSICB	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Billion Btu	$FSICBZZ = FSTCBZZ$ $FSICBUS = FSTCBUS$
FSICP	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Thousand barrels	$FSICPZZ = FSTCPZZ$ $FSICPUS = FSTCPUS$
FSTCB	Petrochemical feedstocks, still gas, total consumed.	Billion Btu	$FSTCBZZ = FSTCPZZ * 6.000$ $FSTCBUS = \Sigma FSTCBZZ$
FSTCP	Petrochemical feedstocks, still gas, total consumed.	Thousand barrels	$FSTCPZZ = (COCAPZZ / COCAPUS) * FSTCPUS$ FSTCPUS is independent.
GECCB	Direct use of geothermal energy and heat pumps in the commerical sector.	Billion Btu	GECCBZZ is independent. $GECCBUS = \Sigma GECCBZZ$
GEEGB	Electricity produced from geothermal energy by the electric power sector.	Billion Btu	$GEEGBZZ = GEEGPZZ * GEETKUS$ $GEEGBUS = \Sigma GEEGBZZ$
GEEGP	Electricity produced from geothermal energy by the electric power sector.	Million kilowatthours	GEEGPZZ is independent. $GEEGPUS = \Sigma GEEGPZZ$
GEETKUS	Factor for converting electricity produced from geothermal energy from physical units to Btu.	Thousand Btu per kilowatthour	GEETKUS is independent.
GEICB	Direct use of geothermal energy and heat pumps in the industrial sector.	Billion Btu	GEICBZZ is independent. $GEICBUS = \Sigma GEICBZZ$
GERCB	Direct use of geothermal energy and heat pumps in the residential sector.	Billion Btu	GERCBZZ is independent. $GERCBUS = \Sigma GERCBZZ$

GETCB	Geothermal total energy consumed.	Billion Btu	$GETCBZZ = GERCBZZ + GECCBZZ + GEICBZZ + GEEGBZZ$ $GETCBUS = \Sigma GETCBZZ$
GOTCB	Electricity produced from geothermal, wind, photovoltaic, and solar thermal energy sources and net international trade of electricity.	Billion Btu	$GOTCBZZ = GETCBZZ + SOTCBZZ + WYTCBZZ + ELNIBZZ$ $GOTCBUS = \Sigma GOTCBZZ$
HVC5P	Electricity produced from conventional hydropower in the commercial sector.	Million kilowatthours	$HVC5PZZ$ is independent. $HVC5PUS = \Sigma HVC5PZZ$
HVEGP	Electricity produced from conventional hydropower by the electric power sector.	Million kilowatthours	$HVEGPZZ$ is independent. $HVEGPUS = \Sigma HVEGPZZ$
HVI5P	Electricity produced from conventional hydropower in the commercial sector.	Million kilowatthours	$HVI5PZZ$ is independent. $HVI5PUS = \Sigma HVI5PZZ$
HYCCB	Electricity produced from conventional hydropower in the commercial sector.	Billion Btu	$HYCCBZZ = HYCCPZZ * FFETKUS$ $HYCCBUS = \Sigma HYCCBZZ$
HYCCP	Electricity produced from conventional hydropower in the commercial sector.	Million kilowatthours	$HYCCPZZ = HVC5PZZ$ $HYCCPUS = \Sigma HYCCPZZ$
HYEGB	Electricity produced from all types of hydropower by the electric power sector.	Billion Btu	$HYEGBZZ = HVEGPZZ * FFETKUS$ $HYEGBUS = \Sigma HYEGBZZ$
HYEGP	Electricity produced from all types of hydropower by the electric power sector.	Million kilowatthours	$HYEGPZZ = HVEGPZZ$ $HYEGPUS = \Sigma HYEGPZZ$
HYICB	Electricity produced from conventional hydropower in the industrial sector.	Billion Btu	$HYICBZZ = HYICPZZ * FFETKUS$ $HYICBUS = \Sigma HYICBZZ$
HYICP	Electricity produced from conventional hydropower in the industrial sector.	Million kilowatthours	$HYICPZZ = HVI5PZZ$ $HYICPUS = \Sigma HYICPZZ$
HYTCB	Electricity produced from hydropower; total production.	Billion Btu	$HYTCBZZ = HYCCBZZ + HYEGBZZ + HYICBZZ$ $HYTCBUS = \Sigma HYTCBZZ$
HYTCP	Electricity produced from hydropower; total production.	Million kilowatthours	$HYTCPZZ = HYCCPZZ + HYEGPZZ + HYICPZZ$ $HYTCPUS = \Sigma HYTCPZZ$
JFACB	Jet fuel consumed by the transportation sector.	Billion Btu	$JFACBZZ = JKACBZZ + JNACBZZ$ $JFACBUS = \Sigma JFACBZZ$
JFACP	Jet fuel consumed by the transportation sector.	Thousand barrels	$JFACPZZ = JKACPZZ + JNACPZZ$ $JFACPUS = \Sigma JFACPZZ$

JFEUB	Jet fuel consumed by electric power sector.	Billion Btu	JFEUBZZ = JKEUBZZ JFEUBUS = JKEUBUS
JFEUP	Jet fuel consumed by electric power sector.	Thousand barrels	JFEUPZZ = JKEUPZZ JFEUPUS = JKEUPUS
JFTCB	Jet fuel total consumed.	Billion Btu	JFTCBZZ = JFACBZZ + JFEUBZZ JFTCBUS = Σ JFTCBZZ
JFTCP	Jet fuel total consumed.	Thousand barrels	JFTCPZZ = JFACPZZ + JFEUPZZ JFTCPUS = Σ JFTCPZZ
JKACB	Kerosene-type jet fuel consumed by the transportation sector.	Billion Btu	JKACBZZ = JKACPZZ * 5.670 JKACBUS = Σ JKACBZZ
JKACP	Kerosene-type jet fuel consumed by the transportation sector.	Thousand barrels	JKACPZZ = (JKTTPZZ / JKTTTPUS) * JKACPUS JKACPUS = JKTCPUS - JKEUPUS
JKEUB	Kerosene-type jet fuel consumed by electric power sector.	Billion Btu	JKEUBZZ = JKEUPZZ * 5.670 JKEUBUS = Σ JKEUBZZ
JKEUP	Kerosene-type jet fuel consumed by electric power sector.	Thousand barrels	JKEUPZZ is independent. JKEUPUS = Σ JKEUPZZ
JKTCB	Kerosene-type jet fuel total consumed.	Billion Btu	JKTCBZZ = JKTCPZZ * 5.670 JKTCBUS = Σ JKTCBZZ
JKTCP	Kerosene-type jet fuel total consumed.	Thousand barrels	JKTCPZZ = JKACPZZ + JKEUPZZ JKTCPUS is independent.
JKTTP	Kerosene-type jet fuel total sold.	Thousand gallons	JKTTPZZ is independent. JKTTTPUS = Σ JKTTPZZ
JNACB	Naphtha-type jet fuel consumed by the transportation sector.	Billion Btu	JNACBZZ = JNTCBZZ JNACBUS = JNTCBUS
JNACP	Naphtha-type jet fuel consumed by the transportation sector.	Thousand barrels	JNACPZZ = JNTCPZZ JNACPUS = JNTCPUS
JNMIP	Naphtha-type jet fuel issued to the military.	Thousand barrels	JNMIPZZ is independent. JNMIPUS = Σ JNMIPZZ
JNTCB	Naphtha-type jet fuel total consumed.	Billion Btu	JNTCBZZ = JNTCPZZ * 5.355 JNTCBUS = Σ JNTCBZZ

JNTCP	Naphtha-type jet fuel total consumed.	Thousand barrels	JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS JNTCPUS is independent.
KSCCB	Kerosene consumed by the commercial sector.	Billion Btu	KSCCBZZ = KSCCPZZ * 5.670 KSCCBUS = Σ KSCCBZZ
KSCCP	Kerosene consumed by the commercial sector.	Thousand barrels	KSCCPZZ = (KSCMPZZ / KSTTPZZ) * KSTCPZZ KSCCPUS = Σ KSCCPZZ
KSCMP	Kerosene sold to the commercial sector.	Thousand barrels	KSCMPZZ is independent. KSCMPUS = Σ KSCMPZZ
KSICB	Kerosene consumed by the industrial sector.	Billion Btu	KSICBZZ = KSICPZZ * 5.670 KSICBUS = Σ KSICBZZ
KSICP	Kerosene consumed by the industrial sector.	Thousand barrels	KSICPZZ = (KSINPZZ / KSTTPZZ) * KSTCPZZ KSICPUS = Σ KSICPZZ
KSIHP	Kerosene sold for industrial heating.	Thousand barrels	KSIHPZZ is independent. KSIHPUS = Σ KSIHPZZ
KSINP	Kerosene sold to the industrial sector.	Thousand barrels	KSINPZZ = KSOTPZZ + KSIHPZZ KSINPUS = Σ KSINPZZ
KSOTP	Kerosene sold for all other uses, including farm use.	Thousand barrels	KSOTPZZ is independent. KSOTPUS = Σ KSOTPZZ
KSRCB	Kerosene consumed by the residential sector.	Billion Btu	KSRCBZZ = KSRCPZZ * 5.670 KSRCBUS = Σ KSRCBZZ
KSRCP	Kerosene consumed by the residential sector.	Thousand barrels	KSRCPZZ = (KSRSPZZ / KSTTPZZ) * KSTCPZZ KSRCPUS = Σ KSRCPZZ
KSRSP	Kerosene sold to the residential sector.	Thousand barrels	KSRSPZZ is independent. KSRSPUS = Σ KSRSPZZ
KSTCB	Kerosene total consumed.	Billion Btu	KSTCBZZ = KSRCBZZ + KSICBZZ + KSCCBZZ KSTCBUS = Σ KSTCBZZ
KSTCP	Kerosene total consumed.	Thousand barrels	KSTCPZZ = (KSTTPZZ / KSTTPUS) * KSTCPUS KSTCPUS is independent.
KSTTP	Kerosene total sold.	Thousand barrels	KSTTPZZ = KSRSPZZ + KSCMPZZ + KSINPZZ KSTTPUS = Σ KSTTPZZ

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LGACB	LPG consumed by the transportation sector.	Billion Btu	LGACBZZ = LGACPZZ * LGTCKUS LGACBUS = ΣLGACBZZ
LGACP	LPG consumed by the transportation sector.	Thousand barrels	LGACPZZ = LGCBPZZ * LGTRSUS LGACPUS = ΣLGACPZZ
LGCBM	LPG sales for internal combustion engine use.	Thousand gallons	LGCBMZZ is independent. LGCBMUS = ΣLGCBMZZ
LGCBP	LPG consumed for internal combustion engine use.	Thousand barrels	LGCBPZZ = LGCBMZZ / 42 LGCBPUS = ΣLGCBPZZ
LGCCB	LPG consumed by the commercial sector.	Billion Btu	LGCCBZZ = LGCCPZZ * LGTCKUS LGCCBUS = ΣLGCCBZZ
LGCCP	LPG consumed by the commercial sector.	Thousand barrels	LGCCPZZ = LGHCPZZ * 0.15 LGCCPUS = ΣLGCCPZZ
LGHCM	LPG sold for residential and commercial use.	Thousand gallons	LGHCMZZ is independent. LGHCMUS = ΣLGHCMZZ
LGHCP	LPG consumed by the residential and commercial sectors.	Thousand barrels	LGHCPZZ = LGHCMZZ / 42 LGHCPUS = ΣLGHCPZZ
LGICB	LPG consumed by the industrial sector.	Billion Btu	LGICBZZ = LGICPZZ * LGTCKUS LGICBUS = ΣLGICBZZ
LGICP	LPG consumed by the industrial sector.	Thousand barrels	LGICPZZ = LGTCPZZ - (LGRCPZZ + LGCCPZZ + LGACPZZ) LGICPUS = ΣLGICPZZ
LGRCB	LPG consumed by the residential sector.	Billion Btu	LGRCBZZ = LGRCPZZ * LGTCKUS LGRCBUS = ΣLGRCBZZ
LGRCP	LPG consumed by the residential sector.	Thousand barrels	LGRCPZZ = LGHCPZZ * 0.85 LGRCPUS = ΣLGRCPZZ
LGTCB	LPG total consumed.	Billion Btu	LGTCBZZ = LGRCBZZ + LGCCBZZ + LGICBZZ + LGACBZZ LGTCBUS = ΣLGTCBZZ
LGTCKUS	Factor for converting LPG from physical units to Btu.	Million Btu per barrel	LGTCKUS is independent.
LGTCP	LPG total consumed.	Thousand barrels	LGTCPZZ = (LGTPPZZ / LGTPPUS) * LGTCPUS LGTCPUS is independent.

LGTRSUS	The transportation sector's share of LPG internal combustion engine sales.	Fraction	LGTRSUS is independent.
LGTTTP	LPG total sold.	Thousand gallons	LGTTTPZZ is independent. LGTTTPUS = Σ LGTTTPZZ
LOACB	The transportation sector's share of electrical system energy losses.	Billion Btu	LOACBZZ = ESACBZZ * ELLSS48 Exceptions: LOACBAK = (ESACBAK / ESTCBAK) * LOTCBAK LOACBHI = (ESACBHI / ESTCBHI) * LOTCBHI LOACBUS = Σ LOACBZZ
LOACP	The transportation sector's share of electrical system energy losses.	Million kilowatthours	LOACPZZ = LOACBZZ / 3.412 LOACPUS = LOACBUS / 3.412
LOCCB	The commercial sector's share of electrical system energy losses.	Billion Btu	LOCCBZZ = ESCCBZZ * ELLSS48 Exceptions: LOCCBAK = (ESCCBAK / ESTCBAK) * LOTCBAK LOCCBHI = (ESCCBHI / ESTCBHI) * LOTCBHI LOCCBUS = Σ LOCCBZZ
LOCCP	The commercial sector's share of electrical system energy losses.	Million kilowatthours	LOCCPZZ = LOCCBZZ / 3.412 LOCCPUS = LOCCBUS / 3.412
LOICB	The industrial sector's share of electrical system energy losses.	Billion Btu	LOICBZZ = ESICBZZ * ELLSS48 Exceptions: LOICBAK = (ESICBAK / ESTCBAK) * LOTCBAK LOICBHI = (ESICBHI / ESTCBHI) * LOTCBHI LOICBUS = Σ LOICBZZ
LOICP	The industrial sector's share of electrical system energy losses.	Million kilowatthours	LOICPZZ = LOICBZZ / 3.412 LOICPUS = LOICBUS / 3.412
LORCB	The residential sector's share of electrical system energy losses.	Billion Btu	LORCBZZ = ESRCBZZ * ELLSS48 Exceptions: LORCBAK = (ESRCBAK / ESTCBAK) * LOTCBAK LORCBHI = (ESRCBHI / ESTCBHI) * LOTCBHI LORCBUS = Σ LORCBZZ
LORCP	The residential sector's share of electrical system energy losses.	Million kilowatthours	LORCPZZ = LORCBZZ / 3.412 LORCPUS = LORCBUS / 3.412
LOTCB	Total electrical system energy losses.	Billion Btu	LOTBZZ = ESTCBZZ * ELLSS48 Exceptions: LOTBAK = TEEIBAK - ESTCBAK LOTBHI = TEEIBHI - ESTCBHI

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LOTCP	Total electrical system energy losses.	Million kilowatthours	$LOTCBUS = TEEIBUS - ESTCBUS$ $LOTCB48 = LOTCBUS - (LOTGBAK + LOTGBHI)$
LUACB	Lubricants consumed by the transportation sector.	Billion Btu	$LOTCPZZ = LOTCBZZ / 3.412$ $LOTCPUS = LOTCBUS / 3.412$
LUACP	Lubricants consumed by the transportation sector.	Thousand barrels	$LUACBZZ = LUACPZZ * 6.065$ $LUACBUS = \Sigma LUACBZZ$
LUICB	Lubricants consumed by the industrial sector.	Billion Btu	$LUACPZZ = (LUTRPZZ / LUTTPZZ) * LUTCPZZ$ $LUACPUS = \Sigma LUACPZZ$
LUICP	Lubricants consumed by the industrial sector.	Thousand barrels	$LUICBZZ = LUICPZZ * 6.065$ $LUICBUS = \Sigma LUICBZZ$
LUINP	Lubricants sold to the industrial sector.	Thousand barrels	$LUICPZZ = (LUINPZZ / LUTTPZZ) * LUTCPZZ$ $LUICPUS = \Sigma LUICPZZ$
LUTCB	Lubricants total consumed.	Billion Btu	$LUINPZZ$ is independent. $LUINPUS = \Sigma LUINPZZ$
LUTCP	Lubricants total consumed.	Thousand barrels	$LUTCBZZ = LUICBZZ + LUACBZZ$ $LUTCBUS = \Sigma LUTCBZZ$
LUTRP	Lubricants sold to the transportation sector.	Thousand barrels	$LUTCPZZ = (LUTTPZZ / LUTTPUS) * LUTCPUS$ $LUTCPUS$ is independent.
LUTTP	Lubricants total sold.	Thousand barrels	$LUTRPZZ$ is independent. $LUTRPUS = \Sigma LUTRPZZ$
MBICB	Motor gasoline blending components consumed by the industrial sector.	Billion Btu	$LUTTPZZ = LUINPZZ + LUTRPZZ$ $LUTTPUS = \Sigma LUTTPZZ$
MBICP	Motor gasoline blending components consumed by the industrial sector.	Thousand barrels	$MBICBZZ = MBTCBZZ$ $MBICBUS = MBTCBUS$
MBTCB	Motor gasoline blending components total consumed.	Billion Btu	$MBICPZZ = MBTCPZZ$ $MBICPUS = MBTCPUS$
MBTCP	Motor gasoline blending components total consumed.	Thousand barrels	$MBTCBZZ = MBTCPZZ * 5.253$ $MBTCBUS = \Sigma MBTCBZZ$
			$MBTCPZZ = (COCAPZZ / COCAPUS) * MBTCPUS$ $MBTCPUS$ is independent.

MGACB	Motor gasoline consumed by the transportation sector.	Billion Btu	MGACBZZ = MGACPZZ * MGTCKUS MGACBUS = ΣMGACBZZ
MGACP	Motor gasoline consumed by the transportation sector.	Thousand barrels	MGACPZZ = (MGTRPZZ / MGTTPZZ) * MGTCPPZZ MGACPUS = ΣMGACPZZ
MGAGP	Motor gasoline sold for agricultural use.	Thousand gallons	MGAGPZZ is independent. MGAGPUS = ΣMGAGPZZ
MGCCB	Motor gasoline consumed by the commercial sector.	Billion Btu	MGCCBZZ = MGCCPZZ * MGTCKUS MGCCBUS = ΣMGCCBZZ
MGCCP	Motor gasoline consumed by the commercial sector.	Thousand barrels	MGCCPZZ = (MGCMPZZ / MGTTPZZ) * MGTCPPZZ MGCCPUS = ΣMGCCPZZ
MGCMP	Motor gasoline sold to the commercial sector.	Thousand gallons	MGCMPZZ = MGMSPZZ + MGPNPZZ MGCMPUS = ΣMGCMPZZ
MGCUP	Motor gasoline sold for construction use.	Thousand gallons	MGCUPZZ is independent. MGCUPUS = ΣMGCUPZZ
MGICB	Motor gasoline consumed by the industrial sector.	Billion Btu	MGICBZZ = MGICPZZ * MGTCKUS MGICBUS = ΣMGICBZZ
MGICP	Motor gasoline consumed by the industrial sector.	Thousand barrels	MGICPZZ = (MGINPZZ / MGTTPZZ) * MGTCPPZZ MGICPUS = ΣMGICPZZ
MGINP	Motor gasoline sold to the industrial sector.	Thousand gallons	MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ MGINPUS = ΣMGINPZZ
MGIYP	Motor gasoline sold for industrial and commercial use (Federal Highway Administration terminology).	Thousand gallons	MGIYPZZ is independent MGIYPUS = ΣMGIYPZZ
MGMFP	Motor gasoline sold for highway use.	Thousand gallons	MGMFPZZ is independent. MGMFPUS = ΣMGMFPZZ
MGMRP	Motor gasoline sold for marine use.	Thousand gallons	MGMRPZZ is independent. MGMRPUS = ΣMGMRPZZ
MGMSP	Motor gasoline sold for miscellaneous and unclassified uses.	Thousand gallons	MGMSPZZ is independent. MGMSPUS = ΣMGMSPZZ
MGPNP	Motor gasoline sold for public nonhighway use.	Thousand gallons	MGPNPZZ is independent. MGPNPUS = ΣMGPNPZZ

MGSFP	Motor gasoline special fuels sold (primarily diesel fuel with small amounts of liquefied petroleum gases).	Thousand gallons	MGSFPZZ is independent. MGSFPUS = Σ MGSFPZZ
MGTCB	Motor gasoline total consumed.	Billion Btu	MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ MGTCBUS = Σ MGTCBZZ
MGTCP	Motor gasoline total consumed.	Thousand barrels	MGTCPZZ = (MGTTPZZ / MGTTPUS) * MGTCPUS MGTCPUS is independent.
MGCKUS	Factor for converting motor gasoline from physical units to Btu.	Million Btu per barrel	MGCKUS is independent.
MGTRP	Motor gasoline sold to the transportation sector.	Thousand gallons	MGTRPZZ = MGMFPZZ + MGMRPZZ – MGSFPZZ MGTRPUS = Σ MGTRPZZ
MGTTP	Motor gasoline total sold.	Thousand gallons	MGTTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ MGTTPUS = Σ MGTTPZZ
MSICB	Miscellaneous petroleum products consumed by the industrial sector.	Billion Btu	MSICBZZ = MSTCBZZ MSICBUS = MSTCBUS
MSICP	Miscellaneous petroleum products consumed by the industrial sector.	Thousand barrels	MSICPZZ = MSTCPZZ MSICPUS = MSTCPUS
MSTCB	Miscellaneous petroleum products total consumed.	Billion Btu	MSTCBZZ = MSTCPZZ * 5.796 MSTCBUS = Σ MSTCBZZ
MSTCP	Miscellaneous petroleum products total consumed.	Thousand barrels	MSTCPZZ = (OCVAVZZ / OCVAVUS) * MSTCPUS MSTCPUS is independent.
NAICB	Natural gasoline consumed by the industrial sector.	Billion Btu	NAICBZZ = NATCBZZ NAICBUS = NATCBUS
NAICP	Natural gasoline consumed by the industrial sector.	Thousand barrels	NAICPZZ = NATCPZZ NAICPUS = NATCPUS
NATCB	Natural gasoline total consumed.	Billion Btu	NATCBZZ = NATCPZZ * 4.620 NATCBUS = Σ NATCBZZ
NATCP	Natural gasoline total consumed.	Thousand barrels	NATCPZZ = (OCVAVZZ / OCVAVUS) * NATCPUS NATCPUS is independent.
NGACB	Natural gas consumed by the transportation sector.	Billion Btu	NGACBZZ = NGACPZZ * NGTXKZZ NGACBUS = Σ NGACBZZ

NGACP	Natural gas consumed by the transportation sector.	Million cubic feet	NGACPZZ = NGPZPZZ + NGVHPZZ NGACPUS = Σ NGACPZZ
NGCCB	Natural gas delivered to the commercial sector, used as consumption.	Billion Btu	NGCCBZZ = NGCCPZZ * NGTXKZZ NGCCBUS = Σ NGCCBZZ
NGCCP	Natural gas delivered to the commercial sector, used as consumption.	Million cubic feet	NGCCPZZ is independent. NGCCPUS = Σ NGCCPZZ
NGEIB	Natural gas consumed by the electric power sector.	Billion Btu	NGEIBZZ = NGEIPZZ * NGEIKZZ NGEIBUS = Σ NGEIBZZ
NGEIK	Factor for converting natural gas consumed by the electric power sector from physical units to Btu.	Thousand Btu per cubic foot	NGEIKZZ is independent. NGEIKUS = NGEIBUS / NGEIPUS
NGEIP	Natural gas consumed by the electric power sector.	Million cubic feet	NGEIPZZ is independent. NGEIPUS = Σ NGEIPZZ
NGICB	Natural gas consumed by the industrial sector.	Billion Btu	NGICBZZ = NGICPZZ * NGTXKZZ NGICBUS = Σ NGICBZZ
NGICP	Natural gas consumed by the industrial sector.	Million cubic feet	NGICPZZ = NGINPZZ + NGLEPZZ + NGPLPZZ NGICPUS = Σ NGICPZZ
NGINP	A portion of the natural gas delivered to the industrial sector.	Million cubic feet	NGINPZZ is independent. NGINPUS = Σ NGINPZZ
NGLEP	Natural gas consumed as lease fuel.	Million cubic feet	NGLEPZZ is independent. NGLEPUS = Σ NGLEPZZ
NGLPB	Natural gas consumed as lease and plant fuel.	Billion Btu	NGLPBZZ = NGLPPZZ * NGTXKZZ NGLPBUS = Σ NGLPBZZ
NGLPP	Natural gas consumed as lease and plant fuel.	Million cubic feet	NGLPPZZ = NGLEPZZ + NGPLPZZ NGLPPUS = Σ NGLPPZZ
NGPLP	Natural gas consumed as plant fuel.	Million cubic feet	NGPLPZZ is independent. NGPLPUS = Σ NGPLPZZ
NGPZB	Natural gas consumed as pipeline fuel.	Billion Btu	NGPZBZZ = NGPZPZZ * NGTXKZZ NGPZBUS = Σ NGPZBZZ
NGPZP	Natural gas consumed as pipeline fuel.	Million cubic feet	NGPZPZZ is independent. NGPZPUS = Σ NGPZPZZ

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NGRCB	Natural gas delivered to the residential sector, used as consumption.	Billion Btu	NGRCBZZ = NGRCPZZ * NGTXKZZ NGRCBUS = ΣNGRCBZZ
NGRCP	Natural gas delivered to the residential sector, used as consumption.	Million cubic feet	NGRCPZZ is independent. NGRCPUS = ΣNGRCPZZ
NGTCB	Natural gas total consumed.	Billion Btu	NGTCBZZ = NGTCPZZ * NGTCKZZ NGTCBUS = ΣNGTCBZZ
NGTCK	Factor for converting natural gas total consumed from physical units to Btu.	Thousand Btu per cubic foot	NGTCKZZ is independent. NGTCKUS = NGTCBUS / NGTCPUS
NGTCP	Natural gas total consumed.	Million cubic feet	NGTCPZZ = NGRCPZZ + NGCCPZZ + NGICPZZ + NGACPZZ + NGEIPZZ NGTCPUS = ΣNGTCPZZ
NGTXK	Factor for converting natural gas consumed by all sectors other than the electric utility sector from physical units to Btu.	Thousand Btu per cubic foot	NGTXKZZ = (NGTCBZZ - NGEIBZZ) / (NGTCPZZ - NGEIPZZ) NGTXKUS = (NGTCBUS - NGEIBUS) / (NGTCPUS - NGEIPUS)
NGVHB	Natural gas consumed as vehicle fuel.	Billion Btu	NGVHBZZ = NGVHPZZ * NGTXKZZ NGVHBUS = ΣNGVHBZZ
NGVHP	Natural gas consumed as vehicle fuel.	Million cubic feet	NGVHPZZ is independent. NGVHPUS = ΣNGVHPZZ
NUEGB	Electricity produced from nuclear power at electric power sector.	Billion Btu	NUEGBZZ = NUEGPZZ * NUETKUS NUEGBUS = ΣNUEGBZZ
NUEGP	Electricity produced from nuclear power at electric power sector.	Million kilowatthours	NUEGPZZ is independent. NUEGPUS = ΣNUEGPZZ
NUETB	Electricity total produced from nuclear power.	Billion Btu	NUETBZZ = NUEGBZZ NUETBUS = ΣNUETBZZ
NUETKUS	Factor for converting electricity produced from nuclear power from physical units to Btu.	Thousand Btu per kilowatthour	NUETKUS is independent.
NUETP	Electricity total produced from nuclear power.	Million kilowatthours	NUETPZZ = NUEGPZZ NUETPUS = ΣNUETPZZ
OCVAV	Value added in manufacture of industrial organic chemicals.	Million dollars	OCVAVZZ is independent. OCVAVUS = ΣOCVAVZZ

PAACB	All petroleum products consumed by the transportation sector.	Billion Btu	$\begin{aligned} \text{PAACBZZ} &= \text{AVACBZZ} + \text{DFACBZZ} + \\ &\quad \text{JKACBZZ} + \text{JNACBZZ} + \text{LGACBZZ} + \\ &\quad \text{LUACBZZ} + \text{MGACBZZ} + \text{RFACBZZ} \\ \text{PAACBUS} &= \Sigma \text{PAACBZZ} \end{aligned}$
PAACKUS	Factor for converting all petroleum products consumed by the transportation sector from physical units to Btu.	Million Btu per barrel	$\text{PAACKUS} = \text{PAACBUS} / \text{PAACPUS}$
PAACP	All petroleum products consumed by the transportation sector.	Thousand barrels	$\begin{aligned} \text{PAACPZZ} &= \text{AVACPZZ} + \text{DFACPZZ} + \\ &\quad \text{JKACPZZ} + \text{JNACPZZ} + \text{LGACPZZ} + \\ &\quad \text{LUACPZZ} + \text{MGACPZZ} + \text{RFACPZZ} \\ \text{PAACPUS} &= \Sigma \text{PAACPZZ} \end{aligned}$
PACCB	All petroleum products consumed by the commercial sector.	Billion Btu	$\begin{aligned} \text{PACCBZZ} &= \text{DFCCBZZ} + \text{KSCCBZZ} + \text{LGCCBZZ} + \\ &\quad \text{MGCCBZZ} + \text{PCCCBZZ} + \text{RFCCBZZ} \\ \text{PACCBUS} &= \Sigma \text{PACCBZZ} \end{aligned}$
PACCKUS	Factor for converting all petroleum products consumed by the commercial sector from physical units to Btu.	Million Btu per barrel	$\text{PACCKUS} = \text{PACCBUS} / \text{PACCPUS}$
PACCP	All petroleum products consumed by the commercial sector.	Thousand barrels	$\begin{aligned} \text{PACCPZZ} &= \text{DFCCPZZ} + \text{KSCCPZZ} + \text{LGCCPZZ} + \\ &\quad \text{MGCCPZZ} + \text{PCCCPZZ} + \text{RFCCPZZ} \\ \text{PACCPUS} &= \Sigma \text{PACCPZZ} \end{aligned}$
PAEIB	All petroleum products consumed by the electric power sector.	Billion Btu	$\begin{aligned} \text{PAEIBZZ} &= \text{DFEIBZZ} + \text{JKEUBZZ} + \\ &\quad \text{PCEIBZZ} + \text{RFEIBZZ} \\ \text{PAEIBUS} &= \Sigma \text{PAEIBZZ} \end{aligned}$
PAEIKUS	Factor for converting all petroleum products consumed by the electric power sector from physical units to Btu.	Million Btu per barrel	$\text{PAEIKUS} = \text{PAEIBUS} / \text{PAEIPUS}$
PAEIP	All petroleum products consumed by the electric power sector.	Thousand barrels	$\begin{aligned} \text{PAEIPZZ} &= \text{DFEIPZZ} + \text{JKEUPZZ} + \\ &\quad \text{PCEIPZZ} + \text{RFEIPZZ} \\ \text{PAEIPUS} &= \Sigma \text{PAEIPZZ} \end{aligned}$
PAHCBUS	All petroleum products consumed by the residential and commercial sectors combined.	Billion Btu	$\text{PAHCBUS} = \text{PARCBUS} + \text{PACCBUS}$
PAHCKUS	Factor for converting all petroleum products consumed by the residential and commercial sectors combined from physical units to Btu.	Million Btu per barrel	$\text{PAHCKUS} = \text{PAHCBUS} / \text{PAHCPUS}$

PAHCPUS	All petroleum products consumed by the residential and commercial sectors combined.	Thousand barrels	$PAHCPUS = PARCPUS + PACCPUS$
PAICB	All petroleum products consumed by the industrial sector.	Billion Btu	$PAICBZZ = ARICBZZ + DFICBZZ + KSICBZZ + LGICBZZ + LUICBZZ + MGICBZZ + RFICBZZ + POICBZZ$ $PAICBUS = \Sigma PAICBZZ$
PAICKUS	Factor for converting all petroleum products consumed by the industrial sector from physical units to Btu.	Million Btu per barrel	$PAICKUS = PAICBUS / PAICPUS$
PAICP	All petroleum products consumed by the industrial sector.	Thousand barrels	$PAICPZZ = ARICPZZ + DFICPZZ + KSICPZZ + LGICPZZ + LUICPZZ + MGICPZZ + RFICPZZ + POICPZZ$ $PAICPUS = \Sigma PAICPZZ$
PARCB	All petroleum products consumed by the residential sector.	Billion Btu	$PARCBZZ = DFRCBZZ + KSRCBZZ + LGRCBZZ$ $PARCBUS = \Sigma PARCBZZ$
PARCKUS	Factor for converting all petroleum products consumed by the residential sector from physical units to Btu.	Million Btu per barrel	$PARCKUS = PARCBUS / PARCPUS$
PARCP	All petroleum products consumed by the residential sector.	Thousand barrels	$PARCPZZ = DFRCPZZ + KSRCPZZ + LGRCPZZ$ $PARCPUS = \Sigma PARCPZZ$
PATCB	All petroleum products consumed by all sectors.	Billion Btu	$PATCBZZ = ARTCBZZ + AVTCBZZ + DFTCBZZ + JKTCBZZ + JNTCBZZ + KSTCBZZ + LGTCBZZ + LUTCBZZ + MGTCBZZ + RFTCBZZ + POTCBZZ$ $PATCBUS = \Sigma PATCBZZ$
PATCKUS	Factor for converting all petroleum products consumed by all sectors from physical units to Btu.	Million Btu per barrel	$PATCKUS = PATCBUS / PATCPUS$
PATCP	All petroleum products consumed by all sectors.	Thousand barrels	$PATCPZZ = ARTCPZZ + AVTCPZZ + DFTCPZZ + JKTCPZZ + JNTCPZZ + KSTCPZZ + LGTCPZZ + LUTCPZZ + MGTCPZZ + RFTCPZZ + POTCPZZ$ $PATCPUS = \Sigma PATCPZZ$
PCC3M	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand tons	PCC3MZZ is independent. $PCC3MUS = \Sigma PCC3MZZ$

PCCCB	Petroleum coke consumed for combined heat and power in the commercial sector.	Billion Btu	$PCCCBZZ = PCCCPZZ * 6.024$ $PCCCBUS = \Sigma PCCCBZZ$
PCCCP	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand barrels	$PCCCPZZ = PCC3MZZ * 5$ $PCCCPUS = \Sigma PCCCPZZ$
PCEIB	Petroleum coke consumed by the electric power sector.	Billion Btu	$PCEIBZZ = PCEIPZZ * 6.024$ $PCEIBUS = \Sigma PCEIBZZ$
PCEIM	Petroleum coke consumed by the electric power sector.	Thousand tons	PCEIMZZ is independent. $PCEIMUS = \Sigma PCEIMZZ$
PCEIP	Petroleum coke consumed by the electric power sector.	Thousand barrels	$PCEIPZZ = PCEIMZZ * 5$ $PCEIPUS = \Sigma PCEIPZZ$
PCI3B	Petroleum coke consumed for combined heat and power in the industrial sector.	Billion Btu	$PCI3BZZ = PCI3PZZ * 6.024$ $PCI3BUS = \Sigma PCI3BZZ$
PCI3M	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand tons	PCI3MZZ is independent. $PCI3MUS = \Sigma PCI3MZZ$
PCI3P	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand barrels	$PCI3PZZ = PCI3MZZ * 5$ $PCI3PUS = \Sigma PCI3PZZ$
PCICB	Petroleum coke consumed by the industrial sector.	Billion Btu	$PCICBZZ = PCICPZZ * 6.024$ $PCICBUS = \Sigma PCICBZZ$
PCICP	Petroleum coke consumed by the industrial sector.	Thousand barrels	$PCICPZZ = PCI3PZZ + PCRFPZZ + PCOCPZZ$ $PCICPUS = PCTCPUS - PCEIPUS - PCCCPUS$
PCOCB	Industrial use of petroleum coke other than that used for catalytic cracking.	Billion Btu	$PCOCBZZ = PCOCPZZ * 6.024$ $PCOCBUS = \Sigma PCOCBZZ$
PCOCP	Industrial use of petroleum coke other than that used for catalytic cracking.	Thousand barrels	$PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS$ $PCOCPUS = PCICPUS - PCI3PUS - PCRFPUS$
PCRFB	Petroleum coke used at refineries as both catalytic and marketable coke.	Billion Btu	$PCRFBZZ = PCRFPZZ * 6.024$ $PCRFBUS = \Sigma PCRFBZZ$
PCRFP	Petroleum coke used at refineries as both catalytic and marketable coke.	Thousand barrels	$PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPZGZ$ or $(CTCAPZZ / CTCAPPZ) * PCRFPZPZ$ or is independent. PCRFPUS is independent.
PCTCB	Petroleum coke total consumed.	Billion Btu	$PCTCBZZ = PCCCBZZ + PCICBZZ + PCEIBZZ$ $PCTCBUS = \Sigma PCTCBZZ$

PCTCP	Petroleum coke total consumed.	Thousand barrels	PCTCPZZ = PCCCPZZ + PCICPZZ + PCEIPZZ PCTCPUS is independent.
PIVAV	Value added in the manufacture of paints and allied products.	Million dollars	PIVAVZZ is independent. PIVAVUS = Σ PIVAVZZ
PLICB	Plant condensate consumed by the industrial sector.	Billion Btu	PLICBZZ = PLTCBZZ PLICBUS = PLTCBUS
PLICP	Plant condensate consumed by the industrial sector.	Thousand barrels	PLICPZZ = PLTCPZZ PLICPUS = PLTCPUS
PLTCB	Plant condensate total consumed.	Billion Btu	PLTCBZZ = PLTCPZZ * 5.418 PLTCBUS = Σ PLTCBZZ
PLTCP	Plant condensate total consumed.	Thousand barrels	PLTCPZZ = (OCVAVZZ / OCVAVUS) * PLTCPUS PLTCPUS is independent.
POICB	Other petroleum products consumed by the industrial sector.	Billion Btu	POICBZZ = ABICBZZ + COICBZZ + FNICBZZ + FOICBZZ + FSICBZZ + MBICBZZ + MSICBZZ + NAICBZZ + PCICBZZ + PLICBZZ + PPICBZZ + SGICBZZ + SNICBZZ + UOICBZZ + USICBZZ + WXICBZZ POICBUS = Σ POICBZZ
POICP	Other petroleum products consumed by the industrial sector.	Thousand barrels	POICPZZ = ABICPZZ + COICPZZ + FNICPZZ + FOICPZZ + FSICPZZ + MBICPZZ + MSICPZZ + NAICPZZ + PCICPZZ + PLICPZZ + PPICPZZ + SGICPZZ + SNICPZZ + UOICPZZ + USICPZZ + WXICPZZ POICPUS = Σ POICPZZ
POTCB	Other petroleum products total consumed.	Billion Btu	POTCBZZ = ABTCBZZ + COTCBZZ + FNTCBZZ + FOTCBZZ + FSTCBZZ + MBTCBZZ + MSTCBZZ + NATCBZZ + PCTCBZZ + PLTCBZZ + PPTCBZZ + SGTCBZZ + SNTCBZZ + UOTCBZZ + USTCBZZ + WXTCBZZ POTCBUS = Σ POTCBZZ
POTCP	Other petroleum products total consumed.	Thousand barrels	POTCPZZ = ABTCPZZ + COTCPZZ + FNTCPZZ + FOTCPZZ + FSTCPZZ + MBTCPZZ + MSTCPZZ + NATCPZZ + PCTCPZZ + PLTCPZZ + PPTCPZZ +

$$\begin{aligned} & \text{SGTCPZZ} + \text{SNTCPZZ} + \text{UOTCPZZ} + \\ & \text{USTCPZZ} + \text{WXTCPZZ} \\ \text{POTCPUS} &= \Sigma \text{POTCPZZ} \end{aligned}$$

PPICB	Pentanes plus consumed by the industrial sector.	Billion Btu	PPICBZZ = PPTCBZZ PPICBUS = PPTCBUS
PPICP	Pentanes plus consumed by the industrial sector.	Thousand barrels	PPICPZZ = PPTCPZZ PPICPUS = PPTCPUS
PPTCB	Pentanes plus total consumed.	Billion Btu	PPTCBZZ = PPTCPZZ * 4.620 PPTCBUS = Σ PPTCBZZ
PPTCP	Pentanes plus total consumed.	Thousand barrels	PPTCPZZ = (OCVAVZZ / OCVAVUS) * PPTCPUS PPTCPUS is independent.
RDICP	Road oil consumed by the industrial sector.	Thousand barrels	RDICPZZ = (RDINPZZ / RDINPUS) * RDTCPUS RDICPUS = Σ RDICPZZ
RDINP	Road oil sold to the industrial sector.	Short tons	RDINPZZ is independent. RDINPUS = Σ RDINPZZ
RDTCP	Road oil total consumed.	Thousand barrels	RDTCPZZ = RDICPZZ RDTCPUS is independent.
REACB	Renewable energy sources consumed by the transportation sector.	Billion Btu	REACBZZ = ENACBZZ REACBUS = ENACBUS
RECCB	Renewable energy sources consumed by the commercial sector.	Billion Btu	RECCBZZ = GECCBZZ + HYCCBZZ + WWCCBZZ RECCBUS = GECCBUS + HYCCBUS + WWCCBUS
REEIB	Renewable energy sources consumed by the electric power sector.	Billion Btu	REEIBZZ = HVEGBZZ + GEEGBZZ + SOEGBZZ + WWEIBZZ + WYEGBZZ REEIBUS = HVENGBUS + GEEGBUS + SOEGBUS + WWEIBUS + WNEGBUS
REICB	Renewable energy sources consumed by the industrial sector.	Billion Btu	REICBZZ = GEICBZZ + HVICBZZ + WWICBZZ REICBUS = GEICBUS + HVICBUS + WWICBUS
RERCB	Renewable energy sources consumed by the residential sector.	Billion Btu	RERCBZZ = WDRCBZZ + GERCBZZ + SOHCBZZ RERCBUS = WDRCBUS + GERCBUS + SOHCBUS
RETCB	Renewable energy sources total consumed.	Billion Btu	RETCBZZ = RERCBZZ + RECCBZZ + REICBZZ + REACBZZ + REEIBZZ RETCBUS = RERCBUS + RECCBUS + REICBUS + REACBUS + REEIBUS

RFACB	Residual fuel consumed by the transportation sector.	Billion Btu	$RFACBZZ = RFACPZZ * 6.287$ $RFACBUS = \Sigma RFACBZZ$
RFACP	Residual fuel consumed by the transportation sector.	Thousand barrels	$RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ$ $RFACPUS = \Sigma RFACPZZ$
RFBKP	Residual fuel sold for vessel bunkering use, excluding deliveries to the Armed Forces.	Thousand barrels	RFBKPZZ is independent. $RFBKPUS = \Sigma RFBKPZZ$
RFCCB	Residual fuel consumed by the commercial sector.	Billion Btu	$RFCCBZZ = RFCCPZZ * 6.287$ $RFCCBUS = \Sigma RFCCBZZ$
RFCCP	Residual fuel consumed by the commercial sector.	Thousand barrels	$RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ$ $RFCCPUS = \Sigma RFCCPZZ$
RFCMP	Residual fuel sold to the commercial sector.	Thousand barrels	RFCMPZZ is independent. $RFCMPUS = \Sigma RFCMPZZ$
RFEIB	Residual fuel consumed by the electric power sector.	Billion Btu	$RFEIBZZ = RFEIPZZ * 6.287$ $RFEIBUS = \Sigma RFEIBZZ$
RFEIP	Residual fuel consumed by the electric power sector.	Thousand barrels	RFEIPZZ is independent. $RFEIPUS = \Sigma RFEIPZZ$
RFIBP	A portion of residual fuel sold for industrial use, including industrial space heating.	Thousand barrels	RFIBPZZ is independent. $RFIBPUS = \Sigma RFIBPZZ$
RFICB	Residual fuel consumed by the industrial sector.	Billion Btu	$RFICBZZ = RFICPZZ * 6.287$ $RFICBUS = \Sigma RFICBZZ$
RFICP	Residual fuel consumed by the industrial sector.	Thousand barrels	$RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ$ $RFICPUS = \Sigma RFICPZZ$
RFINP	Residual fuel sold to the industrial sector.	Thousand barrels	$RFINPZZ = RFIBPZZ + RFOCPZZ + RFMSPZZ$ $RFINPUS = \Sigma RFINPZZ$
RFMIP	Residual fuel sold to the Armed Forces, regardless of use.	Thousand barrels	RFMIPZZ is independent. $RFMIPUS = \Sigma RFMIPZZ$
RFMSP	Residual fuel sold for miscellaneous uses.	Thousand barrels	RFMSPZZ is independent. $RFMSPUS = \Sigma RFMSPZZ$
RFNCP	Residual fuel consumption by all sectors other than the electric utility sector.	Thousand barrels	$RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS$ $RFNCPUS = RFTCPUS - RFEIPUS$

RFNDP	Residual fuel sold to all sectors other than the electric utility sector.	Thousand barrels	RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ RFNDPUS = Σ RFNDPZZ
RFOCP	Residual fuel sold for use by oil companies.	Thousand barrels	RFOCPZZ is independent. RFOCPUS = Σ RFOCPZZ
RFRRP	Residual fuel sold for use by railroads.	Thousand barrels	RFRRPZZ is independent. RFRRPUS = Σ RFRRPZZ
RFTCB	Residual fuel total consumed.	Billion Btu	RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEIBZZ RFTCBUS = Σ RFTCBZZ
RFTCP	Residual fuel total consumed.	Thousand barrels	RFTCPZZ = RFNCPZZ + RFEIPZZ RFTCPUS is independent.
RFTRP	Residual fuel sold to the transportation sector.	Thousand barrels	RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ RFTRPUS = Σ RFTRPZZ
SGICB	Still gas consumed by the industrial sector.	Billion Btu	SGICBZZ = SGTCBZZ SGICBUS = SGTCBUS
SGICP	Still gas consumed by the industrial sector.	Thousand barrels	SGICPZZ = SGTCPZZ SGICPUS = SGTCPUS
SGTCB	Still gas total consumed.	Billion Btu	SGTCBZZ = SGTCPZZ * 6.000 SGTCBUS = Σ SGTCBZZ
SGTCP	Still gas total consumed.	Thousand barrels	SGTCPZZ = (COCAPZZ / COCAPUS) * SGTCPUS SGTCPUS is independent.
SNICB	Special naphthas consumed by the industrial sector.	Billion Btu	SNICBZZ = SNTCBZZ SNICBUS = SNTCBUS
SNICP	Special naphthas consumed by the industrial sector.	Thousand barrels	SNICPZZ = SNTCPZZ SNICPUS = SNTCPUS
SNTCB	Special naphthas total consumed.	Billion Btu	SNTCBZZ = SNTCPZZ * 5.248 SNTCBUS = Σ SNTCBZZ
SNTCP	Special naphthas total consumed.	Thousand barrels	SNTCPZZ = (PIVAVZZ / PIVAVUS) * SNTCPUS SNTCPUS is independent.
SOEGB	Electricity produced from photovoltaic and solar thermal energy by electric power sector.	Billion Btu	SOEGBZZ = SOEGPZZ * FFETKUS SOEGBUS = Σ SOEGBZZ

SOEGP	Electricity produced from photovoltaic and solar thermal energy by electric power sector.	Million kilowatthours	SOEGPZZ is independent. SOEGPUS = Σ SOEGPZZ
SOHCB	Solar thermal energy consumed by the residential and commercial sectors.	Billion Btu	SOHCBZZ = (SOTTPZZ / SOTTPUS) * SOHCBUS SOHCBUS is independent.
SOTCB	Photovoltaic and solar thermal energy sources total consumed.	Billion Btu	SOTCBZZ = SOHCBZZ + SOEGBZZ SOTCBUS = Σ SOTCBZZ
SOTTP	Shipments of solar thermal collectors.	Square feet	SOTTPZZ is independent. SOTTPUS = Σ SOTTPZZ
TEACB	Total energy consumed by the transportation sector.	Billion Btu	TEACBZZ = CLACBZZ + NGACBZZ + PAACBZZ + ESACBZZ + LOACBZZ TEACBUS = CLACBUS + NGACBUS + PAACBUS + ESACBUS + LOACBUS
TEAPB	The transportation sector's energy consumption per capita.	Million Btu	TEAPBZZ = TEACBZZ / TPOPPZZ TEAPBUS = TEACBUS / TPOPPUS
TECCB	Total energy consumed by the commercial sector.	Billion Btu	TECCBZZ = CLCCBZZ + NGCCBZZ + PACCBZZ + HYCCBZZ + WWCCBZZ + GECCBZZ + ESCCBZZ + LOCCBZZ TECCBUS = CLCCBUS + NGCCBUS + PACCBUS + HYCCBUS + WWCCBUS + GECCBUS + ESCCBUS + LOCCBUS
TECPB	The commercial sector's energy consumption per capita.	Million Btu	TECPBZZ = TECCBZZ / TPOPPZZ TECPBUS = TECCBUS / TPOPPUS
TEEIB	Total energy consumed by the electric power sector plus net imports of electricity into the United States.	Billion Btu	TEEIBZZ = CLEIBZZ + NGEIBZZ + PAEIBZZ + HYEGBZZ + NUEGBZZ + GEEGBZZ + WVEIBZZ + WNEGBZZ + ELNIBZZ TEEIBUS = Σ TEEIBZZ
TEICB	Total energy consumed by the industrial sector.	Billion Btu	TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + HYICBZZ + WWICBZZ + GEICBZZ + ESICBZZ + LOICBZZ TEICBUS = CLICBUS + NGICBUS + PAICBUS + HYICBUS + WWICBUS + GEICBUS + ESICBUS + LOICBUS + CCNIBUS
TEIPB	The industrial sector's energy consumption per capita.	Million Btu	TEIPBZZ = TEICBZZ / TPOPPZZ TEIPBUS = TEICBUS / TPOPPUS

TERCB	Total energy consumed by the residential sector.	Billion Btu	$\begin{aligned} \text{TERCBZZ} &= \text{CLRCBZZ} + \text{NGRCBZZ} + \\ &\quad \text{PARCBZZ} + \text{WDRCBZZ} + \\ &\quad \text{GERCBZZ} + \text{SOHCBZZ} + \text{ESRCBZZ} + \\ &\quad \text{LORCBZZ} \\ \text{TERCBUS} &= \text{CLRCBUS} + \text{NGRCBUS} + \\ &\quad \text{PARCBUS} + \text{WDRCBUS} + \\ &\quad \text{GERCBUS} + \text{SOHCBUS} + \text{ESRCBUS} + \\ &\quad \text{LORCBUS} \end{aligned}$
TERPB	The residential sector's energy consumption per capita.	Million Btu	$\begin{aligned} \text{TERPBZZ} &= \text{TERCBZZ} / \text{TPOPPZZ} \\ \text{TERPBUS} &= \text{TERCBUS} / \text{TPOPPUS} \end{aligned}$
TESSB	Total energy consumed (sum of the four end-use sectors). CSEDS cross-check not used in <i>SEDR</i> tables.	Billion Btu	$\begin{aligned} \text{TESSBZZ} &= \text{TERCBZZ} + \text{TECCBZZ} + \text{TEICBZZ} + \\ &\quad \text{TEACBZZ} \\ \text{TESSBUS} &= \text{TERCBUS} + \text{TECCBUS} + \text{TEICBUS} + \\ &\quad \text{TEACBUS} \end{aligned}$
TETCB	Total energy consumed (sum of all energy sources) used in <i>SEDR</i> tables.	Billion Btu	$\begin{aligned} \text{TETCBZZ} &= \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \\ &\quad \text{NUETBZZ} + \text{HYTCBZZ} + \text{WWTCBZZ} \\ &\quad + \text{GOTCBZZ} + \text{ELISBZZ} \\ \text{TETCBUS} &= \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \\ &\quad \text{PATCBUS} + \text{NUETBUS} + \text{HYTCBUS} + \\ &\quad \text{WWTCBUS} + \text{GOTCBUS} \end{aligned}$
TETPB	Total energy consumption per capita.	Million Btu	$\begin{aligned} \text{TETPBZZ} &= \text{TETCBZZ} / \text{TPOPPZZ} \\ \text{TETPBUS} &= \text{TETCBUS} / \text{TPOPPUS} \end{aligned}$
TNACB	Total net energy consumed by the transportation sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\begin{aligned} \text{TNACBZZ} &= \text{TEACBZZ} - \text{LOACBZZ} \\ \text{TNACBUS} &= \text{TEACBUS} - \text{LOACBUS} \end{aligned}$
TNCCB	Total net energy consumed by the commercial sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\begin{aligned} \text{TNCCBZZ} &= \text{TECCBZZ} - \text{LOCCBZZ} \\ \text{TNCCBUS} &= \text{TECCBUS} - \text{LOCCBUS} \end{aligned}$
TNICB	Total net energy consumed by the industrial sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\begin{aligned} \text{TNICBZZ} &= \text{TEICBZZ} - \text{LOICBZZ} \\ \text{TNICBUS} &= \text{TEICBUS} - \text{LOICBUS} \end{aligned}$
TNRCB	Total net energy consumed by the residential sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\begin{aligned} \text{TNRCBZZ} &= \text{TERCBZZ} - \text{LORCBZZ} \\ \text{TNRCBUS} &= \text{TERCBUS} - \text{LORCBUS} \end{aligned}$
TPOPP	The resident population including the Armed Forces residing in each State.	Thousand	$\begin{aligned} \text{TPOPPZZ} &\text{ is independent.} \\ \text{TPOPPUS} &\text{ is independent.} \end{aligned}$

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UOICB	Unfinished oils consumed by the industrial sector.	Billion Btu	UOICBZZ = UOTCBZZ UOICBUS = UOTCBUS
UOICP	Unfinished oils consumed by the industrial sector.	Thousand barrels	UOICPZZ = UOTCPZZ UOICPUS = UOTCPUS
UOTCB	Unfinished oils total consumed.	Billion Btu	UOTCBZZ = UOTCPZZ * 5.825 UOTCBUS = Σ UOTCBZZ
UOTCP	Unfinished oils total consumed.	Thousand barrels	UOTCPZZ = (COCAPZZ / COCAPUS) * UOTCPUS UOTCPUS is independent.
USICB	Unfractionated stream consumed by the industrial sector.	Billion Btu	USICBZZ = USTCBZZ USICBUS = USTCBUS
USICP	Unfractionated stream consumed by the industrial sector.	Thousand barrels	USICPZZ = USTCPZZ USICPUS = USTCPUS
USTCB	Unfractionated stream total consumed.	Billion Btu	USTCBZZ = USTCPZZ * 5.418 USTCBUS = Σ USTCBZZ
USTCP	Unfractionated stream total consumed.	Thousand barrels	USTCPZZ = (OCVAVZZ / OCVAVUS) * USTCPUS USTCPUS is independent.
WDC3B	Wood consumed for combined heat and power in the commercial sector.	Billion Btu	WDC3BZZ is independent. WDC3BUS = Σ WDC3BZZ
WDC4B	Wood energy consumed for other uses in the commercial sector.	Billion Btu	WDC4BZZ = (WDRCPZZ / WDRCPUS) * WDC4BUS WDC4BUS = WDCCBUS – WDC3BUS
WDCCB	Wood energy consumed by the commercial sector, total.	Billion Btu	WDCCBZZ = WDC3BZZ + WDC4BZZ WDCCBUS is independent.
WDEIB	Wood consumed by the electric power sector.	Billion Btu	WDEIBZZ is independent. WDEIBUS = Σ WDEIBZZ
WDI3B	Wood consumed for combined heat and power in the industrial sector.	Billion Btu	WDI3BZZ is independent. WDI3BUS = Σ WDI3BZZ
WDI4B	Wood energy consumed for other uses in the industrial sector.	Billion Btu	WDI4BZZ is independent. WDI4BUS = Σ WDI4BZZ
WDICB	Wood energy consumed by the industrial sector, total.	Billion Btu	WDICBZZ = WDI3BZZ + WDI4BZZ WDICBUS = Σ WDICBZZ

WDRCB	Wood energy consumed by the residential sector.	Billion Btu	$WDRCBZZ = WDRCPZZ * 20$ $WDRCBUS = \Sigma WDRCBZZ$
WDRCP	Wood energy consumed by the residential sector.	Thousand cords	$WDRCPZZ$ is independent. $WDRCPUS = \Sigma WDRCPZZ$
WDTCB	Wood energy, total consumed.	Billion Btu	$WDTCBZZ = WDRCBZZ + WDCCBZZ +$ $WDICBZZ + WDEIBZZ$ $WDTCBUS = \Sigma WDTCBZZ$
WSC3B	Waste consumed for combined heat and power in the commercial sector.	Billion Btu	$WSC3BZZ$ is independent. $WSC3BUS = \Sigma WSC3BZZ$
WSCCB	Waste consumed in the commercial sector, total.	Billion Btu	$WSCCBZZ = WSC3BZZ$ $WSCCBUS = \Sigma WSCCBZZ$
WSEIB	Waste consumed by the electric power sector.	Billion Btu	$WSEIBZZ$ is independent. $WSEIBUS = \Sigma WSEIBZZ$
WSI3B	Waste consumed for combined heat and power in the industrial sector.	Billion Btu	$WSI3BZZ$ is independent. $WSI3BUS = \Sigma WSI3BZZ$
WSI4B	Waste energy consumed for other uses in the industrial sector.	Billion Btu	$WSI4BZZ$ is independent. $WSI4BUS = \Sigma WSI4BZZ$
WSICB	Waste energy consumed by the industrial sector, total.	Billion Btu	$WSICBZZ = WSI3BZZ + WSI4BZZ$ $WSICBUS = \Sigma WSICBZZ$
WSTCB	Waste energy, total consumed.	Billion Btu	$WSTCBZZ = WSCCBZZ + WSICBZZ + WSEIBZZ$ $WSTCBUS = \Sigma WSTCBZZ$
WWCCB	Wood and waste consumed in the commercial sector.	Billion Btu	$WWCCBZZ = WDCCBZZ + WSCCBZZ$ $WWCCBUS = \Sigma WWCCBZZ$
WWEIB	Wood and waste consumed by the electric power sector.	Billion Btu	$WWEIBZZ = WDEIBZZ + WSEIBZZ$ $WWEIBUS = \Sigma WWEIBZZ$
WWI4B	Wood and waste consumed in manufacturing processes in the industrial sector.	Billion Btu	$WWI4BZZ = WDI4BZZ + WSI4BZZ$ $WWI4BUS = \Sigma WWI4BZZ$
WWICB	Wood and waste consumed in the industrial sector, total.	Billion Btu	$WWICBZZ = WDICBZZ + WSICBZZ$ $WWICBUS = \Sigma WWICBZZ$
WWTCB	Wood and waste total consumed.	Billion Btu	$WWTCBZZ = WDTCBZZ + WSTCBZZ$ $WWTCBUS = \Sigma WWTCBZZ$

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WXICB	Waxes consumed by the industrial sector.	Billion Btu	WXICBZZ = WXTCBZZ WXICBUS = WXTCBUS
WXICP	Waxes consumed by the industrial sector.	Thousand barrels	WXICPZZ = WXTCPZZ WXICPUS = WXTCPUS
WXTCB	Waxes total consumed.	Billion Btu	WXTCBZZ = WXTCPZZ * 5.537 WXTCBUS = ΣWXTCBZZ
WXTCP	Waxes total consumed.	Thousand barrels	WXTCPZZ = (CGVAVZZ / CGVAVUS) * WXTCPUS WXTCPUS is independent.
WYEGB	Electricity produced from wind energy at electric power sector.	Billion Btu	WYEGBZZ = WYEGPZZ * FFETKUS WYEGBUS = ΣWYEGBZZ
WYEGP	Electricity produced from wind energy at electric power sector.	Million kilowatthours	WYEGPZZ is independent. WYEGPUS = ΣWYEGPZZ
WYTCB	Electricity produced from wind energy total produced.	Billion Btu	WYTCBZZ = WYEGBZZ WYTCBUS = ΣWYTCBZZ

Appendix B

Thermal Conversion Factors

Table B1. Approximate Heat Content of Petroleum and Heat Rates for Electricity, 1960-2005

Year	Petroleum Consumption			Electricity Net Generation		
	Liquefied Petroleum Gases (LGTKUS)	Motor Gasoline (MGTKUS)	Total Petroleum Products ^a (PATCKUS)	Fossil-Fueled Steam-Electric Plants ^b (FFETKUS)	Nuclear Steam-Electric Plants (NUETKUS)	Geothermal Energy Plants (GEETKUS)
	Million Btu per Barrel			Btu per Kilowatthour		
1960	4.011	5.253	5.55503	10,760	11,629	23,200
1965	4.011	5.253	5.53200	10,453	11,804	22,182
1970	3.779	5.253	5.50317	10,494	10,977	21,606
1971	3.772	5.253	5.50449	10,478	10,837	21,655
1972	3.760	5.253	5.50004	10,379	10,792	21,668
1973	3.746	5.253	5.51461	10,389	10,903	21,674
1974	3.730	5.253	5.50388	10,442	11,161	21,674
1975	3.715	5.253	5.49427	10,406	11,013	21,611
1976	3.711	5.253	5.50448	10,373	11,047	21,611
1977	3.677	5.253	5.51825	10,435	10,769	21,611
1978	3.669	5.253	5.51865	10,361	10,941	21,611
1979	3.680	5.253	5.49383	10,353	10,879	21,545
1980	3.674	5.253	5.47933	10,388	10,908	21,639
1981	3.643	5.253	5.44818	10,453	11,030	21,639
1982	3.615	5.253	5.41514	10,454	11,073	21,629
1983	3.614	5.253	5.40567	10,520	10,905	21,290
1984	3.599	5.253	5.39530	10,440	10,843	21,303
1985	3.603	5.253	5.38744	10,447	10,622	21,263
1986	3.640	5.253	5.41832	10,446	10,579	21,263
1987	3.659	5.253	5.40281	10,419	10,442	21,263
1988	3.652	5.253	5.41017	10,324	10,602	21,096
1989	3.683	5.253	5.40967	10,432	10,583	21,096
1990	3.625	5.253	5.41084	10,402	10,582	21,096
1991	3.614	5.253	5.38408	10,436	10,484	20,997
1992	3.624	5.253	5.37773	10,342	10,471	20,914
1993	3.606	5.253	5.37911	10,309	10,504	20,914
1994	3.635	^c 5.230	5.36097	10,316	10,452	20,914
1995	3.623	5.215	5.34138	10,312	10,507	20,914
1996	3.613	5.216	5.33638	10,340	10,503	20,960
1997	3.616	5.213	5.33598	10,213	10,494	20,960
1998	3.614	5.212	5.34899	10,197	10,491	21,017
1999	3.616	5.211	5.32807	10,226	10,450	21,017
2000	3.607	5.210	5.32576	10,201	10,429	21,017
2001	3.614	5.210	5.34502	10,333	10,448	21,017
2002	3.613	5.208	5.32382	10,173	10,439	21,017
2003	3.629	5.207	5.34050	10,241	10,421	21,017
2004	3.618	5.215	5.34989	10,022	10,427	21,017
2005	3.620	5.218	5.36466	9,999	10,421	21,017

^a This factor is not actually applied in SEDS but is displayed here for information.

^b This factor is the average for electricity generated at U.S. fossil-fueled steam-electric plants. In SEDS, it is applied to convert hydroelectricity, electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

^c There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a factor that is a quantity-weighted average of motor gasoline's major components.

NA = Not available.

Sources: See source listing at the end of this appendix.

Table B2. Approximate Heat Content of Natural Gas Consumed by the Electric Power Sector, 1960-1994, Selected Years
(Thousand Btu per Cubic Foot)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	1.03500	1.03400	1.03100	1.03300	1.13300	1.09900	1.02904	1.02401	1.02367	1.02220	1.01855
Alaska	--	1.01000	1.00500	1.00600	1.00600	1.00600	1.02703	1.00314	1.00154	1.00051	1.00080
Arizona	1.03500	1.07600	1.05900	1.07100	1.05700	1.05900	1.03061	1.02707	1.03026	1.02705	1.02266
Arkansas	1.03500	1.00100	1.00400	1.01100	1.02600	1.05500	1.01765	1.01980	1.02501	1.02825	1.02389
California	1.03500	1.07300	1.05400	1.06300	1.05200	1.05100	1.03205	1.02858	1.03368	1.03145	1.02984
Colorado	1.03500	0.91200	0.97400	0.99600	0.98100	0.98900	1.04148	1.02137	1.09800	1.05610	1.07295
Connecticut	1.03500	1.02200	1.01600	1.00500	--	1.03100	1.03057	1.03089	1.03009	1.02709	1.02265
Delaware	1.03500	1.04300	1.02000	1.07300	1.04200	1.03800	1.07008	1.08692	1.02704	1.03261	1.03656
District of Columbia	--	--	--	--	--	--	--	--	--	--	--
Florida	1.03500	1.03700	1.04100	1.00900	1.01500	1.01100	1.01308	1.01400	1.01153	1.01167	1.01669
Georgia	1.03500	1.04000	1.03100	1.02900	1.03500	1.02400	1.02421	1.02496	1.02395	1.02307	1.02780
Hawaii	--	--	--	--	--	--	--	--	--	--	--
Idaho	--	--	--	1.05300	1.03700	1.04900	--	--	--	--	--
Illinois	1.03500	1.02900	1.02500	1.02900	1.02400	1.02700	1.02323	1.02077	1.02082	1.01819	1.02230
Indiana	1.03500	0.99900	1.00600	1.00000	1.00400	1.00500	1.00251	1.00168	1.00174	1.01316	1.02306
Iowa	1.03500	1.01000	1.00900	1.00800	1.00800	1.02100	1.01396	1.01812	1.00646	1.01116	1.01292
Kansas	1.03500	0.99500	0.99800	0.99100	0.96000	0.96800	0.99773	0.97745	0.98360	0.98439	0.98966
Kentucky	1.03500	1.02800	1.01700	1.01700	1.02400	1.02400	1.02300	1.02144	1.01818	1.02029	1.01916
Louisiana	1.03500	1.04200	1.02900	1.05900	1.04100	1.04700	1.04485	1.04112	1.04249	1.04221	1.04565
Maine	--	--	--	--	--	--	1.00771	1.02811	1.01226	1.01124	1.00826
Maryland	1.03500	1.02500	1.02200	0.94300	1.02300	1.02500	1.03390	1.04181	1.04019	1.03675	1.04017
Massachusetts	1.03500	1.01300	1.01200	1.00200	1.00000	1.03900	1.04723	1.03680	1.02940	1.02939	1.03084
Michigan	1.03500	1.01400	1.01500	0.83400	0.73700	0.46000	0.81306	0.87079	0.88192	0.90370	0.90726
Minnesota	1.03500	0.99800	1.00200	0.98400	0.99400	1.00200	1.01509	1.01457	1.01438	1.01402	1.01272
Mississippi	1.03500	1.02900	1.02500	1.03000	1.01700	1.03900	1.03399	1.02498	1.02742	1.02249	1.03729
Missouri	1.03500	1.02000	1.00700	0.97700	0.97900	0.99200	1.01841	1.01457	1.01298	1.01096	1.00418
Montana	1.03500	1.00100	1.03200	1.14900	1.04900	1.20400	1.15891	1.07579	1.11863	1.08149	1.04877
Nebraska	1.03500	0.99100	1.00800	0.98200	0.95000	0.95700	0.95929	0.95337	0.97870	0.99290	0.99452
Nevada	1.03500	1.06200	1.08200	1.06700	1.07100	1.06500	1.03100	1.02404	1.02846	1.04035	1.04119
New Hampshire	--	--	--	1.00000	--	--	--	--	1.01754	1.01781	1.01521
New Jersey	1.03500	1.04500	1.02600	1.02800	1.03400	1.04600	1.03553	1.03037	1.02742	1.02276	1.02665
New Mexico	1.03500	1.10800	1.08300	1.03300	1.02900	1.01300	1.03374	1.01695	1.01687	1.01627	1.02221
New York	1.03500	1.02600	1.02100	1.02500	1.03600	1.03500	1.03195	1.03041	1.02817	1.02833	1.02728
North Carolina	1.03500	1.03300	1.02400	1.03100	1.03400	1.03300	1.02675	1.03144	1.03321	1.03025	1.03058
North Dakota	1.03500	1.00000	1.03100	1.05400	1.05400	1.05400	1.13379	1.63934	0.72833	0.99404	1.12402
Ohio	1.03500	1.03300	1.02300	0.86400	1.00400	1.01400	1.01125	1.00952	1.03102	1.02644	1.02464
Oklahoma	1.03500	1.02600	1.03200	1.03800	1.04800	1.04400	1.04175	1.03901	1.03817	1.03920	1.03351
Oregon	1.03500	1.07000	1.04500	1.03700	0.99800	--	1.02708	1.01222	1.01166	1.01224	1.01144
Pennsylvania	1.03500	1.03800	1.03300	1.00000	1.02000	1.00000	0.93491	1.02864	1.02943	1.03544	1.03458
Rhode Island	1.03500	1.04200	1.02100	1.04200	1.02200	1.03400	1.03210	1.03020	1.02074	1.02904	1.02013
South Carolina	1.03500	1.04200	1.02800	1.02800	1.03000	1.02900	1.02381	1.02506	1.02253	1.02231	1.02324
South Dakota	1.03500	0.99700	1.00400	1.00000	0.98800	1.01000	1.02803	1.01033	1.02260	1.02286	1.01421
Tennessee	1.03500	1.04600	1.02200	--	1.01600	--	1.02723	1.02281	1.02530	1.02331	1.02371
Texas	1.03500	1.03700	1.02700	1.01900	1.03700	1.03600	1.03509	1.03015	1.02694	1.02718	1.02459
Utah	1.03500	0.92500	0.93800	0.94100	0.95500	1.07500	1.02690	1.05562	1.06077	1.05143	1.04041
Vermont	--	--	--	1.00000	1.00000	1.00000	1.02734	0.98778	0.98754	0.99999	0.99713
Virginia	1.03500	1.03100	1.02600	1.09800	1.10400	1.04000	1.03021	1.03652	1.03666	1.03109	1.03058
Washington	--	--	--	--	1.03000	1.03300	1.02854	1.02967	1.03216	1.02850	1.03141
West Virginia	1.03500	1.07100	1.02900	0.57500	1.00000	1.00000	0.99670	1.00675	1.03604	1.03009	1.04130
Wisconsin	1.03500	1.01800	1.01900	1.01600	1.00700	1.00000	1.01645	1.01499	1.01224	1.01329	1.01631
Wyoming	1.03500	0.92600	1.02300	0.84300	0.84700	1.04800	1.03612	1.04874	1.03531	1.05009	1.03641
U.S. Average	1.03500	1.03765	1.02944	1.02341	1.03313	1.03706	1.02725	1.02509	1.02520	1.02488	1.02488

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B3. Approximate Heat Content of Natural Gas Consumed by the Electric Power Sector, 1995-2004
(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	1.02310	1.02760	1.02950	1.03302	1.02466	1.02720	1.03991	1.02482	1.02736	1.02465
Alaska	1.00343	1.00233	1.00242	1.00268	1.00220	1.00287	0.98014	1.00932	1.00443	1.00662
Arizona	1.02137	1.01496	1.01378	1.01415	1.01305	1.01636	1.02258	1.01840	1.00837	1.01961
Arkansas	1.01913	1.02344	1.02498	1.01929	1.02477	1.01993	1.03700	1.01635	1.03201	1.02794
California	1.02831	1.02584	1.02032	1.02304	1.02214	1.02000	1.02496	1.02158	1.02340	1.04869
Colorado	1.06306	1.12266	1.04229	1.06423	1.05450	1.05607	1.03805	1.01720	1.03365	1.04187
Connecticut	1.02148	1.02345	1.02248	1.02601	1.02436	1.01244	1.01368	1.02097	1.00752	1.01537
Delaware	1.03205	1.03419	1.03450	0.97091	0.98134	1.01673	1.03674	1.01707	1.04245	1.03023
District of Columbia	--	--	--	--	--	--	--	--	--	--
Florida	1.01396	1.01127	1.04256	1.04912	1.04135	1.03646	1.04079	1.02549	1.03436	1.03942
Georgia	1.02690	1.02431	1.00946	1.02606	1.02673	1.01594	1.01792	1.02188	1.02438	1.03018
Hawaii	--	--	--	--	--	--	--	--	--	--
Idaho	--	1.03307	1.03481	1.03002	1.05025	1.03984	1.02873	0.97878	1.00230	1.02706
Illinois	1.01663	1.01965	1.01557	1.01928	1.02158	1.01971	1.01267	1.01163	1.01480	1.03988
Indiana	1.02040	1.01995	1.02040	1.01648	1.01879	1.01671	1.01845	1.02556	1.02146	1.01470
Iowa	1.00934	1.00500	1.00831	1.01268	1.00841	1.00859	0.98995	1.00659	1.01041	1.00131
Kansas	0.98910	0.98351	0.98586	1.00521	1.01066	1.01145	0.86787	1.00056	1.00340	1.00453
Kentucky	1.02032	1.01867	1.02012	1.02181	1.01939	1.01993	1.02416	1.02361	1.02331	1.02450
Louisiana	1.04248	1.04232	1.03456	1.04232	1.03837	1.03444	1.03513	1.02701	1.03237	1.02734
Maine	1.00503	0.99980	0.99954	1.03073	1.00100	1.02127	1.03355	1.03812	1.03671	1.03922
Maryland	1.03470	1.02970	1.03684	1.03865	1.03691	1.04123	1.03292	1.04258	1.03769	1.04025
Massachusetts	1.02632	1.02968	1.02836	1.04262	1.01500	1.03492	1.03456	1.01676	1.02782	1.03918
Michigan	0.85452	0.87193	0.87129	0.88699	0.89247	0.93402	0.98697	1.00796	1.01273	1.08626
Minnesota	1.01111	1.00989	1.01220	1.05067	1.01762	1.01789	0.90308	1.00546	1.00425	1.02553
Mississippi	1.03375	1.03141	1.02934	1.03307	1.02502	1.02791	1.02622	1.02548	1.03318	1.03102
Missouri	1.00814	1.01468	1.01471	1.01668	1.01323	1.01404	1.09205	1.00873	1.01641	1.02156
Montana	1.03758	1.03955	1.02892	1.03493	1.03116	1.01796	1.01456	1.00955	0.95902	1.01570
Nebraska	1.00724	1.01050	1.00967	1.00763	1.00966	1.01493	0.92616	0.97662	0.99673	0.98653
Nevada	1.03278	1.03316	1.02715	1.03558	1.04377	1.02377	1.02605	1.01984	1.02357	1.05185
New Hampshire	1.01833	0.90226	1.01786	1.02281	1.02137	1.06899	1.07385	1.04750	1.04564	1.04510
New Jersey	1.03175	1.03056	1.03482	1.04144	1.03534	1.03151	1.03222	1.03139	1.03536	1.04095
New Mexico	1.01865	0.99824	1.00067	0.99571	0.99600	0.99198	0.93901	1.00213	1.00031	1.02146
New York	1.02207	1.02327	1.02371	1.02447	1.02417	1.01798	1.01851	1.01869	1.02450	1.03031
North Carolina	1.02627	1.02727	1.02622	1.02605	1.02230	1.01722	1.02407	1.00973	1.00655	1.02586
North Dakota	0.88261	1.17474	0.70771	--	--	--	0.76570	1.06157	1.06157	1.18730
Ohio	1.02324	1.02085	1.02017	1.02219	1.02092	1.01937	1.00477	1.02439	1.03352	1.02722
Oklahoma	1.03384	1.02824	1.03153	1.02999	1.02781	1.02916	1.02406	1.02546	1.02943	1.03035
Oregon	1.01078	1.01909	1.01602	1.01970	1.01631	1.01753	1.02082	1.01680	1.02118	1.02012
Pennsylvania	1.02997	1.03198	1.02662	1.02931	1.03645	1.03405	1.03352	1.02807	1.03903	1.03639
Rhode Island	1.02106	1.02322	1.01327	1.02253	1.01450	1.03065	1.03204	1.01847	1.02214	1.02151
South Carolina	1.02322	1.02027	1.01971	1.03096	1.06091	1.03751	1.03684	1.02817	1.02770	1.06649
South Dakota	1.01701	1.01705	1.01916	1.02159	1.01887	1.01954	0.99918	0.98041	0.96009	0.98338
Tennessee	1.01900	1.01661	1.01905	1.02160	1.02350	1.03286	1.03889	1.02290	1.03185	1.02553
Texas	1.02517	1.02413	1.02310	1.02420	1.02190	1.02101	1.02926	1.01876	1.02061	1.02334
Utah	1.04876	1.01896	1.02582	1.03583	1.03557	1.04434	0.90318	1.00539	1.00428	1.00032
Vermont	0.99785	1.03515	1.01041	1.01633	1.01335	1.01229	1.00817	1.03054	1.02425	1.02779
Virginia	1.03249	1.03700	1.04719	1.03817	1.03962	1.03747	1.02992	1.02430	1.02763	1.02674
Washington	1.02840	1.02830	1.02308	1.03466	1.03892	1.02537	1.02829	1.02600	1.02062	1.08844
West Virginia	1.02773	1.01379	1.03654	1.00391	1.00545	1.00560	1.02595	1.03635	1.05680	1.06234
Wisconsin	1.01529	1.01525	1.01687	1.01313	1.01690	1.01176	1.01438	0.97482	0.98645	0.99741
Wyoming	1.04307	1.04237	1.04624	1.04321	1.04270	1.02728	1.03073	0.92332	0.93429	0.94583
U.S. Average	1.02126	1.01968	1.02011	1.02380	1.02158	1.02139	1.02512	1.02070	1.02414	1.03416

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B4. Approximate Heat Content of Natural Gas Consumed by All Sectors Except Electric Power, 1960-1994, Selected Years
(Thousand Btu per Cubic Foot)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	1.03500	1.03400	1.03100	1.02891	1.03349	1.03770	1.02900	1.02706	1.02808	1.03017	1.03022
Alaska	1.03500	1.01000	1.00500	1.00470	1.00231	1.00600	0.94586	1.00189	1.00204	0.99348	1.00102
Arizona	1.03500	1.07600	1.05900	1.04957	1.04558	1.04578	1.03233	1.02453	1.03123	1.02821	1.02803
Arkansas	1.03500	1.00100	1.00400	0.99503	0.99415	1.01677	1.00761	1.01657	1.00681	1.01255	1.02178
California	1.03500	1.07300	1.05400	1.05594	1.04358	1.03848	1.03198	1.02635	1.02657	1.03809	1.01923
Colorado	1.03500	0.91200	0.97400	0.89576	0.99471	0.99923	1.00299	1.02940	1.01930	1.00902	1.00003
Connecticut	1.03500	1.02200	1.01600	1.00500	1.02200	1.02998	1.03333	1.03102	1.02774	1.02699	1.03121
Delaware	1.03500	1.04300	1.02000	1.01468	1.03285	1.02197	1.00925	1.00647	1.03714	1.03563	1.03569
District of Columbia	1.03500	1.02400	1.01600	1.01200	1.00300	1.01500	1.00800	1.00600	1.00700	1.00700	1.01100
Florida	1.03500	1.03700	1.04100	1.07754	1.06968	1.10911	1.08380	1.09835	1.09963	1.09898	1.12842
Georgia	1.03500	1.04000	1.03100	1.02672	1.03196	1.02801	1.02702	1.02701	1.02500	1.02703	1.03001
Hawaii	--	--	--	--	0.96300	1.08200	1.07000	1.08000	1.07300	1.06200	1.05100
Idaho	1.03500	1.06500	1.06100	1.05500	1.05301	1.04900	1.02800	1.03300	1.03000	1.03800	1.03800
Illinois	1.03500	1.02900	1.02500	1.02590	1.02196	1.04008	1.02199	1.01898	1.01797	1.02104	1.02095
Indiana	1.03500	0.99900	1.00600	0.98976	0.98894	1.00801	1.01823	1.01428	1.01115	1.01300	1.01282
Iowa	1.03500	1.01000	1.00900	1.00800	1.00287	1.01091	1.00687	1.00780	1.00397	1.00285	1.00793
Kansas	1.03500	0.99500	0.99800	0.98159	0.99404	0.99990	0.99911	1.01019	0.98714	0.98715	0.99858
Kentucky	1.03500	1.02800	1.01700	1.00799	1.00886	1.03004	1.04003	1.04703	1.05806	1.04804	1.06207
Louisiana	1.03500	1.04200	1.02900	1.03153	1.03707	1.03819	1.04137	1.04827	1.04430	1.03604	1.03879
Maine	--	--	1.01200	1.02400	1.02400	1.03500	1.00488	1.00517	1.01302	1.01408	1.01415
Maryland	1.03500	1.02500	1.02200	1.01323	1.01990	1.03408	1.02720	1.02500	1.02691	1.02749	1.03018
Massachusetts	1.03500	1.01300	1.01200	1.00402	1.01646	1.02388	1.03523	1.03963	1.03924	1.04058	1.02421
Michigan	1.03500	1.01400	1.01500	1.02420	1.01961	1.02304	1.04436	1.03551	1.03493	1.03493	1.03530
Minnesota	1.03500	0.99800	1.00200	1.00225	0.99709	1.00401	1.00379	1.01195	1.01095	1.01096	1.01097
Mississippi	1.03500	1.02900	1.02500	1.02189	1.03421	1.02459	1.03266	1.03034	1.05273	1.02311	1.03098
Missouri	1.03500	1.02000	1.00700	1.00822	1.01577	1.01714	1.01089	1.00871	1.00189	1.00388	1.00603
Montana	1.03500	1.00100	1.03200	1.01927	1.00926	0.99897	1.02672	1.02872	1.02254	1.01768	1.02370
Nebraska	1.03500	0.99100	1.00800	0.99650	0.98019	0.98226	0.98383	0.98501	0.97901	0.97473	0.98476
Nevada	1.03500	1.06200	1.08200	1.06700	1.05209	1.06122	1.03100	1.03623	1.03300	1.02847	1.02775
New Hampshire	1.03500	1.01200	1.01000	1.01024	1.02000	1.02700	1.01400	1.00700	1.00867	1.00994	1.01285
New Jersey	1.03500	1.04500	1.02600	1.03111	1.03269	1.02214	1.02434	1.02496	1.02567	1.03927	1.04231
New Mexico	1.03500	1.10800	1.08300	1.07555	1.04776	1.08795	1.05642	1.04226	1.04289	1.04235	0.99971
New York	1.03500	1.02600	1.02100	1.01476	1.02277	1.02724	1.02930	1.02717	1.02928	1.02921	1.02827
North Carolina	1.03500	1.03300	1.02400	1.01799	1.01175	1.03400	1.03209	1.03201	1.03402	1.03509	1.03604
North Dakota	1.03500	1.00000	1.03100	1.00077	1.05200	1.06200	1.03199	1.04599	1.04501	1.06000	1.05800
Ohio	1.03500	1.03300	1.02300	1.02403	1.01606	1.04403	1.04005	1.04415	1.03602	1.03804	1.03704
Oklahoma	1.03500	1.02600	1.03200	0.99619	1.00198	1.01970	1.02103	1.01318	1.02118	1.02104	1.02589
Oregon	1.03500	1.07000	1.04500	1.03900	1.04620	1.03000	1.02270	1.03073	1.03819	1.04058	1.04635
Pennsylvania	1.03500	1.03800	1.03300	1.02505	1.02201	1.03409	1.03938	1.03507	1.03612	1.03705	1.03606
Rhode Island	1.03500	1.04200	1.02100	1.01399	1.02094	1.03291	1.02678	1.02703	1.01664	1.02896	1.03379
South Carolina	1.03500	1.04200	1.02800	1.02346	1.03312	1.02800	1.02824	1.02715	1.02706	1.02909	1.03116
South Dakota	1.03500	0.99700	1.00400	1.00000	0.99811	1.01000	1.01589	1.01805	1.01499	1.01294	1.00998
Tennessee	1.03500	1.04600	1.02200	1.03100	1.01600	1.03400	1.03502	1.03301	1.03101	1.03507	1.03203
Texas	1.03500	1.03700	1.02700	1.02966	1.03085	1.03909	1.04215	1.04004	1.05007	1.02838	1.04276
Utah	1.03500	0.92500	0.93800	0.95023	1.09212	1.07500	1.08848	1.07371	1.07898	1.08137	1.06884
Vermont	--	--	1.00600	1.00930	0.98936	0.99185	0.98245	0.98804	0.99588	0.99792	0.99597
Virginia	1.03500	1.03100	1.02600	1.01868	1.01471	1.03899	1.04266	1.04253	1.03929	1.04662	1.03943
Washington	1.03500	1.07500	1.05500	1.04200	1.05216	1.04000	1.03000	1.03101	1.03306	1.03823	1.04294
West Virginia	1.03500	1.07100	1.02900	1.03805	1.03201	1.06707	1.07109	1.07310	1.06513	1.06509	1.06408
Wisconsin	1.03500	1.01800	1.01900	1.02023	1.00804	1.01004	1.00591	1.00693	1.00897	1.01098	1.01195
Wyoming	1.03500	0.92600	1.02300	0.93453	1.06069	1.05100	1.09905	1.06001	1.05802	1.05600	1.05602
U.S. Average	1.03500	1.03182	1.02543	1.02232	1.02375	1.03156	1.03079	1.03093	1.03150	1.02888	1.03032

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B5. Approximate Heat Content of Natural Gas Consumed by All Sectors Except Electric Power, 1995-2004
(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	1.02917	1.03313	1.04144	1.03955	1.03584	1.04401	1.03246	1.06486	R 0.99110	1.04662
Alaska	1.00619	0.98908	0.99979	0.99874	0.99983	0.76085	1.01259	1.01438	R 1.01487	1.01475
Arizona	1.03798	1.01012	1.02278	1.01667	1.01596	1.01006	1.00624	1.03410	1.00208	0.98611
Arkansas	1.08447	1.02637	1.01395	1.02485	1.01791	1.01885	1.01329	1.05351	1.05143	1.04514
California	1.01096	1.03426	1.01711	1.05636	1.01470	0.95633	1.01676	0.98692	R 1.02137	1.00809
Colorado	1.01419	1.01517	1.00918	1.00627	1.00036	0.99802	1.00730	1.00250	0.99877	0.98281
Connecticut	1.02968	1.02869	1.02792	1.02600	1.02391	1.02845	1.02306	1.03522	1.00542	0.99599
Delaware	1.03556	1.03562	1.03526	1.06180	1.06762	1.04124	1.03282	1.05002	1.04319	1.04228
District of Columbia	1.00600	1.00900	1.02100	1.02700	1.02100	1.02700	1.02600	1.02400	1.02700	1.02700
Florida	1.06972	1.11625	1.05806	1.05438	1.04611	1.10825	1.06720	1.01936	1.07730	0.98778
Georgia	1.02597	1.02298	1.02784	1.02709	1.02703	1.01823	1.03465	1.02437	1.04473	1.04469
Hawaii	1.04800	1.05700	1.03000	1.05600	1.05500	1.04700	1.03600	1.06000	1.04700	1.04800
Idaho	1.03000	1.02999	1.03090	1.03821	1.03769	1.02464	1.01754	1.02059	1.02514	1.02461
Illinois	1.02013	1.01898	1.02124	1.02217	1.02202	1.02211	1.02038	1.03155	0.99951	0.99868
Indiana	1.01187	1.01093	1.01092	1.01701	1.01798	1.02522	1.02420	0.94474	1.02835	1.03070
Iowa	1.00492	1.00601	1.00901	1.01096	1.01925	1.00493	1.00437	1.00803	1.00897	1.00825
Kansas	1.00306	0.99685	1.00225	0.99370	0.99516	1.00759	1.01780	0.99781	1.04199	1.04147
Kentucky	1.09629	1.04924	1.05029	1.03435	1.03234	1.04038	1.03728	1.03147	1.03215	1.02808
Louisiana	1.03321	1.04431	1.13486	1.07709	1.04300	1.06383	1.02514	R 1.08262	1.04168	1.04282
Maine	1.01621	1.01614	1.01410	1.01687	1.01945	1.15289	1.17664	1.26332	R 1.19899	1.13093
Maryland	1.02506	1.02895	1.03378	1.03679	1.03362	1.03286	1.03744	1.02613	1.02955	1.02932
Massachusetts	1.02584	1.02600	1.01939	1.01524	1.06021	1.04444	1.04621	1.05133	R 1.04878	1.04060
Michigan	1.04042	1.03412	1.04030	1.04705	1.04155	1.03633	1.03155	0.99858	0.99840	0.98767
Minnesota	1.01305	1.01812	1.01810	1.01875	1.01905	1.01492	1.01550	1.00913	1.01027	1.00943
Mississippi	1.02111	1.02937	1.03587	1.05199	1.04182	1.04308	1.02400	1.07990	R 0.98122	1.04714
Missouri	1.00695	1.01093	1.00987	1.01062	1.01298	1.01512	1.00719	1.00455	1.01705	1.01653
Montana	1.02995	1.02993	1.03101	1.02592	1.02397	1.02402	1.02202	0.99097	0.98911	0.99795
Nebraska	0.97938	1.00694	0.99776	1.00281	0.99858	1.00455	1.02031	1.00100	1.00013	0.99628
Nevada	1.03329	1.03993	1.02680	1.04807	1.02043	1.02996	1.02333	1.06771	R 1.01939	0.96686
New Hampshire	1.01007	1.01902	1.01081	1.01091	1.00864	1.05764	1.06173	1.06267	R 0.94880	1.07094
New Jersey	1.03463	1.03722	1.03504	1.03715	1.03990	1.03601	1.03841	1.04315	1.04506	1.03843
New Mexico	1.02024	1.03464	1.02240	0.97888	0.97522	0.96773	0.98311	1.01149	R 1.01187	1.03137
New York	1.03108	1.02699	1.02704	1.02956	1.02845	1.03229	1.03360	0.98173	1.04463	1.01682
North Carolina	1.03319	1.03615	1.03628	1.04095	1.03577	1.03075	1.04244	1.04474	1.04449	1.03596
North Dakota	1.05000	1.05099	1.05001	1.03800	1.04500	1.03500	1.02901	0.97200	0.97000	1.00599
Ohio	1.03812	1.03805	1.04510	1.04018	1.03722	1.04226	1.04249	1.02605	1.02788	1.02495
Oklahoma	1.01462	1.02259	1.00586	1.00666	1.02064	1.00814	1.03016	1.03120	R 1.03662	1.03457
Oregon	1.04450	1.04356	1.05050	1.04997	1.06029	1.03123	1.02891	1.03504	R 1.03629	1.04403
Pennsylvania	1.03528	1.03407	1.03525	1.03633	1.03598	1.03503	1.05476	1.05392	1.05282	1.05392
Rhode Island	1.02872	1.09977	1.03591	1.02711	1.03037	1.04690	1.02937	1.05098	1.03045	1.03239
South Carolina	1.02717	1.03008	1.03120	1.03418	1.02895	1.02852	1.03810	0.99302	0.99720	0.98431
South Dakota	1.01392	1.01394	1.01794	1.00890	1.00502	1.00347	0.99898	1.02124	1.02326	1.02153
Tennessee	1.03110	1.03203	1.03107	1.03019	1.02708	1.03708	1.03698	1.08059	1.03507	1.03509
Texas	1.04232	1.03666	1.03009	1.04975	1.03769	1.03343	1.02423	1.13132	R 1.15911	0.98723
Utah	1.06384	1.04260	1.04241	1.04637	1.05582	1.05145	1.06763	1.06349	1.06357	1.06171
Vermont	0.99596	1.01493	1.01201	1.01189	1.01196	1.01197	1.01206	1.00388	1.00593	1.00386
Virginia	1.03071	1.03928	1.04374	1.04382	1.03772	1.03461	1.03815	1.03667	1.03614	1.02706
Washington	1.04218	1.03856	1.04878	1.04667	1.05368	1.04243	1.03480	1.01757	1.02242	1.00099
West Virginia	1.06116	1.06110	1.06811	1.06321	1.05518	1.06822	1.06778	1.00662	1.04887	1.17429
Wisconsin	1.01089	1.01296	1.01076	1.01085	1.01171	1.00990	1.00864	1.00564	1.00834	1.00439
Wyoming	1.06303	1.06102	1.06902	1.06706	1.05101	1.04635	1.05569	1.04816	1.05050	1.04248
U.S. Average	1.02981	1.03076	1.03524	1.03740	1.02937	1.01978	1.02738	1.03933	R 1.04601	1.01678

R = Revised data.

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B6. Approximate Heat Content of Natural Gas Total Consumption, 1960-1994, Selected Years
(Thousand Btu per Cubic Foot)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	1.03500	1.03400	1.03100	1.02900	1.03400	1.03800	1.02900	1.02700	1.02800	1.03000	1.03000
Alaska	1.03500	1.01000	1.00500	1.00500	1.00300	1.00600	0.95400	1.00200	1.00200	0.99400	1.00100
Arizona	1.03500	1.07600	1.05900	1.05200	1.04900	1.05000	1.03200	1.02500	1.03100	1.02800	1.02700
Arkansas	1.03500	1.00100	1.00400	0.99700	1.00100	1.01900	1.00900	1.01700	1.00900	1.01400	1.02200
California	1.03500	1.07300	1.05400	1.05700	1.04600	1.04300	1.03200	1.02700	1.02900	1.03600	1.02300
Colorado	1.03500	0.91200	0.97400	0.91300	0.99300	0.99900	1.00500	1.02900	1.02300	1.01100	1.00500
Connecticut	1.03500	1.02200	1.01600	1.00500	1.02200	1.03000	1.03300	1.03100	1.02800	1.02700	1.03000
Delaware	1.03500	1.04300	1.02000	1.02000	1.03500	1.02500	1.02600	1.03400	1.03500	1.03500	1.03600
District of Columbia	1.03500	1.02400	1.01600	1.01200	1.00300	1.01500	1.00800	1.00600	1.00700	1.00700	1.01100
Florida	1.03500	1.03700	1.04100	1.04300	1.04100	1.05300	1.04300	1.04900	1.04900	1.05200	1.06800
Georgia	1.03500	1.04000	1.03100	1.02700	1.03200	1.02800	1.02700	1.02700	1.02500	1.02700	1.03000
Hawaii	1.03500	--	0.96200	0.94700	0.96300	1.08200	1.07000	1.08000	1.07300	1.06200	1.05100
Idaho	1.03500	1.06500	1.06100	1.05500	1.05300	1.04900	1.02800	1.03300	1.03000	1.03800	1.03800
Illinois	1.03500	1.02900	1.02500	1.02600	1.02200	1.04000	1.02200	1.01900	1.01800	1.02100	1.02100
Indiana	1.03500	0.99900	1.00600	0.99000	0.98900	1.00800	1.01800	1.01400	1.01100	1.01300	1.01300
Iowa	1.03500	1.01000	1.00900	1.00800	1.00300	1.01100	1.00700	1.00800	1.00400	1.00300	1.00800
Kansas	1.03500	0.99500	0.99800	0.98400	0.98700	0.99800	0.99900	1.00700	0.98700	0.98700	0.99800
Kentucky	1.03500	1.02800	1.01700	1.00800	1.00900	1.03000	1.04000	1.04700	1.05800	1.04800	1.06200
Louisiana	1.03500	1.04200	1.02900	1.03700	1.03800	1.04000	1.04200	1.04700	1.04400	1.03700	1.04000
Maine	1.03500	--	1.01200	1.02400	1.02400	1.03500	1.00500	1.00600	1.01300	1.01400	1.01400
Maryland	1.03500	1.02500	1.02200	1.01300	1.02000	1.03400	1.02800	1.02700	1.02800	1.02800	1.03100
Massachusetts	1.03500	1.01300	1.01200	1.00400	1.01600	1.02700	1.03800	1.03900	1.03700	1.03800	1.02600
Michigan	1.03500	1.01400	1.01500	1.01200	1.01100	1.01500	1.02200	1.02000	1.02000	1.02100	1.02100
Minnesota	1.03500	0.99800	1.00200	1.00100	0.99700	1.00400	1.00400	1.01200	1.01100	1.01100	1.01100
Mississippi	1.03500	1.02900	1.02500	1.02300	1.02800	1.02800	1.03300	1.02900	1.04700	1.02300	1.03300
Missouri	1.03500	1.02000	1.00700	1.00600	1.01400	1.01700	1.01100	1.00900	1.00200	1.00400	1.00600
Montana	1.03500	1.00100	1.03200	1.02100	1.01200	1.00100	1.02800	1.02900	1.02300	1.01800	1.02400
Nebraska	1.03500	0.99100	1.00800	0.99400	0.97800	0.98200	0.98300	0.98400	0.97900	0.97500	0.98500
Nevada	1.03500	1.06200	1.08200	1.06700	1.06100	1.06200	1.03100	1.03200	1.03100	1.03400	1.03500
New Hampshire	1.03500	1.01200	1.01000	1.01000	1.02000	1.02700	1.01400	1.00700	1.00900	1.01000	1.01300
New Jersey	1.03500	1.04500	1.02600	1.03100	1.03300	1.02600	1.02600	1.02600	1.02600	1.03600	1.03900
New Mexico	1.03500	1.10800	1.08300	1.06400	1.04300	1.07400	1.05400	1.03900	1.04000	1.03900	1.00300
New York	1.03500	1.02600	1.02100	1.01500	1.02500	1.02900	1.03000	1.02800	1.02900	1.02900	1.02800
North Carolina	1.03500	1.03300	1.02400	1.01800	1.01200	1.03400	1.03200	1.03200	1.03400	1.03500	1.03600
North Dakota	1.03500	1.00000	1.03100	1.00100	1.05200	1.06200	1.03200	1.04600	1.04500	1.06000	1.05800
Ohio	1.03500	1.03300	1.02300	1.02300	1.01600	1.04400	1.04000	1.04400	1.03600	1.03800	1.03700
Oklahoma	1.03500	1.02600	1.03200	1.01500	1.02300	1.02800	1.02700	1.02100	1.02600	1.02600	1.02800
Oregon	1.03500	1.07000	1.04500	1.03900	1.04600	1.03000	1.02300	1.02900	1.03500	1.03700	1.04000
Pennsylvania	1.03500	1.03800	1.03300	1.02500	1.02200	1.03400	1.03700	1.03500	1.03600	1.03700	1.03600
Rhode Island	1.03500	1.04200	1.02100	1.01400	1.02100	1.03300	1.02800	1.02800	1.01800	1.02900	1.02900
South Carolina	1.03500	1.04200	1.02800	1.02400	1.03300	1.02800	1.02800	1.02700	1.02700	1.02900	1.03100
South Dakota	1.03500	0.99700	1.00400	1.00000	0.99800	1.01000	1.01600	1.01800	1.01500	1.01300	1.01000
Tennessee	1.03500	1.04600	1.02200	1.03100	1.01600	1.03400	1.03500	1.03300	1.03100	1.03500	1.03200
Texas	1.03500	1.03700	1.02700	1.02600	1.03300	1.03800	1.04000	1.03700	1.04300	1.02800	1.03700
Utah	1.03500	0.92500	0.93800	0.95000	1.08600	1.07500	1.08800	1.07300	1.07800	1.08000	1.06700
Vermont	1.03500	--	1.00600	1.00800	0.99000	0.99200	0.98700	0.98800	0.99500	0.99800	0.99600
Virginia	1.03500	1.03100	1.02600	1.01900	1.01600	1.03900	1.04200	1.04200	1.03900	1.04400	1.03800
Washington	1.03500	1.07500	1.05500	1.04200	1.05200	1.04000	1.03000	1.03100	1.03300	1.03700	1.04100
West Virginia	1.03500	1.07100	1.02900	1.03700	1.03200	1.06700	1.07100	1.07300	1.06500	1.06500	1.06400
Wisconsin	1.03500	1.01800	1.01900	1.02000	1.00800	1.01000	1.00600	1.00700	1.00900	1.01100	1.01200
Wyoming	1.03500	0.92600	1.02300	0.93400	1.06000	1.05100	1.09900	1.06000	1.05800	1.05600	1.05600
U.S. Average	1.03500	1.03271	1.02618	1.02249	1.02549	1.03253	1.03019	1.02994	1.03042	1.02821	1.02932

-- =Not applicable.

Sources: See source listing at the end of this appendix.

Table B7. Approximate Heat Content of Natural Gas Total Consumption, 1995-2004
(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	1.02900	1.03300	1.04100	1.03900	1.03500	1.04200	1.03400	1.05300	1.00000	1.04000
Alaska	1.00600	0.99000	1.00000	0.99900	1.00000	0.78100	1.01000	1.01400	1.01400	1.01400
Arizona	1.03500	1.01100	1.02100	1.01600	1.01500	1.01300	1.01500	1.02500	1.00600	1.00900
Arkansas	1.07600	1.02600	1.01500	1.02400	1.01900	1.01900	1.01600	1.04700	1.04700	1.04200
California	1.01600	1.03200	1.01800	1.04700	1.01700	0.97900	1.02000	0.99800	1.02200	1.02100
Colorado	1.01800	1.02400	1.01200	1.01200	1.00700	1.00800	1.01300	1.00500	1.00500	0.99400
Connecticut	1.02800	1.02800	1.02700	1.02600	1.02400	1.02500	1.02100	1.03000	1.00600	1.00300
Delaware	1.03400	1.03500	1.03500	1.03700	1.03700	1.03700	1.03400	1.03900	1.04300	1.03900
District of Columbia	1.00600	1.00900	1.02100	1.02700	1.02100	1.02700	1.02600	1.02400	1.02700	1.02700
Florida	1.03300	1.05000	1.04800	1.05100	1.04300	1.06000	1.04900	1.02400	1.04400	1.02900
Georgia	1.02600	1.02300	1.02700	1.02700	1.02700	1.01800	1.03300	1.02400	1.04300	1.04300
Hawaii	1.04800	1.05700	1.03000	1.05600	1.05500	1.04700	1.03600	1.06000	1.04700	1.04800
Idaho	1.03000	1.03000	1.03100	1.03800	1.03800	1.02500	1.01900	1.01900	1.02200	1.02500
Illinois	1.02000	1.01900	1.02100	1.02200	1.02200	1.02200	1.02000	1.03000	1.00000	1.00000
Indiana	1.01200	1.01100	1.01100	1.01700	1.01800	1.02500	1.02400	0.95000	1.02800	1.03000
Iowa	1.00500	1.00600	1.00900	1.01100	1.01900	1.00500	1.00400	1.00800	1.00900	1.00800
Kansas	1.00200	0.99600	1.00100	0.99500	0.99700	1.00800	1.00500	0.99800	1.04000	1.04000
Kentucky	1.09600	1.04900	1.05000	1.03400	1.03200	1.04000	1.03700	1.03100	1.03200	1.02800
Louisiana	1.03500	1.04400	1.11800	1.07000	1.04200	1.05800	1.02700	1.07000	1.04000	1.04000
Maine	1.01600	1.01600	1.01400	1.01700	1.01800	1.07300	1.05700	1.06200	1.06000	1.05100
Maryland	1.02600	1.02900	1.03400	1.03700	1.03400	1.03400	1.03700	1.02800	1.03000	1.03000
Massachusetts	1.02600	1.02700	1.02200	1.02300	1.04800	1.04200	1.04300	1.04000	1.04000	1.04000
Michigan	1.01700	1.01200	1.01600	1.02000	1.01800	1.02200	1.02500	1.00000	1.00000	1.00200
Minnesota	1.01300	1.01800	1.01800	1.02000	1.01900	1.01500	1.01200	1.00900	1.01000	1.01000
Mississippi	1.02600	1.03000	1.03400	1.04600	1.03600	1.03800	1.02500	1.05400	1.00000	1.04100
Missouri	1.00700	1.01100	1.01000	1.01100	1.01300	1.01500	1.01700	1.00500	1.01700	1.01700
Montana	1.03000	1.03000	1.03100	1.02600	1.02400	1.02400	1.02200	0.99100	0.98900	0.99800
Nebraska	0.98000	1.00700	0.99800	1.00300	0.99900	1.00500	1.01700	1.00000	1.00000	0.99600
Nevada	1.03300	1.03600	1.02700	1.04100	1.03400	1.02600	1.02500	1.03800	1.02200	1.02100
New Hampshire	1.01100	1.01900	1.01100	1.01100	1.00900	1.05800	1.06200	1.06200	1.00000	1.05500
New Jersey	1.03400	1.03600	1.03500	1.03800	1.03900	1.03500	1.03700	1.04000	1.04300	1.03900
New Mexico	1.02000	1.02900	1.01900	0.98200	0.97900	0.97200	0.97500	1.01000	1.01000	1.03000
New York	1.02800	1.02600	1.02600	1.02800	1.02700	1.02800	1.02900	0.99300	1.04000	1.02000
North Carolina	1.03300	1.03600	1.03600	1.04000	1.03500	1.03000	1.04100	1.04000	1.04200	1.03500
North Dakota	1.05000	1.05100	1.05000	1.03800	1.04500	1.03500	1.02900	0.97200	0.97000	1.00600
Ohio	1.03800	1.03800	1.04500	1.04000	1.03700	1.04200	1.04200	1.02600	1.02800	1.02500
Oklahoma	1.02000	1.02400	1.01200	1.01400	1.02300	1.01500	1.02800	1.02900	1.03400	1.03300
Oregon	1.04000	1.04000	1.04600	1.04300	1.05100	1.02700	1.02600	1.03000	1.03100	1.03500
Pennsylvania	1.03500	1.03400	1.03500	1.03600	1.03600	1.03500	1.05400	1.05200	1.05200	1.05200
Rhode Island	1.02600	1.06000	1.02400	1.02500	1.02300	1.03800	1.03100	1.03100	1.02600	1.02700
South Carolina	1.02700	1.03000	1.03100	1.03400	1.03100	1.02900	1.03800	1.00000	1.00000	1.00000
South Dakota	1.01400	1.01400	1.01800	1.01000	1.00600	1.00500	0.99900	1.02000	1.02000	1.02000
Tennessee	1.03100	1.03200	1.03100	1.03000	1.02700	1.03700	1.03700	1.08000	1.03500	1.03500
Texas	1.03700	1.03300	1.02800	1.04100	1.03200	1.02900	1.02600	1.09100	1.11000	1.00000
Utah	1.06300	1.04200	1.04200	1.04600	1.05500	1.05100	1.05200	1.05800	1.05800	1.05800
Vermont	0.99600	1.01500	1.01200	1.01200	1.01200	1.01200	1.01200	1.00400	1.00600	1.00400
Virginia	1.03100	1.03900	1.04400	1.04300	1.03800	1.03500	1.03700	1.03500	1.03500	1.02700
Washington	1.04000	1.03700	1.04600	1.04500	1.05200	1.03800	1.03300	1.01900	1.02200	1.02300
West Virginia	1.06100	1.06100	1.06800	1.06300	1.05500	1.06800	1.06700	1.00700	1.04900	1.17300
Wisconsin	1.01100	1.01300	1.01100	1.01100	1.01200	1.01000	1.00900	1.00400	1.00700	1.00400
Wyoming	1.06300	1.06100	1.06900	1.06700	1.05100	1.04600	1.05500	1.04400	1.04800	1.04200
U.S. Average	1.02818	1.02890	1.03254	1.03460	1.02770	1.02014	1.02684	1.03474	^R 1.04098	1.02101

R = Revised data.

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B8. Approximate Heat Content of Coal Consumed by the Residential and Commercial Sector, 1960-1994, Selected Years
(Million Btu per Short Ton)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	24.90955	24.77905	23.93285	23.51979	24.04242	24.40711	24.62888	24.64742	24.20442	24.24951	24.45597
Alaska	18.90636	18.80731	18.16504	17.68304	--	15.80000	15.80000	15.80000	15.80000	15.80000	15.80000
Arizona	--	--	--	--	--	19.78800	18.69794	20.99769	21.90138	21.38908	25.03703
Arkansas	--	--	--	--	23.89952	22.99046	24.83396	25.96800	24.68871	23.97978	26.10174
California	23.01295	22.89238	22.11061	--	23.10930	23.55520	23.18400	23.14011	23.07808	23.20120	23.24015
Colorado	22.95289	22.83264	22.05291	20.82582	21.46057	21.21743	21.43489	21.57494	20.93156	21.83245	22.14453
Connecticut	24.86790	24.40178	23.47600	22.27200	22.71900	23.03100	25.19900	25.26800	24.79498	24.09600	25.05358
Delaware	24.72100	24.31600	23.47600	22.27200	23.14289	24.11686	24.85615	25.02730	24.71273	23.83238	23.85575
District of Columbia	25.10862	24.97707	24.12411	23.24075	24.54122	24.88768	24.96081	25.04028	24.93794	24.98614	24.95716
Florida	--	--	--	--	24.28341	24.88200	24.86125	25.26805	23.34733	24.96116	24.94758
Georgia	24.74225	24.61262	23.77210	23.49417	24.32123	24.83223	25.14330	25.18826	25.19263	24.99917	25.34326
Hawaii	--	--	--	--	--	--	--	--	--	--	--
Idaho	24.83140	24.70130	23.85776	22.66294	22.29152	22.83215	22.47778	22.57314	22.43044	22.43248	22.47832
Illinois	24.04164	23.91539	23.09871	22.52260	22.06925	22.26944	22.45162	22.59360	22.82204	22.61287	22.44937
Indiana	24.06516	23.93847	23.12085	22.13233	21.88129	22.25860	22.46054	22.45911	22.45790	22.60689	22.64376
Iowa	21.32126	21.20956	20.48526	18.27722	20.22308	21.40188	23.96001	24.08672	23.73387	23.46034	23.62240
Kansas	21.78815	21.67400	20.93384	--	21.18218	21.14600	24.27951	24.51147	24.41040	22.71888	24.51341
Kentucky	24.43091	24.28447	23.45391	23.17784	23.83696	24.34440	24.45011	24.71246	24.79925	24.87005	24.86330
Louisiana	--	--	--	--	21.36502	--	--	25.26800	--	24.09600	--
Maine	24.96425	24.70177	23.61235	22.51890	23.54561	24.27817	24.93701	25.24114	24.95461	24.67605	25.03700
Maryland	25.03270	24.87495	23.94377	22.93823	24.04282	24.74887	25.06708	25.16569	25.13399	24.95297	25.25646
Massachusetts	24.89361	24.49344	23.55718	22.43028	23.41739	23.77832	25.07028	25.21557	24.84729	24.43131	25.02901
Michigan	24.75940	24.62836	23.78687	23.46574	24.35257	24.46038	24.81175	24.88677	24.91422	24.72948	24.48071
Minnesota	21.97087	21.85576	21.10939	19.25676	20.82860	19.14210	17.89230	17.73444	17.80440	18.36730	19.60526
Mississippi	--	--	--	--	22.99343	24.54115	24.85200	25.26800	24.61700	24.09667	--
Missouri	22.94167	22.82147	22.04212	21.40447	21.80697	22.80191	21.93585	21.94880	22.01651	22.44298	22.86902
Montana	21.33557	21.22380	20.49901	20.38911	22.04235	17.68025	18.78135	18.01546	18.17794	18.88756	18.05498
Nebraska	20.91322	20.80366	20.09322	18.40616	18.03826	21.52621	21.37396	22.63244	21.59428	21.70581	21.88812
Nevada	25.11444	25.04926	24.21082	23.32668	22.43015	23.56200	24.01028	23.14800	23.09600	23.20000	23.23600
New Hampshire	24.72100	24.31600	23.47600	22.27200	22.71900	23.03100	25.17092	25.26800	24.77167	24.09600	25.03700
New Jersey	24.72427	24.35398	23.48102	22.26344	22.71900	23.21834	25.17308	25.26177	24.71277	24.09600	25.03700
New Mexico	22.99301	22.87255	22.09147	--	19.78553	19.81693	18.69800	18.63858	19.82432	19.35042	19.54379
New York	24.70038	24.36019	23.49620	22.57414	23.33679	23.81886	24.85588	25.01257	24.73886	24.38320	25.04668
North Carolina	24.76213	24.63240	23.79120	23.49258	24.42236	24.85944	25.18700	25.26828	25.03861	25.01550	24.99588
North Dakota	15.55018	15.46871	14.94046	13.75718	13.24298	13.13815	13.90962	13.90692	14.54945	14.76482	14.92006
Ohio	23.86178	23.73246	22.92073	22.32478	23.20690	23.83693	24.14408	24.17839	24.36654	24.32312	24.33250
Oklahoma	22.72718	22.60811	21.83605	20.67259	23.29143	23.39403	24.83400	25.96800	24.88048	23.89800	26.02613
Oregon	24.60503	24.47612	23.64027	22.38275	22.72195	22.60723	23.18400	23.14800	23.09600	23.70388	23.86580
Pennsylvania	24.73076	24.36478	23.54189	22.48706	23.15028	23.72419	25.11754	25.17103	24.87198	24.45001	25.05420
Rhode Island	24.72100	24.31600	23.47600	22.27200	22.71900	23.03100	25.19900	25.26800	24.61700	24.09600	25.03700
South Carolina	24.76172	24.63199	23.79081	23.49264	24.41433	24.85378	24.87489	25.13865	24.98263	24.88256	24.94988
South Dakota	19.41154	19.30984	18.65041	16.85997	18.42630	19.36902	18.37453	17.50120	19.09582	17.29400	20.61708
Tennessee	24.71533	24.58404	23.74488	23.48019	23.96977	24.38903	24.74124	25.11263	24.27714	25.11816	25.16264
Texas	14.95177	14.87344	14.36552	--	15.20049	22.51056	25.89608	25.71797	21.70100	18.41093	26.10171
Utah	25.89198	25.75633	24.87676	23.74007	23.17910	23.56200	23.14974	23.14850	23.09571	23.20000	23.24200
Vermont	24.72100	24.31600	23.47600	22.27200	22.71900	24.39899	25.19900	25.26800	24.61700	24.09600	24.83200
Virginia	24.78525	24.65237	23.81029	23.46220	24.41436	24.86362	25.08712	25.12517	25.13025	24.99384	24.98404
Washington	22.90924	22.78922	22.01097	19.96772	22.77100	23.45190	21.73662	22.33357	22.18710	22.50221	22.42899
West Virginia	24.99691	24.86595	24.01679	23.70919	24.05881	24.85990	25.01748	25.01572	24.94682	24.82827	24.95405
Wisconsin	21.92254	21.80607	21.06114	18.98021	24.26544	24.56793	24.97777	25.06509	25.03715	24.96032	24.94413
Wyoming	20.62538	20.51732	19.81665	18.57163	17.80856	17.26200	19.93489	23.14964	18.91636	18.55083	18.45662
U.S. Average	23.94283	23.77600	22.98985	22.12012	22.89233	22.68213	23.02050	23.09941	23.14212	22.83810	22.91565

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B9. Approximate Heat Content of Coal Consumed by the Residential and Commercial Sector, 1995-2004
(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	24.64589	24.63827	24.64215	25.47588	25.88280	25.45000	18.84468	24.23196	24.22414	24.22414
Alaska	15.80000	15.80000	15.84800	15.71000	15.60000	15.60000	15.60000	15.60000	15.60000	15.60000
Arizona	21.96150	19.28500	19.10306	21.69872	21.95554	21.95554	18.81885	18.96261	18.65717	18.77970
Arkansas	--	--	24.49708	25.08934	25.46394	--	--	25.20226	--	25.20226
California	23.29600	23.28200	23.10055	23.62691	23.74003	23.79000	23.54564	25.20226	24.57779	22.39951
Colorado	22.16939	22.10652	18.71008	22.43624	22.48006	21.70600	22.42877	22.40126	22.49956	22.46007
Connecticut	23.80410	24.63800	24.49700	27.35000	27.53000	24.84184	25.19040	25.20226	25.17420	25.20226
Delaware	24.69600	24.93390	25.05444	26.90254	26.15092	26.11800	25.20226	--	--	--
District of Columbia	25.17800	24.74271	24.57946	25.31000	25.30000	25.30000	24.69356	24.69356	24.69356	24.69356
Florida	24.64400	25.04400	--	26.04235	25.97502	25.75000	23.49457	24.35506	24.70354	--
Georgia	24.98009	25.04400	25.69800	25.65432	25.84901	25.64200	25.71566	25.71566	--	25.71415
Hawaii	--	--	--	--	--	--	--	--	--	--
Idaho	21.71685	21.72486	22.68311	19.71901	21.04956	22.06000	22.34782	22.07382	21.64352	18.44441
Illinois	22.51632	22.68127	22.80243	21.96000	21.96000	21.95496	23.09564	23.07288	22.94355	22.88660
Indiana	22.29025	22.23182	22.19420	22.75000	25.00000	23.51901	22.30349	22.27207	22.38880	22.34328
Iowa	24.36084	24.52912	23.56166	24.41000	25.97000	26.10085	23.86811	24.17926	24.05462	23.39265
Kansas	23.94481	24.10800	22.52800	24.68789	24.70725	24.15600	24.17185	24.02541	23.54564	--
Kentucky	24.92797	24.35637	23.26395	25.46950	26.23869	26.40800	24.90121	24.70391	24.37750	24.09277
Louisiana	25.07800	--	24.53000	--	--	23.48200	--	--	--	--
Maine	24.69600	24.63800	24.49700	26.34731	26.08147	25.92200	25.19811	25.19627	25.20226	25.20226
Maryland	24.83796	25.08097	25.13840	25.31044	25.29975	25.07200	24.92243	24.61596	24.79575	24.69992
Massachusetts	24.83425	24.79549	24.70762	27.34861	27.53458	27.07000	25.39455	24.64837	24.99683	24.46855
Michigan	24.66160	24.84902	24.59315	24.80000	25.10000	25.09987	24.08681	23.59538	23.70301	24.50332
Minnesota	20.25825	17.54796	18.40880	19.25179	19.31135	19.29400	24.33092	17.38221	18.74383	20.36034
Mississippi	--	--	24.49708	--	--	--	--	--	--	--
Missouri	22.63423	22.66103	22.82574	22.00000	22.43000	22.01372	22.98069	23.14705	23.25095	23.19464
Montana	21.22785	18.18800	17.85986	23.37560	17.09403	16.01600	18.22272	18.51422	18.41265	18.11776
Nebraska	20.32116	24.63800	17.33200	20.74919	--	--	22.34669	22.39411	22.43902	22.39620
Nevada	23.44269	23.28200	23.09600	22.98804	23.10820	23.10820	19.61653	18.11776	18.11776	18.11776
New Hampshire	24.86761	24.84196	24.55195	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	25.20226
New Jersey	24.69600	24.63800	24.49700	25.22885	25.31653	25.50000	25.20226	25.20226	25.20226	25.20226
New Mexico	19.23183	19.32888	18.92150	24.76400	25.11200	25.21200	18.81885	18.78502	19.00920	19.24556
New York	24.95806	24.82789	24.83757	25.45000	25.51000	25.31147	24.84639	25.09365	25.20226	24.99169
North Carolina	25.16371	24.83876	24.99447	26.70000	27.00000	27.00000	25.07997	24.82548	25.32901	24.77161
North Dakota	15.53547	14.92702	14.93796	14.27578	14.26426	14.22800	16.00252	16.22776	16.37937	16.98175
Ohio	24.43882	23.79691	23.89197	25.25000	24.14000	24.01316	24.11117	24.20238	24.14877	21.33540
Oklahoma	25.89400	26.12800	17.35345	19.93863	19.77893	--	24.21484	24.21484	24.21484	--
Oregon	23.29600	--	23.09600	22.00000	23.30868	23.30868	--	--	--	--
Pennsylvania	24.82982	24.70349	24.64969	25.26545	25.44396	26.38599	25.13691	25.10969	25.12376	25.10462
Rhode Island	24.69600	24.63800	24.49700	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	25.20226
South Carolina	25.50314	24.71660	24.97200	26.21051	26.34668	--	--	25.20226	--	--
South Dakota	19.07166	21.61937	17.33200	19.76699	20.36609	20.86800	23.50629	17.38116	17.38116	17.38116
Tennessee	25.27626	25.04338	25.02904	26.04000	26.04000	26.04538	24.45667	24.55328	23.83116	23.49719
Texas	--	--	25.51014	24.81832	16.25125	16.28000	25.62310	18.68536	19.22769	25.68290
Utah	23.29600	23.28200	23.09345	23.54893	23.36625	23.21000	23.54375	23.54578	23.54700	23.54652
Vermont	24.69600	24.63800	24.61419	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	25.20226
Virginia	24.99689	25.10405	24.92831	26.40706	26.45535	26.17391	25.04189	25.04500	24.92450	25.00427
Washington	22.63392	23.09783	22.87154	26.60000	25.98000	25.96100	23.48820	23.50574	23.51911	23.51009
West Virginia	24.82246	24.68019	24.73754	25.76982	25.70998	25.74200	24.76458	24.74624	24.76538	24.71213
Wisconsin	25.07766	25.05235	24.92021	27.45000	26.79000	27.65942	24.44771	24.30858	24.71652	24.32607
Wyoming	18.24057	18.19276	18.03000	20.31540	20.19004	20.11600	17.74573	17.83742	17.86023	17.87893
U.S. Average	23.02709	22.71809	22.37879	23.27631	23.66758	23.36355	22.70619	22.44931	22.48756	22.31421

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B10. Approximate Heat Content of Coal Consumed by Other Industrial Users, 1960-1994, Selected Years
(Million Btu per Short Ton)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	25.17776	24.96027	23.54166	22.98960	24.10560	24.38311	24.67898	24.58103	24.64283	24.53557	24.65614
Alaska	19.42837	19.25707	18.14004	17.68383	--	--	--	--	--	15.80000	16.46473
Arizona	21.61434	21.42376	20.18105	19.77788	20.37305	20.25740	20.07050	19.94197	20.31671	19.99527	20.15810
Arkansas	25.42843	25.20422	--	21.33575	21.40613	21.30956	22.80790	24.19421	24.00205	23.45115	24.82810
California	26.05221	25.82250	24.32464	22.98540	22.17313	23.29909	22.52224	22.73094	22.97040	23.20026	23.22969
Colorado	23.55826	23.35054	21.99607	21.39183	21.81821	21.56832	21.10513	21.08138	20.10740	20.93740	21.56872
Connecticut	25.78016	25.55285	24.07063	23.62736	--	24.41914	25.19900	24.84324	24.93613	24.79454	25.27560
Delaware	25.35920	25.12886	23.74325	23.44148	24.47242	24.71973	24.93784	25.07321	25.25103	25.20759	25.24459
District of Columbia	25.88358	25.65536	24.16719	23.78591	24.35746	--	--	--	--	--	--
Florida	--	--	--	23.54145	22.89184	24.77766	25.00471	25.13081	25.00174	24.88237	24.92795
Georgia	25.42319	25.19903	23.73733	23.50777	24.33122	24.81778	25.14819	25.13954	25.14655	25.10235	25.07263
Hawaii	--	--	--	--	--	24.68800	24.81000	24.85000	24.83000	24.83000	21.50000
Idaho	22.54363	22.34486	21.04872	19.93455	17.68403	17.76163	17.85823	17.75592	17.52799	18.16523	17.74360
Illinois	23.84790	23.63069	22.26726	21.69430	22.35658	22.79936	22.55646	21.86486	22.75432	22.86151	22.65432
Indiana	24.01127	23.79938	22.41888	21.82415	22.25323	22.43118	22.71236	22.92005	22.95050	22.85609	22.63570
Iowa	23.56545	23.33520	21.98253	21.31980	21.51657	22.61050	22.58587	22.19280	20.56822	20.16583	20.11051
Kansas	22.67087	22.47098	21.16753	20.47974	21.56793	21.50635	24.22372	24.42437	24.48944	23.55304	23.96144
Kentucky	24.73441	24.49683	23.11929	22.90395	24.05911	24.51775	24.63342	24.90217	24.89135	24.83788	24.75797
Louisiana	--	--	--	--	22.15263	24.05362	19.97897	18.36116	18.56416	18.41604	18.41001
Maine	25.88863	25.62632	24.13365	23.97519	24.43949	24.86127	24.92375	25.01017	25.06970	24.97451	24.96127
Maryland	25.90399	25.67570	24.18970	23.65802	24.48487	24.72752	25.11792	25.14601	25.20668	25.26143	25.40216
Massachusetts	26.14994	25.90591	24.40195	23.79824	24.60203	24.84959	24.87740	24.92877	24.89677	24.90752	24.96452
Michigan	24.83068	24.61006	23.18747	22.89244	24.04413	24.74112	24.45063	24.52149	24.40010	24.20802	24.22421
Minnesota	19.52134	19.34921	18.22684	18.91730	17.08375	20.69045	18.56250	19.36088	18.52981	18.14535	18.50432
Mississippi	25.68109	25.45466	23.97813	23.21260	23.44243	23.39939	23.25386	23.26526	23.34142	24.01959	23.89459
Missouri	23.60136	23.39246	22.03613	21.43028	22.00267	22.32881	22.98843	23.26695	23.43390	23.57812	23.00631
Montana	22.82715	22.62588	21.31344	20.87854	19.03489	18.06841	18.37578	18.47768	18.78661	18.55546	18.33765
Nebraska	21.97456	21.78080	20.51738	19.28537	19.19380	18.59708	19.05305	18.91741	18.44837	18.77025	19.10347
Nevada	26.49581	26.14446	24.78307	23.42175	23.16143	23.56200	23.18400	23.14800	23.09600	23.20000	23.23600
New Hampshire	24.45007	24.23285	22.94496	23.36408	24.11207	24.62418	24.93865	25.26108	25.31936	24.98000	--
New Jersey	25.38804	25.15576	23.71203	23.37734	23.52635	24.45329	25.23639	25.26680	25.33154	25.26040	25.06850
New Mexico	23.03750	22.83438	21.50984	--	21.86701	21.62540	21.38800	21.54400	20.39800	21.70600	21.92600
New York	25.71896	25.48611	24.05437	23.63516	24.45387	24.85826	25.10824	25.19174	25.15526	25.14915	25.20620
North Carolina	25.44614	25.22177	23.75876	23.49028	24.41869	24.88021	24.93830	25.10847	25.08579	25.14470	25.10470
North Dakota	14.81208	14.68148	13.82987	13.03850	13.12013	13.16040	13.48903	13.41305	13.32713	13.32920	13.45017
Ohio	24.78928	24.56848	23.14857	22.67582	23.33942	24.17814	24.30376	24.44410	24.42144	24.55123	24.55067
Oklahoma	25.38348	25.15967	--	23.43863	21.21166	21.43419	22.80216	23.80519	22.75512	22.42776	21.09034
Oregon	22.67719	22.47724	21.17342	20.34784	17.69347	17.86804	17.35230	17.33432	17.88959	19.00958	19.69751
Pennsylvania	25.47879	25.24913	23.88921	23.42998	24.11035	24.67778	24.92015	25.06594	25.08790	25.07589	25.11963
Rhode Island	24.72100	24.31600	23.47600	22.96321	24.09889	24.41914	25.19900	--	--	--	--
South Carolina	25.42102	25.19405	23.75586	23.47287	24.39898	24.86134	25.11786	25.22595	25.19592	25.17487	25.07478
South Dakota	19.90924	19.73370	18.58902	18.76511	19.21967	17.26200	17.33800	17.46595	17.29575	17.29400	17.26800
Tennessee	25.05567	24.83269	23.41284	23.12927	24.14518	24.57948	25.13269	25.12446	25.25216	25.15832	25.05625
Texas	16.85433	16.90156	17.88528	18.82484	16.29553	15.7653	14.78967	15.05322	14.31012	15.18809	15.48368
Utah	26.19847	25.96747	24.46120	23.64361	22.33114	22.27355	23.18867	23.12437	23.09600	23.49359	22.92161
Vermont	26.52519	26.29132	24.76626	24.05572	24.88781	24.26487	25.07890	25.74698	25.70000	--	--
Virginia	25.46128	25.23740	23.77727	23.47269	24.44795	24.90014	25.06954	25.16480	25.19517	25.09637	25.05070
Washington	25.95480	25.72596	24.23369	23.54643	21.36337	21.63429	22.70686	21.74506	20.69363	20.21833	19.27531
West Virginia	25.51633	25.29299	23.83024	23.52175	24.34671	24.84946	24.88832	24.99430	24.94736	24.93580	24.97828
Wisconsin	24.59694	24.37976	22.96605	21.95744	22.73534	23.32295	24.15041	24.30622	24.27108	23.95843	24.16167
Wyoming	20.53852	20.35742	19.17657	18.35566	17.95474	17.55529	22.17752	22.05079	21.11792	21.28174	21.75639
U.S. Average	24.65746	24.46031	23.06438	22.29033	22.69605	22.24945	22.42959	22.45443	22.20892	22.16755	22.02827

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B11. Approximate Heat Content of Coal Consumed by Other Industrial Users, 1995-2004
(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	24.84808	24.78508	24.67890	24.87433	24.87429	25.45000	25.56317	25.61134	25.60454	25.33626
Alaska	--	15.80000	15.84800	15.71000	15.71000	15.71000	15.60000	15.60000	15.60000	15.60000
Arizona	19.96204	19.79709	19.54036	19.25030	19.23730	22.16400	21.90688	22.34502	22.40728	21.93836
Arkansas	23.95685	23.98664	23.58123	24.43193	24.43179	25.15400	24.92946	24.79729	24.30495	24.40426
California	23.29600	23.28200	23.05519	22.99659	22.99659	23.79000	24.12823	23.88255	24.16352	24.12961
Colorado	21.70231	21.57372	21.57222	21.26260	21.25734	21.70600	21.76792	23.37126	23.21756	22.77619
Connecticut	--	--	--	--	--	--	--	--	--	--
Delaware	25.19175	25.14560	25.21542	25.16859	25.16618	26.15092	26.08942	25.91692	25.68903	26.08198
District of Columbia	--	--	--	--	--	--	--	--	--	--
Florida	25.10701	25.11598	25.05234	25.00217	25.00308	25.75000	25.72868	25.61772	25.50327	25.85017
Georgia	25.19814	25.13735	25.08994	25.07925	25.07909	25.64200	25.71929	25.89083	25.86071	25.66513
Hawaii	21.50000	21.50000	22.49862	23.04000	23.04000	19.51800	18.13971	13.21369	26.40000	23.76000
Idaho	19.03477	18.16585	17.33200	18.15972	18.15972	22.06000	20.56167	20.87305	20.27673	20.34949
Illinois	22.83681	22.84938	23.17145	23.04887	23.05062	22.55200	22.27503	22.00140	21.63749	21.35039
Indiana	23.05468	22.71535	23.18017	23.25752	23.26278	23.86600	24.72806	24.56617	24.09312	24.36426
Iowa	20.97803	21.30743	20.93210	21.17668	21.17762	20.98000	20.98995	20.46674	20.79014	20.23722
Kansas	24.24071	25.47579	24.52305	24.79541	24.79543	24.15600	23.38449	24.01263	24.28579	24.85503
Kentucky	24.84676	24.74520	24.48063	24.69544	24.69546	26.40800	26.07951	26.73192	26.18923	26.29921
Louisiana	18.13611	25.01815	24.85731	25.18061	25.18061	24.50200	24.79641	24.38702	24.23213	24.62068
Maine	25.10225	25.02589	24.98213	24.50979	24.50979	25.92200	25.87095	25.85521	26.13598	25.57684
Maryland	25.32368	25.13270	25.11468	25.02943	24.99151	25.07200	26.15043	25.73619	25.39493	25.12167
Massachusetts	25.17556	24.90749	25.03547	24.47621	24.47621	27.07000	26.97528	27.05517	27.05441	27.23207
Michigan	24.02603	24.34533	24.35386	23.73938	23.73938	24.91200	25.09757	25.51789	25.63669	25.18729
Minnesota	19.07827	19.14046	18.86921	18.61519	18.61053	19.29400	19.46505	19.33533	18.93818	18.99910
Mississippi	24.07263	23.90664	23.67600	24.07408	24.07408	23.92200	24.17841	24.36851	24.14262	23.32565
Missouri	23.17545	23.13412	22.82012	22.90858	22.91315	23.12800	22.97924	23.15466	23.06086	23.00128
Montana	18.09956	18.21032	18.24449	17.91315	18.02330	16.01600	16.45749	14.69448	14.62430	14.87796
Nebraska	19.35912	18.82313	19.13176	19.07469	19.04352	20.50800	19.55943	20.50057	20.26782	20.10598
Nevada	22.66808	22.61981	22.98074	23.13890	23.13890	23.28000	23.37973	23.05508	23.27639	23.02476
New Hampshire	25.21628	--	--	--	--	--	--	--	--	--
New Jersey	23.98345	24.63800	24.49700	23.78144	23.53789	25.50000	24.80000	25.20000	25.24380	25.23317
New Mexico	22.00800	21.97600	21.78800	21.98800	21.98800	25.21200	25.06600	24.75071	25.19525	24.67538
New York	25.11701	25.02823	25.16298	25.04125	25.04584	26.29400	25.53551	25.97046	26.07853	26.15033
North Carolina	25.26890	25.14978	25.06093	25.06861	25.06878	26.49200	26.75042	26.39726	26.46086	26.32947
North Dakota	13.35266	13.38232	13.28668	13.34170	13.34170	14.22800	14.17729	13.98412	14.31013	14.34435
Ohio	24.51161	24.46949	24.43845	24.36431	24.36436	24.81600	25.03997	25.14220	25.08606	25.23022
Oklahoma	22.67545	22.23193	20.88353	23.32931	23.32931	19.88200	19.97336	20.14169	20.43344	21.17481
Oregon	19.02589	21.29915	20.52349	20.16974	--	--	--	22.26898	23.08909	21.85459
Pennsylvania	25.13491	25.06116	25.16267	24.90182	24.90660	24.47600	24.31768	24.11592	24.04275	23.71597
Rhode Island	--	--	--	--	--	--	--	--	--	--
South Carolina	25.19274	25.06364	25.08769	25.03090	25.03144	26.27000	26.07798	26.33401	26.19595	25.98648
South Dakota	17.25800	17.30000	17.41854	17.51564	17.51564	20.86800	16.86083	16.85455	16.76268	16.61502
Tennessee	25.13542	25.02032	25.00384	25.02139	25.02261	26.08800	25.74152	26.03713	26.00196	25.99079
Texas	14.96538	15.34020	15.55204	14.23099	14.22843	16.28000	17.00044	17.70065	17.54537	17.09972
Utah	23.00279	23.28200	23.48885	23.05627	23.05627	23.21000	23.45310	23.01697	23.15785	21.02872
Vermont	--	--	24.49700	24.44600	24.44600	--	--	--	--	--
Virginia	25.08451	25.09830	24.94586	24.86104	24.86104	26.38600	26.21774	25.65424	26.31620	26.25933
Washington	19.00628	19.65817	20.64702	23.00664	23.00664	22.33200	22.65849	22.06989	23.17996	21.86739
West Virginia	24.97467	24.93964	24.96660	24.78222	24.78182	25.74200	25.53245	25.44492	25.17669	24.56337
Wisconsin	24.21942	23.89132	24.13111	24.27928	24.27942	23.69800	23.54541	23.45084	23.18524	23.15207
Wyoming	21.94055	21.89685	21.58115	21.93124	21.93124	20.11600	19.98672	20.14835	19.84803	19.91358
U.S. Average	22.11162	22.15728	22.18651	21.96645	21.88346	22.47646	22.65178	22.57467	22.51083	22.46391

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B12. Approximate Heat Content of Coal Consumed by the Electric Power Sector, 1960-1994, Selected Years
(Million Btu per Short Ton)

State	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Alabama	24.12600	23.70400	23.31400	23.16350	23.91189	24.11116	24.29927	24.30955	24.25124	24.27176	24.21300
Alaska	17.72900	17.85800	17.08000	17.40000	15.80000	15.80000	15.80000	15.80000	15.80000	15.80000	15.80000
Arizona	--	20.85000	21.23800	21.08957	21.24312	20.98564	20.95147	20.69528	20.65065	20.54730	20.56591
Arkansas	--	--	--	--	17.00887	17.20748	17.47750	17.45691	17.44748	17.33422	17.43423
California	--	--	--	--	--	--	20.70330	21.48931	21.51984	20.36472	22.05471
Colorado	20.54600	21.32200	21.53000	19.80780	19.99201	19.49701	19.65952	19.84719	19.87082	19.84346	20.02006
Connecticut	26.54800	25.90800	23.54800	23.90400	--	26.31651	25.80757	25.74956	25.73142	25.33500	25.53117
Delaware	25.98200	26.39200	24.18600	24.53412	24.92212	25.92406	26.06306	26.11092	26.12684	26.05616	25.90977
District of Columbia	27.46000	26.94800	25.92000	25.61888	--	--	--	--	--	--	--
Florida	24.60600	23.76200	22.74800	23.09252	23.68622	24.45038	24.81791	24.77806	24.30273	24.39829	24.22274
Georgia	25.04200	24.93200	23.75600	23.75121	23.80495	24.24094	23.63792	23.75845	23.97928	24.13074	23.32369
Hawaii	--	--	--	--	--	--	17.56757	17.30769	21.77202	22.25097	22.48571
Idaho	--	--	--	--	--	--	--	--	--	--	--
Illinois	21.69400	21.44800	21.00200	20.25912	20.59267	20.96903	21.58672	21.43711	21.57668	20.73708	20.56048
Indiana	22.64000	22.46600	22.03000	21.22923	21.63186	21.31356	21.12450	21.11605	21.14148	21.10610	21.03393
Iowa	20.76800	21.21800	20.88800	20.38486	18.63318	18.19661	17.82578	17.72343	17.72343	17.42828	17.55983
Kansas	23.75400	24.19200	24.10000	19.95680	18.36976	17.53691	17.84113	17.98156	17.72963	17.34725	17.47459
Kentucky	22.97200	22.89200	21.85200	21.48102	22.91705	22.76930	23.09104	23.04490	23.21940	23.35765	23.33411
Louisiana	--	16.03793	--	--	--	16.90673	16.42027	16.44092	16.24591	16.24590	16.27974
Maine	28.58000	--	--	--	--	--	28.00000	26.19913	25.50211	25.50000	25.50211
Maryland	26.61600	26.37200	24.61200	24.32290	24.75727	25.32555	25.47905	25.59031	25.50364	25.50728	25.64576
Massachusetts	26.35200	26.07200	23.26000	24.34726	26.75129	26.56066	26.12189	26.27022	26.14894	25.90039	25.64677
Michigan	24.88400	24.80400	24.20200	23.66213	24.02458	23.39292	22.24344	22.09388	22.00826	21.78981	21.91547
Minnesota	22.39000	22.17600	20.27400	17.94022	17.55670	17.45075	17.64386	17.66237	17.72078	17.75298	17.68430
Mississippi	24.85800	24.89000	24.09800	23.16389	23.99361	24.25244	25.11539	25.11886	25.02120	24.68746	22.61120
Missouri	21.90400	21.55000	21.51800	21.49363	21.30576	21.28922	20.75755	20.57265	20.60369	19.78479	19.34971
Montana	13.50000	13.14000	15.47400	15.95909	17.00328	17.30703	17.10463	17.03682	17.13824	16.98078	16.98694
Nebraska	24.78200	24.56800	23.91400	20.95357	18.80879	17.29876	17.12467	17.08491	17.10644	17.13093	17.16925
Nevada	--	25.48800	25.65400	22.38788	22.07779	22.76835	22.19062	22.25653	22.08991	22.05208	22.60884
New Hampshire	25.44800	27.90400	27.43200	26.70098	26.81635	26.90451	26.64473	26.52078	26.52041	26.34608	26.10531
New Jersey	26.76842	26.45784	24.94400	25.40124	26.18199	26.47525	26.83090	26.76530	26.88122	26.86979	26.58017
New Mexico	25.00000	18.00400	17.96600	17.84874	17.69514	18.37577	18.23374	18.21130	18.02430	17.98831	18.08926
New York	26.50514	26.67800	24.66400	24.05032	24.63519	25.20035	25.71847	25.85121	25.90782	25.79884	25.90120
North Carolina	26.24200	25.81400	24.11400	23.78836	24.53799	24.97487	25.19066	25.12432	25.03817	25.03573	24.96001
North Dakota	13.83600	13.91800	13.66600	13.34445	13.23368	13.15028	13.26794	13.20103	13.12054	13.14975	13.18614
Ohio	23.77000	23.56400	22.50000	21.91934	22.88041	23.62539	23.77469	23.89863	23.92793	24.08432	23.90231
Oklahoma	25.94198	24.00000	25.07600	25.07607	17.39280	17.16768	17.79161	17.88450	17.73038	17.57122	17.54149
Oregon	--	--	--	--	16.39258	16.58400	16.69555	16.85837	19.28304	17.60130	17.87420
Pennsylvania	23.43570	24.09503	23.34132	23.49794	24.17625	24.44508	23.35218	23.46570	23.01454	22.94278	22.58965
Rhode Island	28.15200	27.46800	--	--	--	--	--	--	--	--	--
South Carolina	26.73400	25.82200	24.27400	24.16051	24.84295	25.13214	25.30294	25.45216	25.63625	25.59571	25.54903
South Dakota	17.16800	17.90400	16.57200	12.61613	12.59940	12.20986	13.20310	13.05575	13.07256	12.95171	12.94018
Tennessee	24.04000	23.59000	22.59400	21.98283	23.25397	23.65727	23.94393	24.33412	24.35048	24.52504	24.36212
Texas	--	--	--	13.10305	14.79112	14.80734	14.57822	14.45537	14.46625	14.75740	14.76697
Utah	24.94000	25.18400	24.81200	23.64976	22.90042	23.60722	23.00247	22.88724	22.79854	22.81283	22.67316
Vermont	27.76000	27.34000	24.87000	25.74400	25.92600	25.62800	--	--	--	--	--
Virginia	26.72600	26.47400	24.78200	23.93019	25.01317	25.62794	25.46145	25.56398	25.69509	25.67493	25.62715
Washington	--	--	--	16.20000	16.20000	16.20000	16.27013	16.01428	16.37870	16.24657	16.80124
West Virginia	23.90800	23.73600	23.31800	23.22075	24.26929	24.82719	24.93097	24.92569	24.75582	24.27763	24.40917
Wisconsin	24.20800	24.03600	22.44600	21.23552	20.52333	19.54733	19.11105	19.16292	19.19254	18.82005	18.99358
Wyoming	14.84600	15.99000	16.53400	16.62585	17.59029	17.50962	17.68200	17.55373	17.70171	17.60368	17.58637
U.S. Average	23.92159	23.78120	22.57470	21.65048	21.35691	21.02274	20.77650	20.72774	20.70652	20.67519	20.58686

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Table B13. Approximate Heat Content of Coal Consumed by the Electric Power Sector, 1995-2004
(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	23.71814	23.62530	23.23960	23.11732	22.19134	22.06190	21.89221	R 22.45197	21.79318	21.47520
Alaska	15.80000	15.80000	15.80000	16.90141	16.65753	16.57100	16.53408	16.13460	R 16.26433	16.03953
Arizona	20.57766	20.44148	20.34739	20.38344	20.50387	20.42598	20.30467	20.30611	20.19154	20.39896
Arkansas	17.36965	17.39802	17.41297	17.34710	17.30255	17.35216	17.41107	17.28087	17.01818	16.97863
California	22.06625	23.45821	21.85178	22.24980	23.45239	23.50623	23.53335	23.59704	24.40935	24.37750
Colorado	19.77843	19.90650	19.73791	19.76528	19.55575	19.68516	19.56638	19.57370	19.46454	19.66261
Connecticut	25.61179	25.61007	25.78092	25.60594	24.57017	24.54238	24.57295	22.61785	R 20.35817	20.58514
Delaware	26.17331	26.03587	26.13235	25.90669	25.85637	25.89995	22.85394	24.64016	24.86200	24.57259
District of Columbia	--	--	--	--	--	--	--	--	--	--
Florida	24.30112	24.38155	24.32881	24.27066	24.36377	24.39667	24.19654	R 24.47833	R 24.54170	24.31042
Georgia	22.99264	23.07567	23.26596	23.34800	23.25969	23.17564	R 23.32263	23.27634	23.19329	21.86921
Hawaii	22.46192	21.99277	21.86457	21.98890	21.92900	21.96268	21.95915	22.85558	22.78043	22.38156
Idaho	--	--	--	--	--	--	--	--	--	--
Illinois	20.23176	20.09605	19.81497	19.95586	19.88917	19.00766	R 18.96250	R 17.98552	18.05192	17.94032
Indiana	20.72512	20.75962	20.84809	20.99836	21.17079	21.18776	R 21.07405	20.63657	20.77922	20.93008
Iowa	17.46392	17.36788	17.35340	17.75846	17.74086	17.74159	R 17.75174	17.45934	17.40657	17.36769
Kansas	17.46468	17.63768	17.53745	17.39772	17.28344	17.35757	R 17.40822	17.09551	17.07787	17.18553
Kentucky	23.29869	23.07877	23.16404	23.09505	23.10287	23.21985	R 22.85597	23.02596	22.91007	22.74221
Louisiana	16.16720	16.32941	16.25260	16.19171	16.29411	16.06360	16.02309	15.78423	R 15.83440	15.94057
Maine	25.50000	25.50000	26.00000	25.50000	25.50065	25.50206	25.50913	25.67508	26.34278	25.70385
Maryland	25.92837	25.77953	25.82604	25.83073	25.87305	25.58099	25.39357	R 25.94153	R 25.26517	25.16579
Massachusetts	25.40011	25.28340	25.12795	25.11719	25.17950	25.13633	24.58141	24.98333	24.27228	23.58130
Michigan	21.37664	21.04777	21.18818	21.17513	21.03606	20.87626	R 20.35290	19.80311	19.72285	19.57395
Minnesota	17.69994	17.86324	17.81417	17.80430	17.81200	17.88333	R 17.84650	17.52943	17.68778	17.63017
Mississippi	22.43229	21.98747	20.96791	21.25237	22.11560	23.07236	R 23.34428	19.15204	18.37832	18.21678
Missouri	18.50887	18.16688	17.97357	17.86978	17.90978	17.83803	R 17.83536	17.58855	17.52202	17.54282
Montana	16.99483	16.87895	16.81662	16.83133	16.84815	16.76161	16.76781	R 16.92120	17.00369	16.98384
Nebraska	17.19095	17.19019	17.19342	17.16400	17.00357	17.26387	R 17.16865	17.18567	17.23930	17.08374
Nevada	22.12016	22.27863	22.36387	22.40233	22.49028	22.46450	22.42843	20.35415	22.53116	22.19884
New Hampshire	26.26872	26.25812	26.12156	26.28170	26.33989	26.26371	26.10294	26.03410	26.06670	26.14875
New Jersey	26.51285	26.07115	26.01541	26.14646	26.14399	26.10622	R 26.00633	R 25.70562	R 25.49757	25.38483
New Mexico	18.06103	18.22953	18.14272	18.16905	18.26593	18.38786	R 18.50342	18.57152	18.35153	18.44799
New York	25.91197	25.83610	26.01414	26.04338	26.10032	26.09609	R 26.03933	R 25.59208	25.09965	24.07376
North Carolina	25.05575	24.94896	24.80074	24.85444	24.94669	24.96554	24.69647	24.61092	R 24.69934	24.59170
North Dakota	13.16609	13.18832	13.09621	13.12410	13.09452	13.05680	13.08158	13.00238	12.83980	12.93321
Ohio	24.24279	24.07984	23.78736	23.81224	23.85473	23.54852	R 23.09420	23.27825	23.48272	23.41869
Oklahoma	17.46308	17.48181	17.58891	17.67738	17.56985	17.71738	17.64096	17.63499	17.58214	17.58968
Oregon	17.76504	17.56340	17.51550	17.37069	17.37069	17.27270	17.41227	17.00023	17.12684	16.87973
Pennsylvania	22.65412	22.62252	22.70900	22.84248	23.02907	23.16297	22.44516	23.56468	R 22.98280	22.89975
Rhode Island	--	--	--	--	--	--	--	--	--	--
South Carolina	25.70586	25.52136	25.70091	25.55763	25.56171	25.40681	R 25.12150	24.67291	24.99159	24.89169
South Dakota	14.27626	18.32551	17.62504	17.75382	17.46863	17.18875	17.08216	16.95465	16.94182	16.95651
Tennessee	24.29681	24.22004	23.99457	24.23173	24.26070	24.20313	R 24.17211	23.03553	22.89925	22.64532
Texas	14.72568	14.98921	15.01066	15.05700	15.01573	15.19314	15.33008	R 15.44303	15.24670	15.27832
Utah	22.78871	22.76216	22.40057	22.31132	22.90924	22.92554	22.74758	R 22.51816	22.30324	22.08164
Vermont	--	--	--	--	--	--	--	--	--	--
Virginia	25.53894	25.25975	25.15090	25.22663	25.45736	25.67355	25.37158	R 25.42008	24.39707	24.46955
Washington	16.53810	15.86645	16.08781	16.43364	16.46003	16.19347	16.00174	15.99992	15.79913	16.01374
West Virginia	24.48178	24.50303	24.54181	24.37571	24.47831	24.33315	24.14704	R 24.20576	R 24.18395	24.05631
Wisconsin	18.56316	18.47512	18.67642	18.65018	18.59654	18.88566	R 18.70978	19.23048	R 18.27612	18.34786
Wyoming	17.54191	17.47664	17.65017	17.63874	17.61607	17.63312	17.72695	17.43899	17.79030	17.64501
U.S. Average	20.54157	20.54538	20.51618	20.51614	20.48955	20.51062	R 20.33690	R 20.23817	20.08181	19.97985

R = Revised data.

-- = Not applicable.

Sources: See source listing at the end of this appendix.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

Asphalt. EIA adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Aviation Gasoline. EIA adopted the Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for “Gasoline, Aviation” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Butane. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Butane-Propane Mixture. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

Crude Oil (Including Lease Condensate) Used Directly. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950.”

Distillate Fuel Oil. EIA adopted the thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950.”

Ethane. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Ethane-Propane Mixture. EIA calculated 3.308 million Btu per barrel on the basis of an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

Isobutane. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for “Jet Fuel, Commercial” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Jet Fuel, Naphtha Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for “Jet Fuel, Military” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Kerosene. EIA adopted the thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950.”

Liquefied Petroleum Gases. (LGTCKUS) • 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Crude Petroleum and Petroleum Products, 1956,” Table 4 footnote, constant value of 4.011 million Btu per barrel. • 1967 forward: Calculated annually

by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor, listed in this appendix, and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Quantities consumed are from: 1967 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1. 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

Lubricants. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Miscellaneous Products. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Motor Gasoline. (MGTCKUS) • 1960 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics. • 1994 forward: EIA calculates national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in appendix Table C1). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, *Fuel Economy Impact Analysis of Reformulated Gasoline*.

Natural Gasoline. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Pentanes Plus. EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel, equal to that for natural gasoline. See **Natural Gasoline**.

Petrochemical Feedstocks, Naphtha Less Than 401 °F. EIA assumed the thermal conversion factor to be 5.248 million Btu per barrel, equal to that for special naphthas. See **Special Naphthas**.

Petrochemical Feedstock, Other Oils Equal to or Greater Than 401 °F. EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil. See **Distillate Fuel Oil**.

Petrochemical Feedstock, Still Gas. Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

Petroleum Coke. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30,120,000 Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Petroleum Products, Total Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

Plant Condensate. EIA estimated 5.418 million Btu per barrel from data provided by McClanahan Consultants, Inc., Houston, Texas.

Propane. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Residual Fuel Oil. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Road Oil. EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, equal to that of asphalt and first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970*. See **Asphalt**.

Special Naphthas. EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, equal to that of total gasoline (aviation and motor) and first published in the *Petroleum Statement, Annual, 1970*.

Still Gas. EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970*.

Unfinished Oil. EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil and first published in the *Annual Report to Congress, Volume 3, 1977*. See **Distillate Fuel Oil**.

Unfractionated Stream. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel, equal to that for plant condensate and first published in the EIA, *Annual Report to Congress, Volume 2, 1981*. See **Plant Condensate**.

Waxes. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the EIA, *Petroleum Statement, Annual, 1956*.

Approximate Heat Content of Natural Gas

Natural Gas, Total Consumption. (NGTCKZZ) • 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*. • 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual. • 1980 through 1996: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 16. • 1997 through 2001: EIA, *Natural Gas Annual 2001*, Table 16 and unpublished revisions. • 2002 forward: EIA, *Natural Gas Annual 2004*, Table 16, http://www.eia.doe.gov/pub/oil_gas/natural_gas/data_publications/natural_gas_annual/historical/2004/nga_2004.html and published revisions.

Natural Gas, Consumption by the Electric Power Sector. (NGEIKZZ) • 1960 through 1971: Assumed by EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users.

See **Natural Gas, Total Consumption**. • 1972 through 1982: Calculated annually by EIA by dividing the total heat content of natural gas received at steam electric plants 25 megawatts or greater by the total quantity received at those electric plants. The heat contents and quantities received are from the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." • 1983 through 1988: The average heat content of natural gas received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published from 1993 forward in Btu per cubic foot in the EIA, *Cost and Quality of Fuels for Electric Utility Plants*, Table 14, http://www.eia.doe.gov/cneaf/electricity/cq/cq_sum.html. Note: For States that reported consumption on EIA-759 but were not large enough to report on FERC Form 423, factors were estimated by using previous years' factors or the factor for total natural gas consumption in the State. • 1989 forward: Calculated by dividing the total heat content of natural gas received at electric power plants (including electric utilities, nonutility power plants and combined heat-and-power plants) by the total quantity consumed in physical units collected by the EIA on Forms EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html.

Approximate Heat Content of Coal and Coal Coke

Coal, Consumption at Coke Plants. (CLKCKZZ) • 1960 through 1997: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS. — Anthracite conversion factor (for all end-use sectors) sources: –1960 through 1997: Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and "unaccounted for." — Bituminous coal and lignite conversion factor sources: –1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," sum of columns "Beehive coke plants" and "Oven coke plants." –1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8. –1985 through 1987: EIA, *Weekly*

Coal Production, July 16, 1988, Table 7. —1988 through 1997: EIA, Unpublished data from Form EIA-5. • 1998 through 2000: Average total coal factors by State calculated by EIA using unpublished data from Form EIA-5. The 1998 State factors are used for 1999 and 2000. • 2001 forward: Calculated by EIA from data reported on Form EIA-5, "Quarterly Coal Consumption and Quality Report, Coke Plants." Coke plant data on tons of coal carbonized to create coke, the volatilities of the coal carbonized, and conversion factors based on coal volatility are used to calculate average conversion factors by State.

Coal, Consumption by the Electric Power Sector. (CLEIKZZ) • 1960 through 1988: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS. — Anthracite conversion factor sources: —1960 through 1972: Energy Information Administration (EIA) assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17.500 million Btu per short ton. —1973 through 1988: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. These data are reported on the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and predecessor forms. — Bituminous coal and lignite conversion factor sources: —1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from the Federal Power Commission's (FPC) Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. The specific tables are: —1960 and 1961, Table 1. —1962 through 1972, Table 2. —1973 through 1982: The average heat content of coal received at steam electric plants 25 megawatts or greater from FPC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, tables titled "Destination and Origin of Coal 'Delivered to' (1973–1979) 'Receipts to' (1980) 'Received at' (1981–1982) Steam-Electric Plants 25-MW or Greater." —1983 through 1988: The average heat content of coal received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in the EIA, *Cost and Quality of Fuels for Electric Utility Plants*. The 1997 edition is available electronically only via Internet at: <http://tonto.eia.doe.gov/bookshelf/index.html>, click on "Electricity." The specific tables are: —1983 and 1984, Table 58. —1985 through 1988, Table 48. Notes: The

State conversion factors for 1960 through 1972 were derived from actual consumption data, while the conversion factors for 1973 to 1988 were based on receipts of coal. The factors for 1960 through 1972 may also have included some quantities of anthracite. These breaks in the series create some data discrepancies. In instances where a State had no receipts for a particular year but did report consumption, it was assumed that the coal received in one year was consumed during the following year and the Btu value of the previous year's receipts was used. • 1989 forward: Calculated by dividing the total heat content of coal received at electric power plants (including electric utilities, nonutility power plants and combined heat-and-power plants) by the total quantity consumed in physical units collected on Forms EIA-906, "Power Plant Report," and the EIA-920, "Combined Heat and Power Plant Report," and predecessor forms http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html. • Alaska factors: The sources used to develop thermal conversion factors for bituminous coal and lignite consumed by the electric power sector—the National Coal Association report and the Federal Power Commission's (FPC) Form 423 and FERC Form 423 published in the *Cost and Quality of Fuels for Electric Utility Plants*—exclude Alaska. However, Alaska reported consumption of bituminous coal and lignite at electric utilities for all years, 1960 forward. Unpublished FPC heat rates for coal at electric utilities in Alaska were used for 1960 through 1972. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1973 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 through 1997. From 1998 forward, the Alaska factor is calculated using the same methodology as is used for other States, described above.

Coal, Consumption by Other Industrial Users. (CLOCKZZ) • 1960 through 1997: Calculated by EIA as the consumption-weighted average of national level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS. — Anthracite conversion factor sources: —1960 through 1997: Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and "unaccounted for." — Bituminous coal and lignite conversion factor sources: —1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the

ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average. –1974 through 1997: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on Federal Energy Regulatory Commission (FERC) Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants.” The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, “Coal Distribution Report,” and predecessor Bureau of Mines Form 6-1419-Q. • 1998 through 2000: The average heat content of coal received at manufacturing plants (other than coke plants) consuming more than 1,000 short tons of coal during the year from Form EIA-3A and published in Btu per pound in the EIA *Annual Coal Report* and predecessor publications. • 2001 forward: Calculated by EIA using unpublished data as the average heat content of (1) coal received at manufacturing plants (other than coke plants) consuming more than 1,000 short tons of coal annually from Form EIA-3, “Quarterly Coal Consumption and Quality Report, Manufacturing Plants,” and predecessor forms; (2) coal distributed to agricultural, mining, and construction sectors reported on Form EIA-6A, “Coal Distribution Report - Annual” with heat contents for the coal producing State reported on FERC Form 423 and Form EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants;” and (3) coal consumed by coal mining facilities reported on Form EIA-7A, “Coal Production Report,” with heat contents for the coal producing State reported on FERC Form 423 and Form EIA-423.

Coal, Consumption by Residential and Commercial Users.

(CLHCKZZ) • 1960 through 1997: Calculated by EIA as the consumption-weighted average of national-level anthracite conversion factors and State-level bituminous coal and lignite factors using factors and consumption from SEDS. — Anthracite conversion factor sources: –1960 through 1997: Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and “unaccounted for.” — Bituminous coal and lignite conversion factor sources: –1960 through 1973: Estimated by EIA by adjusting the 1974 average heat

value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average. –1974 through 1997: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on the Federal Energy Regulatory Commission (FERC) Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants.” The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, “Coal Distribution Report,” and predecessor Bureau of Mines Form 6-1419-Q. • 1998 through 2000: The average heat content of coal received for the residential and commercial sectors as reported on the EIA-860. For States that are not represented in data on the EIA-860, it is assumed that the heat content of the coal receipts in these sectors is equivalent to the heat content of coal received in the other industrial sector. For states that are not represented in either the EIA-3A data or the EIA-860 data (CT, NH, VT and DC), the heat content of coal receipts in MA is used for CT, NH, and VT and the heat content of coal receipts in MD is used for DC, since the origin of the coal receipts are similar. • 2001 forward: Calculated by EIA from the coal distribution data reported on Form EIA-6A, “Coal Distribution Report - Annual,” and the average heat content of coal reported on FERC Form 423 and Form EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants.” Form EIA-6A provides distribution data for the combined residential and commercial sectors by State of origin to the destination State. FERC Form 423 and Form EIA-423 provide the average heat content of coal produced in the State of origin.

Coal, Consumption by Transportation Users.

(CLACKZZ) • 1960 through 1977: Assumed by EIA to be equal to the Btu conversion factor for bituminous coal and lignite consumption by industrial users other than coke plants: –1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average. –1974 through 1977: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received

at electric utilities in each State from identified coal-producing districts as reported on Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q. • 1978 forward: Transportation sector coal is included in the other industrial category. Zero is entered for this variable.

Coal Coke, Imports and Exports. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

Approximate Heat Content of Renewable Energy Sources

Ethanol, Consumption by the Transportation Sector. Fuel ethanol, which is derived from agricultural feedstocks (primarily corn) and blended into motor gasoline, is shown separately in *SEDR* to display the use of renewable energy in the transportation sector. Its gross heat content, calculated by EIA, is 3.539 million Btu per barrel.

Wood, Consumption by the Residential and Commercial Sectors. Estimated by EIA to be 20 million Btu per cord of wood. This rough average factor takes into account a number of variables, such as moisture content and species of wood, as explained in the EIA, *Household Energy Consumption and Expenditures 1993*, page 314.

Approximate Heat Rates for Electricity

Fossil-Fueled Steam-Electric Plant Generation. (FFETKUS) There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, biomass fuels, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA uses

data from Form EIA-767 to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. • 1960 through 1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published by EIA in *Electric Plant Cost and Power Production Expenses 1991*, Table 9. • 1989 through 2000: Calculated annually by EIA by using heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels. • 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-906, "Power Plant Report." The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

Geothermal Energy Plant Generation. (GEETKUS) • 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on FPC Form 12. • 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

Nuclear Steam-Electric Plant Generation. (NUETKUS) • 1960 through 1984: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported on FERC Form 1, Form EIA-412, and predecessor forms. The factors for 1982 through 1991 are published in the following EIA reports—1982: *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215; 1983 and 1984: *Electric Plant Cost and Power Production Expenses 1991*, Table 13. • 1985 forward: Calculated annually by EIA using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms), and the generation reported on Form EIA-906, "Power Plant Report" (and predecessor forms).

Appendix C

Resident Population

The population data used in the Energy Information Administration State Energy Data System (SEDS) to calculate per capita consumption are shown in Tables C1 through C5. The data are the U.S. Department of Commerce, Bureau of the Census, census of resident population by State conducted every 10 years with estimates of population for intervening years.

Data Sources

TPOPPUS — Resident population of the United States. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, “Population Estimates and Projections,” Series P-25. Specific publication numbers and table numbers:
 - 1960 through 1969: Number 990, Table 4.
 - 1970 through 1979: Number 957, Table 4.
 - 1980 through 1989: Number 1058, Table 3.

- 1990 through 1999: U.S. Department of Commerce, Bureau of the Census, Internet Release http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/
- 2000 forward: <http://www.census.gov/popest/states/NST-ann-est.html>

TPOPPZZ — Resident population by State. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, “Population Estimates and Projections,” Series P-25. Specific publication numbers and table numbers:
 - 1960 through 1969: Number 460, Table 1.
 - 1970 through 1979: Number 957, Table 4.
 - 1980 through 1989: Number 1058, Table 3.
- 1990 through 1999: U.S. Department of Commerce, Bureau of the Census, Internet Release http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/
- 2000 forward: <http://www.census.gov/popest/states/NST-ann-est.html>

Table C1. Resident Population by State, 1960-1969
(Thousand People)

State	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Alabama	3,267	3,316	3,323	3,358	3,395	3,443	3,464	3,458	3,446	3,440
Alaska	226	238	246	256	263	271	271	278	285	296
Arizona	1,302	1,407	1,471	1,521	1,556	1,584	1,614	1,646	1,682	1,737
Arkansas	1,786	1,806	1,853	1,875	1,897	1,894	1,899	1,901	1,902	1,913
California	15,717	16,497	17,072	17,668	18,151	18,585	18,858	19,176	19,394	19,711
Colorado	1,754	1,844	1,899	1,936	1,970	1,985	2,007	2,053	2,120	2,166
Connecticut	2,535	2,586	2,647	2,727	2,798	2,857	2,903	2,935	2,964	3,000
Delaware	446	461	469	483	497	507	516	525	534	540
District of Columbia	764	778	788	798	798	797	791	791	778	762
Florida	4,952	5,243	5,458	5,628	5,781	5,954	6,104	6,242	6,433	6,641
Georgia	3,943	4,015	4,086	4,172	4,258	4,332	4,379	4,408	4,482	4,551
Hawaii	633	659	684	682	700	704	710	723	734	750
Idaho	667	684	692	683	680	686	689	688	695	707
Illinois	10,081	10,130	10,280	10,402	10,580	10,693	10,836	10,947	10,995	11,039
Indiana	4,662	4,730	4,736	4,799	4,856	4,922	4,999	5,053	5,093	5,143
Iowa	2,758	2,756	2,750	2,747	2,746	2,742	2,762	2,793	2,803	2,805
Kansas	2,179	2,215	2,231	2,217	2,209	2,206	2,200	2,197	2,216	2,236
Kentucky	3,038	3,054	3,079	3,096	3,129	3,140	3,147	3,172	3,195	3,198
Louisiana	3,257	3,287	3,345	3,377	3,446	3,496	3,550	3,581	3,603	3,619
Maine	969	995	994	993	993	997	999	1,004	994	992
Maryland	3,101	3,176	3,263	3,386	3,492	3,600	3,695	3,757	3,815	3,868
Massachusetts	5,149	5,219	5,263	5,344	5,448	5,502	5,535	5,594	5,618	5,650
Michigan	7,823	7,893	7,933	8,058	8,187	8,357	8,512	8,630	8,696	8,781
Minnesota	3,414	3,470	3,513	3,531	3,558	3,592	3,617	3,659	3,703	3,758
Mississippi	2,178	2,206	2,243	2,244	2,241	2,246	2,245	2,228	2,219	2,220
Missouri	4,320	4,349	4,357	4,392	4,442	4,467	4,523	4,539	4,568	4,640
Montana	675	696	698	703	706	706	707	701	700	694
Nebraska	1,411	1,446	1,464	1,476	1,482	1,471	1,456	1,457	1,467	1,474
Nevada	285	315	352	397	426	444	446	449	464	480
New Hampshire	607	618	632	649	663	676	681	697	709	724
New Jersey	6,067	6,265	6,376	6,531	6,660	6,767	6,851	6,928	7,005	7,095
New Mexico	951	965	979	989	1,006	1,012	1,007	1,000	994	1,011
New York	16,782	17,061	17,301	17,461	17,589	17,734	17,843	17,935	18,051	18,105
North Carolina	4,556	4,663	4,707	4,742	4,802	4,863	4,896	4,952	5,004	5,031
North Dakota	632	641	637	644	649	649	647	626	621	621
Ohio	9,706	9,854	9,929	9,986	10,080	10,201	10,330	10,414	10,516	10,563
Oklahoma	2,328	2,380	2,427	2,439	2,446	2,440	2,454	2,489	2,503	2,535
Oregon	1,769	1,787	1,818	1,853	1,888	1,937	1,969	1,979	2,004	2,062
Pennsylvania	11,319	11,392	11,355	11,424	11,519	11,620	11,664	11,681	11,741	11,741
Rhode Island	859	858	871	876	885	893	899	909	922	932
South Carolina	2,383	2,409	2,423	2,460	2,475	2,494	2,520	2,533	2,559	2,570
South Dakota	681	693	705	708	701	692	683	671	669	668
Tennessee	3,567	3,622	3,673	3,718	3,771	3,798	3,822	3,859	3,878	3,897
Texas	9,580	9,820	10,053	10,159	10,270	10,378	10,492	10,599	10,819	11,045
Utah	891	936	958	974	978	991	1,009	1,019	1,029	1,047
Vermont	390	390	393	397	399	404	413	423	430	437
Virginia	3,967	4,095	4,180	4,276	4,357	4,411	4,456	4,508	4,558	4,614
Washington	2,853	2,882	2,942	2,955	2,961	2,967	3,057	3,174	3,270	3,343
West Virginia	1,860	1,828	1,809	1,796	1,797	1,786	1,775	1,763	1,763	1,746
Wisconsin	3,952	4,009	4,049	4,112	4,165	4,232	4,274	4,303	4,345	4,378
Wyoming	330	337	333	336	339	332	323	322	324	329
U.S. Total	179,323	182,973	185,738	188,438	191,085	193,460	195,501	197,374	199,312	201,306

Source: See first page of this appendix.

Table C2. Resident Population by State, 1970-1979
(Thousand People)

State	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alabama	3,444	3,497	3,539	3,580	3,626	3,679	3,735	3,780	3,832	3,866
Alaska	303	316	324	331	341	376	401	403	405	403
Arizona	1,775	1,896	2,008	2,124	2,223	2,285	2,346	2,425	2,515	2,636
Arkansas	1,923	1,972	2,019	2,059	2,101	2,160	2,170	2,209	2,243	2,271
California	19,971	20,346	20,585	20,869	21,174	21,538	21,936	22,352	22,836	23,257
Colorado	2,210	2,304	2,405	2,496	2,541	2,586	2,632	2,696	2,767	2,849
Connecticut	3,032	3,061	3,069	3,068	3,074	3,082	3,083	3,086	3,092	3,096
Delaware	548	565	573	578	581	587	590	592	595	595
District of Columbia	757	750	742	731	718	707	692	677	665	650
Florida	6,791	7,158	7,511	7,914	8,299	8,518	8,667	8,856	9,102	9,426
Georgia	4,588	4,712	4,809	4,910	4,999	5,064	5,133	5,220	5,296	5,401
Hawaii	770	802	828	852	868	886	904	918	932	953
Idaho	713	739	763	782	808	832	857	883	911	933
Illinois	11,110	11,202	11,252	11,251	11,262	11,292	11,343	11,386	11,413	11,397
Indiana	5,195	5,253	5,302	5,338	5,362	5,366	5,389	5,426	5,470	5,501
Iowa	2,825	2,852	2,860	2,864	2,868	2,881	2,903	2,914	2,918	2,916
Kansas	2,249	2,247	2,256	2,266	2,269	2,281	2,301	2,321	2,336	2,351
Kentucky	3,221	3,298	3,336	3,371	3,416	3,468	3,529	3,574	3,610	3,642
Louisiana	3,645	3,710	3,762	3,788	3,820	3,886	3,951	4,014	4,069	4,138
Maine	994	1,015	1,034	1,046	1,059	1,072	1,088	1,104	1,114	1,123
Maryland	3,924	4,018	4,073	4,098	4,119	4,139	4,151	4,170	4,184	4,191
Massachusetts	5,689	5,738	5,760	5,781	5,774	5,758	5,744	5,738	5,736	5,738
Michigan	8,882	8,974	9,029	9,078	9,118	9,118	9,129	9,171	9,218	9,266
Minnesota	3,806	3,853	3,870	3,889	3,904	3,933	3,965	3,989	4,015	4,050
Mississippi	2,217	2,265	2,307	2,350	2,378	2,399	2,430	2,459	2,488	2,507
Missouri	4,678	4,726	4,759	4,783	4,796	4,808	4,839	4,863	4,889	4,912
Montana	694	711	719	727	736	748	757	770	782	787
Nebraska	1,485	1,505	1,519	1,530	1,539	1,543	1,551	1,557	1,564	1,567
Nevada	489	520	547	569	597	620	647	678	719	765
New Hampshire	738	762	781	801	816	829	845	870	892	909
New Jersey	7,171	7,281	7,335	7,333	7,332	7,338	7,340	7,337	7,351	7,367
New Mexico	1,017	1,054	1,079	1,106	1,131	1,160	1,189	1,216	1,238	1,285
New York	18,241	18,358	18,339	18,177	18,050	18,003	17,941	17,813	17,681	17,584
North Carolina	5,084	5,204	5,301	5,390	5,471	5,547	5,608	5,686	5,759	5,823
North Dakota	618	627	631	633	635	639	646	650	651	653
Ohio	10,657	10,735	10,747	10,767	10,766	10,770	10,753	10,771	10,796	10,798
Oklahoma	2,559	2,619	2,659	2,696	2,735	2,775	2,827	2,870	2,917	2,975
Oregon	2,092	2,151	2,197	2,242	2,285	2,330	2,378	2,447	2,518	2,588
Pennsylvania	11,801	11,886	11,908	11,891	11,871	11,906	11,897	11,894	11,879	11,888
Rhode Island	950	963	975	976	951	943	946	950	952	950
South Carolina	2,591	2,662	2,719	2,777	2,845	2,902	2,944	2,992	3,044	3,090
South Dakota	666	671	677	679	680	681	686	688	689	688
Tennessee	3,926	4,014	4,095	4,147	4,214	4,276	4,347	4,423	4,486	4,560
Texas	11,199	11,510	11,759	12,020	12,269	12,569	12,904	13,193	13,500	13,888
Utah	1,059	1,101	1,135	1,170	1,200	1,236	1,275	1,320	1,368	1,420
Vermont	445	454	463	468	473	480	485	492	498	505
Virginia	4,651	4,751	4,824	4,901	4,971	5,047	5,122	5,193	5,270	5,308
Washington	3,413	3,448	3,448	3,479	3,550	3,621	3,694	3,776	3,889	4,018
West Virginia	1,744	1,771	1,798	1,806	1,815	1,842	1,880	1,908	1,923	1,942
Wisconsin	4,418	4,462	4,502	4,524	4,546	4,579	4,596	4,627	4,646	4,683
Wyoming	332	340	347	354	366	382	397	413	433	454
U.S. Total	203,302	206,827	209,284	211,357	213,342	215,465	217,563	219,760	222,095	224,567

Source: See first page of this appendix.

Table C3. Resident Population by State, 1980-1989
(Thousand People)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Alabama	3,894	3,919	3,925	3,934	3,952	3,973	3,992	4,015	4,024	4,030
Alaska	402	418	450	488	514	532	544	539	542	547
Arizona	2,718	2,810	2,890	2,969	3,067	3,184	3,308	3,437	3,535	3,622
Arkansas	2,286	2,293	2,294	2,306	2,320	2,327	2,332	2,342	2,343	2,346
California	23,668	24,286	24,820	25,360	25,844	26,441	27,102	27,777	28,464	29,218
Colorado	2,890	2,978	3,062	3,134	3,170	3,209	3,237	3,260	3,262	3,276
Connecticut	3,108	3,129	3,139	3,162	3,180	3,201	3,224	3,247	3,272	3,283
Delaware	594	596	599	605	612	618	628	637	648	658
District of Columbia	638	637	634	632	633	635	638	637	630	624
Florida	9,746	10,193	10,471	10,750	11,040	11,351	11,668	11,997	12,306	12,638
Georgia	5,463	5,568	5,650	5,728	5,835	5,963	6,085	6,208	6,316	6,411
Hawaii	965	978	994	1,013	1,028	1,040	1,052	1,068	1,080	1,095
Idaho	944	962	974	982	991	994	990	985	986	994
Illinois	11,427	11,443	11,423	11,409	11,412	11,400	11,387	11,391	11,390	11,410
Indiana	5,490	5,480	5,468	5,450	5,458	5,459	5,454	5,473	5,492	5,524
Iowa	2,914	2,908	2,888	2,871	2,859	2,830	2,792	2,767	2,768	2,771
Kansas	2,364	2,385	2,401	2,416	2,424	2,427	2,433	2,445	2,462	2,473
Kentucky	3,661	3,670	3,683	3,694	3,695	3,695	3,688	3,683	3,680	3,677
Louisiana	4,206	4,283	4,353	4,395	4,400	4,408	4,407	4,344	4,289	4,253
Maine	1,125	1,133	1,137	1,145	1,156	1,163	1,170	1,185	1,204	1,220
Maryland	4,217	4,262	4,283	4,313	4,365	4,413	4,487	4,566	4,658	4,727
Massachusetts	5,737	5,769	5,771	5,799	5,841	5,881	5,903	5,935	5,980	6,015
Michigan	9,262	9,209	9,115	9,048	9,049	9,076	9,128	9,187	9,218	9,253
Minnesota	4,076	4,112	4,131	4,141	4,158	4,184	4,205	4,235	4,296	4,338
Mississippi	2,521	2,539	2,557	2,568	2,578	2,588	2,594	2,589	2,580	2,574
Missouri	4,917	4,932	4,929	4,944	4,975	5,000	5,023	5,057	5,082	5,096
Montana	787	795	804	814	821	822	814	805	800	800
Nebraska	1,570	1,579	1,582	1,584	1,589	1,585	1,574	1,567	1,571	1,575
Nevada	800	848	882	902	925	951	981	1,023	1,075	1,137
New Hampshire	921	937	948	958	977	997	1,025	1,054	1,083	1,105
New Jersey	7,365	7,407	7,431	7,468	7,515	7,566	7,622	7,671	7,712	7,726
New Mexico	1,303	1,333	1,364	1,394	1,417	1,438	1,463	1,479	1,490	1,504
New York	17,558	17,568	17,590	17,687	17,746	17,792	17,833	17,869	17,941	17,983
North Carolina	5,882	5,957	6,019	6,077	6,164	6,254	6,322	6,404	6,481	6,565
North Dakota	653	660	669	677	680	677	670	661	655	646
Ohio	10,798	10,788	10,757	10,738	10,738	10,735	10,730	10,760	10,799	10,829
Oklahoma	3,025	3,096	3,206	3,290	3,286	3,271	3,253	3,210	3,167	3,150
Oregon	2,633	2,668	2,665	2,653	2,667	2,673	2,684	2,701	2,741	2,791
Pennsylvania	11,864	11,859	11,845	11,838	11,815	11,771	11,783	11,811	11,846	11,866
Rhode Island	947	953	954	956	962	969	977	990	996	1,001
South Carolina	3,122	3,179	3,208	3,234	3,272	3,303	3,343	3,381	3,412	3,457
South Dakota	691	690	691	693	697	698	696	696	698	697
Tennessee	4,591	4,628	4,646	4,660	4,687	4,715	4,739	4,783	4,822	4,854
Texas	14,229	14,746	15,331	15,752	16,007	16,273	16,561	16,622	16,667	16,807
Utah	1,461	1,515	1,558	1,595	1,622	1,643	1,663	1,678	1,689	1,706
Vermont	511	516	519	523	527	530	534	540	550	558
Virginia	5,347	5,444	5,493	5,565	5,644	5,715	5,812	5,932	6,037	6,120
Washington	4,132	4,236	4,277	4,300	4,344	4,400	4,453	4,532	4,640	4,746
West Virginia	1,950	1,954	1,950	1,945	1,928	1,907	1,882	1,830	1,830	1,807
Wisconsin	4,706	4,726	4,729	4,721	4,736	4,748	4,756	4,778	4,822	4,857
Wyoming	470	492	506	510	505	500	496	477	465	458
U.S. Total	226,546	229,466	231,664	233,792	235,825	237,924	240,133	242,289	244,499	246,819

Source: See first page of this appendix.

Table C4. Resident Population by State, 1990-1999
(Thousand People)

State	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alabama	4,041	R 4,099	R 4,154	R 4,214	R 4,260	R 4,297	R 4,331	R 4,368	R 4,405	R 4,430
Alaska	550	R 570	R 589	R 599	R 603	R 604	R 609	R 613	R 620	R 625
Arizona	3,665	R 3,789	R 3,916	R 4,065	R 4,245	R 4,432	R 4,587	R 4,737	R 4,883	R 5,024
Arkansas	2,351	R 2,383	R 2,416	R 2,456	R 2,494	R 2,535	R 2,572	R 2,601	R 2,626	R 2,652
California	29,760	R 30,471	R 30,975	R 31,275	R 31,484	R 31,697	R 32,019	R 32,486	R 32,988	R 33,499
Colorado	3,294	R 3,387	R 3,496	R 3,614	R 3,724	R 3,827	R 3,920	R 4,018	R 4,117	R 4,226
Connecticut	3,287	R 3,303	R 3,301	R 3,309	R 3,316	R 3,324	R 3,337	R 3,349	R 3,365	R 3,386
Delaware	666	R 683	R 695	R 706	R 718	R 730	R 741	R 751	R 763	R 775
District of Columbia	607	R 601	R 598	R 595	R 589	R 581	R 572	R 568	R 565	R 570
Florida	12,938	R 13,370	R 13,651	R 13,927	R 14,239	R 14,538	R 14,853	R 15,186	R 15,487	R 15,759
Georgia	6,478	R 6,653	R 6,817	R 6,978	R 7,157	R 7,328	R 7,501	R 7,685	R 7,864	R 8,046
Hawaii	1,108	R 1,137	R 1,159	R 1,173	R 1,188	R 1,197	R 1,204	R 1,212	R 1,215	R 1,210
Idaho	1,007	R 1,041	R 1,072	R 1,109	R 1,145	R 1,177	R 1,203	R 1,229	R 1,252	R 1,276
Illinois	11,431	R 11,569	R 11,694	R 11,810	R 11,913	R 12,008	R 12,102	R 12,186	R 12,272	R 12,359
Indiana	5,544	R 5,616	R 5,675	R 5,739	R 5,794	R 5,851	R 5,906	R 5,955	R 5,999	R 6,045
Iowa	2,777	R 2,798	R 2,818	R 2,837	R 2,851	R 2,867	R 2,880	R 2,891	R 2,903	R 2,918
Kansas	2,478	R 2,499	R 2,532	R 2,557	R 2,581	R 2,601	R 2,615	R 2,635	R 2,661	R 2,678
Kentucky	3,685	R 3,722	R 3,765	R 3,812	R 3,849	R 3,887	R 3,920	R 3,953	R 3,985	R 4,018
Louisiana	4,220	R 4,253	R 4,293	R 4,316	R 4,347	R 4,379	R 4,399	R 4,421	R 4,440	R 4,461
Maine	1,228	R 1,237	R 1,239	R 1,242	R 1,243	R 1,243	R 1,249	R 1,255	R 1,259	R 1,267
Maryland	4,781	R 4,868	R 4,923	R 4,972	R 5,023	R 5,070	R 5,112	R 5,157	R 5,204	R 5,255
Massachusetts	6,016	R 6,018	R 6,029	R 6,061	R 6,095	R 6,141	R 6,180	R 6,226	R 6,272	R 6,317
Michigan	9,295	R 9,400	R 9,479	R 9,540	R 9,598	R 9,676	R 9,759	R 9,809	R 9,848	R 9,897
Minnesota	4,375	R 4,441	R 4,496	R 4,556	R 4,610	R 4,660	R 4,713	R 4,763	R 4,813	R 4,873
Mississippi	2,573	R 2,599	R 2,624	R 2,655	R 2,689	R 2,723	R 2,748	R 2,777	R 2,805	R 2,828
Missouri	5,117	R 5,171	R 5,217	R 5,271	R 5,324	R 5,378	R 5,432	R 5,481	R 5,522	R 5,562
Montana	799	R 810	R 826	R 845	R 861	R 877	R 885	R 892	R 897	R 898
Nebraska	1,578	R 1,596	R 1,612	R 1,626	R 1,639	R 1,657	R 1,674	R 1,686	R 1,696	R 1,705
Nevada	1,202	R 1,296	R 1,351	R 1,411	R 1,499	R 1,582	R 1,666	R 1,764	R 1,853	R 1,935
New Hampshire	1,109	R 1,110	R 1,118	R 1,129	R 1,143	R 1,158	R 1,175	R 1,189	R 1,206	R 1,222
New Jersey	7,730	R 7,815	R 7,881	R 7,949	R 8,014	R 8,083	R 8,150	R 8,219	R 8,287	R 8,360
New Mexico	1,515	R 1,555	R 1,595	R 1,636	R 1,682	R 1,720	R 1,752	R 1,775	R 1,793	R 1,808
New York	17,990	R 18,123	R 18,247	R 18,375	R 18,459	R 18,524	R 18,588	R 18,657	R 18,756	R 18,883
North Carolina	6,629	R 6,784	R 6,897	R 7,043	R 7,187	R 7,345	R 7,501	R 7,657	R 7,809	R 7,949
North Dakota	639	R 636	R 638	R 641	R 645	R 648	R 650	R 650	R 648	R 644
Ohio	10,847	R 10,946	R 11,029	R 11,101	R 11,152	R 11,203	R 11,243	R 11,277	R 11,312	R 11,335
Oklahoma	3,146	R 3,175	R 3,221	R 3,252	R 3,281	R 3,308	R 3,340	R 3,373	R 3,405	R 3,437
Oregon	2,842	R 2,929	R 2,992	R 3,060	R 3,121	R 3,184	R 3,247	R 3,304	R 3,352	R 3,394
Pennsylvania	11,882	R 11,982	R 12,049	R 12,120	R 12,166	R 12,198	R 12,220	R 12,228	R 12,246	R 12,264
Rhode Island	1,003	R 1,011	R 1,013	R 1,015	R 1,016	R 1,017	R 1,021	R 1,025	R 1,031	R 1,040
South Carolina	3,487	R 3,570	R 3,620	R 3,663	R 3,705	R 3,749	R 3,796	R 3,860	R 3,919	R 3,975
South Dakota	696	R 704	R 713	R 722	R 731	R 738	R 742	R 744	R 746	R 750
Tennessee	4,877	R 4,967	R 5,050	R 5,138	R 5,231	R 5,327	R 5,417	R 5,499	R 5,570	R 5,639
Texas	16,987	R 17,398	R 17,760	R 18,162	R 18,564	R 18,959	R 19,340	R 19,740	R 20,158	R 20,558
Utah	1,723	R 1,780	R 1,837	R 1,898	R 1,960	R 2,014	R 2,068	R 2,120	R 2,166	R 2,203
Vermont	563	R 569	R 573	R 578	R 584	R 589	R 594	R 597	R 600	R 605
Virginia	6,187	R 6,301	R 6,414	R 6,510	R 6,593	R 6,671	R 6,751	R 6,829	R 6,901	R 7,000
Washington	4,867	R 5,026	R 5,161	R 5,279	R 5,375	R 5,481	R 5,570	R 5,675	R 5,770	R 5,843
West Virginia	1,793	R 1,799	R 1,806	R 1,818	R 1,820	R 1,824	R 1,823	R 1,819	R 1,816	R 1,812
Wisconsin	4,892	R 4,964	R 5,025	R 5,085	R 5,134	R 5,185	R 5,230	R 5,266	R 5,298	R 5,333
Wyoming	454	R 459	R 466	R 473	R 480	R 485	R 488	R 489	R 491	R 492
U.S. Total	248,710	R 252,981	R 256,514	R 259,919	R 263,126	R 266,278	R 269,394	R 272,647	R 275,854	R 279,040

R = Revised data.

Source: See first page of this appendix.

Table C5. Resident Population by State, 2000-2004
(Thousand People)

State	2000	2001	2002	2003	2004
Alabama	4,447	R 4,467	R 4,478	R 4,495	4,517
Alaska	627	R 632	R 641	R 648	657
Arizona	5,131	R 5,300	R 5,445	R 5,582	5,746
Arkansas	2,673	R 2,692	R 2,706	R 2,724	2,747
California	33,872	R 34,550	R 35,025	R 35,466	35,841
Colorado	4,301	R 4,429	R 4,500	R 4,546	4,599
Connecticut	3,406	R 3,433	R 3,458	R 3,482	3,494
Delaware	784	R 795	R 806	R 817	829
District of Columbia	572	R 577	R 579	R 577	580
Florida	15,982	R 16,355	R 16,682	R 16,982	17,367
Georgia	8,186	R 8,424	R 8,598	R 8,750	8,935
Hawaii	1,212	R 1,221	R 1,233	R 1,246	1,259
Idaho	1,294	R 1,321	R 1,344	R 1,367	1,395
Illinois	12,419	R 12,525	R 12,595	R 12,650	12,714
Indiana	6,080	R 6,126	R 6,155	R 6,192	6,223
Iowa	2,926	R 2,932	R 2,935	R 2,942	2,954
Kansas	2,688	R 2,702	R 2,715	R 2,727	2,738
Kentucky	4,042	R 4,068	R 4,089	R 4,114	4,140
Louisiana	4,469	R 4,463	R 4,471	R 4,481	4,496
Maine	1,275	R 1,286	R 1,297	R 1,307	1,314
Maryland	5,296	R 5,380	R 5,441	R 5,507	5,553
Massachusetts	6,349	R 6,407	R 6,431	R 6,440	6,436
Michigan	9,938	R 10,003	R 10,038	R 10,068	10,093
Minnesota	4,919	R 4,986	R 5,025	R 5,059	5,094
Mississippi	2,845	R 2,856	R 2,863	R 2,874	2,893
Missouri	5,595	R 5,643	R 5,680	R 5,712	5,753
Montana	902	R 906	R 910	R 917	926
Nebraska	1,711	R 1,719	R 1,727	R 1,737	1,747
Nevada	1,998	R 2,096	R 2,169	R 2,241	2,332
New Hampshire	1,236	R 1,258	R 1,274	R 1,286	1,298
New Jersey	8,414	R 8,507	R 8,578	R 8,633	8,676
New Mexico	1,819	R 1,833	R 1,855	R 1,878	1,901
New York	18,976	R 19,096	R 19,168	R 19,238	19,292
North Carolina	8,049	R 8,200	R 8,313	R 8,416	8,531
North Dakota	642	R 636	R 634	R 633	636
Ohio	11,353	R 11,392	R 11,415	R 11,438	11,461
Oklahoma	3,451	R 3,467	R 3,488	R 3,504	3,523
Oregon	3,421	R 3,474	R 3,524	R 3,561	3,589
Pennsylvania	12,281	R 12,296	R 12,322	R 12,351	12,377
Rhode Island	1,048	R 1,059	R 1,069	R 1,075	1,079
South Carolina	4,012	R 4,061	R 4,101	R 4,142	4,195
South Dakota	755	R 758	R 760	R 764	770
Tennessee	5,689	R 5,746	R 5,788	R 5,834	5,886
Texas	20,852	R 21,358	R 21,762	R 22,134	22,518
Utah	2,233	R 2,288	R 2,326	R 2,356	2,422
Vermont	609	R 613	R 616	R 619	621
Virginia	7,079	R 7,193	R 7,286	R 7,376	7,472
Washington	5,894	R 5,995	R 6,070	R 6,130	6,206
West Virginia	1,808	R 1,801	R 1,804	R 1,809	1,811
Wisconsin	5,364	R 5,405	R 5,439	R 5,467	5,499
Wyoming	494	R 494	R 499	R 501	506
U.S. Total	281,422	R 285,226	R 288,126	R 290,796	293,638

R = Revised data.

Source: See first page of this appendix.

Appendix D

Metric and Other Physical Conversion Factors

Data presented in the State Energy Data System are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table D1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table D2.

The conversion factors presented in Table D3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table D1. Metric Conversion Factors

U.S. Unit	<i>multiplied by</i>	Conversion Factor	<i>equals</i>	Metric Unit	U.S. Unit	<i>multiplied by</i>	Conversion Factor	<i>equals</i>	Metric Unit
Mass					Volume				
short tons (2,000 lb)	x	0.907 184 7	=	metric tons (t)	barrels of oil (bbl)	x	0.158 987 3	=	cubic meters (cm ³)
long tons	x	1.016 047	=	metric tons (t)	cubic yards (yd ³)	x	0.764 555	=	cubic meters (cm ³)
pounds (lb)	x	0.453 592 37 ^a	=	kilograms (kg)	cubic feet (ft ³)	x	0.028 316 85	=	cubic meters (cm ³)
pounds uranium oxide (lb U ₃ O ₈)	x	0.384 647 ^b	=	kilograms uranium (kgU)	U.S. gallons (gal)	x	3.785 412	=	liters (L)
ounces, avoirdupois (avdp oz)	x	28.349 52	=	grams (g)	ounces, fluid (fl oz)	x	29.573 53	=	milliliters (mL)
					cubic inches (in ³)	x	16.387 06	=	milliliters (mL)
Length					Area				
miles (mi)	x	1.609 344 ^a	=	kilometers (km)	acres	x	0.404 69	=	hectares (ha)
yard (yd)	x	0.914 4 ^a	=	meters (m)	square miles (mi ²)	x	2.589 988	=	square kilometers (km ²)
feet (ft)	x	0.304 8 ^a	=	meters (m)	square yards (yd ²)	x	0.836 127 4	=	square meters (m ²)
inches (in)	x	2.54 ^a	=	centimeters (cm)	square feet (ft ²)	x	0.092 903 04 ^a	=	square meters (m ²)
					square inches (in ²)	x	6.451 6 ^a	=	square centimeters (cm ²)
Energy					Temperature				
British Thermal Units (Btu)	x	1,055.055 852 62 ^{a,c}	=	joules (J)	degrees Fahrenheit (°F)	x	5/9 (after subtracting 32) ^{a,d}	=	degrees Celsius (°C)
calories (cal)	x	4.186 8 ^a	=	joules (J)					
kilowatthours (kWh)	x	3.6 ^a	=	megajoules (MJ)					

^aExact conversion.

^bCalculated by the Energy Information Administration.

^cThe Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.

^dTo convert degrees Celsius (°C) to degrees Fahrenheit (°F) exactly, multiply by 9/5, then add 32.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading.
• Most metric units shown belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, contact Dr. Barry

Taylor at Building 221, Room B160, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301-975-4220.

Sources: General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 27, 1993), pp. 9-11, 13, and 16. National Institute of Standards and Technology, Special Publications 330, 811, and 814. American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268-1992, pp. 28 and 29.

Table D2. Metric Prefixes

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 ¹	deka	da	10 ⁻¹	deci	d
10 ²	hecto	h	10 ⁻²	centi	c
10 ³	kilo	k	10 ⁻³	milli	m
10 ⁶	mega	M	10 ⁻⁶	micro	μ
10 ⁹	giga	G	10 ⁻⁹	nano	n
10 ¹²	tera	T	10 ⁻¹²	pico	p
10 ¹⁵	peta	P	10 ⁻¹⁵	femto	f
10 ¹⁸	exa	E	10 ⁻¹⁸	atto	a
10 ²¹	zetta	Z	10 ⁻²¹	zepto	z
10 ²⁴	yotta	Y	10 ⁻²⁴	yocto	Y

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p. 10.

Table D3. Other Physical Conversion Factors

Energy Source	Original Unit		Conversion Factor		Final Unit
Petroleum	barrels (bbl)	x	42 ^a	=	U.S. gallons (gal)
Coal	short tons	x	2,000 ^a	=	pounds (lb)
	long tons	x	2,240 ^a	=	pounds (lb)
	metric tons (t)	x	1,000 ^a	=	kilograms (kg)
Wood	cords (cd)	x	1.25 ^b	=	short tons
	cords (cd)	x	128 ^a	=	cubic feet (ft ³)

^aExact conversion.

^bCalculated by the Energy Information Administration.

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17, and C-21.

Appendix E

Summary of Changes Reflected in these State Energy Data System Consumption Data

Revisions to consumption data contained in the State Energy Data System (SEDS) and incorporated in this release of State Energy Consumption data estimates for 2004 are summarized in this appendix. Although the portable document file (PDF) tables and HTML-formatted tables contain rounded data for the most recent year, the comma-separated-value (CSV) files provide the data for all years in the greatest precision contained in the SEDS database. The information in this appendix covers revisions to all data for all years from 1960 through 2003.

Coal

Industrial Sector, 2001 through 2003. Quantities of coal consumed by coke plants are withheld for some States in the SEDS data source, the EIA *Annual Coal Report*, to avoid disclosing company-level proprietary data. The methodology used in SEDS for estimating the withheld data is revised for 2001 through 2003. The coke plant and total industrial coal consumption estimates for 10 States in 2001 and 9 States in 2002 and 2003 are revised although the U.S. totals remain virtually the same. The largest reductions in industrial coal consumption estimates occur in New York (by 29 percent in 2003 and by 25 percent in 2002) and in Utah (by 13 percent in 2001). The largest increases occur in Ohio where industrial coal consumption estimates are increased by 18 percent in 2001, 12 percent in 2002, and 19 percent in 2003. The revisions to the consumption data in short tons are reflected proportionally when they are converted to the equivalent British thermal units (Btu).

Electric Power Sector 2001 through 2003. Although estimates of coal consumption by the electric power sector are not revised in SEDS, the factors used to convert coal from thousand short tons to billion Btu are revised for 17 States in 2001, 11 States in 2002, and 10 States in 2003. The revisions to electric power coal consumption expressed in Btu are larger in 2001 than for the other years, although the largest are the 3-percent increases for Michigan and Nebraska and the 2-percent increase for Minnesota. The revisions to electric power sector coal consumption in Btu for 15 of the 17 States in 2001 are large enough to be seen in the PDF and HTML tables as well as in the greater-precision CSV data files. The revisions to consumption values expressed in Btu for 2002 and 2003 are small—generally too small to be seen in the rounded data in the PDF and HTML tables, although they can be seen in the greater-precision data in the CSV data files.

Natural Gas

All Sectors (Except Electric Power), Louisiana, 2002. The factor used to convert natural gas consumed by all sectors, other than the electric power sector, from physical units to Btu (NGTXK) is revised slightly for Louisiana in 2002. The Louisiana factor revision causes small changes in Louisiana's residential, commercial, industrial, and transportation sector consumption expressed in Btu for 2002, but the revisions are too small to be seen in the SEDS tables and can be seen only in the greater-precision CSV files.

Residential and Commercial Sectors, 2003. Natural gas consumption in 2003 was revised in the data source, the EIA Natural Gas Navigator, (http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcfa.htm) for the residential sector of 8 States and the commercial sector of 20 States. Most revisions are by less than 1 percent. Small revisions to the factors used to convert these values from million cubic feet to billion Btu cause additional small revisions to the Btu values, which can only be seen in the greater precision CSV files, for the residential sector of six States and the commercial sector of four States. The largest revisions in the residential sector are the 2-percent decreases in Tennessee and West Virginia and the 1-percent increase in California. In the commercial sector, the largest revisions are the 12-percent decrease in Massachusetts and the 11-percent decrease in California.

Industrial Sector, 1983 through 1990. Data for natural gas consumed as lease fuel and as plant fuel by State from 1983 through 1990, previously combined, are now available separately in the EIA Natural Gas Navigator, (http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_VCF_mmcfa.htm). Incorporating these separate series into the SEDS database, as shown in the CSV files, causes no revisions to the total industrial sector consumption for any State during 1983 through 1990, but do provide additional detail data for SEDS data users.

Industrial Sector, 2001 through 2003. Consumption of natural gas as lease fuel (NGLEP) is revised for three States (Alabama, Louisiana, and Texas) for 2001 through 2003. The data for all three States offshore leases shown combined in the EIA Natural Gas Navigator were revised slightly, while more significant revisions occurred in the State data from the U.S. Department of the Interior, Minerals Management Service, that are used to allocate the combined data to each of the three States. All of the revisions are too small to be seen in the industrial sector natural gas consumption in the PDF and HTML tables and can only be seen in the greater-precision data in the CSV files. Natural gas lease fuel in Oregon was revised for 2003 from 429,585 thousand cubic feet to 42,960 thousand cubic feet in the Natural Gas Navigator.

Industrial Sector, 2003. Deliveries of natural gas to industrial consumers, one component of the industrial sector consumption, were revised for 19 States in the data source, the EIA Natural Gas Navigator. Industrial use is decreased in 11 States and increased in 8 States. The largest revisions occur in Alaska, California, and Massachusetts where the decreases in

Alaska by 25 billion cubic feet and in Massachusetts by 40 billion cubic feet are offset by the increase in California of 75 billion cubic feet. The revisions in all 19 States cause the total U.S. industrial deliveries of natural gas to increase by 11 billion cubic feet. Proportional revisions can also be seen in the data expressed in British thermal units.

Transportation Sector, 1990 and 1991. Natural gas consumed as vehicle fuel (NGVHP) was available in three additional digits of precision for 1990 and 1991 in the source data, the EIA Natural Gas Navigator. Incorporating the greater precision data for the 17 States in 1990 and 26 States in 1991 that have vehicle fuel use of natural gas causes no revisions to the transportation sector natural gas data in cubic feet or Btu shown rounded in SEDS tables, and can be seen only in the greater-precision data in the CSV files.

Transportation Sector, 1997 and 1998. Natural gas consumed as pipeline fuel (NGPZP) was available in three additional digits of precision for 1997 and 1998 in the source data, EIA's Natural Gas Navigator. Incorporating the greater precision data for the States that have pipeline fuel use of natural gas (all States except Hawaii and Maine) causes no revisions to the transportation sector natural gas data in cubic feet or Btu shown rounded in SEDS tables, and can be seen only in the greater-precision data in the CSV files.

Transportation Sector, 2003. Data for natural gas consumed as vehicle fuel (NGVHP) in 2003 were revised in the SEDS source data, EIA's Natural Gas Navigator, for all States with vehicle fuel consumption (all States except Hawaii, which has none). All of the revisions are too small to be seen in the rounded cubic feet and Btu data shown in SEDS tables and can be seen only in the greater-precision data in the CSV files.

Thermal Conversion Factors, 2003. The factor used to convert natural gas consumed by all sectors, other than the electric power sector, from physical units to Btu (NGTXK) is revised slightly for 11 States in 2003. The factor revisions cause small changes in the residential, commercial, industrial, and transportation consumption expressed in Btu for the 11 States. These revisions caused by the factors cannot be seen in the rounded Btu data shown in SEDS tables and can be seen only in the greater-precision Btu and conversion factor data in the CSV files.

Retail Electricity Sales

Residential, Commercial, and Industrial Sectors, 2001 through 2003.

The incorporation of greater-precision data from the EIA survey Form EIA-861, "Annual Electric Power Industry Report," data files (available at <http://www.eia.doe.gov/cneaf/electricity/page/eia861.html>) cause very small revisions (in the 4th and 5th decimal place) in the data for electricity consumption in the residential, commercial, and industrial sectors for 2001 through 2003 in more than half of the States. Proportional revisions occur in the values when they are converted from million kilowatthours to billion Btu. None of these revisions can be seen in the rounded data in the SEDS HTML and PDF tables, but they can be seen in the greater-precision CSV files.

Transportation Sector, 2003. The estimate of electricity use by the transportation sector of Oregon is revised from 33 million kilowatthours to 49 million kilowatthours for 2003, using data from two sources on State-level transportation electricity use. This causes the U.S. total transportation electricity to be revised from 6,901 million kilowatthours to 6,916 million kilowatthours. Proportional revisions occur in the Oregon and U.S. values

when they are converted from million kilowatthours to billion Btu. The incorporation of greater-precision data from the EIA-861 data files causes small revisions to transportation electricity use in 12 other States in 2003. None of those revisions can be seen in the rounded data in the SEDS HTML and PDF tables, but they can be seen in the greater-precision CSV files.

Wood and Waste

Industrial Sector, 2001 through 2003. The value-added data series from the U.S. Department of Commerce, Bureau of the Census, *Economic Census 2002*, were revised causing the allocating series for State-level estimates of wood and waste use in the manufacturing sector in SEDS to be revised. Although the U.S. totals for manufacturing use of wood and waste are not changed, the revisions in the allocating series cause the State portions of the total to be revised in 2001 through 2003 for all States except Rhode Island and the District of Columbia. All of the States' revisions to industrial wood and waste consumption are by 8 percent or less with the exception of the 28-percent increase in Hawaii in 2003.

Glossary

Asphalt: A dark brown-to-black cement-like material obtained by petroleum processing and containing bitumens as the predominant component; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

Aviation Gasoline Blending Components: Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformat). Excluded are oxygenates (alcohols and ethers), butane, and pentanes plus.

Barrel (petroleum): A unit of volume equal to 42 U.S. gallons.

Barrels per Calendar Day (operable refinery capacity): The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation to account for the following limitations that may delay, interrupt, or slow down production: 1) the capability of downstream processing units to absorb the output of crude oil processing facilities of a given refinery (no reduction is necessary for intermediate streams that are distributed to other than downstream facilities as part of a

refinery's normal operation); 2) the types and grades of inputs to be processed; 3) the types and grades of products expected to be manufactured; 4) the environmental constraints associated with refinery operations; 5) the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and 6) the reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.

Barrels per Stream Day (operable refinery capacity): The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

Black Liquor (Pulping Liquor): The alkaline spent liquor removed from the digesters in the process of chemically pulping wood. After evaporation, the liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Bunker Fuels: Fuel supplied to ships and aircraft, both domestic and foreign, consisting primarily of residual fuel oil and distillate fuel oil for ships and kerosene-type jet fuel for aircraft. The term "international bunker fuels" is used to denote the consumption of fuel for international transport activities. *Note:* For the purposes of greenhouse gas emissions inventories, data on emissions from combustion of international bunker fuels are subtracted from national emissions totals. Historically, bunker fuels have meant only ship fuel.

Catalytic Cracking: The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. Coals are classified according to their degree of progressive alteration from lignite to anthracite. In the U.S. classification, the ranks of coal include lignite, subbituminous coal, bituminous coal, and anthracite and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.

Coal Coke: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace.

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

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity. If one or more units of the plant is a CHP unit, then the whole plant is designated as a CHP plant. *Note:* This term is being used in place of the term “cogenerator” that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities.

Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit**.

Cord (wood): A cord of wood measures 4 feet by 4 feet by 8 feet or 128 cubic feet.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude Oil Used Directly: Crude oil consumed as fuel by petroleum pipelines and on crude oil leases.

Cubic foot (cf), natural gas: The amount of natural gas contained at standard temperature and pressure (60 degrees Fahrenheit and 14.73 pounds standard per square inch) in a cube whose edges are one foot long.

Diesel Fuel: A fuel composed of distillate fuel oils obtained in petroleum refining operation or blends of such distillate fuel oils with residual fuel oil

used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity Retail Sales: The amount of electricity sold by electric utilities and other energy service providers to customers purchasing electricity for their own use and not for resale. These sales are usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities and railways, and interdepartmental sales.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public. *Note:* This sector includes electric utilities and independent power producers.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. Electric utilities are included in the electric power sector. *Note:* Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundle their generation, transmission, and distribution operations, "electric utility" currently has inconsistent interpretations from State to State.

End-Use Sectors: The residential, commercial, industrial, and transportation sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy Consumption, End-Use: The sum of fossil fuel consumption by the four end-use sectors (residential, commercial, industrial, and transportation) plus electric utility sales to those sectors and generation of hydroelectric power by nonelectric utilities. **Net** end-use energy consumption excludes electrical system energy losses. **Total** end-use energy consumption includes electrical system energy losses.

Energy Consumption, Total: The sum of fossil fuel consumption by the five sectors (residential, commercial, industrial, transportation, and electric utility) plus hydroelectric power, nuclear electric power, net imports of coal coke, and electricity generated for distribution from wood and waste and geothermal, wind, photovoltaic, and solar thermal energy.

Ethanol: An anhydrous, denatured aliphatic alcohol (C_2H_5OH) intended for motor gasoline blending.

Exports: Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

Fiscal Year: The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in which it ends; e.g., fiscal year 2004 begins on October 1, 2003, and ends on September 30, 2004.

Fossil Fuel: An energy source formed in the Earth's crust from decayed organic material, such as petroleum, coal, and natural gas.

Fossil-Fueled Steam-Electric Power Plant: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Gasohol: A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume.

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the Earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

Heat Content of a Quantity of Fuel, Gross: The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net content. Gross heat content is also referred to as the higher heating value. Btu conversion factors typically used by the Energy Information Administration represent gross heat content.

Heat Content of a Quantity of Fuel, Net: The amount of usable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Net heat content is also referred to as the lower heating value. Btu conversion factors typically used by the Energy Information Administration represent gross heat content.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam plants is heavy oil. Includes fuel oil numbers 4, 5, and 6; crude; and topped crude.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power, Conventional: Hydroelectric power generated from flowing water that is not created by hydroelectric pumped storage.

Hydroelectric Pumped Storage: Hydroelectric power that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in an electric power plant at a lower level.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Imports: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an electric utility. Independent power producers are included in the electric power sector.

Industrial Sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code

21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds.

Kerosene: A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. See **Jet Fuel, Kerosene-Type**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000 watts) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu.

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors), and as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities. This category excludes natural gas plant liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil. Includes fuel oil numbers 1 and 2, kerosene, and jet fuel.

Liquefied Petroleum Gases (LPG): A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

Lubricants: Substances used to reduce friction between bearing surfaces, or incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils, from spindle oil to cylinder oil to those used in greases.

Methanol: A light, volatile alcohol (CH_3OH) eligible for motor gasoline blending.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10-percent recovery point to 365 to 374 degrees Fahrenheit at the 90-percent recovery point. "Motor Gasoline" includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. *Note:* Volumetric data on blending

components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Blending Components: Naphthas (e.g., straight-run gasoline, alkylate, reformat, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gasoline: A term used in the gas processing industry to refer to a mixture of liquid hydrocarbons (mostly pentanes and heavier hydrocarbons) extracted from natural gas. It includes isopentane.

Net Interstate Flow of Electricity: The difference between the sum of electricity sales and losses within a State and the total amount of electricity generated within that State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

Nonutilities: See **Nonutility Power Producer**.

Nonutility Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for electric generation and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers). Nonutility power producers are without a designated franchised service

area and do not file forms listed in the *Code of Federal Regulations*, Title 18, Part 141.

North American Industry Classification System (NAICS): A system of numeric codes used to categorize businesses by the type of activity in which they are engaged. It replaces the Standard Industrial Classification (SIC). This new structure was developed jointly by the United States, Canada, and Mexico to provide consistent, comparable information on an industry-by-industry basis for all three economies.

Nuclear Electric Power (nuclear power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Included are isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. In this report the categories reported are "Naphthas Less Than 401° F. Endpoint" and "Other Oils Equal to or Greater Than 401° F. Endpoint."

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. *Note:* Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke.

Petroleum Coke, Catalyst: The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

Petroleum Coke, Marketable: Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining.

Petroleum Consumption: The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Products Supplied: See **Petroleum Consumption**.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of $-43.67^\circ F$. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Refinery (petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Renewable energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, fossil fuels, which are in finite supply). Renewable sources of energy include conventional hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, and wind.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

Residual Fuel Oil: The heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D396 and D975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore powerplants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil, used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

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

Solar Thermal Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity.

Special Naphthas: All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor

gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities. It has been replaced by **North American Industry Classification System**.

Still Gas (refinery gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

Supplemental Gaseous Fuels: Any gaseous substance introduced into or commingled with natural gas that increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke-oven gas, manufactured gas, biomass gas, or air or inerts added for Btu stabilization.

Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. In this report, natural gas used in the operation of natural gas pipelines is included in the transportation sector.

Unfinished Oils: All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

United States: The 50 States and the District of Columbia.

Value Added by Manufacture: A measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-progress between the beginning and end-of-year inventories.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Energy: Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw used as fuel.

Waxes: Solid or semi-solid materials derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax, whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

Wind Energy: Energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators. Wind pushes against sails, vanes, or blades radiating from a central rotating shaft.

Wood Energy: Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.