



# State Energy Consumption Estimates 1960 Through 2007



## **2007 Consumption Summary Tables**



**Table S1. Energy Consumption Estimates by Source and End-Use Sector, 2007**  
(Trillion Btu)

State	Total Energy <sup>b</sup>	Sources									End-Use Sectors <sup>a</sup>			
		Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass Wood and Waste <sup>f</sup>	Geo-thermal, Solar/PV, and Wind <sup>g</sup>	Net Interstate Flow of Electricity/Losses <sup>h</sup>	Other <sup>i</sup>	Residential	Commercial	Industrial <sup>b</sup>	Transportation
Alabama	2,132.0	888.4	431.4	626.4	360.0	40.9	189.3	0.2	-404.5	0.0	405.5	280.6	941.6	504.4
Alaska	723.6	13.0	371.8	324.1	0.0	12.8	1.7	0.1	0.0	(s)	54.4	62.4	356.3	250.5
Arizona	1,577.8	438.5	402.1	595.4	280.9	65.2	16.4	4.1	-224.7	(s)	430.1	368.5	231.7	547.4
Arkansas	1,149.3	275.0	228.0	386.9	162.4	32.0	84.9	0.6	-20.4	0.0	228.6	161.9	463.7	295.2
California	8,491.5	66.4	2,440.4	3,946.3	375.4	270.1	145.5	357.5	871.2	18.8	1,535.2	1,613.9	1,955.7	3,386.8
Colorado	1,479.3	388.5	515.9	525.4	0.0	17.1	13.2	13.7	12.5	-7.0	342.9	291.1	399.0	446.3
Connecticut	870.7	39.9	184.1	396.8	171.9	3.6	22.7	1.0	45.4	5.1	276.5	218.5	115.2	260.5
Delaware	302.0	63.8	49.8	135.8	0.0	0.0	2.1	0.3	50.3	(s)	66.8	58.4	101.1	75.7
Dist. of Col.	187.2	0.5	33.9	22.5	0.0	0.0	1.1	(s)	129.3	0.0	37.1	124.6	4.0	21.5
Florida	4,601.9	720.8	950.3	1,983.5	307.2	1.5	162.6	38.9	437.2	0.0	1,339.5	1,089.2	558.9	1,614.3
Georgia	3,133.0	934.7	453.9	1,100.2	341.3	22.1	186.4	0.6	93.9	(s)	744.4	565.7	887.4	935.5
Hawaii	343.7	19.1	3.0	306.3	0.0	0.9	8.0	9.2	0.0	-2.8	37.7	42.4	68.3	195.3
Idaho	529.6	10.2	83.9	165.8	0.0	89.2	26.6	3.3	150.7	0.2	122.3	83.6	186.9	136.9
Illinois	4,043.2	1,090.3	979.3	1,418.1	1,004.0	1.5	52.3	9.0	-500.2	-11.2	997.1	780.1	1,202.5	1,063.5
Indiana	2,904.0	1,574.5	548.1	877.7	0.0	4.4	39.1	2.9	-138.8	-3.9	551.5	360.1	1,345.8	646.6
Iowa	1,235.2	464.4	261.9	441.6	47.4	9.5	36.0	28.1	-21.6	-32.0	234.5	192.4	492.2	316.0
Kansas	1,136.2	396.3	291.6	424.5	108.8	0.1	9.8	12.1	-107.0	(s)	226.0	202.5	426.0	281.7
Kentucky	2,023.0	1,020.4	236.0	747.4	0.0	16.5	30.4	1.7	-29.1	-0.1	372.6	260.9	891.6	497.9
Louisiana	3,766.2	249.8	1,423.1	1,599.9	179.1	8.2	141.2	1.2	163.8	0.0	356.4	292.3	2,403.8	713.8
Maine	455.6	6.6	47.9	235.6	0.0	36.9	115.5	1.2	0.4	11.5	106.6	75.7	146.7	126.5
Maryland	1,488.7	327.8	208.5	557.3	150.5	16.3	30.2	0.4	197.8	-0.3	425.6	416.4	184.0	462.7
Massachusetts	1,514.6	120.1	417.3	684.6	53.7	7.9	35.1	0.8	192.5	2.5	443.1	384.0	195.6	491.7
Michigan	3,026.9	799.9	847.8	987.3	330.5	12.6	86.0	3.6	-36.7	-4.1	786.0	624.5	818.6	797.9
Minnesota	1,874.6	366.0	396.5	706.2	137.4	6.5	65.3	26.9	146.4	23.3	413.5	351.9	578.4	530.8
Mississippi	1,239.5	184.9	374.9	470.9	98.2	0.0	63.9	0.6	46.0	0.0	234.4	175.0	454.1	375.9
Missouri	1,964.1	802.4	277.6	758.9	98.3	11.9	20.5	0.2	-5.7	-0.1	521.1	406.8	428.9	607.3
Montana	462.1	202.5	75.0	210.6	0.0	92.6	15.9	5.2	-139.4	-0.2	79.4	68.3	186.4	128.1
Nebraska	692.9	216.8	146.4	235.1	115.8	3.4	10.3	3.0	-37.9	(s)	154.5	136.0	224.2	178.3
Nevada	777.4	82.9	263.6	292.6	0.0	19.8	6.7	29.2	81.5	1.0	183.3	134.2	201.4	258.5
New Hampshire	314.2	44.9	64.6	169.6	112.9	12.5	20.5	0.1	-112.9	2.1	92.2	70.4	44.6	107.1
New Jersey	2,743.7	111.8	640.7	1,373.3	335.7	0.2	22.2	2.6	257.5	-0.4	615.5	639.1	452.1	1,037.0
New Mexico	710.7	296.1	240.3	284.8	0.0	2.6	5.7	14.7	-133.5	-0.1	114.3	124.9	251.9	219.6
New York	4,064.3	257.5	1,218.9	1,633.4	445.2	249.6	105.0	10.4	105.8	38.5	1,201.8	1,257.4	504.6	1,100.5
North Carolina	2,700.0	827.8	245.2	970.8	420.0	29.5	83.5	0.8	122.5	0.0	715.9	573.5	643.7	766.9
North Dakota	428.1	420.1	63.0	142.7	0.0	12.9	3.8	6.7	-220.4	-0.8	63.8	60.9	198.8	104.5
Ohio	4,048.9	1,461.7	836.3	1,357.0	165.3	4.1	51.3	2.4	170.5	0.4	955.6	707.8	1,347.8	1,037.8
Oklahoma	1,608.5	373.2	690.6	578.0	0.0	30.3	26.2	18.3	-108.2	0.0	306.2	250.3	588.3	463.8
Oregon	1,108.2	45.3	258.2	384.7	0.0	332.0	47.1	14.8	21.8	4.2	267.6	209.4	284.2	347.0
Pennsylvania	4,006.2	1,490.7	781.7	1,455.6	811.5	22.1	74.0	6.7	-636.2	0.1	966.6	718.9	1,288.8	1,031.8
Rhode Island	217.6	(s)	90.8	91.5	0.0	(s)	3.7	(s)	30.0	1.4	71.9	57.6	23.5	64.6
South Carolina	1,692.3	444.0	180.3	576.5	558.0	15.4	80.6	0.4	-162.8	(s)	359.0	263.5	620.9	448.9
South Dakota	292.2	33.2	54.1	121.3	0.0	28.8	2.1	2.4	50.2	(s)	66.0	58.7	74.8	92.7
Tennessee	2,330.5	672.4	229.7	827.1	301.0	48.8	54.1	0.7	196.7	0.0	546.2	386.7	740.1	657.5
Texas	11,834.5	1,609.1	3,641.4	5,886.9	429.5	16.3	85.6	91.2	75.4	-0.8	1,594.1	1,381.6	5,950.9	2,907.9
Utah	805.5	391.3	232.2	305.6	0.0	5.3	6.2	4.2	-139.2	-0.1	166.4	151.8	224.9	262.4
Vermont	162.1	(s)	8.9	87.5	49.3	6.4	8.6	0.2	-7.2	8.5	47.5	31.2	29.4	54.0
Virginia	2,610.9	457.9	332.7	1,016.6	286.0	12.3	100.3	1.6	403.6	-0.1	628.4	600.5	567.4	814.5
Washington	2,067.2	95.7	279.7	846.8	85.0	779.1	82.5	25.0	-115.5	-11.1	490.1	383.9	521.0	672.2
West Virginia	850.5	983.0	122.6	288.7	0.0	12.4	5.0	1.7	-563.0	0.0	163.6	111.5	396.1	179.2
Wisconsin	1,846.3	464.9	403.9	619.5	135.4	15.0	84.8	1.7	121.1	(s)	419.0	356.8	623.5	446.9
Wyoming	496.4	494.8	117.6	176.2	0.0	7.2	1.6	8.1	-309.0	-0.2	45.8	60.3	263.4	126.9
United States	101,468.0	22,739.9	23,677.6	40,358.1	8,457.8	2,446.4	2,572.5	770.2	0.0	420.4	21,604.3	18,278.7	32,494.1	29,091.0

<sup>a</sup> End-use sector data include electricity sales and associated electrical system energy losses.<sup>b</sup> U.S. total energy and U.S. industrial sector include 25.2 trillion Btu of net imports of coal coke that is not allocated to the States.<sup>c</sup> Includes supplemental gaseous fuels.<sup>d</sup> Includes fuel ethanol blended into motor gasoline.<sup>e</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>h</sup> 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.

<sup>i</sup> Includes: net imports of electricity; energy losses and co-products from the production of fuel ethanol (U.S. only); and adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

Where shown, (s) = Value less than +0.05 and greater than -0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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, 2007

State			Petroleum							Nuclear Electric Power	Hydro- electric Power <sup>e</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total		
	Million Short Tons	Billion Cubic Feet	Million Barrels							Billion Kilowatthours	
Alabama .....	40.4	420.4	29.3	2.3	3.9	64.3	2.2	13.1	115.1	34.3	4.1
Alaska .....	0.8	370.0	13.5	29.1	0.2	6.9	0.7	6.6	57.0	0.0	1.3
Arizona .....	21.9	393.0	26.3	6.6	1.6	70.0	(s)	5.2	109.7	26.8	6.6
Arkansas .....	16.0	226.4	24.1	1.2	2.7	35.0	0.1	8.1	71.2	15.5	3.2
California .....	2.8	2,394.9	99.0	110.8	11.5	380.8	39.7	76.5	718.3	35.8	27.3
Colorado .....	19.8	504.8	19.7	13.5	6.0	52.2	0.0	6.3	97.8	0.0	1.7
Connecticut .....	1.9	180.2	24.3	2.1	3.4	37.9	2.8	2.7	73.1	16.4	0.4
Delaware .....	2.6	47.9	3.0	0.1	1.1	11.0	2.1	7.3	24.7	0.0	0.0
Dist. of Col. ....	(s)	33.0	1.0	0.0	(s)	3.1	0.0	0.1	4.2	0.0	0.0
Florida .....	29.9	917.2	55.9	31.2	6.3	208.7	38.8	20.5	361.3	29.3	0.2
Georgia .....	42.3	441.1	45.6	6.7	5.7	121.1	7.0	16.6	202.7	32.5	2.2
Hawaii .....	0.9	2.9	9.3	12.8	0.4	11.3	16.3	2.8	52.9	0.0	0.1
Idaho .....	0.5	81.9	10.0	0.9	1.7	16.2	(s)	1.8	30.6	0.0	9.0
Illinois .....	61.1	965.8	49.3	29.6	21.1	124.3	0.1	39.9	264.3	95.7	0.2
Indiana .....	72.8	535.8	43.2	7.4	7.5	76.6	0.6	25.5	160.7	0.0	0.4
Iowa .....	26.3	259.3	22.9	0.9	16.9	40.3	(s)	5.4	86.3	4.5	1.0
Kansas .....	23.0	286.4	19.4	1.5	17.6	32.0	0.5	11.7	82.6	10.4	(s)
Kentucky .....	43.7	229.8	33.5	8.0	9.8	54.1	0.1	31.7	137.3	0.0	1.7
Louisiana .....	15.5	1,377.6	32.7	22.4	56.4	57.9	15.8	116.9	302.2	17.1	0.8
Maine .....	0.3	44.6	15.9	1.8	2.8	16.8	4.1	1.7	43.0	0.0	3.7
Maryland .....	13.1	201.1	21.7	3.5	2.8	66.3	2.4	6.3	103.0	14.4	1.7
Massachusetts ....	5.2	408.8	32.5	8.2	3.4	70.6	7.0	4.0	125.8	5.1	0.8
Michigan .....	39.6	828.8	29.4	5.3	16.2	116.1	1.8	18.8	187.5	31.5	1.3
Minnesota .....	20.6	388.7	27.3	11.3	10.4	64.6	1.3	16.0	131.0	13.1	0.7
Mississippi .....	10.0	364.0	22.9	4.4	3.1	40.5	1.4	13.2	85.5	9.4	0.0
Missouri .....	45.4	272.4	34.4	6.3	10.6	77.8	(s)	12.8	141.9	9.4	1.2
Montana .....	12.0	73.8	13.9	1.0	3.0	12.1	0.0	8.3	38.2	0.0	9.4
Nebraska .....	12.7	143.8	17.2	1.0	3.5	20.3	0.1	1.6	43.7	11.0	0.3
Nevada .....	3.7	254.5	13.4	9.2	0.9	28.4	(s)	1.6	53.6	0.0	2.0
New Hampshire ..	1.6	62.1	8.2	0.2	3.3	17.7	1.4	1.3	32.0	10.8	1.3
New Jersey .....	4.7	619.1	39.6	36.5	2.8	106.1	19.8	42.2	247.0	32.0	(s)
New Mexico .....	16.0	234.0	15.6	1.9	7.3	22.9	0.2	5.8	53.8	0.0	0.3
New York .....	11.0	1,190.3	78.8	20.0	7.3	139.1	29.0	21.1	295.4	42.5	25.3
North Carolina ....	33.6	237.4	35.5	7.2	12.1	107.9	3.8	15.8	182.1	40.0	3.0
North Dakota .....	31.3	60.2	11.9	0.7	3.0	8.6	0.1	2.0	26.4	0.0	1.3
Ohio .....	63.8	806.5	57.9	18.1	9.0	124.1	0.9	38.5	248.5	15.8	0.4
Oklahoma .....	21.3	658.4	33.8	5.3	3.7	45.4	0.3	16.2	104.6	0.0	3.1
Oregon .....	2.7	251.9	18.8	5.6	1.1	37.8	2.5	4.1	70.0	0.0	33.6
Pennsylvania .....	65.6	752.3	70.2	15.5	13.3	124.0	6.6	36.9	266.5	77.4	2.2
Rhode Island .....	(s)	88.0	5.8	0.3	0.4	9.7	0.4	0.2	16.9	0.0	(s)
South Carolina ....	17.8	173.8	21.9	1.9	2.9	61.3	3.2	15.0	106.2	53.2	1.6
South Dakota .....	2.0	53.9	7.8	0.9	2.4	10.3	(s)	1.2	22.7	0.0	2.9
Tennessee .....	30.4	221.1	35.3	13.8	4.1	76.1	0.2	22.0	151.4	28.7	4.9
Texas .....	104.8	3,542.2	144.5	75.4	433.3	290.6	32.7	231.5	1,208.0	41.0	1.6
Utah .....	17.5	219.7	15.9	7.1	1.5	26.1	0.3	4.8	55.7	0.0	0.5
Vermont .....	(s)	8.9	4.9	0.3	2.2	8.4	0.2	0.7	16.7	4.7	0.6
Virginia .....	18.1	319.9	44.6	19.0	5.2	99.0	5.1	13.8	186.8	27.3	1.2
Washington .....	5.8	272.6	30.5	20.5	2.7	65.9	10.0	22.7	152.2	8.1	78.8
West Virginia .....	40.7	114.3	14.7	0.2	1.2	20.2	1.0	15.0	52.4	0.0	1.3
Wisconsin .....	25.6	398.4	28.1	2.2	10.4	62.3	0.8	12.4	116.2	12.9	1.5
Wyoming .....	28.4	113.3	16.3	0.4	1.5	8.5	0.1	4.9	31.6	0.0	0.7
United States .....	1,127.6	23,047.2	1,531.5	592.2	761.0	3,389.3	263.9	1,010.5	7,548.3	806.4	247.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

Where shown, (s) = Value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table S3. Energy Consumption Estimates by Source, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass Wood and Waste <sup>f</sup>	Geo-thermal, Solar/PV, and Wind <sup>g</sup>	Net Interstate Flow of Electricity/Losses <sup>h</sup>	Other <sup>i</sup>	Total <sup>j</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
Alabama .....	888.4	431.4	170.6	13.2	14.1	335.6	13.6	79.4	626.4	360.0	40.9	189.3	0.2	-404.5	0.0	2,132.0
Alaska .....	13.0	371.8	78.8	164.7	0.7	36.2	4.6	39.0	324.1	0.0	12.8	1.7	0.1	0.0	(s)	723.6
Arizona .....	438.5	402.1	153.4	37.5	5.6	365.4	0.1	33.4	595.4	280.9	65.2	16.4	4.1	-224.7	(s)	1,577.8
Arkansas .....	275.0	228.0	140.2	7.0	9.9	182.5	0.9	46.6	386.9	162.4	32.0	84.9	0.6	-20.4	0.0	1,149.3
California .....	66.4	2,440.4	576.8	628.2	41.3	1,987.3	249.5	463.2	3,946.3	375.4	270.1	145.5	357.5	871.2	18.8	8,491.5
Colorado .....	388.5	515.9	115.0	76.7	21.5	272.6	0.0	39.5	525.4	0.0	17.1	13.2	13.7	12.5	-7.0	1,479.3
Connecticut .....	39.9	184.1	141.4	11.7	12.1	197.8	17.6	16.3	396.8	171.9	3.6	22.7	1.0	45.4	5.1	870.7
Delaware .....	63.8	49.8	17.7	0.6	4.0	57.6	13.4	42.5	135.8	0.0	0.0	2.1	0.3	50.3	(s)	302.0
Dist. of Col. ....	0.5	33.9	6.0	0.0	(s)	16.0	0.0	0.5	22.5	0.0	0.0	1.1	(s)	129.3	0.0	187.2
Florida .....	720.8	950.3	325.5	176.7	22.5	1,089.4	243.8	125.6	1,983.5	307.2	1.5	162.6	38.9	437.2	0.0	4,601.9
Georgia .....	934.7	453.9	265.8	38.1	20.6	631.9	44.2	99.6	1,100.2	341.3	22.1	186.4	0.6	93.9	(s)	3,133.0
Hawaii .....	19.1	3.0	54.1	72.3	1.5	59.2	102.6	16.5	306.3	0.0	0.9	8.0	9.2	0.0	-2.8	343.7
Idaho .....	10.2	83.9	58.3	5.1	6.0	84.4	0.2	11.7	165.8	0.0	89.2	26.6	3.3	150.7	0.2	529.6
Illinois .....	1,090.3	979.3	287.1	167.7	75.8	648.6	0.8	238.1	1,418.1	1,004.0	1.5	52.3	9.0	-500.2	-11.2	4,043.2
Indiana .....	1,574.5	548.1	251.4	42.2	26.8	399.8	3.8	153.6	877.7	0.0	4.4	39.1	2.9	-138.8	-3.9	2,904.0
Iowa .....	464.4	261.9	133.2	5.1	60.7	210.1	0.3	32.3	441.6	47.4	9.5	36.0	28.1	-21.6	-32.0	1,235.2
Kansas .....	396.3	291.6	113.0	8.7	63.2	166.9	2.9	69.8	424.5	108.8	0.1	9.8	12.1	-107.0	(s)	1,136.2
Kentucky .....	1,020.4	236.0	195.0	45.2	35.3	282.5	0.7	188.6	747.4	0.0	16.5	30.4	1.7	-29.1	-0.1	2,023.0
Louisiana .....	249.8	1,423.1	190.3	127.1	202.7	302.0	99.6	678.2	1,599.9	179.1	8.2	141.2	1.2	163.8	0.0	3,766.2
Maine .....	6.6	47.9	92.5	10.0	10.1	87.5	25.6	9.9	235.6	0.0	36.9	115.5	1.2	0.4	11.5	455.6
Maryland .....	327.8	208.5	126.4	20.0	10.2	345.8	15.4	39.5	557.3	150.5	16.3	30.2	0.4	197.8	-0.3	1,488.7
Massachusetts ..	120.1	417.3	189.5	46.7	12.1	368.7	44.1	23.6	684.6	53.7	7.9	35.1	0.8	192.5	2.5	1,514.6
Michigan .....	799.9	847.8	171.1	29.9	58.2	605.7	11.2	111.2	987.3	330.5	12.6	86.0	3.6	-36.7	-4.1	3,026.9
Minnesota .....	366.0	396.5	159.2	63.9	37.4	337.3	8.5	99.9	706.2	137.4	6.5	65.3	26.9	146.4	23.3	1,874.6
Mississippi .....	184.9	374.9	133.4	24.8	11.1	211.5	9.1	81.0	470.9	98.2	0.0	63.9	0.6	46.0	0.0	1,239.5
Missouri .....	802.4	277.6	200.2	35.9	38.0	406.1	0.2	78.5	758.9	98.3	11.9	20.5	0.2	-5.7	-0.1	1,964.1
Montana .....	202.5	75.0	80.8	5.8	10.7	63.0	0.0	50.2	210.6	0.0	92.6	15.9	5.2	-139.4	-0.2	462.1
Nebraska .....	216.8	146.4	100.4	5.5	12.7	106.1	0.4	9.9	235.1	115.8	3.4	10.3	3.0	-37.9	(s)	692.9
Nevada .....	82.9	263.6	78.2	52.2	3.3	148.3	0.1	10.5	292.6	0.0	19.8	6.7	29.2	81.5	1.0	777.4
New Hampshire ..	44.9	64.6	47.9	0.9	11.9	92.4	8.7	7.8	169.6	112.9	12.5	20.5	0.1	-112.9	2.1	314.2
New Jersey .....	111.8	640.7	230.9	207.2	9.9	553.6	124.4	247.4	1,373.3	335.7	0.2	22.2	2.6	257.5	-0.4	2,743.7
New Mexico .....	296.1	240.3	91.1	11.0	26.2	119.7	1.0	35.8	284.8	0.0	2.6	5.7	14.7	-133.5	-0.1	710.7
New York .....	257.5	1,218.9	459.3	113.3	26.4	726.2	182.2	126.1	1,633.4	445.2	249.6	105.0	10.4	105.8	38.5	4,064.3
North Carolina ..	827.8	245.2	206.7	40.6	43.4	563.0	23.6	93.5	970.8	420.0	29.5	83.5	0.8	122.5	0.0	2,700.0
North Dakota ....	420.1	63.0	69.5	4.0	10.9	45.1	0.6	12.6	142.7	0.0	12.9	3.8	6.7	-220.4	-0.8	428.1
Ohio .....	1,461.7	836.3	337.0	102.9	32.4	647.7	5.7	231.3	1,357.0	165.3	4.1	51.3	2.4	170.5	0.4	4,048.9
Oklahoma .....	373.2	690.6	196.7	30.0	13.1	236.9	2.0	99.2	578.0	0.0	30.3	26.2	18.3	-108.2	0.0	1,608.5
Oregon .....	45.3	258.2	109.8	31.9	3.8	197.3	16.0	25.9	384.7	0.0	332.0	47.1	14.8	21.8	4.2	1,108.2
Pennsylvania ....	1,490.7	781.7	409.0	87.9	47.8	647.0	41.6	222.3	1,455.6	811.5	22.1	74.0	6.7	-636.2	0.1	4,006.2
Rhode Island ....	(s)	90.8	33.7	1.9	1.5	50.8	2.6	1.1	91.5	0.0	(s)	3.7	(s)	30.0	1.4	217.6
South Carolina ..	444.0	180.3	127.5	10.7	10.3	320.1	20.3	87.8	576.5	558.0	15.4	80.6	0.4	-162.8	(s)	1,692.3
South Dakota ....	33.2	54.1	45.4	5.0	8.6	53.9	0.2	8.1	121.3	0.0	28.8	2.1	2.4	50.2	(s)	292.2
Tennessee .....	672.4	229.7	205.7	78.3	14.6	397.0	1.1	130.3	827.1	301.0	48.8	54.1	0.7	196.7	0.0	2,330.5
Texas .....	1,609.1	3,641.4	842.0	427.6	1,555.9	1,516.7	205.4	1,339.3	5,886.9	429.5	16.3	85.6	91.2	75.4	-0.8	11,834.5
Utah .....	391.3	232.2	92.9	40.2	5.2	136.0	1.9	29.4	305.6	0.0	5.3	6.2	4.2	-139.2	-0.1	805.5
Vermont .....	(s)	8.9	28.6	1.8	7.7	43.6	1.5	4.2	87.5	49.3	6.4	8.6	0.2	-7.2	8.5	162.1
Virginia .....	457.9	332.7	259.7	107.9	18.8	516.8	32.3	81.1	1,016.6	286.0	12.3	100.3	1.6	403.6	-0.1	2,610.9
Washington .....	95.7	279.7	177.5	116.0	9.6	343.9	62.8	137.1	846.8	85.0	779.1	82.5	25.0	-115.5	-11.1	2,067.2
West Virginia ....	983.0	122.6	85.9	1.3	4.2	105.5	6.3	85.5	288.7	0.0	12.4	5.0	1.7	-563.0	0.0	850.5
Wisconsin .....	464.9	403.9	163.6	12.6	37.2	325.0	5.0	76.0	619.5	135.4	15.0	84.8	1.7	121.1	(s)	1,846.3
Wyoming .....	494.8	117.6	95.1	2.1	5.3	44.5	0.5	28.8	176.2	0.0	7.2	1.6	8.1	-309.0	-0.2	496.4
United States ....	22,739.9	23,677.6	8,921.0	3,357.6	2,732.8	17,688.6	1,658.9	5,999.1	40,358.1	8,457.8	2,446.4	2,572.5	770.2	0.0	420.4	101,468.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>h</sup> 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.

<sup>i</sup> Includes: net imports of electricity; energy losses and co-products from the production of fuel ethanol (U.S. only); and adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.<sup>j</sup> U.S. total includes 25.2 trillion Btu of net imports of coal coke that has not been allocated to the States.

Where shown, (s) = Value less than +0.05 and greater than -0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table S4. Residential Sector Energy Consumption Estimates, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass		Solar/PV <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e</sup>	Electrical System Energy Losses <sup>f</sup>	Total <sup>e</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>	Geothermal					
Alabama .....	(s)	36.2	(s)	0.2	7.4	7.6	8.3	0.1	0.1	111.9	164.1	241.3	405.5
Alaska .....	0.7	19.9	8.5	0.9	0.6	10.0	1.4	0.1	(s)	7.2	39.3	15.1	54.4
Arizona .....	(s)	39.3	(s)	(s)	3.0	3.1	13.0	(s)	3.7	117.5	176.6	253.5	430.1
Arkansas .....	(s)	32.7	(s)	(s)	4.9	5.0	2.7	0.5	0.1	59.4	100.4	128.2	228.6
California .....	0.0	498.5	0.6	0.9	27.0	28.4	26.0	0.2	21.6	304.2	878.8	656.4	1,535.2
Colorado .....	(s)	133.2	(s)	(s)	10.6	10.7	10.6	0.2	0.3	60.2	213.1	129.8	342.9
Connecticut .....	(s)	44.6	75.9	0.7	5.5	82.2	4.6	(s)	1.0	45.6	178.1	98.4	276.5
Delaware .....	(s)	10.4	3.7	0.3	2.8	6.8	1.3	0.2	(s)	15.3	33.9	32.9	66.8
Dist. of Col. ....	(s)	13.7	1.2	0.0	(s)	1.2	0.9	0.0	(s)	6.7	22.6	14.5	37.1
Florida .....	(s)	16.3	0.3	0.1	13.7	14.2	2.2	4.6	33.0	402.0	472.2	867.3	1,339.5
Georgia .....	(s)	114.7	0.2	0.2	10.5	10.9	12.6	0.2	0.3	191.8	330.5	413.9	744.4
Hawaii .....	0.0	0.5	(s)	(s)	1.1	1.1	0.0	0.0	2.0	10.9	14.1	23.7	37.7
Idaho .....	0.1	24.0	1.4	(s)	3.7	5.2	3.1	0.1	(s)	28.5	60.9	61.4	122.3
Illinois .....	0.3	438.9	0.9	0.3	18.4	19.6	23.5	1.2	1.3	163.9	643.5	353.6	997.1
Indiana .....	0.4	145.9	2.8	0.7	14.7	18.2	12.5	2.2	0.1	118.2	296.4	255.1	551.5
Iowa .....	0.7	68.4	1.3	0.1	14.9	16.3	6.2	0.3	(s)	48.0	131.0	103.5	234.5
Kansas .....	0.0	64.2	(s)	(s)	7.3	7.3	5.6	0.1	(s)	47.1	124.4	101.6	226.0
Kentucky .....	0.3	52.9	1.4	0.6	7.2	9.2	7.4	1.1	0.1	95.5	166.5	206.2	372.6
Louisiana .....	(s)	38.1	(s)	(s)	2.3	2.4	4.2	0.5	0.1	98.5	143.8	212.6	356.4
Maine .....	(s)	1.3	42.2	5.4	7.7	55.3	2.2	(s)	0.2	15.1	74.1	32.5	106.6
Maryland .....	0.1	86.5	19.5	1.3	6.6	27.3	7.6	0.3	0.1	96.2	218.0	207.6	425.6
Massachusetts ....	0.1	116.2	92.5	0.9	7.5	100.9	8.8	(s)	0.3	68.7	294.9	148.2	443.1
Michigan .....	0.4	336.5	8.0	0.5	36.1	44.6	20.4	2.5	0.6	120.7	525.6	260.4	786.0
Minnesota .....	0.1	131.6	9.0	0.1	17.4	26.4	10.6	0.6	0.2	77.3	246.8	166.7	413.5
Mississippi .....	0.0	22.8	(s)	0.1	6.6	6.7	4.9	(s)	(s)	63.3	97.8	136.7	234.4
Missouri .....	0.4	103.5	0.8	0.3	17.1	18.2	12.2	0.2	(s)	122.4	257.0	264.1	521.1
Montana .....	(s)	20.0	1.1	(s)	7.0	8.2	2.2	0.1	(s)	15.5	46.0	33.4	79.4
Nebraska .....	(s)	39.3	0.3	(s)	6.0	6.3	3.6	0.2	(s)	33.3	82.7	71.8	154.5
Nevada .....	(s)	39.9	0.9	0.1	2.2	3.2	5.3	0.2	1.2	42.3	92.1	91.2	183.3
New Hampshire ..	(s)	7.5	23.7	1.7	8.9	34.3	1.9	(s)	0.1	15.3	59.1	33.1	92.2
New Jersey .....	(s)	236.1	43.8	0.4	5.8	50.1	6.6	0.3	2.1	101.5	396.5	219.0	615.5
New Mexico .....	(s)	34.3	(s)	(s)	6.5	6.5	4.3	(s)	0.2	21.8	67.2	47.0	114.3
New York .....	0.3	406.8	175.3	7.5	18.5	201.3	50.5	0.2	1.4	171.4	831.9	369.9	1,201.8
North Carolina ....	0.1	60.5	11.5	4.8	20.6	36.9	13.2	0.6	0.2	191.4	302.9	413.0	715.9
North Dakota .....	0.4	11.2	2.7	(s)	5.4	8.2	1.4	0.3	(s)	13.9	33.9	29.9	63.8
Ohio .....	0.3	310.7	14.6	1.4	18.3	34.3	22.9	1.5	0.2	185.5	555.3	400.3	955.6
Oklahoma .....	(s)	63.7	0.2	(s)	8.6	8.9	3.4	(s)	(s)	72.9	148.9	157.3	306.2
Oregon .....	0.0	43.7	3.2	(s)	2.3	5.6	7.8	0.3	1.4	66.1	124.9	142.6	267.6
Pennsylvania .....	1.6	240.8	99.8	5.4	19.1	124.3	10.3	0.8	0.8	186.3	564.7	401.9	966.6
Rhode Island .....	(s)	18.4	17.3	0.1	0.9	18.3	1.5	(s)	(s)	10.7	48.9	23.1	71.9
South Carolina ....	(s)	25.4	1.0	1.1	6.1	8.2	6.5	0.4	(s)	100.9	141.3	217.7	359.0
South Dakota .....	(s)	12.4	1.0	(s)	4.8	5.8	1.6	0.2	(s)	14.5	34.6	31.4	66.0
Tennessee .....	0.2	63.1	0.7	1.2	8.4	10.3	10.5	0.1	(s)	146.3	230.5	315.7	546.2
Texas .....	(s)	205.9	(s)	0.1	22.3	22.4	18.4	0.9	0.7	426.2	674.5	919.6	1,594.1
Utah .....	(s)	64.4	0.2	(s)	2.9	3.1	4.5	(s)	0.1	29.9	102.0	64.4	166.4
Vermont .....	(s)	3.2	12.6	1.4	5.9	19.9	1.0	(s)	0.1	7.4	31.6	16.0	47.5
Virginia .....	0.2	84.5	25.4	4.2	12.5	42.1	10.6	0.5	0.6	155.2	293.6	334.8	628.4
Washington .....	(s)	82.3	6.4	0.1	6.6	13.1	13.3	0.1	0.1	120.7	229.6	260.5	490.1
West Virginia .....	0.1	28.5	1.9	0.7	2.8	5.4	2.9	(s)	0.1	40.1	77.1	86.5	163.6
Wisconsin .....	0.1	132.9	11.5	0.1	21.3	32.9	11.5	0.4	0.2	76.3	254.3	164.7	419.0
Wyoming .....	0.1	12.9	0.2	(s)	3.5	3.7	1.2	(s)	(s)	8.8	26.7	19.1	45.8
United States .....	7.2	4,839.2	726.1	43.9	481.5	1,251.5	430.0	22.0	74.9	4,750.3	11,355.3	10,249.0	21,604.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied Petroleum Gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> 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.

<sup>e</sup> Adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

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

Where shown, (s) = Value less than 0.05 trillion Btu.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table S5. Commercial Sector Energy Consumption Estimates, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e</sup>	Biomass Wood and Waste <sup>f</sup>	Geothermal	Retail Electricity Sales	Net Energy <sup>g</sup>	Electrical System Energy Losses <sup>h</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
Alabama .....	(s)	23.9	7.4	(s)	1.3	0.2	0.0	8.9	0.0	1.3	0.0	78.0	112.2	168.4	280.6
Alaska .....	6.1	18.8	5.7	0.6	0.1	0.9	0.0	7.3	0.0	0.2	(s)	9.7	42.2	20.2	62.4
Arizona .....	(s)	33.5	3.7	(s)	0.5	0.2	0.0	4.5	0.0	2.1	(s)	104.0	144.2	224.4	368.5
Arkansas .....	(s)	32.2	0.5	0.1	0.9	0.6	0.0	2.1	0.0	0.5	0.0	40.3	75.0	86.9	161.9
California .....	0.0	254.0	10.7	0.2	4.8	1.5	0.0	17.1	0.1	9.4	0.6	422.0	703.3	910.6	1,613.9
Colorado .....	0.2	64.3	2.6	(s)	1.9	0.2	0.0	4.7	0.0	1.7	0.2	70.0	140.1	151.0	291.1
Connecticut .....	0.1	37.0	15.2	0.2	1.0	0.2	1.2	17.8	0.0	0.7	0.0	51.6	107.2	111.4	218.5
Delaware .....	(s)	9.0	1.4	0.1	0.5	(s)	0.7	2.6	0.0	0.2	0.0	14.7	26.6	31.8	58.4
Dist. of Col. ....	0.4	19.6	1.8	(s)	(s)	0.1	0.0	1.9	0.0	0.1	0.0	32.5	54.5	70.1	124.6
Florida .....	(s)	55.2	13.4	0.1	2.4	3.5	0.3	19.7	0.0	0.9	1.3	320.5	397.7	691.5	1,089.2
Georgia .....	(s)	50.2	4.9	0.1	1.9	0.4	0.0	7.2	0.0	2.0	(s)	160.4	219.7	346.0	565.7
Hawaii .....	0.0	1.9	1.6	(s)	0.2	0.1	(s)	1.9	0.0	2.3	(s)	12.0	16.3	26.0	42.4
Idaho .....	0.8	14.6	1.5	(s)	0.7	0.1	0.0	2.3	0.0	0.5	0.6	20.5	39.3	44.3	83.6
Illinois .....	3.0	206.1	4.3	0.2	3.2	1.3	0.0	9.0	0.0	3.7	0.0	177.6	397.0	383.1	780.1
Indiana .....	3.2	77.3	5.8	0.2	2.6	1.4	(s)	10.0	0.0	2.7	0.5	84.5	177.8	182.3	360.1
Iowa .....	6.2	47.0	1.4	(s)	2.6	8.4	0.0	12.8	0.0	1.7	0.5	41.2	103.5	89.0	192.4
Kansas .....	0.0	31.1	1.6	(s)	1.3	0.4	0.0	3.2	0.0	0.9	0.5	52.8	88.6	113.9	202.5
Kentucky .....	2.7	35.3	3.8	0.1	1.3	0.2	0.0	5.4	0.0	1.2	0.5	68.4	113.4	147.5	260.9
Louisiana .....	(s)	25.9	3.6	(s)	0.4	14.6	0.0	18.6	0.0	0.7	0.5	78.1	123.8	168.5	292.3
Maine .....	0.1	6.5	17.1	0.7	1.4	0.3	2.6	21.9	0.0	2.1	0.0	14.3	44.9	30.9	75.7
Maryland .....	0.7	73.4	6.9	0.2	1.2	0.2	0.1	8.6	0.0	3.1	0.0	104.7	190.5	225.9	416.4
Massachusetts ....	0.5	62.0	18.9	0.1	1.3	0.4	5.3	26.1	0.1	2.4	0.5	92.6	184.2	199.9	384.0
Michigan .....	3.5	167.7	6.6	(s)	6.4	0.4	0.0	13.4	0.0	7.8	0.5	136.6	329.6	294.8	624.5
Minnesota .....	1.0	93.2	4.2	0.1	3.1	4.9	0.6	12.8	0.0	2.2	0.0	76.8	186.1	165.8	351.9
Mississippi .....	0.0	21.3	6.6	(s)	1.2	0.2	0.0	8.0	0.0	0.8	0.6	45.7	76.3	98.6	175.0
Missouri .....	3.7	60.3	2.1	0.1	3.0	0.3	(s)	5.6	0.0	1.9	0.0	106.2	177.7	229.1	406.8
Montana .....	(s)	13.4	1.0	(s)	1.2	0.1	0.0	2.3	0.0	0.3	0.1	16.5	32.8	35.5	68.3
Nebraska .....	0.1	30.6	1.1	(s)	1.1	0.6	0.0	2.8	0.0	0.7	0.6	32.1	66.9	69.2	136.0
Nevada .....	(s)	29.6	1.8	(s)	0.4	0.1	(s)	2.3	0.0	0.8	0.6	31.9	65.3	68.8	134.2
New Hampshire ..	0.1	9.5	6.5	0.2	1.6	0.2	2.8	11.3	0.0	0.3	0.0	15.6	36.7	33.6	70.4
New Jersey .....	0.1	174.7	19.5	0.6	1.0	0.4	1.5	23.0	0.0	1.0	0.0	139.5	338.2	300.9	639.1
New Mexico .....	0.1	25.5	1.1	(s)	1.1	0.1	0.0	2.4	0.0	0.7	0.1	30.5	59.1	65.8	124.9
New York .....	2.7	296.9	85.1	1.4	3.3	1.4	54.8	145.9	(s)	10.5	0.6	253.6	710.3	547.2	1,257.4
North Carolina ....	0.9	47.1	8.7	0.4	3.6	6.0	0.2	19.0	0.1	2.1	0.0	159.7	228.9	344.6	573.5
North Dakota .....	3.4	10.8	0.9	(s)	1.0	0.1	0.2	2.1	0.0	0.2	0.3	14.4	29.8	31.0	60.9
Ohio .....	2.8	165.4	10.3	0.5	3.2	2.4	(s)	16.4	0.0	4.3	0.5	164.2	353.5	354.3	707.8
Oklahoma .....	(s)	43.5	2.8	(s)	1.5	1.1	0.0	5.5	0.0	0.5	0.0	63.6	113.1	137.2	250.3
Oregon .....	0.0	29.6	2.7	0.1	0.4	0.2	0.2	3.6	0.0	1.4	0.5	55.2	90.3	119.2	209.4
Pennsylvania .....	14.8	151.8	28.7	1.1	3.4	0.5	2.4	36.0	0.0	3.7	0.5	162.2	369.0	349.9	718.9
Rhode Island .....	(s)	11.7	4.0	(s)	0.2	0.1	1.5	5.7	0.0	0.2	0.0	12.7	30.3	27.3	57.6
South Carolina ....	(s)	21.5	4.0	0.1	1.1	0.2	0.1	5.5	(s)	2.2	0.0	74.2	103.4	160.1	263.5
South Dakota .....	(s)	10.4	1.3	(s)	0.8	0.1	0.1	2.3	0.0	0.3	0.7	14.3	27.9	30.8	58.7
Tennessee .....	1.4	53.1	5.5	0.1	1.5	0.3	0.1	7.5	0.0	1.6	0.0	102.3	166.0	220.7	386.7
Texas .....	(s)	166.3	14.2	0.2	3.9	1.9	0.1	20.4	0.0	3.4	0.6	377.2	567.8	813.8	1,381.6
Utah .....	0.4	36.6	2.6	(s)	0.5	0.1	0.0	3.3	0.0	0.8	0.3	34.9	76.4	75.4	151.8
Vermont .....	(s)	2.6	4.5	0.2	1.0	(s)	0.5	6.2	0.0	0.2	0.0	7.0	16.1	15.2	31.2
Virginia .....	1.7	69.4	12.2	0.9	2.2	0.6	0.1	16.0	0.0	6.9	0.6	160.3	254.7	345.8	600.5
Washington .....	(s)	55.1	4.6	0.1	1.2	0.9	(s)	6.7	0.4	2.1	0.7	101.0	166.0	217.9	383.9
West Virginia .....	1.3	24.3	0.9	0.1	0.5	0.2	0.0	1.7	0.0	0.5	(s)	26.5	54.3	57.2	111.5
Wisconsin .....	1.1	90.2	5.9	0.1	3.8	0.3	0.2	10.1	(s)	2.2	0.0	80.2	183.9	172.9	356.8
Wyoming .....	0.9	9.8	0.5	(s)	0.6	2.2	0.0	3.4	0.0	0.2	0.6	14.4	29.2	31.0	60.3
United States .....	64.4	3,100.7	383.9	9.2	85.0	61.2	75.4	615.0	0.8	100.4	14.4	4,559.5	8,441.5	9,837.1	18,278.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. Also, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they

are mostly derived, but should be counted only once in net energy and total.

<sup>h</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

Where shown, (s) = Value less than 0.05 trillion Btu.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



**Table S6. Industrial Sector Energy Consumption Estimates, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric power <sup>e</sup>	Biomass	Geo-thermal	Retail Electricity Sales	Net Energy <sup>g,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>g,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
Alabama .....	81.4	173.6	28.5	5.2	5.9	5.1	76.0	120.8	0.0	176.0	(s)	123.4	675.3	266.3	941.6
Alaska .....	(s)	289.7	15.7	0.1	0.3	0.0	35.8	51.9	0.0	0.1	0.0	4.7	346.4	9.9	356.3
Arizona .....	15.3	19.9	25.0	1.4	5.6	0.1	30.8	63.0	0.0	1.1	0.2	41.9	141.3	90.4	231.7
Arkansas .....	9.8	87.7	41.3	3.8	5.0	0.4	43.6	94.1	0.0	79.9	(s)	60.9	332.4	131.3	463.7
California .....	43.0	807.9	66.8	6.9	23.2	0.1	423.4	520.3	0.0	38.6	1.4	172.4	1,583.7	372.0	1,955.7
Colorado .....	5.3	175.7	28.1	8.8	4.2	0.0	36.8	78.0	0.0	0.3	0.2	44.7	302.5	96.5	399.0
Connecticut .....	0.0	23.5	5.2	5.6	2.3	2.5	13.4	28.9	0.0	4.2	0.0	18.5	75.2	40.0	115.2
Delaware .....	2.7	16.4	2.6	0.8	1.0	3.3	41.1	48.7	0.0	0.1	0.0	10.5	78.5	22.7	101.1
Dist. of Col. ....	0.0	0.0	0.3	(s)	0.3	0.0	0.2	0.8	0.0	0.0	0.0	1.0	1.8	2.2	4.0
Florida .....	27.9	73.2	37.1	5.6	18.3	11.1	70.8	142.8	0.0	107.7	0.0	65.7	417.2	141.6	558.9
Georgia .....	38.8	156.1	33.4	7.5	9.3	8.4	95.2	153.8	0.2	171.6	(s)	116.2	636.7	250.7	887.4
Hawaii .....	1.9	0.5	2.6	0.2	1.3	2.7	15.9	22.7	0.4	1.5	(s)	13.2	39.7	28.6	68.3
Idaho .....	9.2	24.7	13.4	1.5	3.5	0.2	10.5	29.2	0.0	21.6	0.9	32.1	117.7	69.2	186.9
Illinois .....	98.7	258.3	50.4	52.9	9.4	0.5	229.1	342.3	0.0	16.8	0.0	155.0	868.0	334.4	1,202.5
Indiana .....	299.7	279.1	36.1	9.1	13.2	2.0	148.4	208.7	0.0	21.7	0.0	170.6	977.8	368.0	1,345.8
Iowa .....	60.7	107.7	27.3	42.9	7.3	0.3	27.3	105.0	0.0	26.6	0.0	65.3	351.4	140.8	492.2
Kansas .....	5.8	145.0	28.5	54.5	5.3	2.9	63.5	154.7	0.0	3.3	0.0	37.1	345.9	80.1	426.0
Kentucky .....	63.8	115.7	27.7	26.5	6.0	0.7	152.8	213.6	0.0	20.6	0.0	151.4	565.0	326.6	891.6
Louisiana .....	1.7	1,073.4	29.6	199.8	8.6	3.7	652.3	894.0	0.0	135.1	(s)	94.8	2,199.1	204.6	2,403.8
Maine .....	2.9	3.4	5.5	1.0	1.4	17.4	2.8	28.2	6.9	70.3	0.0	11.1	122.7	23.9	146.7
Maryland .....	29.8	21.1	9.0	2.3	5.4	4.1	35.8	56.7	0.0	12.0	0.0	20.4	140.0	44.0	184.0
Massachusetts ....	2.2	46.7	7.9	3.2	4.1	6.1	19.6	40.9	0.1	3.8	0.0	32.2	126.1	69.6	195.6
Michigan .....	74.7	191.5	18.4	14.8	11.6	6.1	100.8	151.6	0.3	35.6	0.0	115.6	569.2	249.4	818.6
Minnesota .....	25.7	115.9	30.0	16.6	7.7	5.0	93.1	152.3	0.9	35.3	0.0	78.6	408.8	169.6	578.4
Mississippi .....	3.4	114.1	18.1	3.2	3.3	0.7	78.7	104.0	0.0	58.2	(s)	55.2	335.0	119.2	454.1
Missouri .....	24.3	69.0	33.8	17.3	6.3	0.2	72.4	130.1	0.0	6.1	0.0	63.2	292.6	136.3	428.9
Montana .....	1.6	32.6	26.1	2.4	2.6	0.0	41.3	72.4	0.0	13.3	0.1	21.0	141.0	45.4	186.4
Nebraska .....	8.1	59.9	35.6	5.5	3.8	0.3	7.6	52.8	0.0	5.3	0.0	31.1	157.1	67.0	224.2
Nevada .....	4.7	13.9	20.8	0.4	1.6	0.0	9.3	32.2	0.0	0.6	0.4	47.4	99.1	102.3	201.4
New Hampshire ..	0.0	6.4	2.9	1.4	1.0	2.6	5.4	13.2	(s)	1.6	0.0	7.4	28.6	16.0	44.6
New Jersey .....	0.0	65.3	11.5	2.8	6.1	3.2	241.8	265.5	0.0	2.7	0.0	37.6	371.0	81.1	452.1
New Mexico .....	1.9	104.2	13.5	18.5	2.7	1.0	34.4	70.0	0.0	0.4	0.6	23.7	200.8	51.2	251.9
New York .....	33.9	82.2	21.1	4.5	11.3	9.2	107.6	153.6	0.6	16.5	0.0	69.0	355.8	148.8	504.6
North Carolina ....	30.0	91.7	22.8	15.9	7.2	19.7	84.4	150.1	(s)	59.7	0.0	98.9	430.4	213.3	643.7
North Dakota .....	91.8	26.4	22.5	4.4	3.0	0.4	11.5	42.0	0.0	2.1	0.0	12.4	172.2	26.7	198.8
Ohio .....	108.7	307.0	34.3	10.2	10.1	5.7	211.1	271.3	0.0	23.0	0.0	202.1	911.9	436.0	1,347.8
Oklahoma .....	15.4	258.0	24.0	2.8	6.6	0.8	94.7	128.9	0.0	22.3	0.0	51.9	476.4	111.9	588.3
Oregon .....	2.2	70.2	9.8	0.8	4.5	2.1	21.9	39.0	0.0	31.2	0.2	44.8	187.6	96.6	284.2
Pennsylvania .....	232.6	204.2	45.7	24.9	8.0	8.2	208.3	295.2	0.0	33.5	0.0	165.8	931.2	357.6	1,288.8
Rhode Island .....	0.0	7.0	1.0	0.4	0.8	1.1	0.5	3.8	0.0	0.1	0.0	4.0	14.9	8.6	23.5
South Carolina ....	32.8	78.1	13.3	2.7	3.7	10.1	84.7	114.5	0.0	65.4	0.0	104.5	395.4	225.5	620.9
South Dakota .....	4.6	21.3	12.3	3.0	2.9	0.1	7.0	25.3	0.0	0.2	0.1	7.4	58.9	15.9	74.8
Tennessee .....	77.4	95.7	20.8	4.2	9.7	1.0	124.9	160.6	0.0	41.7	0.0	115.5	490.9	249.2	740.1
Texas .....	40.3	1,666.9	131.5	1,528.4	23.9	19.6	1,313.8	3,017.3	0.0	59.6	0.0	369.5	5,153.7	797.3	5,950.9
Utah .....	20.7	59.6	15.4	1.6	2.7	1.9	27.9	49.6	0.0	0.2	0.4	29.9	160.4	64.5	224.9
Vermont .....	0.0	3.0	2.3	0.8	1.0	1.0	2.3	7.4	(s)	1.4	0.0	5.6	17.4	12.0	29.4
Virginia .....	82.3	78.2	41.4	3.9	5.6	10.3	72.1	133.3	0.1	69.6	0.0	64.6	428.1	139.3	567.4
Washington .....	3.2	75.5	23.1	1.2	5.1	(s)	133.4	162.8	(s)	55.9	0.0	70.8	368.3	152.8	521.0
West Virginia .....	65.8	43.4	30.9	0.9	1.8	6.3	83.1	123.0	4.4	1.6	0.0	50.0	288.2	107.9	396.1
Wisconsin .....	40.0	122.8	33.0	11.6	8.8	4.7	64.6	122.6	1.8	62.3	0.0	86.8	436.3	187.3	623.5
Wyoming .....	34.4	77.7	26.8	1.1	1.6	0.5	27.0	57.0	0.0	0.2	(s)	29.8	199.1	64.3	263.4
United States .....	1,861.2	8,040.6	1,264.9	2,145.8	306.1	193.2	5,590.6	9,500.7	15.7	1,618.7	4.7	3,507.0	24,927.6	7,566.5	32,494.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."

<sup>e</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>g</sup> U.S. total includes 25.2 trillion Btu of net imports of coal coke and 378.0 trillion Btu of energy losses and co-products from the production of fuel ethanol that are not allocated to the States.

<sup>h</sup> Adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only

once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

Where shown, (s) = Value less than 0.05 trillion Btu.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table S7. Transportation Sector Energy Consumption Estimates, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>c</sup>	Retail Electricity Sales	Net Energy <sup>c</sup>	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
Alabama .....	0.0	16.1	0.6	133.8	13.2	0.2	2.6	329.5	8.5	488.3	0.5	(s)	504.4	(s)	504.4
Alaska .....	0.0	2.2	1.3	45.3	164.7	(s)	0.5	34.9	1.7	248.3	1.0	0.0	250.5	0.0	250.5
Arizona .....	0.0	23.1	0.7	124.1	37.5	0.7	1.9	359.5	0.0	524.4	16.3	0.0	547.4	0.0	547.4
Arkansas .....	0.0	10.2	0.6	98.0	7.0	0.2	2.3	176.9	0.0	284.9	0.3	(s)	295.2	(s)	295.2
California .....	0.0	19.7	2.2	497.8	628.2	2.7	15.1	1,962.6	249.3	3,358.0	82.5	2.9	3,380.5	6.2	3,386.8
Colorado .....	0.0	14.2	0.5	83.8	76.7	0.2	2.2	268.2	0.0	431.5	5.8	0.2	445.9	0.3	446.3
Connecticut .....	0.0	4.6	0.6	44.7	11.7	0.1	1.3	195.3	0.1	253.8	12.2	0.7	259.0	1.5	260.5
Delaware .....	0.0	(s)	0.7	9.7	0.6	(s)	0.3	56.5	7.8	75.7	3.4	0.0	75.7	0.0	75.7
Dist. of Col. ....	0.0	0.6	(s)	1.6	0.0	(s)	0.3	15.5	0.0	17.5	0.7	1.1	19.1	2.4	21.5
Florida .....	0.0	11.2	1.9	267.6	176.7	0.7	4.3	1,067.6	83.4	1,602.1	9.1	0.3	1,613.6	0.7	1,614.3
Georgia .....	0.0	6.4	0.8	226.5	38.1	0.8	3.3	622.2	35.5	927.2	5.1	0.6	934.2	1.3	935.5
Hawaii .....	0.0	(s)	0.2	36.4	72.3	(s)	0.4	57.9	28.1	195.3	1.7	0.0	195.3	0.0	195.3
Idaho .....	0.0	7.8	0.4	41.9	5.1	0.1	0.7	80.8	0.0	129.1	1.8	0.0	136.9	0.0	136.9
Illinois .....	0.0	12.0	0.4	230.0	167.7	1.2	8.1	638.0	0.2	1,045.6	34.1	1.9	1,059.5	4.0	1,063.5
Indiana .....	0.0	7.3	0.6	205.1	42.2	0.5	3.7	385.2	1.8	639.1	16.1	0.1	646.5	0.1	646.6
Iowa .....	0.0	12.6	0.2	100.6	5.1	0.3	2.8	194.4	0.0	303.4	4.3	0.0	316.0	0.0	316.0
Kansas .....	0.0	25.2	0.8	82.3	8.7	0.1	3.2	161.2	0.0	256.4	4.9	0.0	281.7	0.0	281.7
Kentucky .....	0.0	12.2	0.3	160.7	45.2	0.3	2.8	276.3	0.0	485.6	11.9	0.0	497.9	0.0	497.9
Louisiana .....	0.0	54.0	0.1	156.7	127.1	0.1	3.9	278.8	92.9	659.7	0.5	(s)	713.7	(s)	713.8
Maine .....	0.0	0.8	0.3	27.5	10.0	(s)	0.7	85.9	1.2	125.7	0.8	0.0	126.5	0.0	126.5
Maryland .....	0.0	3.4	0.5	86.5	20.0	0.1	1.7	340.2	4.6	453.7	17.2	1.8	458.8	3.9	462.7
Massachusetts ....	0.0	2.5	0.4	69.2	46.7	0.1	2.5	364.2	1.8	484.9	21.3	1.4	488.8	3.0	491.7
Michigan .....	0.0	26.7	0.4	136.4	29.9	1.0	7.9	593.7	1.8	771.2	22.8	(s)	797.9	(s)	797.9
Minnesota .....	0.0	20.7	0.4	113.7	63.9	0.3	4.3	324.7	2.5	509.8	19.9	0.1	530.7	0.2	530.8
Mississippi .....	0.0	28.1	0.5	108.3	24.8	0.1	1.7	208.1	4.3	347.8	0.3	(s)	375.9	(s)	375.9
Missouri .....	0.0	2.8	0.6	162.6	35.9	0.6	5.0	399.5	(s)	604.2	13.6	0.1	607.1	0.1	607.3
Montana .....	0.0	7.9	0.4	52.5	5.8	(s)	1.1	60.3	0.0	120.1	1.8	0.0	128.1	0.0	128.1
Nebraska .....	0.0	5.5	0.4	63.1	5.5	0.1	1.9	101.8	0.0	172.8	2.6	0.0	178.3	0.0	178.3
Nevada .....	0.0	3.6	0.7	54.6	52.2	0.2	0.4	146.6	(s)	254.8	4.3	(s)	258.4	0.1	258.5
New Hampshire ..	0.0	(s)	0.2	14.4	0.9	(s)	0.3	91.2	0.0	107.0	3.6	0.0	107.1	0.0	107.1
New Jersey .....	0.0	1.8	0.7	154.8	207.2	0.3	3.8	547.1	118.2	1,032.0	32.6	1.0	1,034.9	2.2	1,037.0
New Mexico .....	0.0	14.1	0.2	76.0	11.0	0.1	1.1	116.9	0.0	205.4	1.3	0.0	219.6	0.0	219.6
New York .....	0.0	16.1	0.9	169.8	113.3	0.2	5.7	713.5	44.4	1,047.8	26.5	11.6	1,075.5	25.0	1,100.5
North Carolina ....	0.0	5.2	0.5	160.5	40.6	3.2	3.4	549.7	3.7	761.7	4.5	(s)	766.9	(s)	766.9
North Dakota .....	0.0	14.6	0.2	42.7	4.0	0.1	0.8	42.0	0.0	89.9	2.1	0.0	104.5	0.0	104.5
Ohio .....	0.0	14.7	1.7	274.4	102.9	0.7	7.7	635.2	(s)	1,022.5	25.7	0.2	1,037.4	0.4	1,037.8
Oklahoma .....	0.0	30.5	0.3	169.5	30.0	0.2	4.2	229.1	0.0	433.3	7.0	0.0	463.8	0.0	463.8
Oregon .....	0.0	9.9	1.0	94.0	31.9	0.4	2.8	192.6	13.7	336.5	5.6	0.2	346.6	0.5	347.0
Pennsylvania .....	0.0	36.6	0.5	229.9	87.9	0.5	7.0	638.5	21.5	985.8	14.1	3.0	1,025.4	6.4	1,031.8
Rhode Island .....	0.0	1.0	0.1	11.2	1.9	(s)	0.4	49.9	(s)	63.6	3.6	0.0	64.6	0.0	64.6
South Carolina ....	0.0	2.7	0.5	107.2	10.7	0.3	1.4	316.2	9.8	446.2	2.7	0.0	448.9	0.0	448.9
South Dakota .....	0.0	5.7	0.3	30.0	5.0	0.1	0.8	50.9	0.0	87.0	2.8	0.0	92.7	0.0	92.7
Tennessee .....	0.0	10.4	0.5	177.0	78.3	0.6	3.6	387.0	(s)	647.1	15.9	(s)	657.5	(s)	657.5
Texas .....	0.0	94.5	2.5	694.8	427.6	1.3	10.3	1,490.8	185.4	2,812.6	53.8	0.2	2,907.4	0.5	2,907.9
Utah .....	0.0	12.9	0.4	74.2	40.2	0.1	1.0	133.1	0.0	249.1	3.1	0.1	262.1	0.2	262.4
Vermont .....	0.0	(s)	0.1	9.3	1.8	(s)	0.3	42.5	0.0	54.0	0.3	0.0	54.0	0.0	54.0
Virginia .....	0.0	7.4	1.0	174.3	107.9	0.2	2.8	510.5	8.3	805.1	18.9	0.7	813.1	1.4	814.5
Washington .....	0.0	8.1	0.9	143.2	116.0	0.6	2.7	338.0	62.7	664.1	10.2	(s)	672.2	(s)	672.2
West Virginia .....	0.0	22.4	0.2	50.3	1.3	(s)	1.3	103.5	0.0	156.7	0.8	(s)	179.2	(s)	179.2
Wisconsin .....	0.0	3.0	0.3	111.4	12.6	0.6	2.8	316.0	0.2	443.9	15.9	(s)	446.9	(s)	446.9
Wyoming .....	0.0	15.2	1.0	67.1	2.1	(s)	0.8	40.6	0.0	111.6	0.9	0.0	126.9	0.0	126.9
United States .....	0.0	668.7	31.6	6,456.9	3,357.6	20.5	152.2	17,321.3	993.6	28,333.8	568.9	28.0	29,030.5	60.5	29,091.0

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Fuel 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.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

Where shown, (s) = Value less than 0.05 trillion Btu.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table S8. Electric Power Sector Consumption Estimates, 2007**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>b</sup>	Biomass Wood and Waste <sup>c</sup>	Geothermal	Solar/PV <sup>d</sup>	Wind	Electricity Net Imports <sup>e</sup>	Total <sup>f</sup>
			Residual Fuel Oil	Distillate Fuel Oil	Petroleum Coke	Total								
Alabama .....	807.0	181.5	0.0	0.9	0.0	0.9	360.0	40.9	3.7	0.0	0.0	0.0	0.0	1,393.9
Alaska .....	6.2	41.2	3.0	3.7	0.0	6.7	0.0	12.8	0.0	0.0	0.0	(s)	(s)	66.8
Arizona .....	423.2	286.3	0.0	0.5	0.0	0.5	280.9	65.2	0.2	0.0	0.1	0.0	(s)	1,056.4
Arkansas .....	265.2	65.2	0.4	0.4	0.0	0.8	162.4	32.0	1.7	0.0	0.0	0.0	0.0	527.4
California .....	23.4	860.4	0.1	1.0	21.4	22.5	375.4	270.0	71.5	273.0	5.5	55.2	18.8	1,975.6
Colorado .....	382.9	128.4	0.0	0.4	0.0	0.4	0.0	17.1	0.6	0.0	(s)	12.8	(s)	540.2
Connecticut .....	39.8	74.5	13.8	0.4	0.0	14.2	171.9	3.6	13.1	0.0	0.0	0.0	5.1	322.3
Delaware .....	61.1	14.0	1.7	0.3	0.0	2.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	77.6
Dist. of Col. ....	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
Florida .....	692.9	794.4	149.2	7.1	48.4	204.7	307.2	1.5	51.7	0.0	0.0	0.0	0.0	2,052.4
Georgia .....	895.8	126.6	0.2	0.9	0.0	1.1	341.3	21.9	0.2	0.0	0.0	0.0	0.0	1,387.0
Hawaii .....	17.2	0.0	71.8	13.5	0.0	85.3	0.0	0.5	4.1	4.8	0.0	2.4	0.0	114.4
Idaho .....	0.0	12.8	0.0	(s)	0.0	(s)	0.0	89.2	1.4	0.0	0.0	1.7	0.2	105.2
Illinois .....	988.3	64.0	0.1	1.5	0.0	1.6	1,004.0	1.5	8.3	0.0	0.0	6.6	0.2	2,073.7
Indiana .....	1,271.2	38.4	0.0	1.7	0.0	1.7	0.0	4.4	2.3	0.0	0.0	0.0	-0.1	1,317.6
Iowa .....	396.8	26.2	0.0	2.6	1.5	4.1	47.4	9.5	1.5	0.0	0.0	27.2	(s)	509.4
Kansas .....	390.6	26.1	0.0	0.5	2.3	2.8	108.8	0.1	0.0	0.0	0.0	11.4	(s)	539.7
Kentucky .....	953.7	19.9	0.0	1.4	32.1	33.5	0.0	16.5	1.1	0.0	0.0	0.0	0.0	1,024.7
Louisiana .....	248.1	231.7	3.0	0.4	21.8	25.1	179.1	8.2	1.3	0.0	0.0	0.0	0.0	693.5
Maine .....	3.6	35.8	4.4	0.2	0.0	4.5	0.0	30.1	40.9	0.0	0.0	1.0	11.5	127.4
Maryland .....	297.2	24.1	6.6	4.4	0.0	11.0	150.5	16.3	7.5	0.0	0.0	0.0	0.0	506.7
Massachusetts ....	117.4	189.9	31.0	0.8	0.0	31.8	53.7	7.7	20.1	0.0	0.0	0.0	2.5	423.1
Michigan .....	721.3	125.5	3.3	1.7	1.5	6.6	330.5	12.3	22.1	0.0	0.0	(s)	-4.1	1,214.2
Minnesota .....	339.2	35.1	0.4	2.3	2.0	4.8	137.4	5.5	17.2	0.0	0.0	26.1	23.4	588.7
Mississippi .....	181.5	188.7	4.1	0.4	0.0	4.5	98.2	0.0	0.0	0.0	0.0	0.0	0.0	472.8
Missouri .....	774.0	42.0	0.0	0.8	0.0	0.8	98.3	11.9	0.2	0.0	0.0	0.0	(s)	927.2
Montana .....	200.8	1.0	0.0	0.1	7.5	7.6	0.0	92.6	0.0	0.0	0.0	4.9	-0.2	306.7
Nebraska .....	208.7	11.1	0.1	0.3	0.0	0.5	115.8	3.4	0.6	0.0	0.0	2.1	(s)	342.2
Nevada .....	78.2	176.6	(s)	0.1	0.0	0.1	0.0	19.8	0.0	26.3	0.4	0.0	1.0	302.5
New Hampshire ..	44.8	41.2	3.4	0.5	0.0	3.9	112.9	12.5	16.7	0.0	0.0	0.0	2.1	234.0
New Jersey .....	111.7	162.8	1.4	1.3	0.0	2.8	335.7	0.2	11.9	0.0	0.0	0.2	0.0	625.2
New Mexico .....	294.1	62.1	0.0	0.5	0.0	0.5	0.0	2.6	0.3	0.0	0.0	13.8	-0.1	373.4
New York .....	220.6	416.9	73.7	8.0	3.0	84.7	445.2	249.0	27.5	0.0	0.0	8.2	38.5	1,490.7
North Carolina ....	796.7	40.7	0.0	3.1	0.0	3.1	420.0	29.4	8.5	0.0	0.0	0.0	0.0	1,298.4
North Dakota .....	324.5	(s)	0.0	0.6	0.0	0.6	0.0	12.9	0.0	0.0	0.0	6.1	4.5	348.7
Ohio .....	1,349.9	38.5	0.0	3.4	9.0	12.5	165.3	4.1	1.0	0.0	0.0	0.1	1.0	1,572.4
Oklahoma .....	357.8	294.9	1.2	0.3	0.0	1.5	0.0	30.3	0.0	0.0	0.0	18.3	0.0	702.8
Oregon .....	43.1	104.9	0.0	0.1	0.0	0.1	0.0	332.0	6.7	0.0	0.0	12.3	4.2	503.3
Pennsylvania .....	1,241.6	148.3	9.5	4.9	0.0	14.4	811.5	22.1	26.4	0.0	0.0	4.6	0.2	2,269.2
Rhode Island .....	0.0	52.7	0.0	0.2	0.0	0.2	0.0	(s)	1.9	0.0	0.0	0.0	1.4	56.3
South Carolina ....	411.1	52.7	0.3	1.9	0.0	2.1	558.0	15.4	6.4	0.0	0.0	0.0	0.0	1,045.7
South Dakota .....	28.6	4.3	0.0	0.8	0.0	0.8	0.0	28.8	0.0	0.0	0.0	1.5	(s)	64.0
Tennessee .....	593.4	7.5	0.0	1.6	0.0	1.6	301.0	48.8	0.2	0.0	0.0	0.5	0.0	953.1
Texas .....	1,568.7	1,507.8	0.3	1.4	12.5	14.1	429.5	16.3	4.2	0.0	0.0	89.0	-0.8	3,628.9
Utah .....	370.1	58.7	0.0	0.4	0.0	0.4	0.0	5.3	0.6	3.4	0.0	0.0	-0.1	438.6
Vermont .....	0.0	(s)	0.0	0.1	0.0	0.1	49.3	6.4	6.0	0.0	0.0	0.1	8.5	70.4
Virginia .....	373.7	93.3	13.6	6.5	0.0	20.1	286.0	12.3	13.1	0.0	0.0	0.0	0.0	798.4
Washington .....	92.5	58.6	0.0	0.2	0.0	0.2	85.0	778.7	11.2	0.0	0.0	24.1	-11.1	1,039.3
West Virginia .....	915.8	4.0	0.0	1.9	0.0	1.9	0.0	8.0	0.0	0.0	0.0	1.7	0.0	931.3
Wisconsin .....	423.6	55.1	0.0	1.7	8.2	9.9	135.4	13.2	8.8	0.0	0.0	1.1	(s)	647.1
Wyoming .....	459.4	2.0	0.0	0.5	0.0	0.5	0.0	7.2	0.0	0.0	0.0	7.5	-0.2	476.4
United States .....	20,807.1	7,028.3	396.6	89.3	171.2	657.1	8,457.8	2,429.9	423.4	307.6	6.0	340.5	106.6	40,557.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Conventional hydroelectric power. Does not include pumped-storage hydroelectricity.

<sup>c</sup> Wood, wood-derived fuels, and waste.

<sup>d</sup> Solar thermal and photovoltaic energy.

<sup>e</sup> Electricity traded with Canada and Mexico.

<sup>f</sup> Adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

Where shown, (s) = Value less than 0.05 trillion Btu.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

## **2007 Consumption Ranking Tables**



Table R1. Energy Consumption by Sector, Ranked by State, 2007

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	Texas	1,594.1	California	1,613.9	Texas	5,950.9	California	3,386.8	Texas	11,834.5
2	California	1,535.2	Texas	1,381.6	Louisiana	2,403.8	Texas	2,907.9	California	8,491.5
3	Florida	1,339.5	New York	1,257.4	California	1,955.7	Florida	1,614.3	Florida	4,601.9
4	New York	1,201.8	Florida	1,089.2	Ohio	1,347.8	New York	1,100.5	New York	4,064.3
5	Illinois	997.1	Illinois	780.1	Indiana	1,345.8	Illinois	1,063.5	Ohio	4,048.9
6	Pennsylvania	966.6	Pennsylvania	718.9	Pennsylvania	1,288.8	Ohio	1,037.8	Illinois	4,043.2
7	Ohio	955.6	Ohio	707.8	Illinois	1,202.5	New Jersey	1,037.0	Pennsylvania	4,006.2
8	Michigan	786.0	New Jersey	639.1	Alabama	941.6	Pennsylvania	1,031.8	Louisiana	3,766.2
9	Georgia	744.4	Michigan	624.5	Kentucky	891.6	Georgia	935.5	Georgia	3,133.0
10	North Carolina	715.9	Virginia	600.5	Georgia	887.4	Virginia	814.5	Michigan	3,026.9
11	Virginia	628.4	North Carolina	573.5	Michigan	818.6	Michigan	797.9	Indiana	2,904.0
12	New Jersey	615.5	Georgia	565.7	Tennessee	740.1	North Carolina	766.9	New Jersey	2,743.7
13	Indiana	551.5	Maryland	416.4	North Carolina	643.7	Louisiana	713.8	North Carolina	2,700.0
14	Tennessee	546.2	Missouri	406.8	Wisconsin	623.5	Washington	672.2	Virginia	2,610.9
15	Missouri	521.1	Tennessee	386.7	South Carolina	620.9	Tennessee	657.5	Tennessee	2,330.5
16	Washington	490.1	Massachusetts	384.0	Oklahoma	588.3	Indiana	646.6	Alabama	2,132.0
17	Massachusetts	443.1	Washington	383.9	Minnesota	578.4	Missouri	607.3	Washington	2,067.2
18	Arizona	430.1	Arizona	368.5	Virginia	567.4	Arizona	547.4	Kentucky	2,023.0
19	Maryland	425.6	Indiana	360.1	Florida	558.9	Minnesota	530.8	Missouri	1,964.1
20	Wisconsin	419.0	Wisconsin	356.8	Washington	521.0	Alabama	504.4	Minnesota	1,874.6
21	Minnesota	413.5	Minnesota	351.9	New York	504.6	Kentucky	497.9	Wisconsin	1,846.3
22	Alabama	405.5	Louisiana	292.3	Iowa	492.2	Massachusetts	491.7	South Carolina	1,692.3
23	Kentucky	372.6	Colorado	291.1	Arkansas	463.7	Oklahoma	463.8	Oklahoma	1,608.5
24	South Carolina	359.0	Alabama	280.6	Mississippi	454.1	Maryland	462.7	Arizona	1,577.8
25	Louisiana	356.4	South Carolina	263.5	New Jersey	452.1	South Carolina	448.9	Massachusetts	1,514.6
26	Colorado	342.9	Kentucky	260.9	Missouri	428.9	Wisconsin	446.9	Maryland	1,488.7
27	Oklahoma	306.2	Oklahoma	250.3	Kansas	426.0	Colorado	446.3	Colorado	1,479.3
28	Connecticut	276.5	Connecticut	218.5	Colorado	399.0	Mississippi	375.9	Mississippi	1,239.5
29	Oregon	267.6	Oregon	209.4	West Virginia	396.1	Oregon	347.0	Iowa	1,235.2
30	Iowa	234.5	Kansas	202.5	Alaska	356.3	Iowa	316.0	Arkansas	1,149.3
31	Mississippi	234.4	Iowa	192.4	Oregon	284.2	Arkansas	295.2	Kansas	1,136.2
32	Arkansas	228.6	Mississippi	175.0	Wyoming	263.4	Kansas	281.7	Oregon	1,108.2
33	Kansas	226.0	Arkansas	161.9	New Mexico	251.9	Utah	262.4	Connecticut	870.7
34	Nevada	183.3	Utah	151.8	Arizona	231.7	Connecticut	260.5	West Virginia	850.5
35	Utah	166.4	Nebraska	136.0	Utah	224.9	Nevada	258.5	Utah	805.5
36	West Virginia	163.6	Nevada	134.2	Nebraska	224.2	Alaska	250.5	Nevada	777.4
37	Nebraska	154.5	New Mexico	124.9	Nevada	201.4	New Mexico	219.6	Alaska	723.6
38	Idaho	122.3	District of Columbia	124.6	North Dakota	198.8	Hawaii	195.3	New Mexico	710.7
39	New Mexico	114.3	West Virginia	111.5	Massachusetts	195.6	West Virginia	179.2	Nebraska	692.9
40	Maine	106.6	Idaho	83.6	Idaho	186.9	Nebraska	178.3	Idaho	529.6
41	New Hampshire	92.2	Maine	75.7	Montana	186.4	Idaho	136.9	Wyoming	496.4
42	Montana	79.4	New Hampshire	70.4	Maryland	184.0	Montana	128.1	Montana	462.1
43	Rhode Island	71.9	Montana	68.3	Maine	146.7	Wyoming	126.9	Maine	455.6
44	Delaware	66.8	Alaska	62.4	Connecticut	115.2	Maine	126.5	North Dakota	428.1
45	South Dakota	66.0	North Dakota	60.9	Delaware	101.1	New Hampshire	107.1	Hawaii	343.7
46	North Dakota	63.8	Wyoming	60.3	South Dakota	74.8	North Dakota	104.5	New Hampshire	314.2
47	Alaska	54.4	South Dakota	58.7	Hawaii	68.3	South Dakota	92.7	Delaware	302.0
48	Vermont	47.5	Delaware	58.4	New Hampshire	44.6	Delaware	75.7	South Dakota	292.2
49	Wyoming	45.8	Rhode Island	57.6	Vermont	29.4	Rhode Island	64.6	Rhode Island	217.6
50	Hawaii	37.7	Hawaii	42.4	Rhode Island	23.5	Vermont	54.0	District of Columbia	187.2
51	District of Columbia	37.1	Vermont	31.2	District of Columbia	4.0	District of Columbia	21.5	Vermont	162.1
	United States	21,604.3	United States	18,278.7	United States <sup>a</sup>	32,494.1	United States	29,091.0	United States <sup>a</sup>	101,468.0

<sup>a</sup> Includes 25.2 trillion Btu of net imports of coal coke and 378.0 trillion Btu of energy losses and co-products from the production of fuel ethanol that are not allocated to the States.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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, 2007

Rank	Coal		Natural Gas <sup>a</sup>		Petroleum <sup>b</sup>		Retail Electricity Sales		Total Consumption per Capita	
	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Million Btu
1	Texas	1,609.1	Texas	3,641.4	Texas	5,886.9	Texas	1,173.1	Alaska	1,062.3
2	Indiana	1,574.5	California	2,440.4	California	3,946.3	California	901.6	Wyoming	948.6
3	Pennsylvania	1,490.7	Louisiana	1,423.1	Florida	1,983.5	Florida	788.5	Louisiana	861.2
4	Ohio	1,461.7	New York	1,218.9	New York	1,633.4	Ohio	552.0	North Dakota	671.1
5	Illinois	1,090.3	Illinois	979.3	Louisiana	1,599.9	Pennsylvania	517.2	Texas	496.3
6	Kentucky	1,020.4	Florida	950.3	Pennsylvania	1,455.6	New York	505.6	Montana	483.1
7	West Virginia	983.0	Michigan	847.8	Illinois	1,418.1	Illinois	498.3	Kentucky	477.5
8	Georgia	934.7	Ohio	836.3	New Jersey	1,373.3	Georgia	469.0	West Virginia	469.9
9	Alabama	888.4	Pennsylvania	781.7	Ohio	1,357.0	North Carolina	450.0	Alabama	460.8
10	North Carolina	827.8	Oklahoma	690.6	Georgia	1,100.2	Virginia	380.7	Indiana	458.4
11	Missouri	802.4	New Jersey	640.7	Virginia	1,016.6	Indiana	373.3	Oklahoma	445.8
12	Michigan	799.9	Indiana	548.1	Michigan	987.3	Michigan	372.9	Mississippi	424.3
13	Florida	720.8	Colorado	515.9	North Carolina	970.8	Tennessee	364.1	Iowa	414.0
14	Tennessee	672.4	Georgia	453.9	Indiana	877.7	Kentucky	315.3	Kansas	409.1
15	Wyoming	494.8	Alabama	431.4	Washington	846.8	Alabama	313.3	Arkansas	406.1
16	Wisconsin	464.9	Massachusetts	417.3	Tennessee	827.1	Washington	292.6	Nebraska	391.6
17	Iowa	464.4	Wisconsin	403.9	Missouri	758.9	Missouri	291.8	South Carolina	384.2
18	Virginia	457.9	Arizona	402.1	Kentucky	747.4	South Carolina	279.6	Tennessee	379.0
19	South Carolina	444.0	Minnesota	396.5	Minnesota	706.2	New Jersey	279.6	South Dakota	367.2
20	Arizona	438.5	Mississippi	374.9	Massachusetts	684.6	Louisiana	271.5	New Mexico	361.8
21	North Dakota	420.1	Alaska	371.8	Alabama	626.4	Arizona	263.4	Minnesota	361.7
22	Kansas	396.3	Virginia	332.7	Wisconsin	619.5	Wisconsin	243.3	Idaho	354.0
23	Utah	391.3	Kansas	291.6	Arizona	595.4	Minnesota	232.8	Ohio	352.8
24	Colorado	388.5	Washington	279.7	Oklahoma	578.0	Maryland	223.1	Delaware	350.4
25	Oklahoma	373.2	Missouri	277.6	South Carolina	576.5	Massachusetts	195.0	Maine	346.3
26	Minnesota	366.0	Nevada	263.6	Maryland	557.3	Oklahoma	188.3	Virginia	339.1
27	Maryland	327.8	Iowa	261.9	Colorado	525.4	Colorado	175.0	Missouri	334.1
28	New Mexico	296.1	Oregon	258.2	Mississippi	470.9	Oregon	166.3	Wisconsin	329.8
29	Arkansas	275.0	North Carolina	245.2	Iowa	441.6	Mississippi	164.3	Georgia	329.0
30	New York	257.5	New Mexico	240.3	Kansas	424.5	Arkansas	160.6	Pennsylvania	322.6
31	Louisiana	249.8	Kentucky	236.0	Connecticut	396.8	Iowa	154.5	Washington	320.5
32	Nebraska	216.8	Utah	232.2	Arkansas	386.9	Kansas	137.0	District of Columbia	318.5
33	Montana	202.5	Tennessee	229.7	Oregon	384.7	Nevada	121.6	New Jersey	317.1
34	Mississippi	184.9	Arkansas	228.0	Alaska	324.1	West Virginia	116.6	Illinois	315.2
35	Massachusetts	120.1	Maryland	208.5	Hawaii	306.3	Connecticut	116.4	Colorado	305.5
36	New Jersey	111.8	Connecticut	184.1	Utah	305.6	Nebraska	96.4	Nevada	304.3
37	Washington	95.7	South Carolina	180.3	Nevada	292.6	Utah	94.8	Utah	301.8
38	Nevada	82.9	Nebraska	146.4	West Virginia	288.7	Idaho	81.1	Michigan	301.2
39	California	66.4	West Virginia	122.6	New Mexico	284.8	New Mexico	76.0	North Carolina	298.6
40	Delaware	63.8	Wyoming	117.6	Maine	235.6	Wyoming	53.0	Oregon	296.7
41	Oregon	45.3	Rhode Island	90.8	Nebraska	235.1	Montana	53.0	Hawaii	269.1
42	New Hampshire	44.9	Idaho	83.9	Montana	210.6	District of Columbia	41.3	Maryland	265.0
43	Connecticut	39.9	Montana	75.0	Wyoming	176.2	North Dakota	40.6	Vermont	261.2
44	South Dakota	33.2	New Hampshire	64.6	New Hampshire	169.6	Delaware	40.5	Florida	252.9
45	Hawaii	19.1	North Dakota	63.0	Idaho	165.8	Maine	40.5	Connecticut	249.5
46	Alaska	13.0	South Dakota	54.1	North Dakota	142.7	New Hampshire	38.3	Arizona	248.3
47	Idaho	10.2	Delaware	49.8	Delaware	135.8	South Dakota	36.2	New Hampshire	239.5
48	Maine	6.6	Maine	47.9	South Dakota	121.3	Hawaii	36.1	Massachusetts	234.2
49	District of Columbia	0.5	District of Columbia	33.9	Rhode Island	91.5	Rhode Island	27.3	California	233.4
50	Rhode Island	(s)	Vermont	8.9	Vermont	87.5	Alaska	21.6	New York	209.2
51	Vermont	(s)	Hawaii	3.0	District of Columbia	22.5	Vermont	20.0	Rhode Island	206.6
United States		22,739.9	United States	23,677.6	United States	40,358.1	United States	12,844.8	United States	336.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Includes fuel ethanol blended into motor gasoline.

(s) = Value less than 0.05 trillion Btu.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table R3. Total Energy Consumption, Gross Domestic Product (GDP), Energy Consumption per Real Dollar of GDP, Ranked by State, 2007

Rank	Total Energy Consumption		Gross Domestic Product (GDP)		Energy Consumption per Real Dollar of GDP	
	State	Trillion Btu	State	Billion Chained (2000) Dollars	State	Thousand Btu per Chained (2000) Dollar
1	Texas	11,834.5	California	1,539.4	Louisiana	26.1
2	California	8,491.5	New York	949.5	Wyoming	23.8
3	Florida	4,601.9	Texas	907.4	Alaska	23.7
4	New York	4,064.3	Florida	613.4	North Dakota	18.9
5	Ohio	4,048.9	Illinois	514.8	West Virginia	18.8
6	Illinois	4,043.2	Pennsylvania	438.9	Mississippi	17.6
7	Pennsylvania	4,006.2	Ohio	388.3	Montana	17.3
8	Louisiana	3,766.2	New Jersey	388.0	Kentucky	15.9
9	Georgia	3,133.0	Georgia	331.3	Alabama	15.7
10	Michigan	3,026.9	Michigan	331.0	Oklahoma	15.5
11	Indiana	2,904.0	North Carolina	329.1	Arkansas	14.6
12	New Jersey	2,743.7	Virginia	320.3	Indiana	13.8
13	North Carolina	2,700.0	Massachusetts	306.5	South Carolina	13.4
14	Virginia	2,610.9	Washington	259.4	Texas	13.0
15	Tennessee	2,330.5	Maryland	217.9	Kansas	11.8
16	Alabama	2,132.0	Minnesota	212.8	New Mexico	11.8
17	Washington	2,067.2	Arizona	211.6	Idaho	11.6
18	Kentucky	2,023.0	Indiana	211.1	Maine	11.4
19	Missouri	1,964.1	Tennessee	209.1	Iowa	11.4
20	Minnesota	1,874.6	Colorado	197.3	Tennessee	11.1
21	Wisconsin	1,846.3	Wisconsin	197.0	Nebraska	10.5
22	South Carolina	1,692.3	Missouri	191.2	Ohio	10.4
23	Oklahoma	1,608.5	Connecticut	178.5	Missouri	10.3
24	Arizona	1,577.8	Oregon	144.8	South Dakota	10.0
25	Massachusetts	1,514.6	Louisiana	144.4	Georgia	9.5
26	Maryland	1,488.7	Alabama	136.1	Wisconsin	9.4
27	Colorado	1,479.3	Kentucky	127.0	Utah	9.3
28	Mississippi	1,239.5	South Carolina	126.3	Michigan	9.1
29	Iowa	1,235.2	Iowa	108.1	Pennsylvania	9.1
30	Arkansas	1,149.3	Oklahoma	104.1	Minnesota	8.8
31	Kansas	1,136.2	Nevada	103.9	North Carolina	8.2
32	Oregon	1,108.2	Kansas	96.0	Virginia	8.2
33	Connecticut	870.7	Utah	86.5	Washington	8.0
34	West Virginia	850.5	Arkansas	78.7	Illinois	7.9
35	Utah	805.5	District of Columbia	72.6	Oregon	7.7
36	Nevada	777.4	Mississippi	70.5	Vermont	7.6
37	Alaska	723.6	Nebraska	65.7	Florida	7.5
38	New Mexico	710.7	New Mexico	60.2	Colorado	7.5
39	Nebraska	692.9	Delaware	50.1	Nevada	7.5
40	Idaho	529.6	New Hampshire	49.6	Arizona	7.5
41	Wyoming	496.4	Hawaii	49.4	New Jersey	7.1
42	Montana	462.1	Idaho	45.5	Hawaii	7.0
43	Maine	455.6	West Virginia	45.2	Maryland	6.8
44	North Dakota	428.1	Maine	39.8	New Hampshire	6.3
45	Hawaii	343.7	Rhode Island	38.5	Delaware	6.0
46	New Hampshire	314.2	Alaska	30.6	Rhode Island	5.7
47	Delaware	302.0	South Dakota	29.3	California	5.5
48	South Dakota	292.2	Montana	26.8	Massachusetts	4.9
49	Rhode Island	217.6	North Dakota	22.6	Connecticut	4.9
50	District of Columbia	187.2	Vermont	21.3	New York	4.3
51	Vermont	162.1	Wyoming	20.8	District of Columbia	2.6
	United States	101,468.0	United States	11,439.2	United States	8.9

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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, 1960-2007, United States

Year	Coal	Net Imports of Coal Coke	Natural Gas <sup>a</sup>	Petroleum						Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Biomass	Geo- thermal, Solar/PV, and Wind <sup>g,h</sup>	Other <sup>i</sup>	Total <sup>g</sup>	
				Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>			Total				Wood and Waste <sup>f,g</sup>
	Million Short Tons	Billion Cubic Feet	Million Barrels						Billion Kilowatthours							
1960	398	(s)	11,967	685	136	227	1,453	559	525	3,586	1	149	--	--	--	--
1965	472	-1	15,280	776	220	307	1,676	587	636	4,202	4	197	--	--	--	--
1970	523	-2	21,139	927	353	447	2,111	804	722	5,364	22	251	--	--	--	--
1975	563	1	19,538	1,041	365	486	2,436	899	730	5,958	173	303	--	--	--	--
1980	703	-1	19,877	1,049	391	538	2,408	918	939	6,242	251	279	--	--	--	--
1985	818	-1	17,281	1,047	445	584	2,493	439	733	5,740	384	284	--	--	--	--
1990	904	(s)	19,174	1,103	556	568	2,641	449	885	6,201	577	293	--	--	--	--
1995	962	2	22,207	1,170	553	693	2,843	311	899	6,469	673	311	--	--	--	--
1996	1,006	1	22,609	1,232	578	736	2,888	311	957	6,701	675	347	--	--	--	--
1997	1,030	2	22,737	1,254	583	744	2,926	291	998	6,796	629	356	--	--	--	--
1998	1,037	3	22,246	1,263	592	713	3,012	324	1,001	6,905	674	323	--	--	--	--
1999	1,039	2	22,405	1,304	611	801	3,077	303	1,029	7,125	728	320	--	--	--	--
2000	1,084	3	23,333	1,362	631	816	3,101	333	967	7,211	754	276	--	--	--	--
2001	1,060	1	22,239	1,404	604	746	3,143	296	979	7,172	769	217	--	--	--	--
2002	1,066	2	23,007	1,378	589	789	3,229	255	972	7,213	780	264	--	--	--	--
2003	1,095	2	22,277	1,433	576	757	3,261	282	1,003	7,312	764	276	--	--	--	--
2004	1,107	6	22,389	1,485	597	780	3,333	316	1,076	7,588	789	268	--	--	--	--
2005	1,126	2	22,011	1,503	613	741	3,343	336	1,057	7,593	782	270	--	--	--	--
2006	1,112	2	R 21,685	1,522	596	749	3,377	251	1,055	7,551	787	289	--	--	--	--
2007	1,128	1	23,047	1,532	592	761	3,389	264	1,011	7,548	806	248	--	--	--	--
Trillion Btu																
1960	9,831	-6	12,385	3,992	739	912	7,631	3,517	3,129	19,919	6	1,608	1,320	1	15	45,080
1965	11,582	-18	15,779	4,519	1,215	1,232	8,806	3,691	3,784	23,246	43	2,059	1,335	4	(s)	54,030
1970	12,269	-58	21,693	5,401	1,973	1,689	11,091	5,057	4,312	29,522	239	2,634	1,431	11	7	67,747
1975	12,656	14	19,977	6,061	2,047	1,807	12,798	5,649	4,370	32,732	1,900	3,155	1,499	70	21	72,023
1980	15,461	-35	R 20,384	6,110	2,190	1,976	12,648	5,772	5,508	34,204	2,739	2,900	2,472	110	-86	78,150
1985	17,540	-13	R 17,843	6,098	2,497	2,103	13,098	2,759	4,371	30,925	4,076	2,970	2,923	198	103	R 76,565
1990	19,168	5	R 19,752	6,422	3,129	2,059	13,872	2,820	5,249	33,552	6,104	3,046	2,626	425	-6	R 84,672
1995	20,099	61	R 22,833	6,818	3,132	2,512	14,825	1,955	5,314	34,556	7,075	3,205	2,901	396	108	R 91,235
1996	21,002	23	R 23,262	7,175	3,274	2,660	15,064	1,952	5,635	35,759	7,087	3,590	3,014	420	87	R 94,244
1997	21,444	46	R 23,477	7,304	3,308	2,690	15,254	1,828	5,881	36,266	6,597	3,640	2,919	429	92	R 94,910
1998	21,583	67	R 23,016	7,359	3,357	2,575	15,701	2,036	5,905	36,933	7,068	3,297	2,726	429	72	R 95,192
1999	21,582	58	R 23,026	7,595	3,462	2,897	16,036	1,905	6,066	37,960	7,610	3,268	2,764	447	90	R 96,804
2000	22,576	65	R 23,803	7,935	3,580	2,945	16,155	2,091	5,695	38,402	7,862	2,811	2,783	440	124	R 98,866
2001	21,906	29	R 22,836	8,179	3,426	2,697	16,373	1,861	5,797	38,333	8,033	2,242	2,374	446	97	R 96,296
2002	21,903	61	R 23,806	8,028	3,340	2,852	16,819	1,605	5,755	38,400	8,143	2,689	2,397	498	136	R 98,033
2003	22,324	51	R 23,188	8,349	3,265	2,747	16,981	1,772	5,936	39,051	7,959	2,825	2,403	509	127	R 98,436
2004	R 22,466	138	R 22,859	8,652	3,383	2,824	17,379	1,990	6,365	40,593	8,222	2,690	2,510	547	188	R 100,213
2005	22,795	44	R 22,645	8,755	3,475	2,682	17,444	2,111	6,265	40,733	8,160	2,703	R 2,538	587	261	R 100,465
2006	22,446	61	R 22,290	8,864	3,379	2,701	17,622	1,581	6,274	40,420	8,214	2,869	R 2,566	679	296	R 99,841
2007	22,740	25	23,678	8,921	3,358	2,733	17,689	1,659	5,999	40,358	8,458	2,446	2,573	770	420	101,468

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; losses and co-products from the production of fuel ethanol, beginning in 1981; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Value less than +0.5 and greater than -0.5.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, United States

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Billion Kilowatthours			
	Million Short Tons	Billion Cubic Feet	Million Barrels				Million Cords						
1960	24	3,103	269	62	85	417	31	--	--	201	--	--	--
1965	15	3,903	294	59	108	461	23	--	--	291	--	--	--
1970	9	4,837	322	53	153	528	20	--	--	466	--	--	--
1975	3	4,924	310	28	142	481	21	--	--	588	--	--	--
1980	1	4,752	226	19	88	333	42	--	--	717	--	--	--
1985	2	4,433	188	28	91	306	51	--	--	794	--	--	--
1990	1	4,391	168	11	101	280	29	--	--	924	--	--	--
1995	1	4,850	155	13	112	280	26	--	--	1,043	--	--	--
1996	1	5,241	159	16	131	306	27	--	--	1,083	--	--	--
1997	1	4,984	150	16	127	294	21	--	--	1,076	--	--	--
1998	1	4,520	133	19	120	272	19	--	--	1,130	--	--	--
1999	1	4,726	142	20	148	309	20	--	--	1,145	--	--	--
2000	(s)	4,996	155	17	156	328	22	--	--	1,192	--	--	--
2001	(s)	4,771	156	17	148	321	19	--	--	1,202	--	--	--
2002	1	4,889	148	11	150	308	19	--	--	1,265	--	--	--
2003	1	5,079	155	12	155	323	20	--	--	1,276	--	--	--
2004	1	4,869	159	15	147	321	21	--	--	1,292	--	--	--
2005	(s)	4,827	147	15	143	304	<sup>R</sup> 21	--	--	1,359	--	--	--
2006	(s)	4,368	122	12	<sup>R</sup> 126	<sup>R</sup> 260	<sup>R</sup> 20	--	--	1,352	--	--	--
2007	(s)	4,717	125	8	134	266	22	--	--	1,392	--	--	--
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	<sup>R</sup> 5,024	1,807	161	528	2,495	425	0	0	2,007	10,014	4,829	14,842
1980	31	<sup>R</sup> 4,855	1,316	107	325	1,748	846	0	0	2,448	9,859	5,906	15,765
1985	39	<sup>R</sup> 4,566	1,092	159	327	1,578	1,010	0	0	2,709	9,848	6,241	16,088
1990	31	<sup>R</sup> 4,519	978	64	365	1,407	582	6	56	3,153	9,708	7,296	17,004
1995	17	<sup>R</sup> 4,984	905	74	404	1,383	520	7	65	3,557	10,493	8,080	18,573
1996	16	<sup>R</sup> 5,391	926	89	473	1,488	540	7	65	3,694	11,161	8,401	19,562
1997	16	<sup>R</sup> 5,125	874	93	461	1,428	428	7	65	3,671	10,703	8,319	19,022
1998	12	<sup>R</sup> 4,671	772	108	434	1,314	380	8	65	3,856	10,272	8,746	19,018
1999	14	<sup>R</sup> 4,857	828	111	534	1,473	400	9	64	3,906	10,687	8,935	19,623
2000	11	<sup>R</sup> 5,100	905	95	564	1,563	430	9	61	4,069	11,209	9,256	20,465
2001	11	<sup>R</sup> 4,902	908	95	535	1,539	374	9	60	4,100	10,965	9,138	20,103
2002	12	<sup>R</sup> 4,994	860	60	543	1,463	380	10	59	4,317	11,211	9,625	20,836
2003	12	<sup>R</sup> 5,231	905	70	564	1,539	400	13	58	4,353	11,582	9,606	21,189
2004	11	<sup>R</sup> 4,969	924	85	532	1,541	410	14	59	4,408	11,392	<sup>R</sup> 9,754	<sup>R</sup> 21,146
2005	8	<sup>R</sup> 4,960	854	84	517	1,455	<sup>R</sup> 428	16	61	4,638	<sup>R</sup> 11,545	10,144	<sup>R</sup> 21,689
2006	6	<sup>R</sup> 4,484	712	66	<sup>R</sup> 454	<sup>R</sup> 1,233	<sup>R</sup> 390	18	67	4,611	<sup>R</sup> 10,790	9,972	<sup>R</sup> 20,762
2007	7	4,839	726	44	481	1,251	430	22	75	4,750	11,355	10,249	21,604

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Value less than 0.5.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, United States

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Million Short Tons	Billion Cubic Feet	Million Barrels						Billion kWh	Wood and Waste <sup>f,g</sup>		Billion KWh			
1960	17	1,020	85	8	15	13	89	210	0	--	--	159	--	--	--
1965	11	1,444	92	9	19	15	103	238	0	--	--	231	--	--	--
1970	7	2,399	101	11	27	16	114	269	0	--	--	352	--	--	--
1975	7	2,508	101	9	25	17	78	230	0	--	--	468	--	--	--
1980	5	2,611	89	7	16	20	90	222	0	--	--	559	--	--	--
1985	6	2,432	108	6	16	18	36	185	0	--	--	689	--	--	--
1990	5	2,623	92	2	18	21	37	170	(s)	--	--	838	--	--	--
1995	5	3,031	82	4	20	3	23	132	(s)	--	--	953	--	--	--
1996	5	3,158	83	4	23	5	22	137	(s)	--	--	980	--	--	--
1997	6	3,215	76	4	22	8	18	129	(s)	--	--	1,027	--	--	--
1998	4	2,999	74	5	21	7	14	121	(s)	--	--	1,078	--	--	--
1999	4	3,045	75	5	26	5	12	123	(s)	--	--	1,104	--	--	--
2000	4	3,182	84	5	28	9	15	140	(s)	--	--	1,159	--	--	--
2001	4	3,023	87	6	26	7	11	137	(s)	--	--	1,191	--	--	--
2002	4	3,144	76	3	27	9	13	127	(s)	--	--	1,205	--	--	--
2003	4	3,179	83	3	27	12	18	143	(s)	--	--	1,199	--	--	--
2004	5	3,129	81	4	26	9	19	138	(s)	--	--	1,230	--	--	--
2005	4	2,999	77	4	25	9	18	133	(s)	--	--	1,275	--	--	--
2006	3	R 2,832	69	3	22	9	12	115	(s)	--	--	1,300	--	--	--
2007	3	3,017	66	2	24	12	12	115	(s)	--	--	1,336	--	--	--
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	R 2,556	587	49	93	89	492	1,310	0	8	0	1,598	5,617	3,845	9,462
1980	117	R 2,666	518	41	57	107	565	1,287	0	21	0	1,906	5,963	4,597	10,560
1985	138	R 2,503	631	33	58	96	228	1,045	0	24	0	2,351	6,030	5,418	11,448
1990	124	R 2,698	536	12	64	111	230	953	1	94	3	2,860	6,703	6,620	13,323
1995	116	R 3,117	479	22	71	18	141	732	1	113	5	3,252	7,309	7,388	14,697
1996	120	R 3,251	483	21	84	27	137	751	1	129	5	3,344	7,575	7,607	15,182
1997	129	R 3,306	444	25	81	43	111	704	1	131	6	3,503	7,756	7,939	15,695
1998	101	R 3,098	429	31	77	39	85	661	1	118	7	3,678	7,642	8,342	15,984
1999	102	R 3,132	438	27	94	28	73	661	1	121	7	3,766	7,769	8,614	16,383
2000	86	R 3,254	491	30	99	45	92	756	1	119	8	3,956	8,159	8,999	17,158
2001	88	R 3,109	508	31	94	37	70	742	1	91	8	4,063	8,082	9,056	17,138
2002	88	R 3,224	444	16	96	45	80	681	(s)	95	9	4,110	8,190	9,164	17,355
2003	83	R 3,293	481	19	100	60	111	771	1	100	11	4,090	8,333	9,026	17,359
2004	103	R 3,195	470	20	94	45	122	752	1	105	12	4,198	8,352	9,289	R 17,641
2005	96	R 3,088	447	22	91	46	116	722	1	104	14	4,351	8,360	9,517	17,877
2006	R 64	R 2,911	401	15	R 80	49	75	621	1	101	14	4,435	R 8,132	9,591	R 17,723
2007	64	3,101	384	9	85	61	75	615	1	100	14	4,560	8,442	9,837	18,279

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the

double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Value less than 0.5.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, United States

Year	Coal	Net Imports of Coal Coke	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
				Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Million Short Tons		Billion Cubic Feet	Million Barrels						Billion kWh	Wood and Waste <sup>f,g</sup>		Billion kWh			
1960	177	(s)	5,771	174	122	73	252	370	991	4	--	--	324	--	--	--
1965	201	-1	7,112	197	172	65	252	499	1,185	3	--	--	429	--	--	--
1970	187	-2	9,249	211	255	55	258	611	1,390	3	--	--	571	--	--	--
1975	147	1	8,365	230	308	43	240	653	1,474	3	--	--	688	--	--	--
1980	127	-1	8,198	227	429	30	215	871	1,772	3	--	--	815	--	--	--
1985	116	-1	6,867	192	469	41	119	662	1,484	3	--	--	837	--	--	--
1990	115	(s)	8,255	198	444	35	65	829	1,571	3	--	--	946	--	--	--
1995	106	2	9,384	194	557	38	54	833	1,677	5	--	--	1,013	--	--	--
1996	103	1	9,685	204	578	38	53	890	1,764	6	--	--	1,034	--	--	--
1997	102	2	9,714	207	590	41	46	924	1,808	6	--	--	1,038	--	--	--
1998	96	3	9,493	208	567	38	37	919	1,768	5	--	--	1,051	--	--	--
1999	93	2	9,158	204	624	29	33	948	1,838	5	--	--	1,058	--	--	--
2000	94	3	9,293	206	630	29	38	892	1,795	4	--	--	1,064	--	--	--
2001	91	1	8,463	223	568	57	32	905	1,786	3	--	--	997	--	--	--
2002	84	2	8,620	207	609	59	30	896	1,801	4	--	--	990	--	--	--
2003	86	2	8,273	195	570	62	35	927	1,790	4	--	--	1,012	--	--	--
2004	86	6	8,341	208	602	71	40	989	1,911	3	--	--	1,018	--	--	--
2005	84	2	7,709	217	566	68	45	966	1,862	3	--	--	1,019	--	--	--
2006	82	2	R 7,654	217	R 594	72	38	975	R 1,895	3	--	--	1,011	--	--	--
2007	79	1	7,823	217	598	59	31	941	1,845	2	--	--	1,028	--	--	--
Trillion Btu																
1960	4,548	-6	5,973	1,016	489	381	1,584	2,278	5,748	39	680	0	1,107	18,089	2,738	20,827
1965	5,134	-18	7,350	1,150	688	342	1,582	3,026	6,789	33	855	0	1,463	21,606	3,493	25,099
1970	4,664	-58	9,498	1,226	964	288	1,624	3,686	7,788	34	1,019	0	1,948	24,892	4,714	29,607
1975	3,658	14	8,571	1,339	1,144	223	1,509	3,932	8,148	32	1,063	0	2,346	23,832	5,643	29,475
1980	3,155	-35	R 8,409	1,324	1,577	158	1,349	5,119	9,527	33	1,600	0	2,781	25,423	6,705	32,128
1985	2,777	-13	R 7,096	1,119	1,690	218	748	3,966	7,741	33	1,875	0	2,855	R 22,366	6,574	R 28,940
1990	2,754	5	R 8,520	1,150	1,608	185	411	4,922	8,277	31	1,634	2	3,226	R 24,456	7,466	R 31,922
1995	2,500	61	R 9,678	1,131	2,019	200	337	4,930	8,617	55	1,847	3	3,455	R 26,263	7,849	R 34,112
1996	2,438	23	R 9,999	1,187	2,089	200	335	5,245	9,056	61	1,907	3	3,527	R 27,036	8,022	R 35,058
1997	2,396	46	R 10,109	1,203	2,134	212	291	5,450	9,290	58	1,915	3	3,542	R 27,403	8,028	R 35,431
1998	2,254	67	R 9,882	1,211	2,048	199	230	5,427	9,116	55	1,784	3	3,587	R 26,795	8,136	R 34,931
1999	2,188	58	R 9,438	1,187	2,256	152	207	5,594	9,396	49	1,791	4	3,611	R 26,588	8,260	R 34,848
2000	2,259	65	R 9,459	1,200	2,271	150	241	5,257	9,119	42	1,781	4	3,631	R 26,431	8,261	R 34,692
2001	2,194	29	R 8,674	1,300	2,054	295	203	5,368	9,220	33	1,571	5	3,400	R 25,204	7,579	R 32,783
2002	2,020	61	R 9,088	1,204	2,200	309	190	5,308	9,211	39	1,543	5	3,379	R 25,453	7,534	R 32,986
2003	2,044	51	R 8,773	1,136	2,068	324	220	5,491	9,240	43	1,506	3	3,454	R 25,262	7,622	R 32,884
2004	2,046	138	R 8,485	1,214	2,180	372	249	5,854	9,870	33	R 1,608	4	3,473	R 25,843	7,683	R 33,526
2005	1,954	44	R 7,935	1,264	2,047	356	281	5,729	9,678	32	1,600	4	3,477	R 24,941	7,606	R 32,547
2006	1,914	61	R 7,872	1,263	R 2,140	376	239	5,797	R 9,816	29	R 1,662	4	3,451	R 25,083	7,462	R 32,544
2007	1,861	25	8,041	1,265	2,146	306	193	5,591	9,501	16	1,619	5	3,507	24,928	7,566	32,494

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1981, includes losses and co-products from the production of fuel ethanol. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Value less than 0.5.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, United States

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Million Short Tons	Billion Cubic Feet	Million Barrels								Million Barrels	Billion Kilowatthours			
1960	3	347	59	153	136	5	25	1,367	134	1,880	0	3	---	---	---
1965	1	501	44	188	220	8	24	1,596	123	2,203	0	3	---	---	---
1970	(s)	722	20	269	353	12	24	2,040	121	2,839	0	3	---	---	---
1975	(s)	583	14	364	362	11	26	2,377	113	3,267	0	3	---	---	---
1980	0	635	13	480	389	5	28	2,357	222	3,494	0	3	---	---	---
1985	0	504	10	544	445	8	26	2,434	125	3,591	14	4	---	---	---
1990	0	660	9	629	556	6	29	2,584	162	3,974	17	5	---	---	---
1995	0	705	8	720	553	5	28	2,801	145	4,259	32	5	---	---	---
1996	0	718	7	767	578	4	27	2,845	135	4,363	23	5	---	---	---
1997	0	760	8	802	583	4	28	2,877	113	4,416	29	5	---	---	---
1998	0	645	7	826	592	5	30	2,967	107	4,533	32	5	---	---	---
1999	0	657	8	859	611	4	30	3,043	106	4,659	34	5	---	---	---
2000	0	655	7	887	631	3	30	3,063	141	4,762	39	5	---	---	---
2001	0	640	7	908	604	4	27	3,079	93	4,722	40	5	---	---	---
2002	0	682	7	926	589	4	27	3,161	108	4,821	48	6	---	---	---
2003	0	610	6	973	576	4	25	3,187	91	4,862	66	7	---	---	---
2004	0	587	6	1,018	597	5	25	3,253	118	5,021	83	7	---	---	---
2005	0	607	7	1,043	613	7	25	3,266	133	5,094	R 95	8	---	---	---
2006	0	R 608	7	1,101	596	7	24	3,296	144	5,175	R 128	7	---	---	---
2007	0	648	6	1,108	592	6	25	3,319	158	5,215	161	8	---	---	---
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	51	14	20,056	33	20,089
1990	0	683	45	3,661	3,129	22	176	13,575	1,016	21,625	61	16	22,385	37	22,423
1995	0	728	40	4,195	3,132	17	168	14,607	911	23,069	114	17	23,814	39	23,853
1996	0	740	37	4,469	3,274	15	163	14,837	851	23,647	82	17	24,404	38	24,442
1997	0	790	40	4,672	3,308	13	172	14,999	712	23,917	103	17	24,723	38	24,761
1998	0	667	35	4,812	3,357	17	180	15,463	674	24,537	115	17	25,221	38	25,259
1999	0	675	39	5,001	3,462	13	182	15,855	665	25,218	120	17	25,911	40	25,951
2000	0	672	36	5,165	3,580	11	179	15,960	888	25,820	137	18	26,510	42	26,551
2001	0	656	35	5,292	3,426	13	164	16,041	586	25,556	143	19	26,230	42	26,272
2002	0	711	34	5,392	3,340	13	162	16,465	677	26,084	170	19	26,814	42	26,856
2003	0	633	30	5,666	3,265	16	150	16,597	571	26,296	232	24	26,952	52	27,004
2004	0	603	31	5,932	3,383	18	152	16,962	740	27,218	292	25	27,846	55	27,901
2005	0	626	35	6,076	3,475	27	151	17,043	837	27,644	334	26	28,296	56	28,352
2006	0	R 629	33	6,414	3,379	26	147	17,197	906	28,103	R 451	25	R 28,757	55	R 28,812
2007	0	669	32	6,457	3,358	21	152	17,321	994	28,334	569	28	29,031	60	29,091

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

--- = Not applicable.

Where shown, R = Revised data and (s) = Value less than 0.5.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, United States

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Million Short Tons	Billion Cubic Feet					Million Barrels				Billion Kilowatthours		Wood and Waste <sup>e,f</sup>	
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	---	15	(s)	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	5,464	140	19	37	196	789	265	---	15	1	14	11	---
2005	1,037	5,869	139	20	40	199	782	267	---	15	1	18	25	---
2006	1,027	6,222	57	13	36	105	787	286	---	15	1	27	18	---
2007	1,045	6,841	63	15	28	107	806	246	---	15	1	34	31	---
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	R 3,804	2,459	169	5	2,634	2,739	2,867	4	110	0	0	71	24,381
1985	14,586	R 3,157	998	85	7	1,090	4,076	2,937	14	198	(s)	(s)	140	26,195
1990	16,259	R 3,333	1,163	97	30	1,289	6,104	3,014	317	326	4	29	8	30,675
1995	17,465	R 4,327	566	108	81	755	7,075	3,149	422	280	5	33	134	33,637
1996	18,428	R 3,882	628	109	80	817	7,087	3,528	438	300	5	33	137	34,649
1997	18,903	R 4,147	715	111	102	927	6,597	3,581	446	309	5	34	116	35,058
1998	19,216	R 4,698	1,047	136	124	1,306	7,068	3,241	444	311	5	31	88	36,400
1999	19,279	R 4,924	959	140	112	1,211	7,610	3,218	453	312	5	46	99	37,150
2000	20,220	R 5,318	871	175	99	1,144	7,862	2,768	453	296	5	57	115	38,232
2001	19,614	R 5,496	1,003	171	103	1,277	8,033	2,209	337	289	6	70	75	37,396
2002	19,783	R 5,789	659	127	175	961	8,143	2,650	380	305	6	105	72	38,189
2003	20,185	R 5,259	869	161	175	1,205	7,959	2,781	397	303	5	115	22	38,227
2004	20,305	R 5,607	879	111	222	1,212	8,222	2,656	388	311	6	142	39	R 38,885
2005	20,737	R 6,036	876	115	243	1,235	8,160	2,670	406	309	6	178	84	39,814
2006	20,461	R 6,394	361	74	214	648	8,214	2,839	412	306	5	264	63	39,601
2007	20,807	7,028	397	89	171	657	8,458	2,430	423	308	6	341	107	40,558

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Value less than +0.5 and greater than -0.5.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	15,578	184	5,393	1,126	3,211	24,578	4,292	4,898	43,498	0	6,239	--	--	--	--	--
1965	21,473	229	5,251	1,156	4,207	28,919	2,553	6,987	49,072	0	7,103	--	--	--	--	--
1970	27,653	298	8,512	1,799	7,583	37,003	3,290	8,524	66,710	0	7,632	--	--	--	--	--
1975	26,609	264	14,697	1,707	6,540	45,174	12,953	8,586	89,656	2,722	12,213	--	--	--	--	--
1980	27,042	269	15,190	2,048	4,949	44,296	7,296	10,158	83,937	23,497	9,408	--	--	--	--	--
1985	27,145	219	14,520	3,516	3,648	43,476	2,249	11,155	78,565	14,313	6,886	--	--	--	--	--
1990	27,713	245	21,579	1,899	4,160	49,199	3,915	12,210	92,962	12,052	10,367	--	--	--	--	--
1995	34,389	323	23,653	3,843	5,115	55,472	3,110	12,198	103,390	20,752	9,502	--	--	--	--	--
1996	37,140	327	23,628	3,508	4,845	54,999	3,154	10,505	100,639	29,708	11,082	--	--	--	--	--
1997	36,692	324	23,057	R 2,184	4,269	55,694	2,542	10,529	98,274	29,573	11,521	--	--	--	--	--
1998	36,415	329	22,409	R 3,525	3,252	57,416	1,440	9,203	R 97,244	28,663	10,565	--	--	--	--	--
1999	38,216	337	24,061	1,963	7,025	57,669	1,461	9,432	101,611	30,892	7,760	--	--	--	--	--
2000	40,103	354	24,607	2,348	7,381	57,162	4,229	9,678	105,406	31,369	5,818	--	--	--	--	--
2001	37,694	333	23,337	2,343	7,163	57,718	1,517	11,832	103,910	30,357	8,356	--	--	--	--	--
2002	37,072	379	22,718	2,257	5,273	61,607	3,989	12,250	108,095	31,857	8,825	--	--	--	--	--
2003	39,306	351	27,155	2,569	4,195	59,207	1,284	12,686	107,095	31,677	12,665	--	--	--	--	--
2004	38,908	383	31,319	2,554	4,458	62,118	1,699	14,970	117,118	31,636	10,626	--	--	--	--	--
2005	40,568	353	29,891	2,466	3,007	62,866	1,778	15,315	115,323	31,694	10,145	--	--	--	--	--
2006	40,551	391	30,040	2,313	R 3,371	63,465	2,258	14,476	R 115,923	31,911	7,252	--	--	--	--	--
2007	40,422	420	29,284	2,321	3,925	64,300	2,161	13,145	115,137	34,325	4,136	--	--	--	--	--
Trillion Btu																
1960	395.4	190.7	31.4	6.1	12.9	129.1	27.0	30.2	236.6	0.0	67.1	45.7	0.0	-68.3	0.0	867.2
1965	533.1	236.9	30.6	6.2	16.9	151.9	16.0	42.8	264.4	0.0	74.2	47.6	0.0	-109.2	0.0	1,047.2
1970	675.6	307.8	49.6	9.9	28.7	194.4	20.7	52.1	355.3	0.0	80.1	52.4	0.0	-74.2	0.0	1,396.9
1975	640.1	R 271.7	85.6	9.4	24.3	237.3	81.4	52.5	490.6	30.0	127.1	57.6	0.0	-98.3	0.0	1,518.7
1980	661.0	R 278.4	88.5	11.3	18.2	232.7	45.9	61.4	457.9	256.3	97.7	141.0	0.0	-238.6	-0.1	1,653.8
1985	662.9	R 227.8	84.6	19.7	13.1	228.4	14.1	67.2	427.2	152.0	71.9	175.4	0.0	-179.5	1.3	1,539.0
1990	682.5	R 252.5	125.7	10.6	15.1	258.4	24.6	73.0	507.4	127.5	107.8	143.7	0.2	-127.1	1.3	1,695.8
1995	828.3	332.4	137.8	21.8	18.5	289.3	19.6	73.6	560.5	218.0	98.0	222.0	0.2	-249.4	(s)	2,010.0
1996	890.7	R 337.8	137.6	19.9	17.5	286.9	19.8	65.4	547.2	312.0	114.6	208.6	0.2	-379.1	(s)	2,032.0
1997	867.3	R 337.5	134.3	12.4	15.4	290.3	16.0	65.4	533.8	310.3	117.7	181.9	0.2	-348.0	(s)	2,000.5
1998	856.5	342.0	130.5	20.0	11.8	299.3	9.1	56.9	527.4	300.7	107.7	209.2	0.2	-304.8	(s)	2,038.9
1999	866.5	349.1	140.2	11.1	25.4	300.5	9.2	58.2	544.6	322.8	79.3	210.8	0.2	-284.7	(s)	2,088.6
2000	904.2	368.5	143.3	13.3	26.6	297.8	26.6	60.1	567.8	327.1	59.3	203.9	0.2	-288.8	0.0	2,142.2
2001	842.3	344.0	135.9	13.3	25.9	300.7	9.5	70.8	556.1	317.2	86.3	165.0	0.2	-347.6	0.0	1,963.6
2002	846.0	399.6	132.3	12.8	19.1	320.9	25.1	73.4	583.5	332.6	89.8	162.8	0.2	-380.7	0.0	2,033.7
2003	873.7	351.0	158.2	14.6	15.2	308.3	8.1	76.0	580.3	330.1	129.7	155.1	0.1	-412.5	(s)	2,007.5
2004	853.9	398.0	182.4	14.5	16.1	323.9	10.7	90.8	638.5	329.9	106.5	184.1	0.1	-362.1	0.0	R 2,148.9
2005	890.1	364.1	174.1	14.0	10.9	328.0	11.2	93.2	R 631.4	330.7	101.4	R 182.3	0.1	-374.3	0.0	R 2,126.0
2006	886.7	402.4	175.0	13.1	12.2	331.2	14.2	88.2	R 633.8	333.0	71.9	R 196.2	0.2	-381.5	0.0	R 2,142.6
2007	888.4	431.4	170.6	13.2	14.1	335.6	13.6	79.4	626.4	360.0	40.9	189.3	0.2	-404.5	0.0	2,132.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	162	41	36	163	2,101	2,300	1,084	--	--	4,129	--	--	--
1965	56	48	24	169	2,672	2,865	765	--	--	6,150	--	--	--
1970	71	56	36	236	4,920	5,192	515	--	--	11,527	--	--	--
1975	6	52	74	134	3,916	4,124	530	--	--	13,409	--	--	--
1980	48	52	13	198	2,589	2,800	817	--	--	16,469	--	--	--
1985	27	44	24	73	2,088	2,184	1,456	--	--	17,182	--	--	--
1990	21	45	17	38	2,688	2,743	757	--	--	20,719	--	--	--
1995	1	50	10	66	2,849	2,926	602	--	--	24,314	--	--	--
1996	5	57	10	64	2,922	2,996	625	--	--	25,634	--	--	--
1997	8	48	40	57	3,008	3,106	329	--	--	24,893	--	--	--
1998	1	47	6	40	2,591	2,638	292	--	--	27,327	--	--	--
1999	3	43	6	44	4,669	4,720	307	--	--	27,048	--	--	--
2000	6	47	12	46	4,925	4,983	330	--	--	28,756	--	--	--
2001	2	49	39	39	3,970	4,047	266	--	--	27,802	--	--	--
2002	(s)	46	37	22	3,372	3,430	270	--	--	30,022	--	--	--
2003	(s)	47	7	49	2,633	2,690	284	--	--	29,416	--	--	--
2004	(s)	44	13	67	2,783	2,863	291	--	--	30,109	--	--	--
2005	(s)	42	14	75	1,818	1,907	R 414	--	--	31,315	--	--	--
2006	2	38	9	50	R 1,984	R 2,043	R 376	--	--	32,277	--	--	--
2007	(s)	35	8	32	2,050	2,090	415	--	--	32,783	--	--	--
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	135.4	273.9
1985	0.7	45.4	0.1	0.4	7.5	8.1	29.1	0.0	0.0	58.6	141.8	135.0	276.8
1990	0.5	46.7	0.1	0.2	9.7	10.1	15.1	(s)	0.1	70.7	143.2	163.5	306.7
1995	(s)	51.0	0.1	0.4	10.3	10.8	12.0	(s)	0.2	83.0	157.0	188.4	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	368.5
1997	0.2	50.5	0.2	0.3	10.9	11.4	6.6	(s)	0.1	84.9	153.8	192.4	346.2
1998	(s)	48.4	(s)	0.2	9.4	9.6	5.8	(s)	0.1	93.2	157.3	211.4	368.7
1999	0.1	44.2	(s)	0.2	16.9	17.2	6.1	(s)	0.1	92.3	160.0	211.1	371.1
2000	0.1	49.5	0.1	0.3	17.8	18.1	6.6	(s)	0.1	98.1	172.6	223.2	395.8
2001	(s)	50.8	0.2	0.2	14.3	14.8	5.3	(s)	0.1	94.9	166.0	211.4	377.4
2002	(s)	49.5	0.2	0.1	12.2	12.5	5.4	(s)	0.1	102.4	170.0	228.3	398.3
2003	(s)	46.2	(s)	0.3	9.6	9.9	5.7	(s)	0.1	100.4	162.2	221.5	383.7
2004	(s)	45.9	0.1	0.4	10.1	10.5	5.8	(s)	0.1	102.7	165.1	227.3	392.4
2005	(s)	43.4	0.1	0.4	6.6	7.1	R 8.3	(s)	0.1	106.8	R 165.7	233.7	R 399.4
2006	0.1	39.2	0.1	0.3	R 7.2	R 7.5	R 7.5	(s)	0.1	110.1	R 164.6	238.1	R 402.7
2007	(s)	36.2	(s)	0.2	7.4	7.6	8.3	0.1	0.1	111.9	164.1	241.3	405.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	112	17	264	294	371	327	(s)	1,257	0	--	--	2,390	--	--	--
1965	42	32	175	306	472	327	(s)	1,280	0	--	--	3,443	--	--	--
1970	56	36	264	426	868	391	(s)	1,950	0	--	--	5,144	--	--	--
1975	14	33	547	242	691	453	1	1,934	0	--	--	6,493	--	--	--
1980	180	29	641	176	457	258	3	1,535	0	--	--	7,190	--	--	--
1985	96	26	913	16	368	251	514	2,061	0	--	--	8,805	--	--	--
1990	84	24	739	11	474	258	606	2,088	0	--	--	11,589	--	--	--
1995	6	26	644	10	503	42	3	1,201	0	--	--	12,845	--	--	--
1996	39	29	556	9	516	42	1	1,123	0	--	--	13,948	--	--	--
1997	65	32	537	9	531	41	0	1,118	0	--	--	17,043	--	--	--
1998	8	26	567	21	457	41	0	1,086	0	--	--	18,307	--	--	--
1999	20	28	570	6	824	41	0	1,441	0	--	--	18,820	--	--	--
2000	47	26	748	9	869	41	(s)	1,668	0	--	--	19,734	--	--	--
2001	14	26	837	26	701	43	0	1,606	0	--	--	19,607	--	--	--
2002	3	25	783	16	595	43	0	1,438	0	--	--	20,430	--	--	--
2003	3	25	1,059	24	465	43	0	1,592	0	--	--	20,411	--	--	--
2004	(s)	26	1,105	25	491	44	0	1,665	0	--	--	21,166	--	--	--
2005	2	25	749	18	321	44	8	1,141	0	--	--	21,608	--	--	--
2006	R 23	24	1,533	10	R 350	45	1	R 1,938	0	--	--	22,120	--	--	--
2007	1	23	1,265	5	362	45	0	1,676	0	--	--	22,873	--	--	--
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	59.1	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	0.0	1.7	0.0	39.5	79.5	91.4	170.9
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	99.5	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	247.7
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	257.2
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	149.1	252.2
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	155.4	259.8
2003	0.1	25.1	6.2	0.1	1.7	0.2	0.0	8.2	0.0	1.0	0.0	69.6	104.0	153.7	257.7
2004	(s)	27.7	6.4	0.1	1.8	0.2	0.0	8.6	0.0	1.0	0.0	72.2	109.5	159.8	269.3
2005	(s)	25.9	4.4	0.1	1.2	0.2	0.1	5.9	0.0	R 1.3	0.0	73.7	106.9	161.3	R 268.1
2006	0.6	25.1	8.9	0.1	1.3	0.2	(s)	10.5	0.0	R 1.2	0.0	75.5	112.9	163.2	R 276.1
2007	(s)	23.9	7.4	(s)	1.3	0.2	0.0	8.9	0.0	1.3	0.0	78.0	112.2	168.4	280.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	7,904	109	2,511	708	382	2,014	3,765	9,380	26	--	--	8,966	--	--	--
1965	8,774	132	1,962	1,020	372	945	5,637	9,935	25	--	--	13,636	--	--	--
1970	11,177	171	2,833	1,696	204	1,611	6,643	12,987	25	--	--	18,041	--	--	--
1975	9,288	156	4,475	1,846	198	5,814	7,353	19,686	25	--	--	20,473	--	--	--
1980	7,221	171	3,356	1,857	104	3,787	9,049	18,154	24	--	--	26,708	--	--	--
1985	5,476	138	2,597	1,031	507	96	10,453	14,683	24	--	--	24,179	--	--	--
1990	5,525	156	4,580	901	443	444	11,548	17,916	0	--	--	27,618	--	--	--
1995	5,543	218	4,397	1,670	674	504	11,551	18,795	0	--	--	32,847	--	--	--
1996	5,792	215	5,086	1,330	678	705	9,879	17,677	0	--	--	33,523	--	--	--
1997	5,694	211	4,407	661	719	600	9,873	16,261	0	--	--	32,617	--	--	--
1998	4,846	209	3,726	187	519	613	8,550	13,596	0	--	--	33,539	--	--	--
1999	4,645	220	3,735	1,517	443	594	8,766	15,054	0	--	--	34,533	--	--	--
2000	4,415	216	2,938	1,548	443	1,338	9,033	15,300	0	--	--	35,034	--	--	--
2001	3,877	168	3,212	2,481	1,002	796	11,221	18,712	0	--	--	31,949	--	--	--
2002	3,523	174	3,281	1,290	1,068	1,871	11,699	19,208	0	--	--	32,615	--	--	--
2003	3,703	174	6,817	1,035	1,133	274	12,114	21,373	0	--	--	34,017	--	--	--
2004	3,824	179	6,823	997	1,278	431	14,371	23,900	0	--	--	35,595	--	--	--
2005	3,570	166	6,488	794	1,207	747	14,718	23,953	0	--	--	36,279	--	--	--
2006	R 3,357	168	5,571	R 957	1,295	766	13,882	R 22,471	0	--	--	36,281	--	--	--
2007	3,188	170	4,899	1,459	1,122	814	12,562	20,857	0	--	--	36,172	--	--	--

  

Trillion Btu															
1960	209.9	112.8	14.6	2.8	2.0	12.7	23.8	55.9	0.3	23.6	0.0	30.6	433.0	75.7	508.7
1965	232.0	136.0	11.4	4.1	2.0	5.9	35.2	58.7	0.3	32.1	0.0	46.5	505.5	111.1	616.6
1970	291.4	176.5	16.5	6.4	1.1	10.1	41.3	75.4	0.3	41.9	0.0	61.6	647.0	149.0	796.0
1975	238.8	160.0	26.1	6.9	1.0	36.6	45.4	115.9	0.3	46.8	0.0	69.9	631.7	168.0	799.7
1980	187.0	R 176.3	19.6	6.8	0.5	23.8	55.1	105.8	0.2	124.3	0.0	91.1	684.7	219.6	904.4
1985	140.4	R 143.0	15.1	3.7	2.7	0.6	63.2	85.3	0.2	145.6	0.0	82.5	597.0	190.0	787.0
1990	143.3	R 160.0	26.7	3.3	2.3	2.8	69.2	104.2	0.0	100.9	0.0	94.2	602.5	217.9	820.4
1995	144.1	224.7	25.6	6.1	3.5	3.2	69.8	108.1	0.0	187.7	0.0	112.1	776.7	254.5	1,031.2
1996	150.1	221.8	29.6	4.8	3.5	4.4	61.8	104.2	0.0	174.3	0.0	114.4	764.8	260.1	1,024.9
1997	146.8	R 219.5	25.7	2.4	3.7	3.8	61.5	97.1	0.0	155.7	0.0	111.3	730.3	252.1	982.4
1998	126.7	217.5	21.7	0.7	2.7	3.9	53.0	81.9	0.0	184.2	0.0	114.4	724.8	259.5	984.3
1999	121.4	227.4	21.8	5.5	2.3	3.7	54.3	87.6	0.0	191.5	(s)	117.8	745.7	269.5	1,015.3
2000	116.7	225.2	17.1	5.6	2.3	8.4	56.3	89.7	0.0	193.0	(s)	119.5	744.1	271.9	1,016.0
2001	102.1	173.6	18.7	9.0	5.2	5.0	67.2	105.1	0.0	155.2	(s)	109.0	645.1	242.9	888.0
2002	92.8	185.0	19.1	4.7	5.6	11.8	70.1	111.2	0.0	153.3	(s)	111.3	653.6	248.1	901.7
2003	97.8	172.4	39.7	3.8	5.9	1.7	72.6	123.7	0.0	145.4	(s)	116.1	655.4	256.1	911.5
2004	100.5	187.7	39.7	3.6	6.7	2.7	87.3	140.0	0.0	174.1	(s)	121.5	723.7	268.7	992.5
2005	90.4	171.6	37.8	2.9	6.3	4.7	89.7	141.4	0.0	169.3	(s)	123.8	696.6	270.7	967.3
2006	85.4	172.9	32.5	R 3.5	6.8	4.8	84.7	R 132.2	0.0	R 183.7	(s)	123.8	R 698.1	267.7	R 965.8
2007	81.4	173.6	28.5	5.2	5.9	5.1	76.0	120.8	0.0	176.0	(s)	123.4	675.3	266.3	941.6

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.  
<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
kWh = Kilowatthours. -- = Not applicable.  
Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.  
Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.  
Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."  
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	136	8	280	2,582	1,126	31	396	23,869	2,278	30,562	0	0	--	--	--
1965	29	12	446	3,090	1,156	43	430	28,220	1,608	34,993	0	0	--	--	--
1970	18	20	349	5,353	1,799	98	421	36,408	1,679	46,107	0	0	--	--	--
1975	2	17	249	9,087	1,707	87	609	44,523	7,039	63,300	0	0	--	--	--
1980	0	16	248	11,049	2,048	46	486	43,934	3,506	61,318	0	0	--	--	--
1985	0	11	172	10,899	3,516	161	442	42,718	1,640	59,548	362	0	--	--	--
1990	0	15	116	16,110	1,899	96	497	48,498	2,865	70,082	461	0	--	--	--
1995	0	20	97	18,421	3,843	93	475	54,756	2,603	80,288	574	(s)	--	--	--
1996	0	19	93	17,676	3,508	78	461	54,279	2,448	78,543	99	(s)	--	--	--
1997	0	21	103	17,842	R 2,184	68	487	54,934	1,942	R 77,560	98	0	--	--	--
1998	0	20	82	17,637	R 3,525	17	509	56,856	826	R 79,451	81	0	--	--	--
1999	0	22	102	19,453	1,963	15	515	57,185	868	80,100	11	0	--	--	--
2000	0	23	83	20,440	2,348	40	507	56,678	2,891	82,986	0	0	--	--	--
2001	0	20	82	18,709	2,343	11	465	56,673	721	79,004	366	0	--	--	--
2002	0	22	54	18,259	2,257	16	459	60,496	2,118	83,661	249	0	--	--	--
2003	0	19	74	18,810	2,569	61	424	58,031	1,010	80,980	360	(s)	--	--	--
2004	0	16	77	23,139	2,554	186	430	60,796	1,268	88,450	711	(s)	--	--	--
2005	0	15	77	22,368	2,466	74	428	61,615	1,022	88,049	R 47	(s)	--	--	--
2006	0	15	118	22,750	2,313	80	417	62,125	1,492	89,293	R 43	(s)	--	--	--
2007	0	16	116	22,963	2,321	55	430	63,133	1,346	90,365	134	(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	1.3	0.0	334.8	0.0	334.8
1990	0.0	15.1	0.6	93.8	10.6	0.3	3.0	254.8	18.0	381.1	1.6	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	2.0	(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	0.3	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	16.8	0.4	134.8	14.5	0.7	2.6	317.1	8.0	478.0	2.5	(s)	494.7	(s)	494.7
2005	0.0	R 15.6	0.4	130.3	14.0	0.3	2.6	321.5	6.4	475.5	R 0.2	(s)	491.1	(s)	491.1
2006	0.0	R 15.4	0.6	132.5	13.1	0.3	2.5	324.2	9.4	482.6	R 0.2	(s)	R 498.0	(s)	R 498.0
2007	0.0	16.1	0.6	133.8	13.2	0.2	2.6	329.5	8.5	488.3	0.5	(s)	504.4	(s)	504.4

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Alabama

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	36,997	105	0	272	0	272	31,694	10,145	--	0	0	0	0	--
2006	37,168	146	0	177	0	177	31,911	7,252	--	0	0	0	0	--
2007	37,233	176	0	148	0	148	34,325	4,136	--	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	R 5.7	0.0	0.8	0.0	0.8	127.5	107.8	26.0	0.0	0.0	0.0	0.0	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	R 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
2005	799.6	107.6	0.0	1.6	0.0	1.6	330.7	101.4	3.4	0.0	0.0	0.0	0.0	1,344.4
2006	800.6	149.7	0.0	1.0	0.0	1.0	333.0	71.9	3.7	0.0	0.0	0.0	0.0	1,359.9
2007	807.0	181.5	0.0	0.9	0.0	0.9	360.0	40.9	3.7	0.0	0.0	0.0	0.0	1,393.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	376	2	2,636	1,972	46	1,657	711	1,176	8,197	0	290	--	--	--	--	--
1965	525	8	3,788	3,005	91	2,450	881	760	10,975	0	350	--	--	--	--	--
1970	740	64	5,100	6,735	151	2,621	1,020	1,352	16,979	0	363	--	--	--	--	--
1975	868	85	7,090	7,420	211	4,179	1,075	1,824	21,800	0	357	--	--	--	--	--
1980	273	153	6,677	9,618	191	3,676	371	2,387	22,919	0	539	--	--	--	--	--
1985	733	213	10,198	15,231	331	5,638	3,072	7,013	41,482	0	748	--	--	--	--	--
1990	784	343	10,548	17,367	384	5,854	426	5,462	40,041	0	975	--	--	--	--	--
1995	815	430	12,803	16,921	272	7,148	746	3,780	R 41,669	0	1,372	--	--	--	--	--
1996	706	448	11,837	18,652	241	6,735	906	4,416	42,786	0	1,266	--	--	--	--	--
1997	740	425	11,979	R 21,108	326	6,312	864	4,681	R 45,270	0	1,099	--	--	--	--	--
1998	1,012	435	11,503	R 21,886	320	6,737	828	4,395	R 45,669	0	1,113	--	--	--	--	--
1999	1,019	423	12,164	23,612	266	6,426	1,068	5,016	48,552	0	817	--	--	--	--	--
2000	1,024	427	10,875	25,872	221	5,973	788	4,770	48,500	0	1,002	--	--	--	--	--
2001	989	409	11,675	24,262	261	6,383	1,129	7,032	50,742	0	1,346	--	--	--	--	--
2002	1,034	419	10,815	R 25,111	318	5,923	1,057	5,479	48,702	0	1,439	--	--	--	--	--
2003	790	414	9,725	27,355	314	5,919	864	5,832	50,009	0	1,583	--	--	--	--	--
2004	891	406	14,059	30,954	209	6,947	702	5,993	58,864	0	1,498	--	--	--	--	--
2005	905	433	12,584	31,940	266	6,853	708	6,319	58,670	0	1,464	--	--	--	--	--
2006	968	R 374	13,936	31,747	R 277	6,789	713	6,844	R 60,306	0	1,224	--	--	--	--	--
2007	849	370	13,534	29,053	209	6,927	734	6,555	57,012	0	1,291	--	--	--	--	--
Trillion Btu																
1960	7.2	2.0	15.4	10.6	0.2	8.7	4.5	6.1	45.4	0.0	3.1	3.7	0.0	0.0	0.0	61.4
1965	9.9	7.7	22.1	16.5	0.4	12.9	5.5	4.4	61.7	0.0	3.7	4.9	0.0	0.0	0.0	87.8
1970	13.2	64.0	29.7	37.7	0.6	13.8	6.4	7.8	96.0	0.0	3.8	5.0	0.0	0.0	(s)	182.0
1975	15.3	85.2	41.3	41.7	0.8	22.0	6.8	10.7	123.1	0.0	3.7	4.9	0.0	0.0	0.0	232.2
1980	4.3	153.8	38.9	54.0	0.7	19.3	2.3	14.0	129.3	0.0	5.6	2.7	0.0	0.0	0.0	295.8
1985	11.6	214.0	59.4	85.8	1.2	29.6	19.3	41.7	237.0	0.0	7.8	4.0	(s)	0.0	0.0	474.4
1990	12.4	326.8	61.4	97.9	1.4	30.8	2.7	32.2	226.4	0.0	10.1	8.2	0.1	0.0	(s)	584.0
1995	12.9	432.8	74.6	95.9	1.0	37.3	4.7	22.5	236.0	0.0	14.1	8.3	0.1	0.0	(s)	704.2
1996	11.2	443.6	68.9	105.8	0.9	35.1	5.7	26.4	242.8	0.0	13.1	8.0	0.1	0.0	(s)	718.8
1997	11.7	425.4	69.8	R 119.7	1.2	32.9	5.4	27.8	256.7	0.0	11.2	3.7	0.1	0.0	(s)	708.8
1998	16.5	434.4	67.0	R 124.2	1.2	35.1	5.2	26.5	R 259.1	0.0	11.4	1.9	0.1	0.0	(s)	R 723.3
1999	16.4	422.8	70.9	134.1	1.0	33.5	6.7	29.8	276.0	0.0	8.4	1.8	0.1	0.0	(s)	725.4
2000	16.5	333.7	63.3	146.7	0.8	31.1	5.0	28.6	275.5	0.0	10.2	1.9	0.1	0.0	(s)	637.9
2001	15.9	413.0	68.0	137.6	0.9	33.3	7.1	43.0	289.9	0.0	13.9	3.0	0.1	0.0	(s)	735.8
2002	16.4	425.0	63.0	143.2	1.1	30.8	6.6	33.0	277.8	0.0	14.6	3.2	0.1	0.0	(s)	737.2
2003	12.6	420.0	56.7	155.2	1.1	30.8	5.4	34.9	284.1	0.0	16.2	3.3	0.1	0.0	(s)	736.2
2004	14.1	412.0	81.9	175.5	0.8	36.2	4.4	36.0	334.8	0.0	15.0	3.3	0.1	0.0	(s)	779.3
2005	14.0	433.8	73.3	181.1	1.0	35.8	4.5	37.7	333.3	0.0	14.6	R 1.7	0.1	0.0	(s)	R 797.5
2006	15.0	R 374.2	81.2	180.0	R 1.0	35.4	4.5	40.7	R 342.7	0.0	12.1	R 1.6	0.1	0.0	(s)	R 745.7
2007	13.0	371.8	78.8	164.7	0.7	36.2	4.6	39.0	324.1	0.0	12.8	1.7	0.1	0.0	(s)	723.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	38	(s)	866	0	36	902	90	--	--	151	--	--	--
1965	20	1	1,110	10	77	1,197	80	--	--	292	--	--	--
1970	13	6	1,362	19	77	1,458	65	--	--	527	--	--	--
1975	5	10	1,621	91	69	1,781	71	--	--	898	--	--	--
1980	0	8	1,172	0	58	1,231	47	--	--	1,092	--	--	--
1985	96	13	1,274	1	192	1,466	93	--	--	1,674	--	--	--
1990	99	14	1,557	3	300	1,860	76	--	--	1,661	--	--	--
1995	68	15	2,024	(s)	157	2,181	92	--	--	1,713	--	--	--
1996	57	16	1,927	(s)	195	2,122	96	--	--	1,766	--	--	--
1997	55	15	1,849	(s)	123	1,972	78	--	--	1,726	--	--	--
1998	58	16	1,672	1	98	1,771	70	--	--	1,768	--	--	--
1999	66	18	2,033	17	213	2,263	73	--	--	1,866	--	--	--
2000	58	16	1,731	13	188	1,933	79	--	--	1,855	--	--	--
2001	52	17	1,824	16	214	2,054	126	--	--	1,891	--	--	--
2002	57	16	1,491	(s)	211	1,702	128	--	--	1,932	--	--	--
2003	58	17	1,429	15	234	1,678	134	--	--	1,987	--	--	--
2004	50	18	1,687	20	147	1,854	138	--	--	2,062	--	--	--
2005	<sup>R</sup> 40	18	1,619	31	<sup>R</sup> 217	1,868	<sup>R</sup> 69	--	--	2,062	--	--	--
2006	<sup>R</sup> 50	21	1,932	275	<sup>R</sup> 211	<sup>R</sup> 2,418	<sup>R</sup> 63	--	--	2,120	--	--	--
2007	43	20	1,458	161	161	1,781	69	--	--	2,114	--	--	--

  

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	(s)	(s)	5.7	32.3	15.4	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	16.0	54.3
2002	0.9	16.4	8.7	(s)	0.8	9.4	2.6	(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	0.8	18.5	9.8	0.1	0.5	10.5	2.8	(s)	(s)	7.0	39.5	16.7	56.3
2005	<sup>R</sup> 0.6	18.1	9.4	0.2	0.8	10.4	<sup>R</sup> 1.4	(s)	(s)	<sup>R</sup> 7.0	<sup>R</sup> 37.5	16.6	<sup>R</sup> 54.1
2006	<sup>R</sup> 0.8	20.6	11.3	1.6	0.8	13.6	<sup>R</sup> 1.3	(s)	(s)	7.2	<sup>R</sup> 43.5	16.7	<sup>R</sup> 60.2
2007	0.7	19.9	8.5	0.9	0.6	10.0	1.4	0.1	(s)	7.2	39.3	15.1	54.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	26	0	268	0	6	130	464	868	0	--	--	99	--	--	--	
1965	15	2	344	0	14	253	751	1,361	0	--	--	267	--	--	--	
1970	10	13	422	0	14	246	807	1,488	0	--	--	478	--	--	--	
1975	12	14	502	0	12	415	558	1,487	0	--	--	657	--	--	--	
1980	0	17	577	0	10	258	4	849	0	--	--	728	--	--	--	
1985	341	20	901	3	34	268	0	1,205	0	--	--	1,898	--	--	--	
1990	395	22	1,049	(s)	53	52	0	1,154	0	--	--	2,133	--	--	--	
1995	455	25	1,035	(s)	28	21	0	1,084	0	--	--	2,372	--	--	--	
1996	417	27	1,181	(s)	34	294	0	1,509	0	--	--	2,429	--	--	--	
1997	448	27	947	(s)	22	71	0	1,040	0	--	--	2,359	--	--	--	
1998	472	27	1,068	(s)	17	116	0	1,201	0	--	--	2,508	--	--	--	
1999	486	28	1,310	1	38	88	0	1,437	0	--	--	2,583	--	--	--	
2000	466	26	1,155	(s)	33	64	0	1,252	0	--	--	2,418	--	--	--	
2001	421	16	1,686	1	38	680	0	2,405	0	--	--	2,483	--	--	--	
2002	414	16	1,239	(s)	37	124	0	1,400	0	--	--	2,445	--	--	--	
2003	390	17	905	(s)	41	9	0	955	0	--	--	2,473	--	--	--	
2004	447	18	1,158	1	26	95	0	1,279	0	--	--	2,601	--	--	--	
2005	465	17	1,006	1	38	168	0	1,213	0	--	--	2,695	--	--	--	
2006	<sup>R</sup> 508	19	1,166	185	<sup>R</sup> 37	156	3	<sup>R</sup> 1,547	0	--	--	2,819	--	--	--	
2007	390	19	981	106	28	176	0	1,292	0	--	--	2,828	--	--	--	
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	0.0	0.2	(s)	7.3	40.7	19.8	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	45.0	21.0	66.0	
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	38.0	20.3	58.3	
2004	7.0	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	
2005	7.3	16.9	5.9	(s)	0.1	0.9	0.0	6.9	0.0	<sup>R</sup> 0.2	(s)	9.2	<sup>R</sup> 40.5	21.7	<sup>R</sup> 62.2	
2006	<sup>R</sup> 7.9	18.5	6.8	1.0	0.1	0.8	(s)	8.8	0.0	<sup>R</sup> 0.2	(s)	9.6	<sup>R</sup> 45.2	22.2	<sup>R</sup> 67.3	
2007	6.1	18.8	5.7	0.6	0.1	0.9	0.0	7.3	0.0	0.2	(s)	9.7	42.2	20.2	62.4	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	256	2	878	4	0	229	141	1,252	0	--	45	--	--	--
1965	339	2	1,238	(s)	83	60	417	1,798	0	--	59	--	--	--
1970	467	19	1,923	60	107	73	812	2,975	0	--	101	--	--	--
1975	594	40	2,117	130	106	31	1,146	3,530	0	--	485	--	--	--
1980	0	100	1,784	119	111	14	1,795	3,823	0	--	757	--	--	--
1985	0	140	1,713	91	406	2,577	6,433	11,220	0	--	417	--	--	--
1990	0	271	1,413	25	55	116	4,872	6,481	0	--	459	--	--	--
1995	0	358	3,099	85	62	375	3,298	6,920	0	--	546	--	--	--
1996	2	371	3,733	9	64	387	4,184	8,376	0	--	584	--	--	--
1997	2	345	3,583	180	54	139	4,180	8,134	0	--	756	--	--	--
1998	1	358	3,595	204	79	0	4,143	8,021	0	--	818	--	--	--
1999	1	340	3,295	16	25	0	4,370	7,705	0	--	844	--	--	--
2000	1	342	2,266	(s)	25	0	4,137	6,428	0	--	1,037	--	--	--
2001	1	339	2,288	7	76	18	6,681	9,070	0	--	1,079	--	--	--
2002	1	351	2,337	47	86	0	5,210	7,680	0	--	1,088	--	--	--
2003	(s)	342	2,130	35	113	0	5,578	7,856	0	--	1,104	--	--	--
2004	1	328	2,089	33	112	0	5,707	7,942	0	--	1,126	--	--	--
2005	2	356	1,912	6	102	0	5,927	7,948	0	--	1,156	--	--	--
2006	2	R 289	2,187	R 25	103	0	6,053	8,368	0	--	1,243	--	--	--
2007	1	288	2,691	16	66	0	5,956	8,729	0	--	1,384	--	--	--
Trillion Btu														
1960	5.0	1.9	5.1	(s)	0.0	1.4	0.8	7.4	0.0	1.8	0.0	0.2	16.2	0.6
1965	6.5	1.8	7.2	(s)	0.4	0.4	2.6	10.6	0.0	3.2	0.0	0.2	22.3	0.8
1970	8.5	19.6	11.2	0.2	0.6	0.5	5.0	17.5	0.0	3.7	0.0	0.3	49.6	1.4
1975	10.5	40.4	12.3	0.5	0.6	0.2	7.1	20.6	0.0	3.5	0.0	1.7	76.7	5.9
1980	0.0	100.3	10.4	0.4	0.6	0.1	11.0	22.5	0.0	1.8	0.0	2.6	127.1	10.4
1985	0.0	140.7	10.0	0.3	2.1	16.2	38.7	67.3	0.0	2.1	0.0	1.4	211.5	4.1
1990	0.0	256.1	8.2	0.1	0.3	0.7	29.2	38.5	0.0	6.5	(s)	1.6	302.6	4.3
1995	0.0	360.0	18.1	0.3	0.3	2.4	20.0	41.0	0.0	6.2	(s)	1.9	409.1	4.5
1996	(s)	367.4	21.7	(s)	0.3	2.4	25.2	49.7	0.0	5.9	(s)	2.0	425.0	4.7
1997	(s)	344.8	20.9	0.6	0.3	0.9	25.1	47.8	0.0	1.8	(s)	2.6	397.1	6.3
1998	(s)	357.4	20.9	0.7	0.4	0.0	25.1	47.2	0.0	0.2	(s)	2.8	407.6	6.3
1999	(s)	339.7	19.2	0.1	0.1	0.0	26.5	45.8	0.0	0.1	0.0	2.9	388.5	6.0
2000	(s)	260.1	13.2	(s)	0.1	0.0	25.3	38.6	0.0	0.1	0.0	3.5	302.4	8.3
2001	(s)	342.2	13.3	(s)	0.4	0.1	41.1	55.0	0.0	(s)	0.0	3.7	400.9	9.1
2002	(s)	356.2	13.6	0.2	0.4	0.0	31.6	45.8	0.0	0.2	0.0	3.7	405.9	9.3
2003	(s)	346.7	12.4	0.1	0.6	0.0	33.5	46.6	0.0	0.1	0.0	3.8	397.2	9.1
2004	(s)	333.1	12.2	0.1	0.6	0.0	34.4	47.3	0.0	0.1	0.0	3.8	384.4	9.1
2005	(s)	356.7	11.1	(s)	0.5	0.0	35.6	47.3	0.0	0.1	0.0	3.9	408.0	9.3
2006	(s)	R 288.6	12.7	0.1	0.5	0.0	36.3	R 49.7	0.0	0.1	0.0	4.2	R 342.6	9.8
2007	(s)	289.7	15.7	0.1	0.3	0.0	35.8	51.9	0.0	0.1	0.0	4.7	346.4	9.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	4	(s)	1,032	528	1,972	0	3	1,527	15	5,077	0	0	--	--	--
1965	1	0	293	789	3,005	(s)	40	2,113	66	6,307	0	0	--	--	--
1970	1	17	462	1,000	6,735	1	59	2,267	135	10,659	0	0	--	--	--
1975	(s)	(s)	466	2,157	7,420	0	121	3,658	484	14,305	0	0	--	--	--
1980	0	(s)	498	2,605	9,618	4	94	3,306	0	16,125	0	0	--	--	--
1985	0	5	490	5,793	15,231	14	86	4,964	19	26,596	0	0	--	--	--
1990	0	2	491	6,042	17,367	6	96	5,747	138	29,888	0	0	--	--	--
1995	0	2	389	6,053	16,921	2	92	7,065	114	30,636	181	0	--	--	--
1996	0	2	142	4,340	18,652	4	89	6,377	4	29,608	199	0	--	--	--
1997	0	5	407	5,002	R 21,108	2	94	6,187	2	R 32,803	167	0	--	--	--
1998	0	6	152	4,632	R 21,886	1	99	6,543	7	R 33,319	97	0	--	--	--
1999	0	7	529	4,898	23,612	(s)	100	6,312	230	35,680	111	0	--	--	--
2000	0	7	521	5,308	25,872	(s)	98	5,884	118	37,801	49	0	--	--	--
2001	0	5	245	5,384	24,262	2	90	5,627	54	35,663	118	0	--	--	--
2002	0	4	179	5,195	R 25,111	23	89	5,713	51	36,360	93	0	--	--	--
2003	0	4	156	4,751	27,355	3	82	5,797	13	38,158	63	0	--	--	--
2004	0	4	182	8,596	30,954	2	83	6,740	0	46,558	123	0	--	--	--
2005	0	3	277	7,509	31,940	4	83	6,583	12	46,407	R 219	0	--	--	--
2006	0	3	250	8,065	31,747	4	81	6,530	27	46,704	R 221	0	--	--	--
2007	0	2	248	7,771	29,053	3	83	6,685	263	44,105	271	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	0.0	0.0	153.9	0.0	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	R 119.7	(s)	0.6	32.3	(s)	183.7	0.6	0.0	R 188.7	0.0	R 188.7
1998	0.0	5.6	0.8	27.0	R 124.2	(s)	0.6	34.1	(s)	R 186.7	0.3	0.0	R 192.3	0.0	R 192.3
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	0.4	0.0	205.5	0.0	205.5
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	35.2	0.0	262.2	0.4	0.0	266.0	0.0	266.0
2005	0.0	2.7	1.4	43.7	181.1	(s)	0.5	34.3	0.1	261.2	R 0.8	0.0	263.8	0.0	263.8
2006	0.0	2.9	1.3	47.0	180.0	(s)	0.5	34.1	0.2	263.0	0.8	0.0	R 265.8	0.0	R 265.8
2007	0.0	2.2	1.3	45.3	164.7	(s)	0.5	34.9	1.7	248.3	1.0	0.0	250.5	0.0	250.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Alaska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--	0	0	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	--
2005	398	39	696	538	0	1,234	0	1,464	--	0	0	1	1	--
2006	408	43	682	586	0	1,268	0	1,224	--	0	0	1	1	--
2007	414	41	471	633	0	1,105	0	1,291	--	0	0	1	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	0.0	0.0	0.0	0.0	(s)	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	32.7	6.6	2.9	0.0	9.5	0.0	13.9	0.0	0.0	0.0	(s)	(s)	64.7
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
2005	6.1	39.5	4.4	3.1	0.0	7.5	0.0	14.6	0.0	0.0	0.0	(s)	(s)	67.8
2006	6.2	43.6	4.3	3.4	0.0	7.7	0.0	12.1	0.0	0.0	0.0	(s)	(s)	69.7
2007	6.2	41.2	3.0	3.7	0.0	6.7	0.0	12.8	0.0	0.0	0.0	(s)	(s)	66.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	10	136	2,787	4,721	724	12,363	125	1,901	22,622	0	2,990	--	--	--	--	--
1965	337	154	3,528	5,545	1,056	14,997	82	1,918	27,125	0	4,439	--	--	--	--	--
1970	406	193	4,899	6,644	1,304	21,542	105	4,615	39,108	0	6,154	--	--	--	--	--
1975	4,392	156	10,143	7,075	1,119	27,704	5,942	3,412	55,395	0	7,254	--	--	--	--	--
1980	11,559	166	10,769	7,967	1,589	30,589	1,339	3,097	55,350	0	9,836	--	--	--	--	--
1985	16,364	131	10,109	7,154	1,722	36,148	176	3,320	58,629	1,130	13,987	--	--	--	--	--
1990	16,419	127	11,371	8,501	1,508	39,326	28	3,335	64,069	20,598	7,418	--	--	--	--	--
1995	16,682	124	15,125	7,588	1,938	47,159	81	3,985	75,875	26,985	8,288	--	--	--	--	--
1996	16,793	124	17,387	7,922	1,625	49,417	107	4,860	81,317	28,840	9,214	--	--	--	--	--
1997	18,206	135	17,911	R 7,978	1,204	48,884	14	5,274	R 81,264	29,314	12,049	--	--	--	--	--
1998	19,013	159	18,668	R 8,677	1,345	52,661	20	6,621	R 87,990	30,301	10,970	--	--	--	--	--
1999	19,710	165	20,169	9,627	1,809	54,854	40	6,436	92,935	30,416	9,759	--	--	--	--	--
2000	21,128	205	19,923	10,433	1,660	56,431	69	6,063	94,579	30,381	8,354	--	--	--	--	--
2001	20,830	241	21,591	9,914	1,650	58,506	252	3,772	95,684	28,724	7,624	--	--	--	--	--
2002	19,955	251	19,928	10,344	1,509	61,230	29	4,729	97,769	30,862	7,427	--	--	--	--	--
2003	20,059	273	20,308	10,650	1,823	61,827	0	4,683	99,291	28,581	7,075	--	--	--	--	--
2004	20,799	350	22,509	8,256	1,575	65,248	40	6,000	103,629	28,113	6,973	--	--	--	--	--
2005	21,053	322	25,930	8,018	1,395	67,483	21	5,822	108,670	25,807	6,410	--	--	--	--	--
2006	21,247	358	26,839	7,721	R 1,567	69,307	18	5,272	R 110,724	24,012	6,793	--	--	--	--	--
2007	21,901	393	26,330	6,612	1,569	70,010	22	5,185	109,727	26,782	6,598	--	--	--	--	--
Trillion Btu																
1960	0.2	140.3	16.2	25.3	2.9	64.9	0.8	11.3	121.5	0.0	32.2	4.0	0.0	-15.0	-0.1	283.1
1965	7.0	166.1	20.6	30.1	4.2	78.8	0.5	11.8	145.9	0.0	46.4	3.7	0.0	6.4	-0.1	375.4
1970	8.6	204.4	28.5	36.4	4.9	113.2	0.7	29.6	213.3	0.0	64.6	4.3	0.0	25.4	-0.2	520.4
1975	92.4	164.3	59.1	39.0	4.2	145.5	37.4	21.6	306.7	0.0	75.5	5.4	0.0	16.1	(s)	660.4
1980	245.0	174.0	62.7	43.9	5.8	160.7	8.4	19.6	301.2	0.0	102.2	17.8	0.0	-84.9	-0.1	755.2
1985	342.0	137.3	58.9	39.4	6.2	189.9	1.1	21.4	316.9	12.0	146.1	25.6	0.0	-135.6	0.0	844.3
1990	343.4	130.8	66.2	47.3	5.5	206.6	0.2	21.4	347.1	218.0	77.2	13.7	3.9	-182.8	(s)	951.3
1995	342.9	127.9	88.1	43.0	7.0	245.9	0.5	25.7	410.3	283.5	85.5	14.4	4.2	-180.9	1.1	1,089.0
1996	342.8	125.3	101.3	44.9	5.9	257.8	0.7	29.5	440.0	302.9	95.3	12.8	4.2	-169.4	(s)	1,153.9
1997	369.9	137.6	104.3	45.2	4.4	254.8	0.1	32.2	441.0	307.6	123.1	14.5	4.2	-208.2	0.4	1,190.1
1998	386.8	161.1	108.7	49.2	4.9	274.5	0.1	41.0	478.4	317.9	111.9	10.8	4.1	-224.0	(s)	1,247.0
1999	403.3	167.8	117.5	54.6	6.5	285.8	0.3	39.8	504.5	317.8	99.8	11.5	4.1	-216.9	0.0	1,291.8
2000	432.8	208.1	116.1	59.2	6.0	294.0	0.4	37.3	512.9	316.8	85.2	12.2	3.9	-235.9	0.2	1,336.2
2001	424.0	244.4	125.8	56.2	6.0	304.8	1.6	23.9	518.2	300.1	78.8	8.4	3.7	-238.7	0.2	1,339.1
2002	406.5	257.0	116.1	58.6	5.5	318.9	0.2	30.2	529.5	322.2	75.6	8.2	3.5	-249.5	(s)	1,352.8
2003	406.5	274.6	118.3	60.4	6.6	321.9	0.0	29.9	537.1	297.8	72.5	8.5	3.4	-232.9	-0.1	1,367.4
2004	425.4	352.8	131.1	46.8	5.7	340.3	0.3	38.7	562.8	293.1	69.9	8.6	3.3	R -284.7	0.3	R 1,431.5
2005	428.4	327.7	151.0	45.5	5.0	352.1	0.1	37.5	591.3	269.3	64.1	R 16.8	3.4	R -215.0	-0.3	R 1,485.7
2006	432.0	R 364.5	156.3	43.8	R 5.6	361.6	0.1	33.9	R 601.4	250.5	67.4	R 15.4	3.7	-197.2	-0.6	R 1,537.1
2007	438.5	402.1	153.4	37.5	5.6	365.4	0.1	33.4	595.4	280.9	65.2	16.4	4.1	-224.7	(s)	1,577.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	0	27	47	0	397	445	138	--	--	1,355	--	--	--
1965	0	25	59	9	727	794	129	--	--	2,230	--	--	--
1970	0	30	98	68	840	1,006	151	--	--	4,327	--	--	--
1975	0	38	216	77	542	836	170	--	--	7,138	--	--	--
1980	0	30	2	0	657	659	438	--	--	9,637	--	--	--
1985	(s)	29	12	3	956	971	741	--	--	12,249	--	--	--
1990	(s)	30	9	(s)	772	782	411	--	--	15,378	--	--	--
1995	1	27	6	2	971	979	411	--	--	18,036	--	--	--
1996	(s)	28	10	3	784	797	426	--	--	19,746	--	--	--
1997	(s)	31	7	2	720	729	485	--	--	20,683	--	--	--
1998	(s)	36	4	3	1,028	1,036	431	--	--	21,611	--	--	--
1999	(s)	33	4	2	1,423	1,429	453	--	--	22,517	--	--	--
2000	(s)	35	4	1	1,250	1,255	487	--	--	24,844	--	--	--
2001	(s)	36	7	1	1,181	1,188	284	--	--	26,200	--	--	--
2002	(s)	35	9	1	1,200	1,210	288	--	--	26,413	--	--	--
2003	(s)	36	9	2	1,030	1,041	303	--	--	27,742	--	--	--
2004	(s)	38	5	1	864	870	311	--	--	28,921	--	--	--
2005	(s)	36	3	4	R 849	857	R 649	--	--	30,544	--	--	--
2006	(s)	36	3	2	R 886	R 891	R 591	--	--	32,367	--	--	--
2007	(s)	38	2	(s)	846	848	651	--	--	34,437	--	--	--
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	186.3
1990	(s)	31.3	0.1	(s)	2.8	2.9	8.2	(s)	3.7	52.5	98.6	121.3	219.9
1995	(s)	27.9	(s)	(s)	3.5	3.6	8.2	(s)	4.0	61.5	105.2	139.7	245.0
1996	(s)	28.0	0.1	(s)	2.8	2.9	8.5	(s)	4.0	67.4	110.8	153.2	264.0
1997	(s)	31.8	(s)	(s)	2.6	2.7	9.7	(s)	4.0	70.6	118.7	159.9	278.5
1998	(s)	36.7	(s)	(s)	3.7	3.8	8.6	(s)	3.9	73.7	126.7	167.2	293.9
1999	(s)	33.5	(s)	(s)	5.1	5.2	9.1	(s)	3.8	76.8	128.3	175.7	304.1
2000	(s)	35.1	(s)	(s)	4.5	4.5	9.7	(s)	3.6	84.8	137.7	192.8	330.5
2001	(s)	36.5	(s)	(s)	4.3	4.3	5.7	(s)	3.4	89.4	139.2	199.2	338.5
2002	(s)	36.5	0.1	(s)	4.3	4.4	5.8	(s)	3.2	90.1	140.0	200.9	340.9
2003	(s)	35.9	0.1	(s)	3.7	3.8	6.1	(s)	3.1	94.7	143.5	208.9	352.4
2004	(s)	37.7	(s)	(s)	3.1	3.2	6.2	(s)	3.0	98.7	148.8	218.3	367.1
2005	(s)	36.0	(s)	(s)	3.1	3.1	R 13.0	(s)	3.0	104.2	R 159.4	227.9	R 387.3
2006	(s)	36.5	(s)	(s)	R 3.2	R 3.2	R 11.8	(s)	3.3	110.4	R 165.3	238.8	R 404.1
2007	(s)	39.3	(s)	(s)	3.0	3.1	13.0	(s)	3.7	117.5	176.6	253.5	430.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	25	106	0	70	89	39	305	0	--	--	3,302	--	--	--
1965	0	19	131	2	128	137	17	416	0	--	--	3,044	--	--	--
1970	0	23	220	12	148	146	31	557	0	--	--	4,690	--	--	--
1975	0	33	485	14	96	177	83	855	0	--	--	7,162	--	--	--
1980	0	27	280	0	116	179	0	576	0	--	--	9,122	--	--	--
1985	1	25	463	2	169	140	(s)	774	0	--	--	12,295	--	--	--
1990	(s)	28	456	2	136	257	0	851	0	--	--	16,058	--	--	--
1995	4	28	354	1	171	35	0	562	0	--	--	18,562	--	--	--
1996	(s)	29	592	2	138	35	5	772	0	--	--	19,555	--	--	--
1997	(s)	30	655	4	127	35	0	821	0	--	--	20,520	--	--	--
1998	(s)	32	1,122	1	181	36	0	1,340	0	--	--	21,683	--	--	--
1999	(s)	31	945	5	251	36	0	1,237	0	--	--	22,688	--	--	--
2000	(s)	32	867	3	221	37	0	1,127	0	--	--	24,311	--	--	--
2001	1	31	766	3	208	40	0	1,017	0	--	--	24,697	--	--	--
2002	1	32	832	2	212	41	0	1,086	0	--	--	25,162	--	--	--
2003	1	32	476	1	182	40	0	700	0	--	--	25,425	--	--	--
2004	1	33	346	2	153	40	0	541	0	--	--	26,106	--	--	--
2005	1	32	473	2	150	40	0	665	0	--	--	27,468	--	--	--
2006	1	33	458	2	R 156	43	0	R 660	0	--	--	28,626	--	--	--
2007	1	33	641	2	149	45	0	837	0	--	--	30,475	--	--	--
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	0.0	0.9	(s)	54.8	89.5	126.7	216.2
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	143.8	240.5
1996	(s)	29.3	3.4	(s)	0.5	0.2	(s)	4.2	0.0	1.2	(s)	66.7	101.4	151.7	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	158.6	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	294.5
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	311.8
2001	(s)	31.3	4.5	(s)	0.8	0.2	0.0	5.4	0.0	1.1	(s)	84.3	122.1	187.8	309.9
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	191.4	317.0
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	191.4	315.4
2004	(s)	32.7	2.0	(s)	0.6	0.2	0.0	2.8	0.0	1.0	0.1	89.1	125.7	197.1	R 322.8
2005	(s)	32.1	2.8	(s)	0.5	0.2	0.0	3.5	0.0	R 2.1	0.1	93.7	131.6	205.0	R 336.6
2006	(s)	33.2	2.7	(s)	R 0.6	0.2	0.0	R 3.5	0.0	R 2.0	0.1	97.7	136.4	211.2	R 347.6
2007	(s)	33.5	3.7	(s)	0.5	0.2	0.0	4.5	0.0	2.1	(s)	104.0	144.2	224.4	368.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	10	14	1,227	222	515	27	1,008	3,000	0	--	--	1,481	--	--	--
1965	4	55	1,545	161	437	20	1,224	3,387	0	--	--	3,331	--	--	--
1970	5	58	1,387	253	456	55	3,879	6,031	13	--	--	4,751	--	--	--
1975	133	51	3,113	430	440	102	2,696	6,781	14	--	--	6,868	--	--	--
1980	643	38	3,570	739	309	154	2,469	7,241	15	--	--	8,003	--	--	--
1985	1,915	17	1,799	505	404	31	2,815	5,554	15	--	--	8,457	--	--	--
1990	660	18	2,768	545	503	18	2,783	6,617	0	--	--	10,034	--	--	--
1995	657	28	3,590	745	410	69	3,504	8,317	0	--	--	11,992	--	--	--
1996	675	27	4,066	667	437	80	4,371	9,621	0	--	--	12,783	--	--	--
1997	702	28	4,229	331	457	14	4,769	9,801	0	--	--	13,253	--	--	--
1998	698	28	3,620	128	473	20	6,062	10,302	0	--	--	12,549	--	--	--
1999	684	27	4,157	116	334	27	5,905	10,540	0	--	--	12,456	--	--	--
2000	720	21	4,222	167	339	23	5,493	10,243	0	--	--	11,975	--	--	--
2001	672	21	4,338	249	913	27	3,245	8,771	0	--	--	11,377	--	--	--
2002	626	17	3,750	79	911	29	4,215	8,984	0	--	--	11,026	--	--	--
2003	681	15	2,957	478	988	0	4,143	8,566	0	--	--	10,914	--	--	--
2004	738	21	3,141	436	1,202	33	5,527	10,338	0	--	--	11,906	--	--	--
2005	719	17	4,921	193	1,048	21	5,323	11,506	0	--	--	11,379	--	--	--
2006	740	18	4,542	R 292	1,220	17	4,794	R 10,866	0	--	--	12,259	--	--	--
2007	711	19	4,300	392	1,075	22	4,730	10,519	0	--	--	12,281	--	--	--
Trillion Btu															
1960	0.2	14.2	7.1	0.9	2.7	0.2	6.6	17.5	0.0	1.0	0.0	5.1	37.9	12.5	50.4
1965	0.1	59.4	9.0	0.6	2.3	0.1	8.1	20.1	0.0	1.1	0.0	11.4	92.0	27.1	119.1
1970	0.1	61.2	8.1	1.0	2.4	0.3	25.6	37.4	0.1	1.3	0.0	16.2	116.3	39.2	155.5
1975	2.6	53.4	18.1	1.6	2.3	0.6	17.6	40.3	0.1	1.9	0.0	23.4	121.9	56.4	178.2
1980	13.1	39.5	20.8	2.7	1.6	1.0	16.1	42.2	0.2	8.9	0.0	27.3	131.2	65.8	197.0
1985	38.8	17.3	10.5	1.8	2.1	0.2	18.5	33.1	0.2	10.4	0.0	28.9	128.6	66.5	195.1
1990	13.3	19.0	16.1	2.0	2.6	0.1	18.2	39.1	0.0	4.6	0.2	34.2	110.5	79.2	189.6
1995	13.1	28.8	20.9	2.7	2.1	0.4	23.0	49.1	0.0	5.0	0.2	40.9	137.2	92.9	230.1
1996	13.4	27.3	23.7	2.4	2.3	0.5	26.7	55.6	0.0	3.1	0.2	43.6	143.2	99.2	242.4
1997	13.7	28.6	24.6	1.2	2.4	0.1	29.3	57.6	0.0	3.2	0.2	45.2	148.5	102.5	250.9
1998	13.4	28.7	21.1	0.5	2.5	0.1	37.8	62.0	0.0	0.8	0.2	42.8	147.9	97.1	245.0
1999	13.2	27.5	24.2	0.4	1.7	0.2	36.7	63.3	0.0	0.8	0.2	42.5	147.5	97.2	244.7
2000	16.0	21.5	24.6	0.6	1.8	0.1	34.0	61.1	0.0	0.7	0.2	40.9	140.4	92.9	233.3
2001	14.7	21.4	25.3	0.9	4.8	0.2	20.9	52.0	0.0	1.3	0.2	38.8	128.4	86.5	214.9
2002	14.0	17.8	21.8	0.3	4.7	0.2	27.3	54.3	0.0	0.9	0.2	37.6	124.9	83.9	208.8
2003	15.2	15.3	17.2	1.7	5.1	0.0	26.8	50.9	0.0	0.9	0.2	37.2	119.8	82.2	202.0
2004	16.2	20.4	18.3	1.6	6.3	0.2	36.0	62.3	0.0	1.0	0.2	40.6	140.7	89.9	230.6
2005	15.9	17.1	28.7	0.7	5.5	0.1	34.6	69.6	0.0	1.0	0.2	38.8	142.7	84.9	227.6
2006	16.3	18.7	26.5	R 1.1	6.4	0.1	31.2	R 65.2	0.0	1.0	0.2	41.8	R 143.2	90.5	R 233.7
2007	15.3	19.9	25.0	1.4	5.6	0.1	30.8	63.0	0.0	1.1	0.2	41.9	141.3	90.4	231.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	(s)	16	699	1,404	4,721	34	193	11,759	17	18,829	0	0	--	--	--
1965	(s)	18	478	1,790	5,545	40	206	14,423	0	22,482	0	0	--	--	--
1970	(s)	24	427	3,192	6,644	63	229	20,940	0	31,494	0	0	--	--	--
1975	(s)	17	358	4,756	6,995	51	267	27,087	0	39,514	0	0	--	--	--
1980	0	21	281	6,480	7,967	78	347	30,100	0	45,253	0	0	--	--	--
1985	0	19	184	7,624	7,154	92	316	35,604	0	50,974	0	0	--	--	--
1990	0	25	194	7,936	8,501	55	355	38,566	0	55,608	0	0	--	--	--
1995	0	19	139	11,068	7,588	51	339	46,714	0	65,899	649	0	--	--	--
1996	0	18	155	12,618	7,922	35	329	48,944	0	70,003	547	0	--	--	--
1997	0	19	151	12,909	R 7,978	26	347	48,391	0	R 69,803	543	0	--	--	--
1998	0	20	191	13,805	R 8,677	7	364	52,152	0	R 75,196	419	0	--	--	--
1999	0	19	157	14,987	9,627	18	368	54,484	0	79,642	363	0	--	--	--
2000	0	21	204	14,474	10,433	23	362	56,056	0	81,551	416	0	--	--	--
2001	0	23	191	16,045	9,914	12	332	57,554	0	84,047	570	0	--	--	--
2002	0	21	183	15,237	10,344	18	328	60,279	0	86,389	325	0	--	--	--
2003	0	19	233	16,770	10,650	134	303	60,799	0	88,889	313	0	--	--	--
2004	0	17	164	18,934	8,256	122	307	64,007	0	91,789	301	0	--	--	--
2005	0	19	188	20,456	8,018	203	305	66,394	0	95,564	R 3,897	0	--	--	--
2006	0	23	177	21,703	7,721	233	298	68,043	0	98,175	R 4,116	0	--	--	--
2007	0	22	145	21,303	6,612	181	307	68,890	0	97,438	4,592	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	0.0	0.0	293.4	0.0	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	1.9	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	R 375.7	1.9	0.0	R 395.1	0.0	R 395.1
1998	0.0	20.5	1.0	80.4	49.2	(s)	2.2	271.8	0.0	404.6	1.5	0.0	R 425.2	0.0	R 425.2
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	2.0	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
2005	0.0	R 19.6	0.9	119.2	45.5	0.7	1.9	346.4	0.0	514.6	R 13.8	0.0	534.2	0.0	534.2
2006	0.0	R 22.9	0.9	126.4	43.8	0.8	1.8	355.1	0.0	528.8	R 14.6	0.0	551.7	0.0	551.7
2007	0.0	23.1	0.7	124.1	37.5	0.7	1.9	359.5	0.0	524.4	16.3	0.0	547.4	0.0	547.4

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Arizona

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	R -16	--
2004	20,060	240	7	83	0	90	28,113	6,973	--	0	4	0	78	--
2005	20,333	217	1	78	0	78	25,807	6,410	--	0	14	0	R -76	--
2006	20,506	248	1	131	0	132	24,012	6,793	--	0	13	0	-182	--
2007	21,189	280	0	85	0	85	26,782	6,598	--	0	9	0	3	--
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	0.0	0.0	0.0	0.0	(s)	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	0.4	0.0	(s)	0.0	(s)	939.2
2003	391.3	171.6	0.0	0.6	0.0	0.6	297.8	72.5	0.3	0.0	(s)	0.0	R -0.1	934.0
2004	409.2	245.0	(s)	0.5	0.0	0.5	293.1	69.9	0.4	0.0	(s)	0.0	0.3	1,018.4
2005	412.5	222.8	(s)	0.5	0.0	0.5	269.3	64.1	0.6	0.0	0.1	0.0	R -0.3	R 969.6
2006	415.7	253.2	(s)	0.8	0.0	0.8	250.5	67.4	0.5	0.0	0.1	0.0	-0.6	987.6
2007	423.2	286.3	0.0	0.5	0.0	0.5	280.9	65.2	0.2	0.0	0.1	0.0	(s)	1,056.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Arkansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	14	215	2,021	2,237	4,823	14,675	539	4,180	28,475	0	992	--	--	--	--	--
1965	6	277	2,828	2,094	5,599	17,922	453	5,437	34,332	0	1,080	--	--	--	--	--
1970	0	382	5,462	2,204	10,198	22,457	935	6,579	47,835	0	2,160	--	--	--	--	--
1975	40	258	9,566	1,995	9,467	27,611	9,086	6,852	64,577	4,874	3,433	--	--	--	--	--
1980	2,076	274	10,686	2,035	4,847	26,490	4,981	8,292	57,331	7,833	1,695	--	--	--	--	--
1985	12,682	196	12,804	2,030	3,673	26,607	735	4,576	50,424	9,889	4,434	--	--	--	--	--
1990	12,092	232	12,585	1,693	3,463	28,997	228	3,218	50,184	11,282	3,655	--	--	--	--	--
1995	13,540	253	17,007	1,179	3,229	32,121	219	3,910	57,665	11,658	3,218	--	--	--	--	--
1996	14,816	268	16,848	1,534	3,116	32,081	197	8,969	62,745	13,357	2,797	--	--	--	--	--
1997	14,068	260	17,950	1,539	3,068	33,184	48	9,561	65,351	14,208	3,516	--	--	--	--	--
1998	14,563	266	18,699	R 1,528	2,322	33,261	103	9,295	R 65,208	13,097	3,117	--	--	--	--	--
1999	15,299	253	17,781	4,575	5,973	33,698	109	9,466	71,602	12,920	2,694	--	--	--	--	--
2000	15,249	251	18,815	4,868	6,522	33,297	302	9,256	73,060	11,652	2,370	--	--	--	--	--
2001	15,547	228	20,897	1,036	6,152	33,246	1,543	7,493	70,367	14,781	2,548	--	--	--	--	--
2002	14,587	242	21,682	794	4,047	34,103	226	9,218	70,070	14,559	3,436	--	--	--	--	--
2003	14,726	247	22,044	822	3,211	34,343	570	8,643	69,633	14,689	2,655	--	--	--	--	--
2004	15,733	215	23,356	722	3,470	34,628	1,188	8,367	71,731	15,450	3,643	--	--	--	--	--
2005	14,399	214	24,418	1,251	2,705	34,498	264	7,592	70,727	13,690	3,083	--	--	--	--	--
2006	14,979	234	23,624	1,183	R 2,767	34,560	223	8,402	R 70,759	15,233	1,551	--	--	--	--	--
2007	16,027	226	24,072	1,226	2,749	34,962	139	8,062	71,209	15,486	3,237	--	--	--	--	--
Trillion Btu																
1960	0.4	222.2	11.8	12.0	19.3	77.1	3.4	25.4	148.9	0.0	10.7	37.4	0.0	7.3	0.0	426.9
1965	0.2	277.7	16.5	11.2	22.5	94.1	2.8	32.9	180.0	0.0	11.3	35.1	0.0	25.5	0.0	529.8
1970	0.0	383.5	31.8	11.9	38.5	118.0	5.9	40.3	246.3	0.0	22.7	34.3	0.0	21.9	0.0	708.7
1975	0.9	257.4	55.7	10.8	35.2	145.0	57.1	41.6	345.4	53.7	35.7	35.9	0.0	61.2	0.0	790.2
1980	36.6	274.0	62.2	11.0	17.8	139.1	31.3	49.8	311.3	85.4	17.6	52.4	0.0	94.2	(s)	871.6
1985	219.8	199.3	74.6	11.0	13.2	139.8	4.6	27.3	270.6	105.0	46.3	62.9	0.0	-106.6	0.1	797.4
1990	212.7	234.5	73.3	9.2	12.6	152.3	1.4	19.0	267.9	119.4	38.0	70.6	1.4	-88.5	0.5	856.4
1995	237.3	272.0	99.1	6.7	11.7	167.5	1.4	23.7	310.1	122.5	33.2	82.9	1.4	-32.3	0.0	1,027.1
1996	260.1	275.0	98.1	8.7	11.3	167.3	1.2	50.5	337.2	140.3	28.9	87.8	1.4	-53.1	0.0	1,077.5
1997	246.8	264.0	104.6	8.7	11.1	173.0	0.3	54.0	351.7	149.1	35.9	86.9	1.3	-40.3	0.0	1,095.4
1998	254.7	272.9	108.9	8.7	8.4	173.4	0.6	52.4	352.3	137.4	31.8	82.0	1.2	-21.5	0.0	1,110.8
1999	267.0	257.7	103.6	25.9	21.6	175.6	0.7	53.3	380.7	135.0	27.6	82.2	1.2	-18.0	0.0	1,133.3
2000	267.6	256.1	109.6	27.6	23.5	173.5	1.9	52.0	388.1	121.5	24.2	83.5	1.0	23.7	0.0	1,165.8
2001	274.0	231.6	121.7	5.9	22.2	173.2	9.7	42.7	375.4	154.4	26.3	66.8	0.9	-20.1	0.0	1,109.4
2002	255.2	253.7	126.3	4.5	14.6	177.6	1.4	54.2	378.6	152.0	35.0	72.9	0.8	-8.7	0.0	1,139.5
2003	253.7	258.5	128.4	4.7	11.7	178.8	3.6	50.1	377.3	153.1	27.2	80.4	0.7	-20.2	0.0	1,130.6
2004	270.2	224.2	136.0	4.1	12.6	180.6	7.5	47.6	388.3	161.1	36.5	75.9	0.6	R -27.8	0.0	R 1,129.0
2005	247.2	216.0	142.2	7.1	9.8	180.0	1.7	43.0	383.7	142.9	30.8	77.8	0.5	36.1	0.0	1,134.9
2006	256.9	R 241.6	137.6	6.7	10.0	180.3	1.4	48.7	R 384.7	158.9	15.4	81.1	0.5	5.6	0.0	R 1,144.7
2007	275.0	228.0	140.2	7.0	9.9	182.5	0.9	46.6	386.9	162.4	32.0	84.9	0.6	-20.4	0.0	1,149.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.

<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arkansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	0	33	24	62	2,831	2,918	969	--	--	1,339	--	--	--
1965	0	37	43	63	3,420	3,527	667	--	--	2,333	--	--	--
1970	0	60	70	147	6,552	6,769	417	--	--	4,321	--	--	--
1975	0	49	161	128	5,162	5,451	430	--	--	7,751	--	--	--
1980	1	47	152	0	2,142	2,294	102	--	--	10,227	--	--	--
1985	(s)	40	1	31	2,083	2,114	192	--	--	8,936	--	--	--
1990	(s)	39	(s)	20	1,851	1,871	158	--	--	10,558	--	--	--
1995	0	41	2	14	1,497	1,513	229	--	--	12,417	--	--	--
1996	0	46	1	12	1,490	1,503	238	--	--	12,934	--	--	--
1997	(s)	42	1	19	1,577	1,596	117	--	--	12,990	--	--	--
1998	(s)	38	1	15	1,169	1,184	104	--	--	14,339	--	--	--
1999	(s)	36	1	36	3,027	3,064	110	--	--	14,045	--	--	--
2000	0	42	1	25	2,686	2,711	118	--	--	14,871	--	--	--
2001	0	37	1	24	2,823	2,848	111	--	--	15,104	--	--	--
2002	(s)	39	9	20	2,112	2,140	113	--	--	15,527	--	--	--
2003	0	38	4	16	1,743	1,763	119	--	--	15,598	--	--	--
2004	(s)	35	6	11	1,934	1,951	122	--	--	15,619	--	--	--
2005	0	34	1	14	1,485	1,500	134	--	--	17,134	--	--	--
2006	(s)	31	3	9	R 1,462	R 1,474	122	--	--	17,065	--	--	--
2007	(s)	33	3	6	1,377	1,387	135	--	--	17,415	--	--	--
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	0.1	1.3	36.0	86.9	83.3	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	208.9
2000	0.0	43.2	(s)	0.1	9.7	9.8	2.4	0.2	0.9	50.7	107.1	115.4	222.5
2001	0.0	37.7	(s)	0.1	10.2	10.3	2.2	0.2	0.7	51.5	102.7	114.8	217.5
2002	(s)	41.2	(s)	0.1	7.6	7.8	2.3	0.2	0.6	53.0	105.0	118.1	223.1
2003	0.0	39.9	(s)	0.1	6.3	6.4	2.4	0.3	0.4	53.2	102.7	117.4	220.1
2004	(s)	36.3	(s)	0.1	7.0	7.1	2.4	0.3	0.3	53.3	99.7	117.9	217.6
2005	0.0	33.8	(s)	0.1	5.4	5.5	2.7	0.3	0.1	58.5	100.8	127.9	228.7
2006	(s)	32.6	(s)	0.1	R 5.3	R 5.3	2.4	0.4	0.1	58.2	R 99.1	125.9	R 225.0
2007	(s)	32.7	(s)	(s)	4.9	5.0	2.7	0.5	0.1	59.4	100.4	128.2	228.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

<sup>e</sup> 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 an explanation of estimation methodology.

<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



**Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arkansas**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	17	14	38	500	151	103	806	0	--	--	1,161	--	--	--
1965	0	28	24	39	604	127	88	883	0	--	--	1,834	--	--	--
1970	0	39	40	90	1,156	181	41	1,508	0	--	--	2,789	--	--	--
1975	0	33	92	79	911	143	1,077	2,302	0	--	--	4,382	--	--	--
1980	5	31	112	132	378	162	437	1,221	0	--	--	5,326	--	--	--
1985	1	27	829	84	368	119	0	1,400	0	--	--	5,848	--	--	--
1990	(s)	25	298	1	327	142	0	769	0	--	--	6,681	--	--	--
1995	0	27	301	5	264	29	0	599	0	--	--	7,771	--	--	--
1996	0	31	291	5	263	29	(s)	588	0	--	--	8,063	--	--	--
1997	(s)	29	270	5	278	28	0	582	0	--	--	8,236	--	--	--
1998	(s)	28	358	7	206	29	0	600	0	--	--	8,910	--	--	--
1999	(s)	28	260	4	534	28	0	827	0	--	--	9,064	--	--	--
2000	0	33	376	4	474	29	0	883	0	--	--	9,472	--	--	--
2001	0	32	593	9	498	30	0	1,131	0	--	--	9,894	--	--	--
2002	(s)	33	446	4	373	110	0	933	0	--	--	10,035	--	--	--
2003	0	32	722	3	308	99	0	1,132	0	--	--	10,568	--	--	--
2004	(s)	30	515	17	341	104	(s)	977	0	--	--	10,731	--	--	--
2005	0	32	714	20	262	140	0	1,137	0	--	--	11,366	--	--	--
2006	(s)	31	93	12	R 258	145	0	R 508	0	--	--	11,581	--	--	--
2007	1	32	90	9	243	123	0	465	0	--	--	11,801	--	--	--
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	0.1	0.0	18.2	55.2	43.8	99.0
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	100.4
1990	(s)	25.3	1.7	(s)	1.2	0.7	0.0	3.7	0.0	0.5	(s)	22.8	52.3	52.7	105.0
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	68.9	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	70.7	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	75.2	147.5
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	76.3	150.4
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	79.6	155.4
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	81.0	154.2
2005	0.0	31.7	4.2	0.1	0.9	0.7	0.0	6.0	0.0	0.5	0.0	38.8	R 77.0	84.8	161.8
2006	(s)	32.4	0.5	0.1	0.9	0.8	0.0	2.3	0.0	R 0.5	0.0	39.5	74.7	85.4	160.1
2007	(s)	32.2	0.5	0.1	0.9	0.6	0.0	2.1	0.0	0.5	0.0	40.3	75.0	86.9	161.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



**Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arkansas**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	14	108	1,055	1,183	431	315	3,629	6,614	0	--	--	3,161	--	--	--
1965	6	134	1,057	1,141	485	291	4,548	7,522	0	--	--	4,883	--	--	--
1970	0	162	1,962	1,798	291	191	5,750	9,992	0	--	--	6,333	--	--	--
1975	40	132	2,841	2,715	169	3,634	6,081	15,440	0	--	--	5,994	--	--	--
1980	296	126	3,544	2,122	51	1,438	7,453	14,608	0	--	--	10,946	--	--	--
1985	379	109	4,273	1,076	630	726	3,981	10,687	0	--	--	9,049	--	--	--
1990	256	127	2,424	1,202	416	214	2,630	6,886	0	--	--	10,126	--	--	--
1995	325	140	4,041	1,416	449	204	3,326	9,436	0	--	--	14,483	--	--	--
1996	348	144	3,393	1,317	454	116	8,420	13,700	0	--	--	15,139	--	--	--
1997	296	152	3,997	1,171	472	21	8,969	14,630	0	--	--	15,632	--	--	--
1998	287	149	3,816	915	648	3	8,698	14,079	0	--	--	16,066	--	--	--
1999	324	140	3,528	1,955	549	17	8,851	14,899	0	--	--	16,680	--	--	--
2000	382	132	4,026	3,269	550	9	8,682	16,536	0	--	--	17,268	--	--	--
2001	437	124	4,589	2,741	936	203	6,864	15,332	0	--	--	16,734	--	--	--
2002	422	120	4,347	1,507	999	46	8,668	15,567	0	--	--	16,887	--	--	--
2003	417	112	5,173	1,113	1,071	188	8,143	15,688	0	--	--	16,942	--	--	--
2004	415	102	5,583	1,143	1,257	446	7,830	16,259	0	--	--	17,322	--	--	--
2005	368	91	6,890	875	1,218	33	7,110	16,128	0	--	--	17,665	--	--	--
2006	365	89	6,952	R 966	1,336	4	7,900	R 17,159	0	--	--	17,990	--	--	--
2007	396	88	7,091	1,069	950	69	7,554	16,734	0	--	--	17,839	--	--	--
Trillion Btu															
1960	0.4	112.1	6.1	4.7	2.3	2.0	22.2	37.4	0.0	17.7	0.0	10.8	178.3	26.7	205.0
1965	0.2	134.2	6.2	4.6	2.5	1.8	28.0	43.1	0.0	21.6	0.0	16.7	215.7	39.8	255.5
1970	0.0	162.8	11.4	6.8	1.5	1.2	35.6	56.6	0.0	25.8	0.0	21.6	266.7	52.3	319.0
1975	0.9	131.7	16.5	10.1	0.9	22.8	37.2	87.6	0.0	27.1	0.0	20.5	267.7	49.2	316.9
1980	6.3	125.1	20.6	7.8	0.3	9.0	45.0	82.8	0.0	50.3	0.0	37.3	301.9	90.0	391.9
1985	8.1	110.9	24.9	3.9	3.3	4.6	23.8	60.5	0.0	58.9	0.0	30.9	269.3	71.1	340.4
1990	5.8	128.3	14.1	4.4	2.2	1.3	15.6	37.6	0.0	66.9	0.0	34.6	273.2	79.9	353.1
1995	7.8	151.8	23.5	5.1	2.3	1.3	20.4	52.6	0.0	77.5	0.0	49.4	339.2	112.2	451.4
1996	8.4	148.0	19.8	4.8	2.4	0.7	47.3	74.9	0.0	82.2	0.0	51.7	365.1	117.5	482.6
1997	7.0	153.9	23.3	4.2	2.5	0.1	50.6	80.7	0.0	84.0	0.0	53.3	378.9	120.8	499.7
1998	7.0	153.1	22.2	3.3	3.4	(s)	48.9	77.8	0.0	79.4	0.0	54.8	372.1	124.3	496.4
1999	7.9	142.1	20.6	7.1	2.9	0.1	49.7	80.2	0.0	79.4	0.0	56.9	366.6	130.2	496.8
2000	9.6	134.8	23.4	11.8	2.9	0.1	48.6	86.8	0.0	80.6	0.0	58.9	370.8	134.0	504.8
2001	10.9	125.5	26.7	9.9	4.9	1.3	39.0	81.8	0.0	64.0	0.0	57.1	339.3	127.2	466.5
2002	10.5	126.3	25.3	5.4	5.2	0.3	50.9	87.2	0.0	70.1	0.0	57.6	351.7	128.4	480.1
2003	10.1	R 118.1	30.1	4.0	5.6	1.2	47.2	88.1	0.0	70.3	0.0	57.8	344.5	127.6	472.1
2004	10.1	R 107.0	32.5	4.1	6.6	2.8	44.5	90.5	0.0	70.5	0.0	59.1	R 337.2	130.8	468.0
2005	9.3	R 91.1	40.1	3.2	6.4	0.2	40.1	90.0	0.0	72.5	0.0	60.3	323.1	131.8	454.9
2006	9.1	R 92.5	40.5	R 3.5	7.0	(s)	45.7	96.7	0.0	77.4	0.0	61.4	R 337.2	132.7	R 469.9
2007	9.8	87.7	41.3	3.8	5.0	0.4	43.6	94.1	0.0	79.9	0.0	60.9	332.4	131.3	463.7

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.  
<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
 kWh = Kilowatthours. -- = Not applicable.  
 Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.  
 Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.  
 Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."  
 Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

**Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Arkansas**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	(s)	9	177	926	2,237	309	274	14,093	3	18,019	0	0	--	--	--
1965	(s)	11	482	1,703	2,094	434	305	17,310	36	22,364	0	0	--	--	--
1970	0	13	293	3,383	2,204	692	300	21,985	5	28,862	0	0	--	--	--
1975	(s)	12	254	6,410	1,995	679	308	27,299	11	36,957	0	0	--	--	--
1980	0	11	275	6,699	2,035	205	432	26,276	0	35,922	0	0	--	--	--
1985	0	8	86	7,690	2,030	147	393	25,857	0	36,203	18	0	--	--	--
1990	0	9	125	9,722	1,693	83	442	28,438	0	40,503	144	0	--	--	--
1995	0	11	143	12,569	1,179	51	422	31,644	0	46,008	9	0	--	--	--
1996	0	13	121	13,066	1,534	45	410	31,599	0	46,775	1	0	--	--	--
1997	0	12	135	13,582	1,539	42	433	32,684	0	R 48,415	0	0	--	--	--
1998	0	10	122	14,345	R 1,528	33	453	32,585	0	R 49,066	0	0	--	--	--
1999	0	9	118	13,824	4,575	457	458	33,120	0	52,552	0	0	--	--	--
2000	0	9	93	14,346	4,868	93	451	32,719	0	52,570	0	0	--	--	--
2001	0	9	183	15,633	1,036	89	413	32,280	0	49,634	0	0	--	--	--
2002	0	8	118	16,811	794	54	408	32,995	0	51,180	0	0	--	--	--
2003	0	9	103	16,075	822	47	377	33,173	0	50,597	0	0	--	--	--
2004	0	8	127	17,189	722	51	382	33,267	0	51,739	0	(s)	--	--	--
2005	0	9	67	16,739	1,251	83	380	33,139	1	51,661	R 27	(s)	--	--	--
2006	0	11	111	16,529	1,183	81	371	33,079	0	51,352	R 25	(s)	--	--	--
2007	0	10	110	16,825	1,226	59	383	33,889	0	52,491	80	(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	0.1	0.0	203.4	0.0	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	8.3	0.6	100.1	4.1	0.2	2.3	173.5	0.0	280.9	0.0	(s)	289.2	(s)	289.2
2005	0.0	9.0	0.3	97.5	7.1	0.3	2.3	172.9	(s)	280.5	R 0.1	(s)	289.5	(s)	289.5
2006	0.0	11.0	0.6	96.3	6.7	0.3	2.2	172.6	0.0	278.7	R 0.1	(s)	289.7	(s)	289.7
2007	0.0	10.2	0.6	98.0	7.0	0.2	2.3	176.9	0.0	284.9	0.3	(s)	295.2	(s)	295.2

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Arkansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--	0	0	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	--
2005	14,031	49	230	72	0	302	13,690	3,083	--	0	0	0	0	--
2006	14,614	71	219	48	0	267	15,233	1,551	--	0	0	0	0	--
2007	15,629	64	70	63	0	133	15,486	3,237	--	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	0.0	0.0	0.0	0.0	0.0	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	R 506.5
2005	237.9	50.4	1.4	0.4	0.0	1.9	142.9	30.8	2.1	0.0	0.0	0.0	0.0	465.9
2006	247.8	73.0	1.4	0.3	0.0	1.7	158.9	15.4	0.8	0.0	0.0	0.0	0.0	497.6
2007	265.2	65.2	0.4	0.4	0.0	0.8	162.4	32.0	1.7	0.0	0.0	0.0	0.0	527.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.

<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.

<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>g</sup> Solar thermal and photovoltaic energy.

<sup>h</sup> Electricity traded with Canada and Mexico.

<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	1,342	1,258	26,683	25,818	8,888	137,025	80,575	46,536	325,526	(s)	17,445	--	--	--	--	--
1965	2,379	1,690	35,105	40,150	11,029	169,900	69,745	49,197	375,126	270	30,523	--	--	--	--	--
1970	2,327	2,126	39,221	59,614	15,532	214,064	70,324	55,062	453,818	3,132	38,082	--	--	--	--	--
1975	2,151	1,833	42,335	62,607	19,264	241,508	111,086	59,924	536,724	6,071	40,103	--	--	--	--	--
1980	2,669	1,808	62,277	63,201	19,197	253,593	148,701	75,195	622,165	4,920	40,780	--	--	--	--	--
1985	1,942	1,846	71,538	67,028	20,497	267,368	66,724	75,749	568,904	19,729	31,717	--	--	--	--	--
1990	3,809	2,036	77,233	94,907	19,992	305,983	64,095	78,125	640,335	32,693	23,793	--	--	--	--	--
1995	3,675	2,077	73,050	<sup>R</sup> 95,304	14,798	313,464	46,248	66,550	609,415	30,246	48,033	--	--	--	--	--
1996	3,444	1,955	73,677	103,773	10,914	318,257	40,283	71,219	618,122	34,097	44,751	--	--	--	--	--
1997	3,628	2,146	79,624	<sup>R</sup> 103,188	8,854	322,871	21,420	68,918	<sup>R</sup> 604,874	30,512	41,055	--	--	--	--	--
1998	2,903	2,310	78,526	<sup>R</sup> 105,482	10,936	329,943	17,194	67,773	<sup>R</sup> 609,854	34,594	49,548	--	--	--	--	--
1999	3,005	2,340	82,748	98,673	12,171	337,791	23,794	73,346	628,524	33,372	40,737	--	--	--	--	--
2000	2,954	2,509	93,456	103,001	12,558	342,890	33,734	68,472	654,112	35,176	38,334	--	--	--	--	--
2001	2,834	2,465	97,376	97,216	11,060	351,981	25,470	78,628	661,731	33,220	25,542	--	--	--	--	--
2002	2,943	2,273	89,580	102,756	14,696	369,567	30,768	78,424	<sup>R</sup> 685,790	34,352	31,141	--	--	--	--	--
2003	2,866	2,269	121,454	99,721	14,689	367,675	23,421	74,277	<sup>R</sup> 701,238	35,594	36,371	--	--	--	--	--
2004	2,847	2,407	94,023	105,408	14,831	376,075	27,786	75,015	693,138	30,268	34,141	--	--	--	--	--
2005	2,849	2,248	96,902	104,612	12,375	381,301	33,939	76,128	705,257	36,155	39,632	--	--	--	--	--
2006	2,771	<sup>R</sup> 2,316	99,305	106,403	<sup>R</sup> 12,090	383,178	37,731	75,410	<sup>R</sup> 714,117	31,959	48,047	--	--	--	--	--
2007	2,774	2,395	99,024	110,794	11,505	380,780	39,680	76,481	718,263	35,792	27,328	--	--	--	--	--
Trillion Btu																
1960	35.9	1,301.8	155.4	140.7	35.7	719.8	506.6	280.6	1,838.7	(s)	187.7	82.1	0.8	6.1	-1.4	3,451.7
1965	63.7	1,813.2	204.5	222.2	44.2	892.5	438.5	296.3	2,098.2	3.2	319.1	97.5	4.2	-4.7	(s)	4,394.3
1970	61.8	2,241.3	228.5	332.9	58.7	1,124.5	442.1	331.5	2,518.2	34.4	399.6	116.8	11.3	131.8	(s)	5,515.3
1975	56.4	1,937.3	246.6	350.7	71.6	1,268.6	698.4	361.4	2,997.3	66.9	417.3	127.5	70.2	383.9	0.0	6,056.7
1980	66.2	1,890.9	362.8	354.2	70.5	1,332.1	934.9	455.0	3,509.6	53.7	423.6	115.6	109.8	407.7	0.3	6,577.3
1985	45.3	1,925.5	416.7	375.8	73.8	1,404.5	419.5	458.2	3,148.5	209.6	331.3	165.3	195.7	595.9	15.4	6,632.5
1990	84.2	2,101.6	449.9	534.7	72.5	1,607.3	403.0	471.0	3,538.3	346.0	247.5	218.4	358.3	647.0	19.8	7,561.0
1995	84.3	2,110.0	425.5	540.4	53.6	1,634.7	290.8	403.2	3,348.2	317.8	495.3	172.9	298.9	550.5	5.9	7,383.8
1996	80.3	2,017.7	429.2	588.4	39.4	1,660.0	253.3	431.9	3,402.1	358.1	462.7	167.6	318.4	670.7	4.2	7,481.8
1997	82.7	2,185.0	463.8	<sup>R</sup> 585.1	32.0	1,683.1	134.7	417.7	<sup>R</sup> 3,316.4	320.2	419.3	151.2	326.2	785.4	4.5	<sup>R</sup> 7,590.9
1998	66.2	2,418.7	457.4	<sup>R</sup> 598.1	39.5	1,719.7	108.1	414.2	<sup>R</sup> 3,337.0	362.9	505.2	141.1	325.3	696.4	-2.1	<sup>R</sup> 7,850.6
1999	69.5	2,379.6	482.0	559.5	44.0	1,760.2	149.6	449.9	3,445.2	348.7	416.6	151.5	333.4	705.0	0.6	7,850.1
2000	70.0	2,456.4	544.4	584.0	45.3	1,786.5	212.1	421.7	3,593.9	366.8	391.0	159.2	320.0	629.4	11.5	7,998.4
2001	67.8	2,513.9	567.2	551.2	40.0	1,833.8	160.1	478.4	3,630.7	347.1	263.9	<sup>R</sup> 156.1	317.8	698.3	10.4	8,006.1
2002	70.0	2,268.6	521.8	582.6	53.1	1,924.7	193.4	476.3	3,752.0	358.6	316.8	162.1	338.6	722.5	6.4	7,995.6
2003	69.5	2,319.3	707.5	565.4	53.3	1,914.5	147.2	448.6	3,836.6	370.9	372.5	<sup>R</sup> 155.3	337.1	<sup>R</sup> 745.8	14.1	8,221.1
2004	68.9	2,457.4	547.7	597.7	53.7	1,961.2	174.7	453.2	3,788.2	315.6	342.2	<sup>R</sup> 155.8	343.5	<sup>R</sup> 866.7	4.2	<sup>R</sup> 8,342.4
2005	67.4	2,297.7	564.5	593.1	44.8	1,989.6	213.4	459.5	3,864.9	377.3	396.3	<sup>R</sup> 145.6	341.3	<sup>R</sup> 823.1	18.9	<sup>R</sup> 8,332.4
2006	67.0	<sup>R</sup> 2,355.1	578.5	603.3	<sup>R</sup> 43.6	1,999.4	237.2	454.9	<sup>R</sup> 3,916.9	333.5	476.6	<sup>R</sup> 146.1	344.3	781.1	8.1	<sup>R</sup> 8,428.7
2007	66.4	2,440.4	576.8	628.2	41.3	1,987.3	249.5	463.2	3,946.3	375.4	270.1	145.5	357.5	871.2	18.8	8,491.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	4	365	485	15	3,778	4,277	1,263	--	--	14,975	--	--	--
1965	6	489	427	31	5,095	5,553	1,083	--	--	23,800	--	--	--
1970	61	553	500	166	5,167	5,833	1,209	--	--	35,777	--	--	--
1975	0	631	493	211	2,708	3,412	1,374	--	--	44,257	--	--	--
1980	1	529	94	18	4,919	5,032	2,649	--	--	52,011	--	--	--
1985	12	527	144	73	5,350	5,567	4,577	--	--	57,501	--	--	--
1990	5	515	202	88	5,750	6,040	3,659	--	--	66,575	--	--	--
1995	17	477	175	81	4,884	5,140	2,832	--	--	68,783	--	--	--
1996	21	473	148	103	4,079	4,331	2,941	--	--	71,396	--	--	--
1997	12	479	159	135	3,686	3,979	1,883	--	--	73,086	--	--	--
1998	13	550	169	237	6,092	6,498	1,674	--	--	75,205	--	--	--
1999	3	568	171	187	5,711	6,069	1,762	--	--	75,303	--	--	--
2000	3	517	241	281	5,328	5,850	1,894	--	--	79,241	--	--	--
2001	(s)	513	293	350	3,657	4,301	1,777	--	--	76,668	--	--	--
2002	(s)	511	147	216	4,256	4,619	1,804	--	--	77,202	--	--	--
2003	(s)	498	117	196	6,386	6,699	1,899	--	--	82,926	--	--	--
2004	1	512	142	276	8,120	8,539	1,947	--	--	83,361	--	--	--
2005	2	484	156	304	8,313	8,773	R 1,294	--	--	85,610	--	--	--
2006	(s)	492	153	287	R 6,989	R 7,429	R 1,178	--	--	89,836	--	--	--
2007	0	492	96	152	7,507	7,756	1,299	--	--	89,158	--	--	--
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	427.7	1,229.3
1985	0.3	547.8	0.8	0.4	19.3	20.5	91.5	0.0	0.0	196.2	856.3	451.9	1,308.2
1990	0.1	531.0	1.2	0.5	20.8	22.5	73.2	0.2	18.4	227.2	872.5	525.3	1,397.8
1995	0.4	482.7	1.0	0.5	17.7	19.2	56.6	0.2	20.5	234.7	814.3	533.0	1,347.3
1996	0.5	489.5	0.9	0.6	14.7	16.2	58.8	0.2	20.4	243.6	829.3	554.0	1,383.2
1997	0.3	487.1	0.9	0.8	13.3	15.0	37.7	0.2	20.1	249.4	809.7	565.0	1,374.7
1998	0.3	580.9	1.0	1.3	22.0	24.3	33.5	0.2	19.7	256.6	915.6	581.9	1,497.5
1999	0.1	576.9	1.0	1.1	20.7	22.7	35.2	0.1	19.2	256.9	911.2	587.7	1,498.9
2000	0.1	494.2	1.4	1.6	19.2	22.2	37.9	0.2	18.4	270.4	843.2	615.0	1,458.2
2001	(s)	520.6	1.7	2.0	13.2	16.9	35.6	0.2	17.8	261.6	852.7	582.9	1,435.6
2002	(s)	504.3	0.9	1.2	15.4	17.5	36.1	0.2	17.3	263.4	838.7	587.2	1,425.9
2003	(s)	508.6	0.7	1.1	23.2	25.0	38.0	0.2	17.1	282.9	871.7	624.4	1,496.1
2004	(s)	R 520.8	0.8	1.6	29.4	31.8	38.9	0.2	17.2	284.4	R 893.3	629.3	1,522.7
2005	(s)	492.8	0.9	1.7	30.1	32.7	R 25.9	0.2	17.4	292.1	R 861.1	638.9	R 1,500.0
2006	(s)	R 496.4	0.9	1.6	R 25.2	R 27.7	R 23.6	0.2	19.3	306.5	R 873.7	662.8	R 1,536.5
2007	0.0	498.5	0.6	0.9	27.0	28.4	26.0	0.2	21.6	304.2	878.8	656.4	1,535.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet							Thousand Barrels							
1960	3	109	637	46	667	1,406	7,284	10,040	0	--	--	22,039	--	--	--	
1965	5	164	560	95	899	1,309	6,200	9,064	0	--	--	29,917	--	--	--	
1970	48	210	657	510	912	1,482	8,631	12,192	0	--	--	40,634	--	--	--	
1975	0	240	647	650	478	1,622	4,377	7,774	0	--	--	57,846	--	--	--	
1980	3	258	3,225	222	868	1,795	6,811	12,921	0	--	--	63,465	--	--	--	
1985	41	205	3,416	353	944	1,759	35	6,507	0	--	--	73,592	--	--	--	
1990	20	285	4,094	19	1,015	1,928	882	7,937	7	--	--	88,311	--	--	--	
1995	116	279	3,164	27	862	236	4	4,292	4	--	--	86,032	--	--	--	
1996	156	235	2,559	69	720	231	12	3,591	11	--	--	88,605	--	--	--	
1997	97	254	2,487	41	650	233	2	3,414	5	--	--	92,299	--	--	--	
1998	103	282	2,657	63	1,075	250	59	4,104	12	--	--	99,067	--	--	--	
1999	24	245	2,745	29	1,008	236	0	4,018	11	--	--	95,771	--	--	--	
2000	21	246	3,104	52	940	237	1	4,335	8	--	--	99,900	--	--	--	
2001	(s)	246	2,838	63	645	246	27	3,820	0	--	--	107,390	--	--	--	
2002	(s)	238	2,190	27	751	253	0	3,222	0	--	--	108,972	--	--	--	
2003	(s)	233	1,743	47	1,127	262	0	3,179	1	--	--	109,578	--	--	--	
2004	8	232	1,663	72	1,433	271	0	3,439	(s)	--	--	118,953	--	--	--	
2005	18	233	1,968	59	1,467	274	0	3,768	5	--	--	117,551	--	--	--	
2006	1	244	1,481	54	R 1,233	285	0	R 3,053	7	--	--	121,255	--	--	--	
2007	0	251	1,834	31	1,325	280	0	3,469	13	--	--	123,690	--	--	--	
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	521.9	1,084.8	
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	502.0	578.3	1,080.2	
1990	0.5	294.2	23.8	0.1	3.7	10.1	5.5	43.3	0.1	8.4	0.3	301.3	648.1	696.8	1,344.9	
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	666.6	1,279.5	
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	687.5	1,267.6	
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	713.5	1,317.6	
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	766.6	1,435.9	
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	747.4	1,353.7	
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	775.3	1,386.8	
2001	(s)	249.6	16.5	0.4	2.3	1.3	0.2	20.7	0.0	9.1	0.6	366.4	646.4	816.5	R 1,462.9	
2002	(s)	235.2	12.8	0.2	2.7	1.3	0.0	16.9	0.0	9.9	0.7	371.8	634.5	828.8	1,463.3	
2003	(s)	237.9	10.2	0.3	4.1	1.4	0.0	15.9	(s)	10.9	0.7	373.9	639.2	825.0	1,464.3	
2004	0.2	235.6	9.7	0.4	5.2	1.4	0.0	16.7	(s)	11.0	0.7	405.9	670.0	898.0	1,568.0	
2005	0.4	237.5	11.5	0.3	5.3	1.4	0.0	18.5	0.1	R 9.6	0.7	401.1	667.9	877.3	R 1,545.1	
2006	(s)	246.7	8.6	0.3	R 4.4	1.5	0.0	14.9	0.1	R 10.4	0.7	413.7	686.5	894.6	R 1,581.1	
2007	0.0	254.0	10.7	0.2	4.8	1.5	0.0	17.1	0.1	9.4	0.6	422.0	703.3	910.6	1,613.9	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	1,313	451	10,127	4,231	2,851	10,750	38,766	66,725	(s)	--	20,190	--	--	--
1965	2,361	529	13,002	4,826	2,245	11,846	42,957	74,876	(s)	--	28,904	--	--	--
1970	2,215	711	8,510	9,147	1,942	12,121	49,746	81,466	(s)	--	42,169	--	--	--
1975	2,151	666	10,519	15,688	1,338	8,308	55,037	90,890	0	--	46,053	--	--	--
1980	2,665	486	15,576	12,887	1,698	12,554	71,866	114,581	0	--	51,888	--	--	--
1985	1,889	433	17,779	12,977	3,065	18,732	71,418	123,971	0	--	52,972	--	--	--
1990	2,874	588	17,076	12,304	3,163	1,838	73,223	107,604	0	--	55,892	--	--	--
1995	2,485	698	11,664	8,489	2,849	1,467	60,284	84,752	0	--	57,367	--	--	--
1996	2,414	702	11,865	5,634	2,741	304	64,721	85,265	0	--	57,683	--	--	--
1997	2,697	794	14,035	4,169	2,910	102	62,361	83,577	0	--	62,017	--	--	--
1998	1,885	819	12,849	3,100	3,263	31	60,548	79,791	0	--	61,641	--	--	--
1999	2,034	792	14,766	5,068	1,922	570	66,301	88,627	0	--	63,217	--	--	--
2000	1,992	841	18,686	5,948	1,971	108	61,170	87,884	0	--	64,311	--	--	--
2001	1,937	719	21,700	6,367	4,533	333	71,799	104,733	0	--	63,041	--	--	--
2002	1,973	785	14,644	9,188	4,821	194	71,580	100,426	0	--	48,448	--	--	--
2003	1,976	821	10,432	6,703	5,009	53	67,353	89,550	0	--	49,909	--	--	--
2004	1,914	876	14,218	4,799	5,720	14	68,158	92,910	0	--	48,812	--	--	--
2005	1,956	822	13,230	1,752	5,375	11	68,905	89,273	0	--	50,242	--	--	--
2006	1,870	R 792	13,861	R 3,000	5,503	102	68,645	R 91,111	0	--	50,991	--	--	--
2007	1,813	798	11,461	1,913	4,448	11	69,815	87,646	0	--	50,538	--	--	--
Trillion Btu														
1960	35.2	466.3	59.0	17.0	15.0	67.6	238.9	397.5	(s)	56.3	0.0	68.9	1,024.2	1,194.6
1965	63.2	567.4	75.7	19.4	11.8	74.5	261.9	443.3	(s)	74.8	0.0	98.6	1,247.3	1,482.8
1970	59.3	749.1	49.6	34.6	10.2	76.2	301.8	472.3	(s)	91.7	0.0	143.9	1,516.4	1,864.6
1975	56.4	703.6	61.3	58.3	7.0	52.2	333.7	512.5	0.0	99.3	0.0	157.1	1,529.0	1,906.9
1980	66.1	507.4	90.7	47.3	8.9	78.9	435.2	661.2	0.0	61.1	0.0	177.0	1,472.7	1,899.5
1985	44.0	449.5	103.6	46.8	16.1	117.8	433.5	717.6	0.0	71.6	0.0	180.7	1,463.5	1,879.8
1990	64.7	606.7	99.5	44.6	16.6	11.6	442.5	614.7	0.0	65.3	0.6	190.7	1,542.9	1,983.8
1995	57.9	705.4	67.9	30.8	14.9	9.2	366.2	489.0	0.0	42.3	1.4	195.7	1,491.7	1,936.2
1996	56.2	726.4	69.1	20.4	14.3	1.9	393.4	499.1	0.0	35.6	1.4	196.8	1,515.4	1,963.0
1997	62.2	807.3	81.8	15.1	15.2	0.6	378.9	491.6	0.0	42.1	1.6	211.6	1,616.3	2,095.7
1998	43.3	864.8	74.8	11.2	17.0	0.2	371.3	474.5	0.0	34.7	1.6	210.3	1,629.2	2,106.2
1999	46.8	803.6	86.0	18.3	10.0	3.6	408.2	526.1	0.0	37.6	1.2	215.7	1,631.1	2,124.4
2000	47.4	803.8	108.8	21.5	10.3	0.7	378.4	519.7	0.0	41.1	1.3	219.4	1,632.8	2,131.9
2001	46.7	730.3	126.4	23.0	23.6	2.1	437.8	612.9	0.0	50.9	1.4	215.1	1,657.2	2,136.6
2002	47.1	774.6	85.3	33.2	25.1	1.2	435.6	580.5	0.0	34.9	1.4	165.3	1,603.8	1,972.3
2003	47.7	838.7	60.8	24.3	26.1	0.3	407.5	519.0	0.0	33.8	1.0	170.3	1,610.5	1,986.3
2004	46.2	891.0	82.8	17.4	29.8	0.1	412.5	542.6	0.0	34.0	1.1	166.5	1,681.4	2,049.9
2005	46.3	837.6	77.1	6.3	28.0	0.1	416.5	528.0	0.0	37.0	1.3	171.4	1,621.6	1,996.5
2006	45.1	R 799.1	80.7	R 10.8	28.7	0.6	414.7	R 535.6	0.0	R 37.3	1.3	174.0	R 1,592.3	R 1,968.5
2007	43.0	807.9	66.8	6.9	23.2	0.1	423.4	520.3	0.0	38.6	1.4	172.4	1,583.7	1,955.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	23	11	5,383	15,313	25,818	214	2,327	132,768	38,610	220,432	0	66	--	--	--
1965	8	16	3,342	21,032	40,150	208	2,772	166,346	35,109	268,960	0	66	--	--	--
1970	4	17	2,184	29,448	59,614	305	2,457	210,641	27,982	332,632	0	65	--	--	--
1975	(s)	20	1,640	30,528	62,509	390	2,386	238,548	20,056	356,057	0	265	--	--	--
1980	0	15	285	41,801	62,224	522	2,804	250,100	66,673	424,409	0	203	--	--	--
1985	0	14	1,354	49,892	67,028	1,225	2,552	262,544	43,340	427,934	421	266	--	--	--
1990	0	20	1,106	55,598	94,907	923	2,871	300,893	54,206	510,503	1,114	315	--	--	--
1995	0	20	807	57,940	R 95,304	564	2,739	310,379	44,043	R 511,776	2,499	423	--	--	--
1996	0	19	769	58,960	103,773	481	2,658	315,285	38,983	520,908	2,108	429	--	--	--
1997	0	24	836	62,659	R 103,188	349	2,808	319,727	21,272	R 510,840	2,113	478	--	--	--
1998	0	10	574	62,554	R 105,482	670	2,940	326,430	17,094	R 515,744	1,593	521	--	--	--
1999	0	11	825	64,787	98,673	384	2,971	335,633	23,223	526,496	1,386	540	--	--	--
2000	0	12	723	70,525	103,001	341	2,926	340,681	33,540	551,739	1,579	606	--	--	--
2001	0	14	536	71,172	97,216	390	2,681	347,202	24,617	543,814	2,175	660	--	--	--
2002	0	12	599	72,375	102,756	501	2,649	364,493	30,534	573,906	2,551	591	--	--	--
2003	0	12	601	108,907	99,721	472	2,449	362,405	23,358	597,914	14,204	809	--	--	--
2004	0	17	553	77,767	105,408	478	2,481	370,084	27,772	584,543	20,482	900	--	--	--
2005	0	20	530	81,307	104,612	842	2,468	375,652	33,924	599,335	R 22,432	846	--	--	--
2006	0	17	461	83,608	106,403	868	2,405	377,390	37,614	608,749	R 22,157	877	--	--	--
2007	0	19	443	85,465	110,794	760	2,483	376,053	39,652	615,649	23,298	848	--	--	--
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	1.5	0.9	2,362.2	2.1	2,364.2
1990	0.0	20.8	5.6	323.9	534.7	3.3	17.4	1,580.6	340.8	2,806.2	3.9	1.1	2,832.0	2.5	2,834.5
1995	0.0	20.0	4.1	337.5	540.4	2.0	16.6	1,618.6	276.9	2,796.1	8.8	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	R 585.1	1.3	17.0	1,666.7	133.7	R 2,773.1	7.5	1.6	R 2,799.1	3.7	R 2,802.8
1998	0.0	10.9	2.9	364.4	R 598.1	2.4	17.8	1,701.4	107.5	R 2,794.4	5.6	1.8	R 2,807.1	4.0	R 2,811.1
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	13.8	2.7	414.6	551.2	1.4	16.3	1,808.9	154.8	2,949.9	7.7	2.3	2,965.9	5.0	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	9.0	2.0	3,129.6	4.5	3,134.1
2003	0.0	12.3	3.0	634.4	565.4	1.7	14.9	1,887.0	146.9	3,253.3	50.3	2.8	3,268.4	6.1	3,274.5
2004	0.0	17.1	2.8	453.0	597.7	1.7	15.0	1,930.0	174.6	3,174.8	72.5	3.1	3,195.0	6.8	3,201.8
2005	0.0	R 20.6	2.7	473.6	593.1	3.0	15.0	1,960.2	213.3	3,260.9	R 79.4	2.9	3,284.3	6.3	3,290.7
2006	0.0	R 17.1	2.3	487.0	603.3	3.1	14.6	1,969.2	236.5	3,316.1	R 78.4	3.0	R 3,336.1	6.5	R 3,342.6
2007	0.0	19.7	2.2	497.8	628.2	2.7	15.1	1,962.6	249.3	3,358.0	82.5	2.9	3,380.5	6.2	3,386.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, California

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	14,521	367	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	R 4,126	--
2004	924	771	0	233	3,474	3,707	30,268	34,141	--	13,105	571	4,306	1,243	--
2005	873	689	4	241	3,863	4,108	36,155	39,626	--	13,023	537	4,262	R 5,527	--
2006	899	771	15	201	3,558	3,775	31,959	48,040	--	12,821	495	4,883	2,372	--
2007	961	834	17	169	3,557	3,742	35,792	27,314	--	12,991	557	5,585	5,505	--
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	71.5	306.3	3.8	28.7	15.8	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	999.5	3.1	8.0	19.3	30.4	347.1	263.9	60.7	256.0	5.6	36.2	10.4	2,030.9
2002	22.9	742.3	0.2	1.3	20.2	21.7	358.6	316.8	81.2	274.8	5.6	38.7	6.4	1,869.0
2003	21.7	721.8	0.1	1.5	21.9	23.4	370.9	372.5	72.6	272.8	5.5	39.9	R 14.1	R 1,915.3
2004	22.5	792.9	0.0	1.4	20.9	22.3	315.6	342.2	71.9	275.4	5.7	43.2	4.2	1,895.9
2005	20.7	709.3	(s)	1.4	23.3	24.7	377.3	396.2	73.1	273.7	5.4	42.6	R 18.9	R 1,941.8
2006	21.9	795.8	0.1	1.2	21.4	22.7	333.5	476.5	74.9	269.5	4.9	48.4	8.1	2,056.2
2007	23.4	860.4	0.1	1.0	21.4	22.5	375.4	270.0	71.5	273.0	5.5	55.2	18.8	1,975.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Colorado

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	2,940	188	4,194	480	3,153	16,461	1,883	4,072	30,242	0	970	--	--	--	--	--
1965	4,204	224	3,925	3,426	3,339	19,321	2,056	4,994	37,061	0	938	--	--	--	--	--
1970	5,101	282	5,212	7,476	4,710	26,103	1,507	5,984	50,991	0	1,236	--	--	--	--	--
1975	7,603	308	8,846	7,151	5,053	31,916	3,388	4,354	60,709	0	1,507	--	--	--	--	--
1980	11,981	256	11,228	4,725	3,870	34,282	1,814	5,429	61,348	667	1,717	--	--	--	--	--
1985	15,241	219	9,149	7,861	2,324	35,742	194	5,135	60,404	-32	2,357	--	--	--	--	--
1990	17,102	247	10,116	6,109	3,045	35,562	13	5,481	60,326	0	1,420	--	--	--	--	--
1995	17,330	290	12,183	7,428	3,936	41,357	8	5,981	70,893	0	2,131	--	--	--	--	--
1996	17,586	315	12,483	7,765	3,897	43,028	20	6,626	73,818	0	1,820	--	--	--	--	--
1997	18,297	315	11,863	R 7,177	1,954	43,744	3	5,342	R 70,083	0	2,032	--	--	--	--	--
1998	18,429	330	14,517	R 6,798	1,413	44,841	3	7,408	R 74,981	0	1,462	--	--	--	--	--
1999	18,573	333	15,025	7,800	2,973	47,069	3	4,907	77,778	0	1,562	--	--	--	--	--
2000	19,652	368	15,566	7,582	6,484	47,424	7	6,413	83,476	0	1,454	--	--	--	--	--
2001	20,367	464	17,436	7,718	6,509	49,636	5	5,581	86,885	0	1,495	--	--	--	--	--
2002	19,877	459	17,412	7,131	5,597	49,151	0	3,997	83,287	0	1,209	--	--	--	--	--
2003	20,153	436	17,664	5,652	6,965	48,708	0	7,752	86,741	0	1,262	--	--	--	--	--
2004	19,766	440	16,614	12,354	7,169	50,824	1	6,737	93,698	0	1,195	--	--	--	--	--
2005	19,445	470	17,562	12,320	5,707	51,312	0	5,684	92,584	0	1,415	--	--	--	--	--
2006	20,059	R 451	18,962	12,987	R 6,751	51,702	29	5,701	R 96,132	0	1,791	--	--	--	--	--
2007	19,777	505	19,736	13,530	5,996	52,238	0	6,283	97,783	0	1,730	--	--	--	--	--
Trillion Btu																
1960	68.2	195.0	24.4	2.6	12.6	86.5	11.8	24.3	162.3	0.0	10.4	6.5	0.0	-17.2	0.0	425.1
1965	98.1	204.5	22.9	19.3	13.4	101.5	12.9	29.4	199.3	0.0	9.8	6.6	0.0	-8.8	0.0	509.5
1970	115.7	275.0	30.4	42.3	17.8	137.1	9.5	37.2	274.2	0.0	13.0	8.4	0.0	-7.7	0.0	678.5
1975	159.3	281.0	51.5	40.4	18.8	167.7	21.3	27.1	326.8	0.0	15.7	9.0	0.0	-6.8	0.0	785.0
1980	247.6	R 254.6	65.4	26.7	14.2	180.1	11.4	33.2	331.0	7.3	17.8	10.7	0.0	-17.4	-9.8	841.9
1985	299.1	R 218.7	53.3	44.5	8.4	187.8	1.2	32.6	327.7	-0.3	24.6	16.9	0.0	-7.8	-7.3	871.6
1990	337.4	R 247.8	58.9	34.6	11.0	186.8	0.1	34.8	326.2	0.0	14.8	10.9	0.6	-0.4	-14.6	922.5
1995	344.2	R 295.7	71.0	42.0	14.3	215.7	0.1	38.2	381.1	0.0	22.0	10.7	0.6	20.5	-7.3	1,067.6
1996	350.7	R 322.8	72.7	44.0	14.1	224.4	0.1	41.9	397.3	0.0	18.8	10.9	0.6	24.1	-7.0	1,118.4
1997	362.4	R 318.3	69.1	40.7	7.1	228.0	(s)	33.4	378.3	0.0	20.8	11.8	0.6	30.2	-6.2	R 1,116.2
1998	364.9	R 334.3	84.6	38.5	5.1	233.7	(s)	47.2	409.1	0.0	14.9	10.6	0.6	35.6	-5.4	1,164.6
1999	364.2	R 335.5	87.5	44.2	10.8	245.3	(s)	30.4	418.2	0.0	16.0	11.3	0.8	43.4	-4.6	1,184.9
2000	387.9	R 370.9	90.7	43.0	23.4	247.1	(s)	40.6	444.8	0.0	14.8	11.5	0.8	21.7	-4.8	1,247.7
2001	400.0	R 469.8	101.6	43.8	23.5	258.6	(s)	34.7	462.2	0.0	15.4	6.8	1.3	-6.7	-5.6	1,343.3
2002	390.5	R 461.7	101.4	40.4	20.2	256.0	0.0	24.4	442.5	0.0	12.3	6.4	2.2	32.6	-5.8	1,342.4
2003	394.2	R 438.4	102.9	32.0	25.3	253.6	0.0	49.3	463.1	0.0	12.9	6.6	2.3	32.6	-5.4	1,344.8
2004	390.2	R 437.7	96.8	70.0	25.9	265.0	(s)	42.5	500.3	0.0	12.0	7.3	3.0	32.6	-5.2	1,378.0
2005	386.7	R 483.5	102.3	69.9	20.7	267.7	0.0	35.4	496.0	0.0	14.2	R 13.1	8.6	R 31.8	-5.4	R 1,428.3
2006	394.3	R 466.2	110.5	73.6	R 24.3	269.8	0.2	35.5	R 513.9	0.0	17.8	R 12.0	9.5	28.0	-6.4	R 1,435.3
2007	388.5	515.9	115.0	76.7	21.5	272.6	0.0	39.5	525.4	0.0	17.1	13.2	13.7	12.5	-7.0	1,479.3

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.  
<sup>i</sup> 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.  
<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.  
kWh = Kilowatthours. -- = Not applicable.  
Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.  
Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.  
Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."  
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Colorado

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	152	52	148	50	2,097	2,294	212	--	--	1,776	--	--	--
1965	182	65	90	285	2,224	2,599	179	--	--	2,521	--	--	--
1970	129	83	168	112	3,080	3,361	195	--	--	3,859	--	--	--
1975	6	100	283	36	2,862	3,181	233	--	--	5,142	--	--	--
1980	21	90	78	23	1,670	1,772	462	--	--	6,693	--	--	--
1985	34	90	95	49	1,390	1,534	753	--	--	8,861	--	--	--
1990	12	92	27	22	1,697	1,747	366	--	--	9,787	--	--	--
1995	3	104	35	20	2,188	2,243	360	--	--	11,307	--	--	--
1996	2	111	45	21	2,100	2,165	373	--	--	11,871	--	--	--
1997	7	116	52	19	330	400	418	--	--	12,261	--	--	--
1998	2	111	19	24	171	214	372	--	--	12,652	--	--	--
1999	12	112	10	16	2,011	2,037	391	--	--	13,131	--	--	--
2000	9	116	62	29	2,821	2,912	421	--	--	14,029	--	--	--
2001	32	124	56	18	2,639	2,713	236	--	--	14,470	--	--	--
2002	27	129	25	9	2,683	2,716	239	--	--	15,425	--	--	--
2003	36	124	11	35	3,875	3,921	252	--	--	15,725	--	--	--
2004	22	121	16	45	3,380	3,441	258	--	--	15,532	--	--	--
2005	11	124	9	36	3,424	3,469	R 529	--	--	16,436	--	--	--
2006	R 6	119	9	16	R 2,590	R 2,615	R 482	--	--	16,952	--	--	--
2007	1	131	8	6	2,963	2,977	531	--	--	17,634	--	--	--
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	R 89.2	0.5	0.1	6.1	6.7	9.2	0.0	0.0	22.8	124.8	55.0	179.9
1985	0.7	R 90.1	0.6	0.3	5.0	5.8	15.1	0.0	0.0	30.2	138.0	69.6	207.6
1990	0.2	R 92.2	0.2	0.1	6.2	6.4	7.3	0.1	0.2	33.4	133.4	77.2	210.6
1995	0.1	R 105.8	0.2	0.1	7.9	8.2	7.2	0.1	0.2	38.6	157.1	87.6	244.8
1996	(s)	R 112.6	0.3	0.1	7.6	8.0	7.5	0.1	0.2	40.5	166.1	92.1	258.2
1997	0.1	R 116.6	0.3	0.1	1.2	1.6	8.4	0.1	0.2	41.8	166.2	94.8	261.0
1998	(s)	R 111.5	0.1	0.1	0.6	0.9	7.4	0.1	0.2	43.2	161.3	97.9	259.2
1999	0.3	R 111.8	0.1	0.1	7.3	7.4	7.8	0.1	0.2	44.8	170.7	102.5	273.2
2000	0.2	R 116.1	0.4	0.2	10.2	10.7	8.4	0.1	0.2	47.9	181.9	108.9	290.8
2001	0.7	R 124.2	0.3	0.1	9.5	10.0	4.7	0.1	0.2	49.4	187.6	110.0	297.6
2002	0.6	R 129.2	0.1	0.1	9.7	9.9	4.8	0.1	0.2	52.6	195.6	117.3	312.9
2003	0.8	R 124.1	0.1	0.2	14.1	14.3	5.0	0.1	0.2	53.7	196.4	118.4	314.8
2004	0.5	R 118.5	0.1	0.3	12.2	12.6	5.2	0.1	0.2	53.0	R 188.4	117.3	305.7
2005	0.2	R 127.5	0.1	0.2	12.4	12.6	R 10.6	0.1	0.2	56.1	R 205.8	122.7	R 328.4
2006	0.1	R 123.2	0.1	0.1	R 9.3	R 9.5	R 9.6	0.1	0.3	57.8	R 198.7	125.1	R 323.8
2007	(s)	133.2	(s)	(s)	10.6	10.7	10.6	0.2	0.3	60.2	213.1	129.8	342.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Colorado**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	105	28	123	66	370	135	56	750	0	--	--	1,772	--	--	--	
1965	137	39	75	376	393	186	49	1,078	0	--	--	2,842	--	--	--	
1970	101	59	140	148	544	124	38	993	0	--	--	4,594	--	--	--	
1975	15	76	235	48	505	109	75	972	0	--	--	6,276	--	--	--	
1980	79	67	339	6	295	312	3	955	0	--	--	7,277	--	--	--	
1985	122	69	610	15	245	176	1	1,047	0	--	--	12,344	--	--	--	
1990	46	66	442	10	299	265	0	1,016	0	--	--	14,420	--	--	--	
1995	17	67	703	5	386	58	0	1,152	0	--	--	14,300	--	--	--	
1996	12	69	732	6	371	265	0	1,374	0	--	--	15,251	--	--	--	
1997	57	69	892	5	58	37	0	992	0	--	--	15,506	--	--	--	
1998	16	63	867	9	30	38	3	948	0	--	--	16,920	--	--	--	
1999	90	59	812	9	355	166	1	1,344	0	--	--	17,915	--	--	--	
2000	71	61	605	8	498	128	0	1,239	0	--	--	19,028	--	--	--	
2001	259	65	632	10	466	40	0	1,149	0	--	--	18,836	--	--	--	
2002	201	67	497	10	473	41	0	1,021	0	--	--	19,802	--	--	--	
2003	240	63	303	10	684	41	0	1,039	0	--	--	19,657	--	--	--	
2004	200	62	323	12	596	41	0	972	0	--	--	19,498	--	--	--	
2005	122	62	625	31	604	41	0	1,301	0	--	--	19,846	--	--	--	
2006	R 60	60	658	16	R 457	42	0	R 1,174	0	--	--	20,153	--	--	--	
2007	11	63	447	5	523	43	0	1,018	0	--	--	20,508	--	--	--	
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	R 66.6	2.0	(s)	1.1	1.6	(s)	4.7	0.0	0.2	0.0	24.8	95.4	59.8	155.2	
1985	2.6	R 68.9	3.6	0.1	0.9	0.9	(s)	5.5	0.0	0.4	0.0	42.1	116.4	97.0	213.4	
1990	1.0	R 66.5	2.6	0.1	1.1	1.4	0.0	5.1	0.0	1.1	0.2	49.2	118.4	113.8	232.2	
1995	0.4	R 67.6	4.1	(s)	1.4	0.3	0.0	5.8	0.0	1.4	0.2	48.8	122.2	110.8	233.0	
1996	0.3	R 70.0	4.3	(s)	1.3	1.4	0.0	7.0	0.0	1.4	0.2	52.0	129.2	118.3	247.5	
1997	1.1	R 69.7	5.2	(s)	0.2	0.2	0.0	5.6	0.0	1.7	0.2	52.9	129.6	119.9	249.4	
1998	0.4	R 63.5	5.1	(s)	0.1	0.2	(s)	5.4	0.0	1.6	0.2	57.7	127.6	130.9	258.5	
1999	2.0	R 59.4	4.7	0.1	1.3	0.9	(s)	6.9	0.0	1.9	0.2	61.1	130.6	139.8	270.5	
2000	1.5	R 60.8	3.5	(s)	1.8	0.7	0.0	6.0	0.0	1.5	0.2	64.9	134.1	147.7	281.8	
2001	5.8	R 65.4	3.7	0.1	1.7	0.2	0.0	5.6	0.0	1.3	0.2	64.3	141.7	143.2	284.9	
2002	4.5	R 67.1	2.9	0.1	1.7	0.2	0.0	4.9	0.0	0.8	0.2	67.6	144.2	150.6	294.8	
2003	5.4	R 62.5	1.8	0.1	2.5	0.2	0.0	4.5	0.0	0.9	0.2	67.1	139.8	148.0	287.8	
2004	4.5	R 60.9	1.9	0.1	2.2	0.2	0.0	4.3	0.0	0.9	0.2	66.5	136.5	147.2	283.7	
2005	2.7	R 63.7	3.6	0.2	2.2	0.2	0.0	6.2	0.0	R 1.7	0.2	67.7	141.5	148.1	R 289.6	
2006	R 1.3	R 61.8	3.8	0.1	R 1.6	0.2	0.0	5.8	0.0	R 1.6	0.2	68.8	138.5	148.7	R 287.2	
2007	0.2	64.3	2.6	(s)	1.9	0.2	0.0	4.7	0.0	1.7	0.2	70.0	140.1	151.0	291.1	

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Colorado

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	1,438	69	1,768	593	1,303	1,583	2,551	7,798	1	--	--	1,289	--	--	--
1965	1,698	82	1,994	641	1,039	1,254	2,937	7,865	1	--	--	1,576	--	--	--
1970	1,657	88	2,228	953	1,036	1,128	5,100	10,444	1	--	--	2,334	--	--	--
1975	1,871	73	3,419	1,498	860	2,327	3,701	11,805	1	--	--	4,407	--	--	--
1980	1,757	60	3,983	1,860	695	1,640	4,732	12,910	1	--	--	6,900	--	--	--
1985	791	48	2,054	621	580	40	4,562	7,857	1	--	--	5,468	--	--	--
1990	729	66	2,712	975	408	13	4,870	8,978	0	--	--	6,587	--	--	--
1995	729	85	2,749	1,294	541	(s)	5,440	10,023	0	--	--	9,706	--	--	--
1996	367	98	3,058	1,357	631	4	6,094	11,144	0	--	--	9,947	--	--	--
1997	728	90	3,059	1,536	681	3	4,773	10,051	0	--	--	10,297	--	--	--
1998	392	114	3,366	1,186	625	(s)	6,810	11,987	0	--	--	9,998	--	--	--
1999	429	112	3,186	538	564	1	4,260	8,549	0	--	--	9,521	--	--	--
2000	427	118	3,274	3,108	546	0	5,800	12,728	0	--	--	9,955	--	--	--
2001	311	178	3,370	3,345	1,171	4	4,898	12,788	0	--	--	10,918	--	--	--
2002	202	174	3,333	2,389	1,229	0	3,439	10,390	0	--	--	10,672	--	--	--
2003	281	161	2,982	2,355	1,268	0	7,217	13,822	0	--	--	11,076	--	--	--
2004	293	163	3,270	3,116	1,401	0	6,203	13,990	0	--	--	11,675	--	--	--
2005	300	178	3,658	1,602	1,378	0	5,135	11,773	0	--	--	12,052	--	--	--
2006	286	R 166	4,270	R 3,624	1,441	1	5,172	R 14,508	0	--	--	12,605	--	--	--
2007	233	173	4,829	2,463	810	0	5,814	13,917	0	--	--	13,113	--	--	--
Trillion Btu															
1960	36.6	71.8	10.3	2.4	6.8	10.0	16.3	45.8	(s)	2.2	0.0	4.4	160.7	10.9	171.6
1965	44.2	74.9	11.6	2.6	5.5	7.9	18.3	45.8	(s)	2.9	0.0	5.4	173.2	12.8	186.1
1970	41.4	85.3	13.0	3.6	5.4	7.1	32.3	61.4	(s)	4.4	0.0	8.0	200.5	19.3	219.8
1975	45.8	R 65.6	19.9	5.6	4.5	14.6	23.4	68.1	(s)	4.3	0.0	15.0	198.8	36.2	235.0
1980	43.1	R 59.9	23.2	6.8	3.6	10.3	29.3	73.3	(s)	1.3	0.0	23.5	198.9	56.7	255.7
1985	17.1	R 47.7	12.0	2.2	3.0	0.2	29.3	46.8	(s)	1.5	0.0	18.7	130.1	43.0	173.1
1990	15.4	R 66.5	15.8	3.5	2.1	0.1	31.3	52.8	0.0	2.4	0.2	22.5	156.3	52.0	208.2
1995	15.8	R 86.6	16.0	4.7	2.8	(s)	35.0	58.5	0.0	2.1	0.2	33.1	194.6	75.2	269.8
1996	7.9	R 99.9	17.8	4.9	3.3	(s)	38.9	64.9	0.0	2.0	0.2	33.9	207.0	77.2	284.2
1997	15.7	R 91.2	17.8	5.6	3.5	(s)	30.1	57.0	0.0	1.7	0.2	35.1	199.4	79.6	279.0
1998	8.3	R 114.8	19.6	4.3	3.3	(s)	43.7	70.8	0.0	1.6	0.2	34.1	228.3	77.4	305.7
1999	9.1	R 112.3	18.6	1.9	2.9	(s)	26.7	50.1	0.0	1.6	0.2	32.5	204.7	74.3	279.0
2000	9.3	R 117.4	19.1	11.2	2.8	0.0	37.1	70.2	0.0	1.3	0.3	34.0	231.3	77.3	308.5
2001	6.8	R 179.4	19.6	12.1	6.1	(s)	30.8	68.7	0.0	0.4	0.3	37.3	290.9	83.0	373.9
2002	4.7	R 174.4	19.4	8.6	6.4	0.0	21.2	55.7	0.0	0.3	0.3	36.4	269.8	81.2	351.0
2003	6.5	R 161.0	17.4	8.5	6.6	0.0	46.2	78.7	0.0	0.3	0.2	37.8	282.9	83.4	366.2
2004	6.7	R 160.7	19.0	11.3	7.3	0.0	39.4	77.1	0.0	0.3	0.2	39.8	283.2	88.1	371.4
2005	6.9	R 182.5	21.3	5.8	7.2	0.0	32.3	66.6	0.0	0.3	0.2	41.1	296.0	89.9	385.9
2006	6.5	R 171.1	24.9	R 13.1	7.5	(s)	32.5	R 78.0	0.0	0.3	0.2	43.0	R 297.3	93.0	R 390.3
2007	5.3	175.7	28.1	8.8	4.2	0.0	36.8	78.0	0.0	0.3	0.2	44.7	302.5	96.5	399.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Colorado

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	25	1	1,125	2,146	480	93	280	15,023	137	19,284	0	0	--	--	--
1965	6	2	1,111	1,763	3,426	81	286	18,097	713	25,476	0	0	--	--	--
1970	3	2	337	2,655	7,476	133	286	24,943	99	35,929	0	0	--	--	--
1975	(s)	5	267	4,290	7,151	188	302	30,948	104	43,250	0	0	--	--	--
1980	0	8	265	6,554	4,725	45	402	33,275	0	45,267	0	0	--	--	--
1985	0	7	142	6,277	7,861	68	366	34,986	146	49,845	437	0	--	--	--
1990	0	9	167	6,884	6,109	75	412	34,889	0	48,535	225	0	--	--	--
1995	0	11	124	8,669	7,428	69	393	40,757	0	57,440	884	4	--	--	--
1996	0	11	124	8,613	7,765	70	382	42,132	(s)	59,085	1,515	4	--	--	--
1997	0	13	143	7,822	R 7,177	31	403	43,026	0	R 58,602	1,496	5	--	--	--
1998	0	10	144	10,179	R 6,798	25	422	44,178	0	R 61,747	1,482	5	--	--	--
1999	0	9	195	10,947	7,800	70	426	46,339	0	65,776	1,256	5	--	--	--
2000	0	10	156	11,435	7,582	56	420	46,750	0	66,400	1,422	9	--	--	--
2001	0	11	270	13,040	7,718	59	385	48,425	0	69,897	1,921	11	--	--	--
2002	0	12	158	13,506	7,131	52	380	47,881	0	69,108	1,706	37	--	--	--
2003	0	10	138	14,297	5,652	51	352	47,399	0	67,889	1,976	37	--	--	--
2004	0	11	121	12,974	12,354	77	356	49,382	0	75,264	1,889	19	--	--	--
2005	0	13	128	13,226	12,320	77	354	49,893	0	75,998	R 1,066	19	--	--	--
2006	0	13	151	13,981	12,987	80	345	50,219	0	77,763	R 953	25	--	--	--
2007	0	14	101	14,388	13,530	47	356	51,385	0	79,808	1,644	44	--	--	--
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	1.5	0.0	277.6	0.0	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	3.1	(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	5.4	(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	5.3	(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	R 331.5	5.2	(s)	R 341.2	(s)	341.2
1999	0.0	8.9	1.0	63.8	44.2	0.3	2.6	241.5	0.0	353.3	4.4	(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	5.0	(s)	366.5	0.1	366.6
2001	0.0	10.8	1.4	76.0	43.8	0.2	2.3	252.3	0.0	375.9	6.8	(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	6.0	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	7.0	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	6.7	0.1	417.1	0.1	417.2
2005	0.0	13.8	0.6	77.0	69.9	0.3	2.1	260.3	0.0	410.3	R 3.8	0.1	424.2	0.1	424.3
2006	0.0	R 13.5	0.8	81.4	73.6	0.3	2.1	262.0	0.0	420.3	R 3.4	0.1	R 433.9	0.2	R 434.0
2007	0.0	14.2	0.5	83.8	76.7	0.2	2.2	268.2	0.0	431.5	5.8	0.2	445.9	0.3	446.3

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Colorado

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	R 2	--
2004	19,251	83	1	30	0	31	0	1,195	--	0	0	220	37	--
2005	19,013	93	0	43	0	43	0	1,415	--	0	0	776	R 6	--
2006	19,707	93	28	44	0	72	0	1,791	--	0	0	866	1	--
2007	19,533	124	0	65	0	65	0	1,730	--	0	2	1,292	(s)	--
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	R 31.3	1.1	1.6	0.0	2.7	7.3	17.8	0.0	0.0	0.0	0.0	0.0	260.2
1985	278.7	R 4.9	(s)	0.7	0.0	0.7	-0.3	24.6	(s)	0.0	0.0	0.0	0.0	308.4
1990	320.8	R 13.4	(s)	0.3	0.0	0.3	0.0	14.8	0.1	0.0	0.0	0.0	0.0	348.4
1995	328.0	R 24.1	(s)	0.2	0.0	0.2	0.0	22.0	0.1	0.0	0.0	0.0	0.0	373.6
1996	342.5	R 29.1	0.1	0.2	0.0	0.3	0.0	18.8	0.1	0.0	0.0	0.0	0.0	390.0
1997	345.5	R 27.9	(s)	0.2	0.0	0.2	0.0	20.8	0.1	0.0	0.0	0.0	0.1	394.0
1998	356.2	R 34.7	(s)	0.5	0.0	0.5	0.0	14.9	0.0	0.0	0.0	0.0	(s)	405.7
1999	352.8	R 43.1	(s)	0.4	0.0	0.4	0.0	16.0	0.0	0.0	0.0	0.0	(s)	411.7
2000	376.9	R 66.8	(s)	1.1	0.0	1.2	0.0	14.8	0.2	0.0	0.0	0.0	(s)	458.9
2001	386.7	R 90.0	(s)	2.0	0.0	2.0	0.0	15.4	0.5	0.0	0.0	0.5	0.1	494.0
2002	380.6	R 79.5	0.0	0.3	0.0	0.3	0.0	12.3	0.5	0.0	0.0	1.4	(s)	473.5
2003	381.4	R 80.5	0.0	0.4	0.0	0.4	0.0	12.9	0.4	0.0	0.0	1.5	(s)	476.1
2004	378.5	R 86.7	(s)	0.2	0.0	0.2	0.0	12.0	1.0	0.0	0.0	2.2	0.1	R 479.6
2005	376.8	R 95.9	0.0	0.3	0.0	0.3	0.0	14.2	0.5	0.0	0.0	7.8	R (s)	494.1
2006	386.4	R 96.5	0.2	0.3	0.0	0.4	0.0	17.8	0.5	0.0	0.0	8.6	(s)	508.6
2007	382.9	128.4	0.0	0.4	0.0	0.4	0.0	17.1	0.6	0.0	(s)	12.8	(s)	540.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	3,851	28	23,369	1,129	1,092	19,349	14,622	3,678	63,238	0	424	--	--	--	--	--
1965	4,957	41	21,186	1,411	1,383	22,933	17,159	4,029	68,100	0	187	--	--	--	--	--
1970	2,060	61	24,117	2,897	1,854	28,638	35,595	8,680	101,782	3,604	329	--	--	--	--	--
1975	55	64	21,613	2,124	2,209	31,822	32,512	2,953	93,233	8,135	493	--	--	--	--	--
1980	16	73	22,304	1,973	1,501	30,205	29,334	3,677	88,994	11,835	256	--	--	--	--	--
1985	815	78	20,680	1,085	1,283	30,999	21,040	5,149	80,236	12,721	264	--	--	--	--	--
1990	1,493	105	23,264	2,344	1,592	31,140	16,554	3,765	78,659	19,776	571	--	--	--	--	--
1995	1,594	141	21,322	2,489	1,410	30,591	6,803	4,194	66,808	18,749	364	--	--	--	--	--
1996	1,606	135	22,170	2,718	1,517	32,663	10,407	6,326	75,802	6,225	626	--	--	--	--	--
1997	1,745	145	22,176	R 2,372	1,732	32,934	14,673	6,393	R 80,281	-125	447	--	--	--	--	--
1998	1,272	132	19,886	R 2,214	2,243	33,589	14,982	5,870	R 78,785	3,243	448	--	--	--	--	--
1999	619	152	22,407	2,456	1,673	36,283	14,429	5,980	83,228	12,675	422	--	--	--	--	--
2000	1,477	160	23,578	2,599	2,130	34,933	11,835	6,077	81,151	16,365	526	--	--	--	--	--
2001	1,627	146	24,817	2,356	2,422	35,437	9,033	2,582	76,646	15,428	286	--	--	--	--	--
2002	1,512	178	22,382	2,201	2,065	37,436	4,437	2,318	70,840	14,918	335	--	--	--	--	--
2003	2,055	154	25,891	2,108	2,954	40,498	4,692	3,673	79,816	16,078	564	--	--	--	--	--
2004	2,136	163	28,850	2,382	3,057	43,565	4,093	4,018	85,966	16,539	463	--	--	--	--	--
2005	2,076	168	26,518	2,461	3,973	38,601	6,609	4,501	82,663	15,562	478	--	--	--	--	--
2006	R 2,248	173	24,317	2,249	3,698	37,710	3,071	3,917	74,961	16,589	544	--	--	--	--	--
2007	1,939	180	24,281	2,056	3,364	37,906	2,793	2,723	73,123	16,386	363	--	--	--	--	--
Trillion Btu																
1960	101.7	29.4	136.1	6.4	4.4	101.6	91.9	22.0	362.4	0.0	4.6	12.8	0.0	-2.8	0.0	508.2
1965	128.6	41.7	123.4	8.0	5.5	120.5	107.9	24.2	389.4	0.0	2.0	13.5	0.0	-3.2	0.0	572.0
1970	48.6	61.5	140.5	16.4	7.0	150.4	223.8	49.3	587.4	39.6	3.5	15.8	0.0	-34.0	0.0	722.4
1975	1.3	64.3	125.9	12.0	8.2	167.2	204.4	18.0	535.7	89.6	5.1	17.1	0.0	-20.8	0.0	692.3
1980	0.4	R 74.2	129.9	11.2	5.5	158.7	184.4	21.2	510.9	129.1	2.7	41.1	0.0	-20.7	-0.1	737.4
1985	21.3	R 80.6	120.5	6.1	4.6	162.8	132.3	30.9	457.2	135.1	2.8	37.5	0.0	-2.7	-0.1	731.7
1990	38.5	R 109.0	135.5	13.3	5.8	163.6	104.1	22.7	444.9	209.3	5.9	28.7	0.1	-64.4	(s)	772.0
1995	40.8	144.9	124.2	14.1	5.1	159.5	42.8	25.3	371.1	197.0	3.8	42.2	0.2	-26.2	4.3	778.0
1996	41.1	R 139.2	129.1	15.4	5.5	170.4	65.4	36.3	422.1	65.4	6.5	49.4	0.2	101.3	4.5	829.6
1997	45.0	148.6	129.2	13.4	6.3	171.7	92.3	36.4	449.2	-1.3	4.6	45.9	0.2	126.6	5.8	824.6
1998	32.6	134.9	115.8	R 12.6	8.1	175.1	94.2	32.8	438.5	34.0	4.6	44.4	0.2	109.8	6.0	805.0
1999	15.2	155.9	130.5	13.9	6.1	189.1	90.7	33.4	463.7	132.5	4.3	44.9	0.3	31.1	6.6	854.5
2000	36.2	163.7	137.3	14.7	7.7	182.0	74.4	33.9	450.1	170.7	5.4	45.1	0.3	-20.1	5.4	856.8
2001	40.0	R 149.4	144.6	13.4	8.8	184.6	56.8	15.2	423.3	161.2	3.0	26.5	0.3	30.3	2.6	836.6
2002	34.2	182.9	130.4	12.5	7.5	195.0	27.9	13.7	386.9	155.7	3.4	24.5	0.4	43.0	1.1	832.2
2003	41.9	R 155.0	150.8	12.0	10.7	210.9	29.5	22.3	436.2	167.5	5.8	25.1	0.5	54.0	1.1	887.0
2004	44.0	R 163.1	168.1	13.5	11.1	227.2	25.7	24.3	469.9	172.5	4.6	25.1	0.5	38.3	3.2	921.3
2005	42.0	R 171.9	154.5	14.0	14.4	201.4	41.6	27.3	453.1	162.4	4.8	R 22.9	0.7	36.0	3.6	R 897.4
2006	45.7	R 177.7	141.6	12.8	13.3	196.8	19.3	23.7	407.5	173.1	5.4	R 22.6	0.9	9.4	3.9	R 846.1
2007	39.9	184.1	141.4	11.7	12.1	197.8	17.6	16.3	396.8	171.9	3.6	22.7	1.0	45.4	5.1	870.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	114	16	15,480	1,507	624	17,611	255	--	--	2,724	--	--	--
1965	46	22	13,649	1,101	692	15,442	239	--	--	3,812	--	--	--
1970	24	31	14,239	526	802	15,568	308	--	--	6,396	--	--	--
1975	7	32	12,950	291	768	14,009	332	--	--	7,449	--	--	--
1980	3	32	13,468	233	595	14,296	1,104	--	--	8,218	--	--	--
1985	8	33	10,896	605	639	12,140	776	--	--	8,638	--	--	--
1990	2	37	13,576	196	857	14,628	483	--	--	10,376	--	--	--
1995	3	41	12,528	122	875	13,525	523	--	--	10,760	--	--	--
1996	1	44	13,202	124	1,061	14,388	543	--	--	10,943	--	--	--
1997	1	41	12,949	143	1,208	14,301	390	--	--	10,859	--	--	--
1998	1	35	11,060	126	1,530	12,716	346	--	--	10,935	--	--	--
1999	1	38	12,905	177	1,182	14,264	365	--	--	11,619	--	--	--
2000	(s)	42	14,123	199	1,335	15,656	392	--	--	11,645	--	--	--
2001	(s)	41	13,603	161	1,387	15,151	304	--	--	11,975	--	--	--
2002	(s)	40	13,095	92	1,496	14,683	308	--	--	12,473	--	--	--
2003	1	46	15,298	270	1,833	17,401	325	--	--	13,178	--	--	--
2004	(s)	44	17,021	349	1,724	19,093	333	--	--	13,211	--	--	--
2005	(s)	45	14,916	326	1,577	16,819	R 231	--	--	13,803	--	--	--
2006	(s)	39	12,895	232	R 1,308	R 14,435	R 210	--	--	12,963	--	--	--
2007	(s)	43	13,037	129	1,531	14,697	232	--	--	13,372	--	--	--
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	164.8	67.6	232.4
1985	0.2	R 33.8	63.5	3.4	2.3	69.2	15.5	0.0	0.0	29.5	148.0	67.9	215.9
1990	0.1	38.7	79.1	1.1	3.1	83.3	9.7	0.0	0.1	35.4	167.1	81.9	249.0
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	249.6
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	83.9	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	236.0
1999	(s)	39.3	75.2	1.0	4.3	80.4	7.3	(s)	0.3	39.6	167.0	90.7	257.6
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	91.0	265.5
2002	(s)	41.7	76.3	0.5	5.4	82.2	6.2	(s)	0.4	42.6	173.0	94.9	267.9
2003	(s)	45.9	89.1	1.5	6.7	97.3	6.5	(s)	0.5	45.0	195.1	99.2	294.3
2004	(s)	R 44.0	99.1	2.0	6.2	107.4	6.7	(s)	0.5	45.1	203.6	99.7	303.3
2005	(s)	R 45.9	86.9	1.8	5.7	94.4	R 4.6	(s)	0.7	47.1	R 192.6	103.0	R 295.7
2006	(s)	40.8	75.1	1.3	R 4.7	R 81.1	R 4.2	(s)	0.9	44.2	R 171.2	95.6	R 266.9
2007	(s)	44.6	75.9	0.7	5.5	82.2	4.6	(s)	1.0	45.6	178.1	98.4	276.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	79	3	5,029	52	110	63	871	6,125	0	--	--	1,825	--	--	--
1965	35	6	4,434	38	122	76	958	5,629	0	--	--	2,873	--	--	--
1970	19	15	4,626	18	142	97	995	5,877	0	--	--	4,649	--	--	--
1975	16	16	4,207	10	136	239	656	5,248	0	--	--	6,000	--	--	--
1980	13	20	2,905	7	105	275	1,171	4,463	0	--	--	7,039	--	--	--
1985	29	25	3,961	64	113	142	1,679	5,960	0	--	--	8,731	--	--	--
1990	10	29	3,481	51	151	204	1,034	4,921	0	--	--	10,711	--	--	--
1995	22	38	3,017	27	154	250	447	3,896	0	--	--	11,297	--	--	--
1996	5	40	2,958	72	187	823	455	4,495	0	--	--	11,546	--	--	--
1997	7	43	2,935	104	213	983	321	4,556	0	--	--	11,654	--	--	--
1998	6	42	2,630	176	270	725	160	3,961	0	--	--	12,184	--	--	--
1999	4	48	2,649	82	209	778	210	3,928	0	--	--	12,349	--	--	--
2000	4	48	2,983	119	236	825	218	4,380	0	--	--	12,496	--	--	--
2001	4	44	3,403	231	245	290	165	4,334	0	--	--	12,994	--	--	--
2002	4	41	2,885	132	264	821	321	4,423	0	--	--	13,162	--	--	--
2003	3	39	3,495	125	323	1,850	705	6,498	0	--	--	13,094	--	--	--
2004	4	36	3,547	172	304	152	329	4,504	0	--	--	13,455	--	--	--
2005	5	36	3,008	266	278	190	353	4,095	0	--	--	13,949	--	--	--
2006	R 3	33	2,726	181	R 231	46	317	R 3,500	0	--	--	13,611	--	--	--
2007	3	36	2,607	34	270	40	190	3,141	0	--	--	15,126	--	--	--
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	R 25.3	23.1	0.4	0.4	0.7	10.6	35.1	0.0	0.4	0.0	29.8	91.2	68.6	159.8
1990	0.2	30.4	20.3	0.3	0.5	1.1	6.5	28.7	0.0	1.1	0.0	36.5	96.9	84.5	181.4
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	87.5	189.4
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	115.0	89.6	204.6
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	210.5
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	R 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	98.8	214.3
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	100.1	213.0
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	98.6	219.7
2004	0.1	R 35.4	20.7	1.0	1.1	0.8	2.1	25.6	0.0	1.1	0.0	45.9	108.0	101.6	209.6
2005	0.1	36.8	17.5	1.5	1.0	1.0	2.2	23.2	0.0	R 0.7	0.0	47.6	108.5	104.1	R 212.6
2006	0.1	34.1	15.9	1.0	0.8	0.2	2.0	20.0	0.0	R 0.7	0.0	46.4	101.3	100.4	R 201.7
2007	0.1	37.0	15.2	0.2	1.0	0.2	1.2	17.8	0.0	0.7	0.0	51.6	107.2	111.4	218.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	866	7	1,665	355	243	11,950	1,756	15,968	26	--	--	2,837	--	--	--
1965	776	12	1,561	564	248	13,180	2,463	18,016	9	--	--	3,862	--	--	--
1970	142	15	1,968	890	269	13,710	7,773	24,611	3	--	--	5,094	--	--	--
1975	29	16	1,944	1,280	36	9,124	2,365	14,750	7	--	--	5,050	--	--	--
1980	0	20	3,235	785	66	6,683	3,101	13,870	6	--	--	5,944	--	--	--
1985	4	19	1,197	499	225	2,202	4,185	8,308	6	--	--	6,113	--	--	--
1990	1	25	1,209	548	263	1,415	3,171	6,605	8	--	--	6,100	--	--	--
1995	0	32	852	355	195	755	3,762	5,918	6	--	--	5,913	--	--	--
1996	0	32	811	247	223	964	5,858	8,102	8	--	--	5,928	--	--	--
1997	0	35	847	295	232	387	5,875	7,636	8	--	--	5,919	--	--	--
1998	0	32	780	391	138	308	5,257	6,873	0	--	--	5,838	--	--	--
1999	0	32	783	249	210	405	5,428	7,075	0	--	--	5,836	--	--	--
2000	0	32	859	526	233	380	5,472	7,470	0	--	--	5,811	--	--	--
2001	0	26	1,026	697	536	598	1,877	4,733	0	--	--	5,572	--	--	--
2002	0	29	848	271	499	347	1,808	3,773	0	--	--	5,370	--	--	--
2003	0	24	1,703	772	560	764	3,017	6,815	0	--	--	5,366	--	--	--
2004	0	21	1,091	997	634	1,103	3,219	7,044	0	--	--	5,358	--	--	--
2005	1	20	930	2,080	561	1,109	3,504	8,184	0	--	--	5,153	--	--	--
2006	0	22	979	R 2,136	578	590	3,164	R 7,446	0	--	--	4,926	--	--	--
2007	0	23	896	1,546	445	393	2,215	5,495	0	--	--	5,433	--	--	--
Trillion Btu															
1960	22.8	7.5	9.7	1.4	1.3	75.1	11.1	98.6	0.3	7.6	0.0	9.7	146.5	23.9	170.5
1965	20.4	12.7	9.1	2.3	1.3	82.9	15.3	110.8	0.1	8.7	0.0	13.2	165.9	31.5	197.3
1970	3.4	14.9	11.5	3.4	1.4	86.2	44.1	146.6	(s)	9.6	0.0	17.4	191.9	42.1	233.9
1975	0.7	15.6	11.3	4.8	0.2	57.4	14.6	88.3	0.1	10.3	0.0	17.2	132.2	41.4	173.6
1980	0.0	R 20.8	18.8	2.9	0.3	42.0	17.9	82.0	0.1	18.5	0.0	20.3	141.5	48.9	190.4
1985	0.1	R 19.5	7.0	1.8	1.2	13.8	25.3	49.1	0.1	21.6	0.0	20.9	111.2	48.0	159.2
1990	(s)	26.3	7.0	2.0	1.4	8.9	19.3	38.6	0.1	2.1	0.0	20.8	87.9	48.1	136.0
1995	0.0	33.1	5.0	1.3	1.0	4.7	22.8	34.8	0.1	2.9	0.0	20.2	91.1	45.8	136.9
1996	0.0	33.4	4.7	0.9	1.2	6.1	33.5	46.4	0.1	5.8	0.0	20.2	105.8	46.0	151.8
1997	0.0	35.5	4.9	1.1	1.2	2.4	33.4	43.0	0.1	6.1	0.0	20.2	104.9	45.8	150.7
1998	0.0	33.3	4.5	1.4	0.7	1.9	29.2	37.8	0.0	5.1	0.0	19.9	96.2	45.2	141.4
1999	0.0	32.8	4.6	0.9	1.1	2.5	30.2	39.3	0.0	5.3	0.0	19.9	97.2	45.5	142.8
2000	0.0	33.1	5.0	1.9	1.2	2.4	30.4	40.9	0.0	5.0	0.0	19.8	98.8	45.1	143.9
2001	0.0	26.2	6.0	2.5	2.8	3.8	11.2	26.2	0.0	5.1	0.0	19.0	76.5	42.4	118.8
2002	0.0	30.1	4.9	1.0	2.6	2.2	10.7	21.4	0.0	3.6	0.0	18.3	73.4	40.8	114.2
2003	0.0	23.7	9.9	2.8	2.9	4.8	18.5	39.0	0.0	3.6	0.0	18.3	84.6	40.4	125.0
2004	0.0	20.4	6.4	3.6	3.3	6.9	19.8	40.0	0.0	3.8	0.0	18.3	82.5	40.5	123.0
2005	(s)	21.1	5.4	7.5	2.9	7.0	21.7	44.6	0.0	3.9	0.0	17.6	87.1	38.5	125.6
2006	0.0	22.6	5.7	R 7.7	3.0	3.7	19.4	R 39.6	0.0	4.1	0.0	16.8	R 83.0	36.3	R 119.4
2007	0.0	23.5	5.2	5.6	2.3	2.5	13.4	28.9	0.0	4.2	0.0	18.5	75.2	40.0	115.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	15	(s)	104	1,117	1,129	2	258	19,044	204	21,857	0	0	--	--	--
1965	3	(s)	172	1,415	1,411	5	255	22,609	471	26,338	0	0	--	--	--
1970	(s)	(s)	124	2,266	2,897	21	238	28,273	359	34,177	0	0	--	--	--
1975	(s)	(s)	90	2,391	2,013	26	196	31,547	581	36,844	0	0	--	--	--
1980	0	(s)	89	2,580	1,921	15	247	29,864	53	34,768	0	0	--	--	--
1985	0	(s)	71	4,542	1,085	32	225	30,631	152	36,738	30	0	--	--	--
1990	0	(s)	94	4,800	2,344	36	253	30,673	84	38,285	0	0	--	--	--
1995	0	1	41	4,756	2,489	26	242	30,146	11	37,711	23	0	--	--	--
1996	0	1	37	5,086	2,718	21	235	31,617	36	39,750	78	0	--	--	--
1997	0	3	23	5,320	R 2,372	16	248	31,719	25	R 39,722	82	0	--	--	--
1998	0	1	52	5,302	R 2,214	52	259	32,726	14	R 40,620	80	0	--	--	--
1999	0	3	32	5,598	2,456	34	262	35,294	12	43,689	85	0	--	--	--
2000	0	3	30	5,470	2,599	33	258	33,875	22	42,287	94	0	--	--	--
2001	0	3	78	6,683	2,356	93	237	34,611	10	44,067	29	0	--	--	--
2002	0	3	52	5,478	2,201	35	234	36,116	1	44,117	81	0	--	--	--
2003	0	4	45	5,213	2,108	26	216	38,088	2	45,698	471	192	--	--	--
2004	0	4	59	7,079	2,382	32	219	42,779	22	52,573	R 3,614	190	--	--	--
2005	0	3	187	7,562	2,461	38	218	37,850	22	48,339	R 964	190	--	--	--
2006	0	3	127	7,646	2,249	23	212	37,086	5	47,349	R 2,824	177	--	--	--
2007	0	4	126	7,669	2,056	17	219	37,422	15	47,524	3,459	198	--	--	--
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	0.1	0.0	196.8	0.0	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	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	R 12.6	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	1.7	0.7	246.5	1.4	248.0
2004	0.0	3.6	0.3	41.2	13.5	0.1	1.3	223.1	0.1	279.7	12.8	0.6	283.9	1.4	285.4
2005	0.0	3.5	0.9	44.1	14.0	0.1	1.3	197.5	0.1	258.1	R 3.4	0.6	262.2	1.4	263.6
2006	0.0	3.4	0.6	44.5	12.8	0.1	1.3	193.5	(s)	252.8	R 10.0	0.6	256.9	1.3	258.2
2007	0.0	4.6	0.6	44.7	11.7	0.1	1.3	195.3	0.1	253.8	12.2	0.7	259.0	1.5	260.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Connecticut

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	2,070	64	5,125	101	0	5,227	15,562	478	--	0	0	0	1,140	--
2006	2,245	76	2,160	71	0	2,231	16,589	544	--	0	0	0	1,165	--
2007	1,936	74	2,195	71	0	2,266	16,386	363	--	0	0	0	1,509	--
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	15.9	0.0	0.0	0.0	0.1	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	338.3
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	14.3	0.0	0.0	0.0	2.6	306.1
2002	34.1	66.4	23.7	0.4	0.0	24.1	155.7	3.4	13.7	0.0	0.0	0.0	1.1	298.6
2003	41.8	42.9	20.2	1.1	0.0	21.3	167.5	5.8	13.8	0.0	0.0	0.0	1.2	294.3
2004	43.9	59.7	16.6	0.7	0.0	17.2	172.5	4.6	13.5	0.0	0.0	0.0	3.4	314.8
2005	41.9	<sup>R</sup> 64.6	32.2	0.6	0.0	32.8	162.4	4.8	13.6	0.0	0.0	0.0	3.9	323.9
2006	45.6	76.7	13.6	0.4	0.0	14.0	173.1	5.4	13.6	0.0	0.0	0.0	4.0	332.4
2007	39.8	74.5	13.8	0.4	0.0	14.2	171.9	3.6	13.1	0.0	0.0	0.0	5.1	322.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>i</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	791	9	2,712	2,144	1,007	4,314	6,246	5,175	21,599	0	0	--	--	--	--	--
1965	1,103	18	3,275	2,086	1,507	5,076	5,538	6,040	23,522	0	0	--	--	--	--	--
1970	1,541	26	4,308	2,062	2,255	6,247	6,588	5,832	27,293	0	0	--	--	--	--	--
1975	937	19	4,309	1,654	2,654	7,069	10,218	5,114	31,018	0	0	--	--	--	--	--
1980	1,130	30	3,716	1,573	3,199	6,614	12,717	6,253	34,072	0	0	--	--	--	--	--
1985	2,766	38	3,696	1,569	994	7,556	3,602	5,114	22,532	0	0	--	--	--	--	--
1990	2,293	39	3,518	1,306	1,043	8,012	3,804	7,758	25,441	0	0	--	--	--	--	--
1995	2,011	61	3,386	<sup>R</sup> 76	1,361	8,471	4,066	6,467	<sup>R</sup> 23,827	0	0	--	--	--	--	--
1996	1,956	54	3,755	62	1,707	8,453	5,425	7,482	26,883	0	0	--	--	--	--	--
1997	1,866	47	3,339	<sup>R</sup> 73	1,217	8,587	4,389	7,426	<sup>R</sup> 25,032	0	0	--	--	--	--	--
1998	1,773	41	3,164	<sup>R</sup> 87	1,427	9,079	4,465	7,044	<sup>R</sup> 25,265	0	0	--	--	--	--	--
1999	1,393	56	3,322	105	1,118	9,259	4,858	7,152	25,814	0	0	--	--	--	--	--
2000	1,934	48	4,309	104	1,006	8,999	4,170	6,302	24,891	0	0	--	--	--	--	--
2001	1,653	50	3,508	129	1,352	9,299	5,021	7,404	26,713	0	0	--	--	--	--	--
2002	1,640	52	3,607	124	1,290	9,945	3,599	7,531	26,096	0	0	--	--	--	--	--
2003	1,887	46	3,847	142	1,393	9,894	3,573	7,783	26,632	0	0	--	--	--	--	--
2004	2,174	48	3,412	166	1,355	10,065	2,904	7,583	25,484	0	0	--	--	--	--	--
2005	2,325	47	3,476	167	1,401	10,530	3,176	8,111	26,862	0	0	--	--	--	--	--
2006	2,291	43	3,216	144	1,249	10,827	2,046	7,615	25,096	0	0	--	--	--	--	--
2007	2,566	48	3,033	113	1,124	11,034	2,134	7,258	24,697	0	0	--	--	--	--	--
Trillion Btu																
1960	20.5	9.4	15.8	11.5	4.0	22.7	39.3	30.9	124.2	0.0	0.0	5.0	0.0	-2.4	0.0	156.6
1965	29.0	18.7	19.1	11.2	6.0	26.7	34.8	36.2	134.0	0.0	0.0	5.6	0.0	-2.8	0.0	184.6
1970	37.2	26.9	25.1	11.1	8.5	32.8	41.4	35.2	154.2	0.0	0.0	7.0	0.0	-5.4	0.0	219.9
1975	22.9	19.0	25.1	8.9	9.9	37.1	64.2	30.9	176.1	0.0	0.0	7.9	0.0	-5.2	0.0	220.6
1980	28.1	30.8	21.6	8.4	11.8	34.7	80.0	36.6	193.2	0.0	0.0	2.5	0.0	-3.6	-0.1	250.9
1985	71.4	<sup>R</sup> 39.5	21.5	8.4	3.6	39.7	22.6	30.9	126.8	0.0	0.0	3.0	0.0	-21.7	(s)	219.0
1990	59.5	<sup>R</sup> 40.1	20.5	7.0	3.8	42.1	23.9	46.4	143.7	0.0	0.0	1.6	0.1	8.2	-4.5	248.6
1995	52.4	62.7	19.7	0.4	4.9	44.2	25.6	38.1	132.9	0.0	0.0	2.4	0.1	22.2	(s)	272.8
1996	50.8	55.9	21.9	0.4	6.2	44.1	34.1	43.9	150.5	0.0	0.0	2.5	0.1	24.7	(s)	284.6
1997	48.6	48.1	19.5	0.4	4.4	44.8	27.6	43.5	140.1	0.0	0.0	2.1	0.1	43.1	(s)	<sup>R</sup> 282.2
1998	45.8	42.3	18.4	<sup>R</sup> 0.5	5.2	47.3	28.1	41.2	<sup>R</sup> 140.7	0.0	0.0	1.8	0.1	50.7	0.0	<sup>R</sup> 281.4
1999	35.9	58.1	19.3	0.6	4.0	48.3	30.5	41.8	144.6	0.0	0.0	1.9	0.1	53.8	0.0	294.5
2000	50.1	50.2	25.1	0.6	3.6	46.9	26.2	36.9	139.4	0.0	0.0	2.2	0.1	64.8	(s)	306.8
2001	38.3	51.8	20.4	0.7	4.9	48.4	31.6	43.5	149.6	0.0	0.0	1.2	0.1	61.0	(s)	302.0
2002	40.5	54.3	21.0	0.7	4.7	51.8	22.6	44.5	145.3	0.0	0.0	1.2	0.1	69.0	0.0	310.4
2003	47.0	48.2	22.4	0.8	5.1	51.5	22.5	45.7	148.0	0.0	0.0	1.2	0.2	67.7	(s)	312.2
2004	53.6	49.9	19.9	0.9	4.9	52.5	18.3	44.3	140.8	0.0	0.0	1.3	0.2	58.5	(s)	304.2
2005	56.7	48.6	20.2	0.9	5.1	54.9	20.0	47.4	148.6	0.0	0.0	<sup>R</sup> 1.5	0.2	56.9	(s)	<sup>R</sup> 312.6
2006	56.6	44.7	18.7	0.8	4.5	56.5	12.9	44.7	138.1	0.0	0.0	<sup>R</sup> 1.4	0.2	59.7	(s)	<sup>R</sup> 300.8
2007	63.8	49.8	17.7	0.6	4.0	57.6	13.4	42.5	135.8	0.0	0.0	2.1	0.3	50.3	(s)	302.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	12	4	1,485	807	176	2,468	76	--	--	496	--	--	--
1965	7	6	1,651	604	288	2,543	58	--	--	729	--	--	--
1970	4	8	2,037	365	416	2,818	54	--	--	1,169	--	--	--
1975	1	7	1,866	215	394	2,474	63	--	--	1,640	--	--	--
1980	1	7	1,316	275	375	1,966	121	--	--	1,866	--	--	--
1985	1	6	1,486	649	593	2,727	147	--	--	1,924	--	--	--
1990	4	7	1,149	144	573	1,866	60	--	--	2,651	--	--	--
1995	(s)	9	1,113	120	859	2,092	91	--	--	3,168	--	--	--
1996	1	10	1,091	180	913	2,185	94	--	--	3,271	--	--	--
1997	1	9	905	121	982	2,009	71	--	--	3,257	--	--	--
1998	1	8	805	164	1,041	2,010	63	--	--	3,339	--	--	--
1999	(s)	9	912	125	931	1,968	67	--	--	3,532	--	--	--
2000	(s)	9	1,138	131	734	2,004	72	--	--	3,575	--	--	--
2001	(s)	9	1,004	113	935	2,052	47	--	--	3,734	--	--	--
2002	0	10	990	65	996	2,052	47	--	--	4,020	--	--	--
2003	0	11	1,057	87	973	2,117	50	--	--	4,190	--	--	--
2004	0	10	965	127	986	2,078	51	--	--	4,305	--	--	--
2005	0	10	908	134	897	1,938	<sup>R</sup> 63	--	--	4,594	--	--	--
2006	<sup>R</sup> (s)	9	707	108	<sup>R</sup> 741	<sup>R</sup> 1,555	<sup>R</sup> 57	--	--	4,259	--	--	--
2007	(s)	10	638	49	769	1,455	63	--	--	4,470	--	--	--
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	15.3	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	<sup>R</sup> 7.3	6.7	0.8	2.1	9.6	1.2	0.1	(s)	9.0	26.5	20.9	47.5
1995	(s)	8.8	6.5	0.7	3.1	10.3	1.8	0.1	(s)	10.8	31.8	24.5	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	27.7	61.4
2001	(s)	9.5	5.8	0.6	3.4	9.9	0.9	0.1	(s)	12.7	33.1	28.4	61.5
2002	0.0	10.0	5.8	0.4	3.6	9.7	0.9	0.1	(s)	13.7	34.5	30.6	65.1
2003	0.0	11.2	6.2	0.5	3.5	10.2	1.0	0.1	(s)	14.3	36.9	31.5	68.4
2004	0.0	10.8	5.6	0.7	3.6	9.9	1.0	0.2	(s)	14.7	36.6	32.5	69.1
2005	0.0	10.7	5.3	0.8	3.2	9.3	<sup>R</sup> 1.3	0.2	(s)	15.7	<sup>R</sup> 37.1	34.3	<sup>R</sup> 71.4
2006	<sup>R</sup> (s)	9.4	4.1	0.6	2.7	7.4	<sup>R</sup> 1.1	0.2	(s)	14.5	<sup>R</sup> 32.7	31.4	64.1
2007	(s)	10.4	3.7	0.3	2.8	6.8	1.3	0.2	(s)	15.3	33.9	32.9	66.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	8	1	572	114	31	13	1,812	2,542	0	--	--	361	--	--	--
1965	6	1	636	85	51	11	2,081	2,864	0	--	--	536	--	--	--
1970	3	3	785	51	73	24	1,736	2,670	0	--	--	889	--	--	--
1975	3	3	719	30	70	32	1,204	2,054	0	--	--	1,333	--	--	--
1980	3	3	634	9	66	45	4,265	5,020	0	--	--	1,514	--	--	--
1985	5	3	373	51	105	38	70	638	0	--	--	1,698	--	--	--
1990	18	4	401	10	101	35	178	725	0	--	--	2,361	--	--	--
1995	1	6	282	2	152	8	131	575	0	--	--	2,900	--	--	--
1996	4	7	383	6	161	8	221	779	0	--	--	2,970	--	--	--
1997	5	7	338	16	173	8	194	729	0	--	--	3,124	--	--	--
1998	6	6	290	12	184	11	124	620	0	--	--	3,280	--	--	--
1999	1	6	324	52	164	20	99	659	0	--	--	3,407	--	--	--
2000	1	5	274	136	130	12	226	777	0	--	--	4,099	--	--	--
2001	1	6	303	127	165	30	215	841	0	--	--	3,667	--	--	--
2002	0	7	339	4	176	11	214	744	0	--	--	3,847	--	--	--
2003	0	8	293	7	172	11	272	756	0	--	--	3,886	--	--	--
2004	0	8	300	10	174	6	191	681	0	--	--	4,033	--	--	--
2005	0	8	238	15	158	10	178	600	0	--	--	4,238	--	--	--
2006	R (s)	8	283	27	R 131	7	164	R 611	0	--	--	4,196	--	--	--
2007	(s)	9	239	11	136	7	107	499	0	--	--	4,321	--	--	--
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	R 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	R 4.1	2.3	0.1	0.4	0.2	1.1	4.1	0.0	0.1	0.0	8.1	16.3	18.6	34.9
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	23.0	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	24.1	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	27.9	51.0
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	29.3	54.4
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	29.3	55.6
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	R 30.5	56.9
2005	0.0	8.7	1.4	0.1	0.6	0.1	1.1	3.2	0.0	0.2	0.0	14.5	R 26.6	31.6	58.2
2006	R (s)	8.4	1.6	0.2	0.5	(s)	1.0	3.3	0.0	0.2	0.0	14.3	R 26.3	31.0	57.2
2007	(s)	9.0	1.4	0.1	0.5	(s)	0.7	2.6	0.0	0.2	0.0	14.7	26.6	31.8	58.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	32	1	482	798	205	2,931	4,161	8,577	0	--	--	863	--	--	--
1965	35	6	715	1,165	144	2,785	5,130	9,939	0	--	--	1,373	--	--	--
1970	35	12	794	1,753	92	2,643	4,088	9,370	0	--	--	2,527	--	--	--
1975	27	7	1,079	2,154	63	1,878	4,567	9,741	0	--	--	2,176	--	--	--
1980	184	13	616	2,744	35	1,808	5,424	10,628	0	--	--	2,439	--	--	--
1985	217	22	473	293	54	649	3,989	5,457	0	--	--	2,693	--	--	--
1990	215	17	516	363	48	736	6,051	7,715	0	--	--	3,272	--	--	--
1995	194	19	339	346	64	1,570	6,230	8,548	0	--	--	3,511	--	--	--
1996	164	14	503	628	70	1,460	7,183	9,845	0	--	--	3,399	--	--	--
1997	174	15	452	55	70	1,215	7,161	8,953	0	--	--	3,741	--	--	--
1998	174	16	431	199	86	978	6,746	8,440	0	--	--	3,779	--	--	--
1999	148	21	475	20	77	1,169	6,893	8,635	0	--	--	3,613	--	--	--
2000	179	25	485	140	58	1,437	5,949	8,069	0	--	--	3,601	--	--	--
2001	172	20	596	251	99	1,342	7,041	9,330	0	--	--	3,978	--	--	--
2002	99	18	613	115	113	1,159	7,311	9,311	0	--	--	4,151	--	--	--
2003	100	15	498	247	117	647	7,553	9,062	0	--	--	4,523	--	--	--
2004	119	16	468	192	132	775	7,315	8,882	0	--	--	3,423	--	--	--
2005	117	15	573	342	102	714	7,770	9,501	0	--	--	3,305	--	--	--
2006	102	16	470	R 374	114	609	7,285	R 8,852	0	--	--	3,100	--	--	--
2007	103	16	439	218	193	519	7,004	8,374	0	--	--	3,078	--	--	--
Trillion Btu															
1960	0.8	1.5	2.8	3.2	1.1	18.4	25.1	50.7	0.0	3.4	0.0	2.9	59.4	7.3	66.7
1965	0.9	6.6	4.2	4.7	0.8	17.5	31.1	58.2	0.0	4.4	0.0	4.7	74.8	11.2	86.0
1970	0.8	12.3	4.6	6.6	0.5	16.6	24.9	53.2	0.0	5.9	0.0	8.6	80.9	20.9	101.8
1975	0.6	7.1	6.3	8.0	0.3	11.8	27.6	54.1	0.0	6.6	0.0	7.4	75.8	17.9	93.7
1980	4.5	R 13.1	3.6	10.1	0.2	11.4	31.8	57.0	0.0	0.0	0.0	8.3	82.8	20.1	102.9
1985	5.4	22.1	2.8	1.1	0.3	4.1	24.4	32.6	0.0	0.0	0.0	9.2	69.2	21.2	90.3
1990	5.3	R 17.2	3.0	1.3	0.3	4.6	36.3	45.5	0.0	0.2	0.0	11.2	77.5	25.8	103.3
1995	4.9	20.1	2.0	1.3	0.3	9.9	36.8	50.2	0.0	0.3	0.0	12.0	87.5	27.2	114.7
1996	4.1	14.7	2.9	2.3	0.4	9.2	42.2	57.0	0.0	0.4	0.0	11.6	87.8	26.4	114.1
1997	4.4	15.3	2.6	0.2	0.4	7.6	42.0	52.8	0.0	0.4	0.0	12.8	85.7	28.9	114.7
1998	4.4	17.3	2.5	0.7	0.4	6.1	39.5	49.4	0.0	0.4	0.0	12.9	84.3	29.2	113.5
1999	3.7	22.5	2.8	0.1	0.4	7.4	40.3	50.9	0.0	0.4	0.0	12.3	89.8	28.2	118.0
2000	4.7	26.4	2.8	0.5	0.3	9.0	34.9	47.6	0.0	0.4	0.0	12.3	91.3	27.9	119.2
2001	4.5	20.7	3.5	0.9	0.5	8.4	41.4	54.8	0.0	0.1	0.0	13.6	93.7	30.2	123.9
2002	2.6	18.5	3.6	0.4	0.6	7.3	43.3	55.1	0.0	0.1	0.0	14.2	90.4	31.6	122.0
2003	2.6	15.8	2.9	0.9	0.6	4.1	44.4	52.9	0.0	0.1	0.0	15.4	86.8	34.1	120.9
2004	3.1	16.7	2.7	0.7	0.7	4.9	42.8	51.8	0.0	0.1	0.0	11.7	83.3	25.8	109.2
2005	3.1	15.8	3.3	1.2	0.5	4.5	45.5	55.1	0.0	0.1	0.0	11.3	85.4	24.7	110.1
2006	2.7	17.0	2.7	1.3	0.6	3.8	42.9	R 51.4	0.0	0.1	0.0	10.6	81.7	22.9	104.6
2007	2.7	16.4	2.6	0.8	1.0	3.3	41.1	48.7	0.0	0.1	0.0	10.5	78.5	22.7	101.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	1	0	19	166	2,144	2	74	4,096	1,464	7,965	0	0	--	--	--
1965	(s)	0	150	256	2,086	3	71	4,921	589	8,076	0	0	--	--	--
1970	(s)	0	20	385	2,062	13	67	6,131	671	9,350	0	0	--	--	--
1975	(s)	0	15	510	1,654	36	52	6,973	961	10,201	0	0	--	--	--
1980	0	0	10	963	1,573	14	64	6,533	812	9,970	0	0	--	--	--
1985	0	(s)	16	1,264	1,569	5	58	7,464	232	10,608	0	0	--	--	--
1990	0	(s)	78	1,342	1,306	6	65	7,929	900	11,625	0	0	--	--	--
1995	0	(s)	53	1,493	R 76	5	62	8,398	1,030	R 11,117	0	0	--	--	--
1996	0	(s)	52	1,555	62	4	60	8,375	1,997	12,105	0	0	--	--	--
1997	0	(s)	64	1,522	R 73	7	64	8,510	1,666	R 11,906	0	0	--	--	--
1998	0	(s)	55	1,519	R 87	3	67	8,982	1,372	R 12,085	0	0	--	--	--
1999	0	(s)	15	1,398	105	2	67	9,163	1,743	12,493	0	0	--	--	--
2000	0	(s)	20	2,151	104	2	66	8,928	1,635	12,908	0	0	--	--	--
2001	0	(s)	62	1,384	129	(s)	61	9,170	1,304	12,110	0	0	--	--	--
2002	0	(s)	90	1,483	124	3	60	9,821	1,167	12,749	0	0	--	--	--
2003	0	(s)	79	1,468	142	2	56	9,766	995	12,508	0	0	--	--	--
2004	0	(s)	75	1,595	166	3	56	9,927	988	12,810	0	0	--	--	--
2005	0	(s)	136	1,662	167	4	56	10,418	1,090	13,533	R 264	0	--	--	--
2006	0	(s)	140	1,683	144	4	55	10,706	1,150	13,882	R 780	0	--	--	--
2007	0	(s)	138	1,660	113	2	56	10,834	1,243	14,047	970	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	0.0	0.0	56.9	0.0	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	R 60.1	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	R 64.9	0.0	0.0	64.9	0.0	64.9
1998	0.0	(s)	0.3	8.8	R 0.5	(s)	0.4	46.8	8.6	R 65.5	0.0	0.0	R 65.5	0.0	R 65.5
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	69.0	0.0	69.0
2005	0.0	0.1	0.7	9.7	0.9	(s)	0.3	54.4	6.9	72.9	R 0.9	0.0	72.9	0.0	72.9
2006	0.0	(s)	0.7	9.8	0.8	(s)	0.3	55.9	7.2	74.8	R 2.8	0.0	74.8	0.0	74.8
2007	0.0	(s)	0.7	9.7	0.6	(s)	0.3	56.5	7.8	75.7	3.4	0.0	75.7	0.0	75.7

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Delaware

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	2,208	13	1,193	96	0	1,290	0	0	--	0	0	0	0	--
2006	2,189	10	123	74	0	196	0	0	--	0	0	0	0	--
2007	2,462	13	265	57	0	322	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	R 11.5	12.5	0.6	8.5	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.5
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
2005	53.6	13.4	7.5	0.6	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0
2006	53.9	9.9	0.8	0.4	0.0	1.2	0.0	0.0	(s)	0.0	0.0	0.0	0.0	65.0
2007	61.1	14.0	1.7	0.3	0.0	2.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	77.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	1,051	13	2,894	0	2	4,957	2,428	292	10,573	0	3	--	--	--	--	--
1965	526	17	3,435	(s)	2	5,469	6,749	194	15,850	0	3	--	--	--	--	--
1970	1,128	26	4,934	(s)	4	5,688	11,144	119	21,889	0	1	--	--	--	--	--
1975	418	26	3,157	0	4	5,748	4,174	190	13,273	0	1	--	--	--	--	--
1980	134	28	2,284	329	4	3,881	1,612	345	8,455	0	0	--	--	--	--	--
1985	140	29	2,394	7	4	3,802	740	151	7,098	0	0	--	--	--	--	--
1990	69	29	1,652	5	4	4,043	1,020	104	6,829	0	0	--	--	--	--	--
1995	6	33	1,839	R 0	5	4,142	532	224	R 6,742	0	0	--	--	--	--	--
1996	23	34	2,004	0	6	3,862	337	187	6,396	0	0	--	--	--	--	--
1997	40	34	1,474	R 0	7	4,066	160	307	R 6,015	0	0	--	--	--	--	--
1998	6	30	1,284	R 0	3	4,031	454	393	R 6,165	0	0	--	--	--	--	--
1999	6	32	1,380	0	3	3,979	442	326	6,130	0	0	--	--	--	--	--
2000	7	33	1,710	0	7	4,070	210	340	6,337	0	0	--	--	--	--	--
2001	30	30	1,660	0	5	3,890	285	293	6,134	0	0	--	--	--	--	--
2002	4	33	2,131	0	3	3,927	0	88	6,149	0	0	--	--	--	--	--
2003	7	33	1,859	0	5	3,497	0	77	5,437	0	0	--	--	--	--	--
2004	30	32	1,960	0	4	3,590	0	74	5,629	0	0	--	--	--	--	--
2005	38	32	1,873	0	4	3,366	0	78	5,322	0	0	--	--	--	--	--
2006	0	29	1,046	0	4	3,188	0	79	4,318	0	0	--	--	--	--	--
2007	19	33	1,030	0	5	3,057	0	87	4,178	0	0	--	--	--	--	--
Trillion Btu																
1960	27.8	13.0	16.9	0.0	(s)	26.0	15.3	1.7	59.9	0.0	(s)	0.1	0.0	19.1	0.0	119.9
1965	13.8	17.3	20.0	(s)	(s)	28.7	42.4	1.1	92.3	0.0	(s)	0.1	0.0	35.6	0.0	159.2
1970	28.4	26.4	28.7	(s)	(s)	29.9	70.1	0.7	129.4	0.0	(s)	0.1	0.0	21.6	0.0	205.9
1975	10.1	26.2	18.4	0.0	(s)	30.2	26.2	1.1	76.0	0.0	(s)	0.1	0.0	50.8	0.0	163.3
1980	3.3	R 28.0	13.3	1.9	(s)	20.4	10.1	2.0	47.7	0.0	0.0	2.8	0.0	71.7	(s)	153.5
1985	3.5	29.3	13.9	(s)	(s)	20.0	4.7	0.9	39.5	0.0	0.0	3.3	0.0	90.6	(s)	166.3
1990	1.7	29.1	9.6	(s)	(s)	21.2	6.4	0.6	38.0	0.0	0.0	1.3	(s)	105.9	0.0	175.9
1995	0.1	33.2	10.7	R 0.0	(s)	21.6	3.3	1.3	37.0	0.0	0.0	1.9	(s)	112.2	0.0	184.4
1996	0.6	34.2	11.7	0.0	(s)	20.1	2.1	1.1	35.1	0.0	0.0	1.9	(s)	111.4	0.0	183.2
1997	1.0	34.8	8.6	R 0.0	(s)	21.2	1.0	1.8	R 32.6	0.0	0.0	1.4	(s)	111.4	0.0	R 181.2
1998	0.2	31.2	7.5	R 0.0	(s)	21.0	2.9	2.3	R 33.6	0.0	0.0	1.2	(s)	111.1	0.0	R 177.4
1999	0.2	33.0	8.0	0.0	(s)	20.7	2.8	1.9	33.5	0.0	0.0	1.3	(s)	113.5	0.0	181.3
2000	0.2	34.4	10.0	0.0	(s)	21.2	1.3	2.0	34.5	0.0	0.0	1.4	(s)	116.3	0.0	186.7
2001	0.7	30.6	9.7	0.0	(s)	20.3	1.8	1.7	33.5	0.0	0.0	0.9	(s)	117.8	0.0	183.4
2002	0.1	33.7	12.4	0.0	(s)	20.5	0.0	0.5	33.4	0.0	0.0	0.9	(s)	119.0	0.0	187.1
2003	0.2	33.7	10.8	0.0	(s)	18.2	0.0	0.5	29.5	0.0	0.0	0.9	(s)	118.7	0.0	183.0
2004	0.7	33.1	11.4	0.0	(s)	18.7	0.0	0.5	30.6	0.0	0.0	0.9	(s)	124.4	0.0	189.8
2005	0.9	33.8	10.9	0.0	(s)	17.6	0.0	0.5	29.0	0.0	0.0	R 1.1	(s)	125.4	0.0	R 190.1
2006	0.0	29.8	6.1	0.0	(s)	16.6	0.0	0.5	23.2	0.0	0.0	R 1.0	(s)	121.6	0.0	175.6
2007	0.5	33.9	6.0	0.0	(s)	16.0	0.0	0.5	22.5	0.0	0.0	1.1	(s)	129.3	0.0	187.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	79	9	1,314	67	1	1,382	6	--	--	429	--	--	--
1965	59	11	1,241	43	1	1,285	4	--	--	578	--	--	--
1970	22	14	1,622	21	1	1,644	5	--	--	830	--	--	--
1975	5	13	1,161	7	1	1,169	6	--	--	909	--	--	--
1980	23	14	749	5	1	755	139	--	--	1,085	--	--	--
1985	31	17	553	10	1	564	162	--	--	1,233	--	--	--
1990	14	15	178	3	1	182	58	--	--	1,480	--	--	--
1995	1	16	284	6	2	292	81	--	--	1,608	--	--	--
1996	3	17	302	6	2	310	84	--	--	1,614	--	--	--
1997	4	16	258	6	2	266	59	--	--	1,554	--	--	--
1998	1	13	235	6	2	243	52	--	--	1,596	--	--	--
1999	1	14	209	5	2	216	55	--	--	1,643	--	--	--
2000	1	15	218	3	1	222	59	--	--	1,624	--	--	--
2001	3	13	199	(s)	2	201	37	--	--	1,699	--	--	--
2002	(s)	14	352	(s)	2	354	37	--	--	1,790	--	--	--
2003	1	15	352	(s)	2	354	39	--	--	1,754	--	--	--
2004	3	14	387	(s)	2	389	40	--	--	1,834	--	--	--
2005	3	14	351	(s)	2	353	R 47	--	--	1,938	--	--	--
2006	0	11	183	0	2	185	R 43	--	--	1,822	--	--	--
2007	2	13	205	0	2	207	47	--	--	1,970	--	--	--
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	0.0	(s)	5.1	22.9	11.7	34.5
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	12.3	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	12.9	34.0
2002	(s)	14.6	2.0	(s)	(s)	2.1	0.7	0.0	(s)	6.1	23.5	13.6	37.1
2003	(s)	15.6	2.0	(s)	(s)	2.1	0.8	0.0	(s)	6.0	24.4	13.2	37.6
2004	0.1	14.7	2.3	(s)	(s)	2.3	0.8	0.0	(s)	6.3	24.1	13.8	37.9
2005	0.1	14.6	2.0	(s)	(s)	2.0	0.9	0.0	(s)	6.6	24.2	14.5	38.7
2006	0.0	11.7	1.1	0.0	(s)	1.1	R 0.9	0.0	(s)	6.2	19.8	13.4	R 33.3
2007	(s)	13.7	1.2	0.0	(s)	1.2	0.9	0.0	(s)	6.7	22.6	14.5	37.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	55	4	1,060	34	(s)	85	1,443	2,621	0	--	--	955	--	--	--
1965	45	6	1,001	22	(s)	78	4,044	5,144	0	--	--	1,359	--	--	--
1970	18	12	1,308	10	(s)	65	5,081	6,464	0	--	--	1,935	--	--	--
1975	11	12	936	4	(s)	78	1,051	2,068	0	--	--	2,355	--	--	--
1980	86	14	647	1	(s)	40	37	725	0	--	--	2,457	--	--	--
1985	109	12	836	55	(s)	27	286	1,205	0	--	--	4,317	--	--	--
1990	56	13	596	8	(s)	71	218	893	0	--	--	5,250	--	--	--
1995	5	17	830	129	(s)	101	130	1,190	0	--	--	8,275	--	--	--
1996	20	16	961	101	(s)	20	96	1,178	0	--	--	8,108	--	--	--
1997	36	18	506	202	(s)	49	34	792	0	--	--	8,132	--	--	--
1998	5	17	318	293	(s)	170	4	786	0	--	--	8,261	--	--	--
1999	5	18	335	227	(s)	22	2	587	0	--	--	8,354	--	--	--
2000	6	18	561	243	(s)	54	1	859	0	--	--	8,540	--	--	--
2001	27	17	541	207	(s)	253	1	1,003	0	--	--	8,716	--	--	--
2002	4	18	296	(s)	(s)	511	0	807	0	--	--	8,878	--	--	--
2003	6	17	371	1	(s)	243	0	616	0	--	--	8,639	--	--	--
2004	27	17	457	1	(s)	178	0	637	0	--	--	8,994	--	--	--
2005	35	18	404	3	(s)	246	0	653	0	--	--	9,296	--	--	--
2006	0	17	348	3	(s)	66	0	417	0	--	--	9,030	--	--	--
2007	17	19	304	1	(s)	24	0	330	0	--	--	9,519	--	--	--
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	0.0	0.1	0.0	17.9	38.3	41.4	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	116.7
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	114.6
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	66.3	119.4
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	67.5	121.2
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	65.0	115.8
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	67.9	120.8
2005	0.9	18.6	2.4	(s)	(s)	1.3	0.0	3.7	0.0	0.1	0.0	31.7	55.0	69.4	124.4
2006	0.0	17.5	2.0	(s)	(s)	0.3	0.0	2.4	0.0	0.1	0.0	30.8	50.9	66.6	117.5
2007	0.4	19.6	1.8	(s)	(s)	0.1	0.0	1.9	0.0	0.1	0.0	32.5	54.5	70.1	124.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	463	(s)	211	1	0	949	80	1,241	0	--	--	1,237	--	--
1965	129	(s)	316	1	0	2,689	70	3,076	0	--	--	1,836	--	--
1970	414	(s)	377	2	0	3,296	35	3,710	0	--	--	2,627	--	--
1975	292	(s)	150	2	0	686	132	970	0	--	--	2,532	--	--
1980	25	(s)	192	3	0	54	285	534	0	--	--	3,356	--	--
1985	0	0	40	2	59	1	37	139	0	--	--	2,534	--	--
1990	0	0	2	2	90	1	38	133	0	--	--	2,976	--	--
1995	0	0	16	3	44	(s)	33	95	0	--	--	262	--	--
1996	0	0	18	3	39	(s)	29	89	0	--	--	252	--	--
1997	0	0	21	4	56	0	42	121	0	--	--	262	--	--
1998	0	0	17	1	27	0	36	81	0	--	--	262	--	--
1999	0	0	140	1	18	0	34	194	0	--	--	249	--	--
2000	0	0	34	5	23	(s)	36	98	0	--	--	273	--	--
2001	0	0	36	3	126	0	33	197	0	--	--	281	--	--
2002	0	0	69	1	96	0	34	201	0	--	--	282	--	--
2003	0	0	94	2	161	0	27	284	0	--	--	267	--	--
2004	0	0	47	2	133	0	25	207	0	--	--	282	--	--
2005	0	0	39	1	112	0	24	177	0	--	--	256	--	--
2006	0	0	42	1	112	0	24	179	0	--	--	240	--	--
2007	0	0	49	2	55	0	32	138	0	--	--	297	--	--
Trillion Btu														
1960	12.0	0.2	1.2	(s)	0.0	6.0	0.5	7.7	0.0	0.0	0.0	4.2	24.0	34.5
1965	3.3	0.3	1.8	(s)	0.0	16.9	0.4	19.2	0.0	0.0	0.0	6.3	29.0	44.0
1970	10.0	0.4	2.2	(s)	0.0	20.7	0.2	23.1	0.0	0.0	0.0	9.0	42.6	64.3
1975	7.0	0.4	0.9	(s)	0.0	4.3	0.8	6.0	0.0	0.0	0.0	8.6	22.0	42.8
1980	0.6	0.4	1.1	(s)	0.0	0.3	1.6	3.1	0.0	0.0	0.0	11.5	15.5	43.1
1985	0.0	0.0	0.2	(s)	0.3	(s)	0.2	0.8	0.0	0.0	0.0	8.6	9.4	29.4
1990	0.0	0.0	(s)	(s)	0.5	(s)	0.2	0.7	0.0	0.0	0.0	10.2	10.9	34.4
1995	0.0	0.0	0.1	(s)	0.2	(s)	0.2	0.5	0.0	0.0	0.0	0.9	1.4	3.5
1996	0.0	0.0	0.1	(s)	0.2	(s)	0.2	0.5	0.0	0.0	0.0	0.9	1.4	3.3
1997	0.0	0.0	0.1	(s)	0.3	0.0	0.3	0.7	0.0	0.0	0.0	0.9	1.6	3.6
1998	0.0	0.0	0.1	(s)	0.1	0.0	0.2	0.5	0.0	0.0	0.0	0.9	1.4	3.4
1999	0.0	0.0	0.8	(s)	0.1	0.0	0.2	1.1	0.0	0.0	0.0	0.9	2.0	3.9
2000	0.0	0.0	0.2	(s)	0.1	(s)	0.2	0.6	0.0	0.0	0.0	0.9	1.5	3.6
2001	0.0	0.0	0.2	(s)	0.7	0.0	0.2	1.1	0.0	0.0	0.0	1.0	2.0	4.2
2002	0.0	0.0	0.4	(s)	0.5	0.0	0.2	1.1	0.0	0.0	0.0	1.0	2.1	4.2
2003	0.0	0.0	0.5	(s)	0.8	0.0	0.2	1.6	0.0	0.0	0.0	0.9	2.5	4.5
2004	0.0	0.0	0.3	(s)	0.7	0.0	0.2	1.1	0.0	0.0	0.0	1.0	2.1	4.2
2005	0.0	0.0	0.2	(s)	0.6	0.0	0.2	1.0	0.0	0.0	0.0	0.9	1.8	3.8
2006	0.0	0.0	0.2	(s)	0.6	0.0	0.2	1.0	0.0	0.0	0.0	0.8	1.8	3.6
2007	0.0	0.0	0.3	(s)	0.3	0.0	0.2	0.8	0.0	0.0	0.0	1.0	1.8	4.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	8	(s)	0	305	0	(s)	112	4,872	28	5,317	0	32	--	--	--
1965	(s)	0	0	874	(s)	(s)	59	5,391	6	6,331	0	0	--	--	--
1970	1	(s)	0	492	(s)	(s)	53	5,623	13	6,182	0	0	--	--	--
1975	(s)	(s)	0	820	0	1	46	5,670	350	6,887	0	0	--	--	--
1980	0	0	0	587	329	(s)	54	3,841	59	4,870	0	106	--	--	--
1985	0	(s)	0	898	7	1	49	3,716	202	4,873	(s)	130	--	--	--
1990	0	(s)	0	804	5	1	55	3,882	3	4,750	0	142	--	--	--
1995	0	(s)	4	634	R 0	1	53	3,997	0	R 4,688	0	170	--	--	--
1996	0	(s)	(s)	674	0	1	51	3,803	0	4,529	0	163	--	--	--
1997	0	(s)	3	619	R 0	1	54	3,962	0	R 4,639	0	158	--	--	--
1998	0	(s)	3	598	R 0	(s)	56	3,833	0	R 4,490	0	162	--	--	--
1999	0	(s)	3	588	0	(s)	57	3,938	0	4,586	0	172	--	--	--
2000	0	(s)	2	728	0	1	56	3,993	0	4,779	0	179	--	--	--
2001	0	(s)	2	832	0	(s)	51	3,511	(s)	4,396	0	185	--	--	--
2002	0	(s)	2	794	0	(s)	51	3,320	0	4,167	0	179	--	--	--
2003	0	1	2	852	0	(s)	47	3,093	0	3,994	0	285	--	--	--
2004	0	1	(s)	938	0	(s)	48	3,280	0	4,266	0	304	--	--	--
2005	0	1	4	541	0	1	47	3,007	0	3,600	R 55	326	--	--	--
2006	0	1	6	242	0	(s)	46	3,010	0	3,306	R 154	305	--	--	--
2007	0	1	6	274	0	(s)	48	2,978	0	3,307	191	325	--	--	--
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	(s)	0.4	27.2	1.0	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	R 0.0	(s)	0.3	20.8	0.0	24.9	0.0	0.6	R 25.7	1.3	27.1
1996	0.0	0.3	(s)	3.9	R 0.0	(s)	0.3	19.8	0.0	24.1	0.0	0.6	R 24.9	1.3	26.2
1997	0.0	0.3	(s)	3.6	R 0.0	(s)	0.3	20.7	0.0	R 24.6	0.0	0.5	R 25.4	1.2	R 26.7
1998	0.0	0.3	(s)	3.5	R 0.0	(s)	0.3	20.0	0.0	R 23.8	0.0	0.6	R 24.7	1.3	R 25.9
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	26.5
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	2.1	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
2005	0.0	0.6	(s)	3.1	0.0	(s)	0.3	15.7	0.0	19.1	R 0.2	1.1	20.8	2.4	23.3
2006	0.0	0.5	(s)	1.4	0.0	(s)	0.3	15.7	0.0	17.4	R 0.5	1.0	19.0	2.2	21.3
2007	0.0	0.6	(s)	1.6	0.0	(s)	0.3	15.5	0.0	17.5	0.7	1.1	19.1	2.4	21.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, District of Columbia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--
2005	0	0	0	540	0	540	0	0	--	0	0	0	0	--
2006	0	0	0	231	0	231	0	0	--	0	0	0	0	--
2007	0	0	0	197	0	197	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
2005	0.0	0.0	0.0	3.1	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
2006	0.0	0.0	0.0	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
2007	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

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	1,104	138	8,621	9,482	4,936	43,148	30,199	13,050	109,435	0	278	--	--	--	--	--
1965	2,323	185	12,279	17,525	5,663	53,136	43,344	14,590	146,537	0	298	--	--	--	--	--
1970	5,131	337	15,639	23,840	7,828	76,254	53,642	13,340	190,543	0	292	--	--	--	--	--
1975	5,779	280	23,387	24,224	7,478	100,592	79,315	9,300	244,296	8,370	234	--	--	--	--	--
1980	9,543	317	29,431	35,911	10,718	109,279	96,756	11,223	293,318	16,737	215	--	--	--	--	--
1985	19,305	290	31,906	23,101	9,932	125,346	37,777	14,420	242,481	23,461	244	--	--	--	--	--
1990	25,512	328	35,310	31,958	7,744	142,351	54,283	13,060	284,708	21,780	175	--	--	--	--	--
1995	28,223	561	39,733	28,045	7,796	157,657	47,245	12,029	292,505	28,741	231	--	--	--	--	--
1996	30,551	534	38,333	29,345	8,081	159,028	47,414	18,485	300,686	25,470	216	--	--	--	--	--
1997	30,842	522	41,584	R 30,520	5,839	161,878	49,697	20,003	R 309,521	22,968	241	--	--	--	--	--
1998	30,841	504	43,644	R 28,508	6,269	169,201	70,590	21,705	R 339,916	31,115	199	--	--	--	--	--
1999	29,368	559	46,011	28,977	7,170	173,543	63,926	21,735	341,362	31,526	140	--	--	--	--	--
2000	31,100	542	47,692	35,134	7,386	178,336	65,253	20,398	354,199	32,291	87	--	--	--	--	--
2001	29,927	543	49,243	30,658	7,170	181,063	69,088	15,447	352,669	31,583	148	--	--	--	--	--
2002	29,345	689	50,084	27,035	6,047	188,082	55,210	18,928	345,386	33,704	184	--	--	--	--	--
2003	29,450	690	53,719	25,653	6,259	191,578	53,424	20,798	R 351,432	30,979	263	--	--	--	--	--
2004	28,689	734	57,724	29,246	7,498	201,705	62,471	24,026	382,670	31,216	265	--	--	--	--	--
2005	27,672	778	60,982	27,891	6,979	207,482	61,033	25,777	390,144	28,759	266	--	--	--	--	--
2006	28,883	892	62,235	27,631	7,152	210,006	40,915	25,407	373,348	31,426	203	--	--	--	--	--
2007	29,923	917	55,874	31,161	6,254	208,744	38,786	20,484	361,302	29,289	154	--	--	--	--	--
Trillion Btu																
1960	27.2	142.9	50.2	51.5	19.8	226.7	189.9	74.8	612.8	0.0	3.0	32.7	0.0	-8.1	0.0	810.5
1965	55.2	191.7	71.5	97.2	22.7	279.1	272.5	83.6	826.6	0.0	3.1	36.8	0.0	2.1	0.0	1,115.5
1970	116.7	350.6	91.1	133.2	29.6	400.6	337.2	77.7	1,069.4	0.0	3.1	48.0	0.0	-6.4	0.0	1,581.4
1975	133.5	292.1	136.2	135.7	27.8	528.4	498.7	55.3	1,382.0	92.2	2.4	47.6	0.0	-4.7	0.0	1,945.1
1980	225.5	329.6	171.4	201.6	39.4	574.0	608.3	67.1	1,661.9	182.6	2.2	87.8	0.0	36.0	(s)	2,525.5
1985	472.4	305.1	185.9	129.2	35.8	658.4	237.5	87.4	1,334.1	249.2	2.5	108.1	0.0	238.3	3.9	2,713.6
1990	633.4	342.0	205.7	179.6	28.1	747.8	341.3	79.8	1,582.1	230.5	1.8	170.3	27.5	309.9	0.6	3,298.1
1995	686.9	579.3	231.4	159.0	28.2	822.2	297.0	73.9	1,611.8	302.0	2.4	186.3	32.6	252.3	0.0	3,653.6
1996	745.8	561.1	223.3	166.4	29.2	829.5	298.1	107.7	1,654.1	267.5	2.2	206.0	33.2	287.4	0.0	3,757.5
1997	751.3	547.2	242.2	173.0	21.1	843.9	312.4	115.2	R 1,707.9	241.0	2.5	196.9	33.3	298.1	0.0	3,778.2
1998	749.5	529.6	254.2	R 161.6	22.7	881.9	443.8	125.7	R 1,889.9	326.4	2.0	171.7	33.3	220.9	0.0	R 3,923.4
1999	716.3	583.4	268.0	164.3	25.9	904.3	401.9	125.3	1,889.8	329.4	1.4	171.7	32.9	253.2	0.0	3,978.2
2000	760.4	574.5	277.8	199.2	26.6	929.1	410.2	117.4	1,960.5	336.8	0.9	R 164.2	32.0	313.2	0.0	4,142.4
2001	725.9	569.8	286.8	173.8	25.9	943.3	434.4	93.7	1,958.0	330.0	1.5	127.3	31.7	354.5	0.0	R 4,098.6
2002	719.7	705.9	291.7	153.3	21.8	979.5	347.1	114.8	1,908.3	351.8	1.9	144.1	31.2	356.3	0.0	4,219.3
2003	723.8	720.3	312.9	145.5	22.7	997.5	335.9	125.8	1,940.3	322.8	2.7	157.6	31.6	376.3	0.0	4,275.5
2004	699.1	755.5	336.2	165.8	27.1	1,051.9	392.8	146.1	2,119.9	325.5	2.7	149.0	31.8	363.9	0.0	4,447.3
2005	672.3	814.0	355.2	158.1	25.3	1,082.6	383.7	156.2	2,161.2	300.1	2.7	R 153.2	32.8	416.8	0.0	R 4,553.1
2006	696.2	916.6	362.5	156.7	25.8	1,095.8	257.2	155.4	2,053.4	327.9	2.0	R 158.1	35.5	416.6	0.0	R 4,606.2
2007	720.8	950.3	325.5	176.7	22.5	1,089.4	243.8	125.6	1,983.5	307.2	1.5	162.6	38.9	437.2	0.0	4,601.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	0	6	541	3,150	3,458	7,149	436	--	--	7,258	--	--	--
1965	0	8	976	3,001	4,095	8,073	292	--	--	12,283	--	--	--
1970	0	15	1,010	2,414	5,698	9,121	373	--	--	24,610	--	--	--
1975	0	15	1,097	724	5,157	6,977	481	--	--	34,756	--	--	--
1980	2	15	1,215	774	4,434	6,422	2,290	--	--	44,746	--	--	--
1985	24	14	634	864	5,994	7,492	2,942	--	--	54,118	--	--	--
1990	1	13	277	154	4,989	5,421	1,266	--	--	71,115	--	--	--
1995	(s)	15	228	211	3,944	4,382	487	--	--	85,770	--	--	--
1996	(s)	16	213	264	4,030	4,507	505	--	--	88,315	--	--	--
1997	0	13	145	202	3,992	4,340	319	--	--	87,845	--	--	--
1998	1	14	109	167	4,455	4,731	284	--	--	95,768	--	--	--
1999	1	14	101	161	4,433	4,695	298	--	--	93,846	--	--	--
2000	1	15	119	99	4,387	4,605	321	--	--	99,006	--	--	--
2001	7	16	122	91	3,663	3,876	238	--	--	101,377	--	--	--
2002	1	15	94	63	3,965	4,122	242	--	--	108,164	--	--	--
2003	1	16	111	97	3,872	4,080	254	--	--	112,650	--	--	--
2004	0	16	127	95	5,193	5,414	261	--	--	112,203	--	--	--
2005	(s)	16	99	82	4,138	4,318	R 110	--	--	115,791	--	--	--
2006	(s)	16	84	54	R 3,942	R 4,080	R 100	--	--	117,053	--	--	--
2007	(s)	15	50	20	3,827	3,898	111	--	--	117,816	--	--	--
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	368.0	610.5
1985	0.6	15.0	3.7	4.9	21.6	30.2	58.8	0.0	0.0	184.7	289.3	425.3	714.6
1990	(s)	14.1	1.6	0.9	18.1	20.6	25.3	1.1	26.2	242.6	330.0	561.1	891.1
1995	(s)	15.6	1.3	1.2	14.3	16.8	9.7	1.4	31.0	292.6	367.1	664.6	1,031.7
1996	(s)	18.2	1.2	1.5	14.6	17.3	10.1	1.5	31.4	301.3	379.8	685.2	1,065.0
1997	0.0	13.9	0.8	1.1	14.4	16.4	6.4	1.6	31.3	299.7	369.3	679.1	1,048.4
1998	(s)	14.9	0.6	0.9	16.1	17.7	5.7	1.6	31.2	326.8	397.8	741.0	1,138.8
1999	(s)	14.4	0.6	0.9	16.0	17.5	6.0	1.6	30.8	320.2	390.6	732.4	1,123.0
2000	(s)	16.8	0.7	0.6	15.8	17.1	6.4	1.6	29.9	337.8	409.6	768.4	1,178.0
2001	0.2	16.6	0.7	0.5	13.2	14.5	4.8	1.9	29.3	345.9	413.0	770.8	1,183.8
2002	(s)	15.4	0.5	0.4	14.3	15.2	4.8	2.0	28.6	369.1	435.2	822.7	1,257.8
2003	(s)	17.1	0.6	0.5	14.1	15.2	5.1	2.6	28.1	384.4	452.5	848.1	1,300.7
2004	0.0	16.3	0.7	0.5	18.8	20.1	5.2	2.9	28.0	382.8	455.2	847.1	R 1,302.3
2005	(s)	17.7	0.6	0.5	15.0	16.0	R 2.2	3.3	28.4	395.1	R 462.6	864.1	R 1,326.8
2006	(s)	16.0	0.5	0.3	R 14.2	R 15.0	R 2.0	3.8	30.4	399.4	R 466.7	863.6	R 1,330.3
2007	(s)	16.3	0.3	0.1	13.7	14.2	2.2	4.6	33.0	402.0	472.2	867.3	1,339.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/fl\\_seds.html](http://www.eia.doe.gov/emeu/states/fl_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	7	1,097	175	610	685	2,126	4,693	0	--	--	5,586	--	--	--
1965	0	13	1,981	166	723	712	1,608	5,190	0	--	--	9,369	--	--	--
1970	0	27	2,049	134	1,005	1,382	1,467	6,038	0	--	--	16,244	--	--	--
1975	0	32	2,226	40	910	1,038	1,555	5,769	0	--	--	22,904	--	--	--
1980	8	30	1,926	28	782	1,340	1,476	5,552	0	--	--	27,422	--	--	--
1985	86	31	4,083	1,047	1,058	1,368	2,170	9,726	0	--	--	41,290	--	--	--
1990	4	36	3,853	125	880	1,412	2,365	8,636	0	--	--	55,769	--	--	--
1995	1	40	2,944	95	696	100	138	3,973	0	--	--	65,201	--	--	--
1996	1	42	2,120	106	711	100	99	3,136	0	--	--	66,255	--	--	--
1997	0	37	1,785	54	705	241	124	2,909	0	--	--	68,879	--	--	--
1998	5	38	1,393	65	786	247	10	2,501	0	--	--	73,087	--	--	--
1999	6	36	1,801	61	782	251	13	2,908	0	--	--	74,790	--	--	--
2000	8	48	2,641	28	774	303	15	3,761	0	--	--	77,900	--	--	--
2001	53	49	3,037	25	646	243	15	3,965	0	--	--	79,455	--	--	--
2002	9	56	2,568	16	700	397	71	3,751	0	--	--	83,279	--	--	--
2003	7	54	2,661	19	683	260	17	3,641	0	--	--	85,257	--	--	--
2004	0	56	3,980	20	916	281	117	5,315	0	--	--	86,765	--	--	--
2005	(s)	58	3,542	52	730	383	351	5,057	0	--	--	89,410	--	--	--
2006	(s)	51	3,732	17	R 696	446	82	R 4,972	0	--	--	91,300	--	--	--
2007	(s)	51	2,306	12	675	676	41	3,711	0	--	--	93,931	--	--	--
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	225.5	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	0.0	3.2	0.2	190.3	281.7	440.0	721.7
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	505.2	794.5
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	514.1	805.6
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	532.5	823.4
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	565.5	869.4
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	583.7	894.0
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	604.6	945.7
2001	1.2	52.5	17.7	0.1	2.3	1.3	0.1	21.5	0.0	1.2	0.6	271.1	348.2	604.1	952.3
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	633.4	996.7
2003	0.2	58.5	15.5	0.1	2.5	1.4	0.1	19.6	0.0	1.1	0.9	290.9	371.1	641.9	1,013.0
2004	0.0	R 57.6	23.2	0.1	3.3	1.5	0.7	28.8	0.0	1.4	1.0	296.0	384.9	655.0	1,039.9
2005	(s)	63.2	20.6	0.3	2.6	2.0	2.2	27.8	0.0	R 0.8	1.2	305.1	398.1	667.3	R 1,065.3
2006	(s)	51.9	21.7	0.1	R 2.5	2.3	0.5	27.2	0.0	R 0.8	1.2	311.5	392.7	673.6	R 1,066.3
2007	(s)	55.2	13.4	0.1	2.4	3.5	0.3	19.7	0.0	0.9	1.3	320.5	397.7	691.5	1,089.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	0	35	2,934	785	182	10,883	4,535	19,320	0	--	--	3,963	--	--
1965	0	74	4,451	711	180	9,636	6,426	21,404	0	--	--	6,449	--	--
1970	0	92	4,494	928	202	8,148	6,985	20,757	0	--	--	9,365	--	--
1975	21	90	4,724	1,242	92	7,369	5,993	19,421	0	--	--	13,294	--	--
1980	748	102	7,077	5,341	86	13,673	8,277	34,453	0	--	--	18,598	--	--
1985	911	76	5,181	2,489	1,022	6,283	10,936	25,910	0	--	--	15,742	--	--
1990	1,207	87	4,148	1,662	1,069	3,220	11,149	21,248	0	--	--	16,605	--	--
1995	1,325	129	5,792	3,008	1,148	4,980	10,338	25,265	0	--	--	16,473	--	--
1996	1,270	133	5,649	3,221	1,139	3,903	16,520	30,432	0	--	--	17,212	--	--
1997	1,347	128	5,740	1,039	1,144	3,440	15,038	26,401	0	--	--	18,266	--	--
1998	1,279	124	5,515	936	1,900	4,137	15,576	28,063	0	--	--	18,448	--	--
1999	1,189	137	6,361	1,822	1,069	3,174	15,445	27,872	0	--	--	18,579	--	--
2000	1,245	107	6,230	2,087	1,139	3,495	15,614	28,565	0	--	--	18,884	--	--
2001	1,171	97	6,820	2,547	2,371	2,804	9,438	23,981	0	--	--	19,854	--	--
2002	1,196	85	7,115	1,211	2,452	1,589	9,721	22,088	0	--	--	18,959	--	--
2003	1,111	75	10,195	1,531	2,665	1,882	9,134	25,406	0	--	--	19,375	--	--
2004	1,045	65	8,401	1,121	2,875	3,066	11,156	26,619	0	--	--	19,518	--	--
2005	1,068	64	8,939	1,770	2,795	2,851	10,076	26,431	0	--	--	19,676	--	--
2006	1,128	71	8,283	R 2,190	2,875	2,426	11,769	R 27,543	0	--	--	19,768	--	--
2007	1,096	68	6,362	1,554	3,507	1,759	11,335	24,517	0	--	--	19,241	--	--
Trillion Btu														
1960	0.0	36.4	17.1	3.2	1.0	68.4	29.0	118.7	0.0	23.8	0.0	13.5	192.4	225.9
1965	0.0	77.2	25.9	2.9	0.9	60.6	39.7	130.0	0.0	30.8	0.0	22.0	260.0	312.5
1970	0.0	96.3	26.2	3.5	1.1	51.2	43.4	125.4	0.0	40.4	0.0	32.0	294.0	371.3
1975	0.5	96.6	27.5	4.6	0.5	46.3	37.5	116.4	0.0	37.8	0.0	45.4	296.7	405.7
1980	17.1	108.6	41.2	19.6	0.5	86.0	50.9	198.2	0.0	40.9	0.0	63.5	428.3	581.3
1985	22.6	84.2	30.2	9.0	5.4	39.5	67.9	151.9	0.0	47.9	0.0	53.7	360.3	484.0
1990	30.2	93.9	24.2	6.0	5.6	20.2	69.1	125.2	0.0	111.0	0.0	56.7	416.9	547.9
1995	33.3	137.9	33.7	10.9	6.0	31.3	64.4	146.3	0.0	112.9	0.0	56.2	486.6	614.2
1996	31.9	148.6	32.9	11.6	5.9	24.5	96.4	171.5	0.0	120.4	0.0	58.7	531.1	664.7
1997	33.7	135.0	33.4	3.8	6.0	21.6	85.9	150.7	0.0	117.3	0.0	62.3	499.0	640.2
1998	32.0	131.0	32.1	3.4	9.9	26.0	89.3	160.7	0.0	99.8	0.0	62.9	486.4	629.1
1999	29.7	142.9	37.1	6.6	5.6	20.0	88.0	157.2	0.0	95.8	0.0	63.4	489.1	634.0
2000	32.1	118.7	36.3	7.5	5.9	22.0	89.2	161.0	0.0	90.2	0.0	64.4	466.3	612.9
2001	30.1	103.3	39.7	9.2	12.4	17.6	58.0	136.9	0.0	87.9	0.0	67.7	425.9	576.9
2002	30.6	86.6	41.4	4.4	12.8	10.0	59.8	128.4	0.0	93.0	0.0	64.7	403.3	547.5
2003	28.3	80.3	59.4	5.6	13.9	11.8	55.9	146.5	0.0	100.2	0.0	66.1	421.6	567.5
2004	27.0	66.4	48.9	4.1	15.0	19.3	68.9	156.2	0.0	91.2	0.0	66.6	407.4	554.7
2005	27.6	70.6	52.1	6.4	14.6	17.9	62.1	153.1	0.0	99.7	0.0	67.1	418.1	564.9
2006	28.7	73.2	48.3	R 7.9	15.0	15.3	73.6	R 160.0	0.0	R 104.8	0.0	R 434.2	145.8	R 580.0
2007	27.9	73.2	37.1	5.6	18.3	11.1	70.8	142.8	0.0	107.7	0.0	65.7	417.2	558.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	0	1	4,517	3,858	9,482	82	674	42,281	3,770	64,663	0	0	--	--	--
1965	0	3	4,273	4,482	17,525	134	723	52,244	4,751	84,132	0	0	--	--	--
1970	0	4	3,138	7,493	23,840	197	669	74,670	2,244	112,252	0	0	--	--	--
1975	(s)	2	1,921	10,160	24,199	169	622	99,462	2,211	138,744	0	0	--	--	--
1980	0	4	1,339	16,014	35,911	161	805	107,853	11,613	173,695	0	0	--	--	--
1985	0	4	841	20,762	23,101	390	733	122,956	6,892	175,675	1,072	18	--	--	--
1990	0	3	808	25,155	31,958	213	824	139,870	9,946	208,776	180	46	--	--	--
1995	0	8	599	28,915	28,045	148	786	156,410	8,435	223,338	57	49	--	--	--
1996	0	6	519	28,649	29,345	120	763	157,789	8,126	225,310	20	51	--	--	--
1997	0	6	567	32,321	R 30,520	103	806	160,492	8,485	R 233,294	34	51	--	--	--
1998	0	4	431	33,143	R 28,508	92	844	167,054	7,664	R 237,736	35	51	--	--	--
1999	0	7	591	34,490	28,977	132	853	172,223	7,609	244,875	24	55	--	--	--
2000	0	8	612	35,141	35,134	138	840	176,893	9,977	258,735	44	54	--	--	--
2001	0	7	483	36,439	30,658	314	770	178,449	8,488	255,601	26	66	--	--	--
2002	0	12	492	36,609	27,035	171	761	185,233	10,437	260,739	10	72	--	--	--
2003	0	10	398	37,634	25,653	173	703	188,653	4,525	257,740	0	97	--	--	--
2004	0	11	393	42,771	29,246	269	712	198,549	12,752	284,692	1	98	--	--	--
2005	0	10	443	46,030	27,891	342	709	204,304	13,428	293,145	R 1,249	99	--	--	--
2006	0	12	418	48,968	27,631	324	690	206,686	14,030	298,747	R 1,778	99	--	--	--
2007	0	10	370	45,932	31,161	197	713	204,560	13,260	296,193	2,569	96	--	--	--
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	3.8	0.1	957.6	0.1	957.7
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	R 161.6	0.3	5.1	870.7	48.2	R 1,281.2	0.1	0.2	R 1,285.7	0.4	R 1,286.1
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	1,394.3
2004	0.0	11.5	2.0	249.1	165.8	1.0	4.3	1,035.4	80.2	1,537.8	(s)	0.3	1,549.7	0.7	1,550.4
2005	0.0	10.5	2.2	268.1	158.1	1.2	4.3	1,066.1	84.4	1,584.5	R 4.4	0.3	1,595.3	0.7	1,596.1
2006	0.0	12.5	2.1	285.2	156.7	1.2	4.2	1,078.5	88.2	1,616.1	R 6.3	0.3	1,628.9	0.7	1,629.6
2007	0.0	11.2	1.9	267.6	176.7	0.7	4.3	1,067.6	83.4	1,602.1	9.1	0.3	1,613.6	0.7	1,614.3

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Florida

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	26,603	630	44,403	2,373	14,416	61,192	28,759	266	--	0	0	0	0	--
2006	27,755	742	24,378	1,167	12,459	38,004	31,426	203	--	0	0	0	0	--
2007	28,826	773	23,726	1,223	8,034	32,983	29,289	154	--	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	30.8	0.0	0.0	0.0	0.0	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	389.9	363.3	16.5	27.9	407.7	330.0	1.5	33.4	0.0	0.0	0.0	0.0	1,856.9
2002	688.8	535.2	271.0	21.5	47.4	340.0	351.8	1.9	45.0	0.0	0.0	0.0	0.0	1,962.7
2003	695.3	553.5	295.5	18.2	62.9	376.6	322.8	2.7	51.1	0.0	0.0	0.0	0.0	2,002.0
2004	672.0	<sup>R</sup> 603.7	292.6	14.2	70.2	377.0	325.5	2.7	51.2	0.0	0.0	0.0	0.0	<sup>R</sup> 2,032.1
2005	644.7	652.1	279.2	13.8	86.8	379.8	300.1	2.7	50.4	0.0	0.0	0.0	0.0	2,029.8
2006	667.5	762.9	153.3	6.8	75.1	235.1	327.9	2.0	50.4	0.0	0.0	0.0	0.0	2,045.9
2007	692.9	794.4	149.2	7.1	48.4	204.7	307.2	1.5	51.7	0.0	0.0	0.0	0.0	2,052.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	3,548	182	5,140	2,306	4,253	32,079	6,551	5,390	55,720	0	2,306	--	--	--	--	--
1965	6,116	211	8,531	2,158	5,424	39,136	8,413	8,205	71,867	0	3,234	--	--	--	--	--
1970	8,131	333	12,781	10,506	7,430	54,081	10,279	7,026	102,104	0	2,519	--	--	--	--	--
1975	13,141	327	16,115	12,887	8,168	65,541	10,809	8,006	121,527	3,093	4,334	--	--	--	--	--
1980	21,892	315	19,437	16,421	7,444	65,506	9,036	12,255	130,097	8,436	4,423	--	--	--	--	--
1985	29,898	282	24,639	16,236	6,825	72,993	11,931	10,668	143,292	10,130	2,826	--	--	--	--	--
1990	30,067	311	28,927	18,439	6,021	83,148	3,491	13,153	153,179	24,797	4,589	--	--	--	--	--
1995	31,288	374	34,292	18,451	7,288	97,672	4,103	15,926	R 177,731	30,661	4,197	--	--	--	--	--
1996	31,158	385	40,426	17,293	7,490	101,063	4,777	14,216	185,265	29,925	4,679	--	--	--	--	--
1997	32,846	372	36,178	R 15,240	7,800	101,576	4,251	14,286	R 179,330	30,414	4,280	--	--	--	--	--
1998	32,720	369	37,511	R 15,148	6,188	106,860	2,367	15,237	R 183,310	31,380	5,235	--	--	--	--	--
1999	33,491	338	40,637	15,316	6,899	109,920	2,199	17,609	192,580	31,478	2,751	--	--	--	--	--
2000	35,149	414	42,597	13,046	9,112	111,119	2,710	15,137	193,720	32,473	2,481	--	--	--	--	--
2001	32,896	351	45,554	9,903	6,692	113,550	1,726	15,530	192,955	33,682	2,596	--	--	--	--	--
2002	34,470	384	41,946	7,430	6,820	116,875	3,699	15,763	192,533	31,108	2,716	--	--	--	--	--
2003	35,111	380	42,889	R 8,790	6,290	118,244	4,429	15,495	196,136	33,257	4,140	--	--	--	--	--
2004	37,872	395	45,732	9,177	6,504	120,751	6,753	17,334	206,251	33,748	3,692	--	--	--	--	--
2005	40,887	413	50,768	9,576	6,310	122,294	7,648	16,698	213,294	31,534	4,032	--	--	--	--	--
2006	40,477	420	47,937	6,552	6,090	120,440	9,937	16,804	207,759	32,006	2,569	--	--	--	--	--
2007	42,313	441	45,635	6,726	5,729	121,069	7,029	16,552	202,740	32,545	2,236	--	--	--	--	--
Trillion Btu																
1960	89.0	188.5	29.9	12.4	17.1	168.5	41.2	33.1	302.2	0.0	24.8	71.2	0.0	26.2	0.0	701.8
1965	152.6	219.8	49.7	11.6	21.8	205.6	52.9	49.9	391.4	0.0	33.8	74.2	0.0	46.4	0.0	918.2
1970	193.2	342.8	74.5	59.0	28.1	284.1	64.6	43.4	553.6	0.0	26.4	71.8	0.0	93.2	0.0	1,281.0
1975	312.0	335.4	93.9	72.6	30.3	344.3	68.0	49.3	658.3	34.1	45.1	78.3	0.0	30.3	0.0	1,493.4
1980	521.5	325.3	113.2	92.6	27.3	344.1	56.8	73.3	707.3	92.0	45.9	98.1	0.0	-56.4	(s)	1,733.8
1985	725.7	R 289.7	143.5	91.5	24.6	383.4	75.0	64.2	782.3	107.6	29.5	116.7	0.0	-107.0	-0.1	1,944.4
1990	714.1	R 319.4	168.5	104.2	21.8	436.8	21.9	80.1	833.3	262.4	47.7	187.6	0.1	-62.0	0.5	2,303.2
1995	723.8	R 383.5	199.8	104.6	26.4	509.4	25.8	94.2	960.2	322.2	43.3	205.6	0.2	20.7	-0.1	2,659.4
1996	723.1	R 393.5	235.5	98.0	27.1	527.1	30.0	84.8	1,002.6	314.3	48.4	208.3	0.2	86.4	-0.1	2,776.6
1997	768.0	381.7	210.7	86.4	28.2	529.5	26.7	84.9	R 966.5	319.2	43.7	218.5	0.2	38.7	(s)	2,736.5
1998	767.4	R 378.6	218.5	R 85.9	22.4	557.0	14.9	90.9	R 989.5	329.2	53.4	202.9	0.3	90.5	(s)	R 2,811.7
1999	782.6	347.1	236.7	86.8	24.9	572.8	13.8	106.0	1,041.1	328.9	28.1	203.0	0.3	131.6	(s)	2,862.8
2000	819.5	421.3	248.1	74.0	32.9	578.9	17.0	90.2	1,041.1	338.7	25.3	196.9	0.3	147.3	-0.1	2,990.4
2001	772.0	R 362.7	265.4	56.2	24.2	591.6	10.8	92.7	1,040.9	351.9	26.8	164.9	0.3	158.9	-0.1	2,878.5
2002	807.1	R 392.8	244.3	42.1	24.6	608.7	23.3	93.8	1,036.8	324.7	27.6	255.7	0.4	190.9	(s)	3,036.1
2003	819.0	396.1	249.8	49.8	22.8	615.7	27.8	92.1	1,058.1	346.6	42.4	179.4	0.4	153.3	(s)	2,995.3
2004	835.0	412.0	266.4	52.0	23.5	629.7	42.5	103.5	1,117.7	351.9	37.0	189.4	0.4	191.6	(s)	3,134.9
2005	901.0	425.8	295.7	54.3	22.8	638.1	48.1	99.9	1,158.9	329.1	40.3	R 182.3	0.4	134.3	(s)	R 3,172.1
2006	892.7	R 433.5	279.2	37.1	22.0	628.5	62.5	101.1	1,130.4	333.9	25.5	R 189.3	0.5	143.1	(s)	R 3,148.9
2007	934.7	453.9	265.8	38.1	20.6	631.9	44.2	99.6	1,100.2	341.3	22.1	186.4	0.6	93.9	(s)	3,133.0

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.  
<sup>i</sup> 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.  
<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.  
kWh = Kilowatthours. -- = Not applicable.  
Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.  
Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.  
Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."  
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	226	56	131	633	2,279	3,042	1,719	--	--	4,469	--	--	--
1965	110	67	211	460	3,092	3,764	1,173	--	--	6,936	--	--	--
1970	71	87	250	121	4,164	4,536	729	--	--	12,474	--	--	--
1975	15	87	298	34	3,896	4,229	758	--	--	16,457	--	--	--
1980	5	90	578	91	3,553	4,222	1,033	--	--	20,033	--	--	--
1985	8	84	395	257	3,952	4,604	1,297	--	--	23,505	--	--	--
1990	4	90	297	111	3,400	3,808	548	--	--	29,933	--	--	--
1995	8	115	164	126	4,001	4,290	829	--	--	35,812	--	--	--
1996	(s)	127	151	144	4,072	4,367	861	--	--	37,763	--	--	--
1997	2	114	79	135	4,387	4,601	686	--	--	36,831	--	--	--
1998	1	107	93	171	3,770	4,035	609	--	--	41,519	--	--	--
1999	2	99	55	241	4,106	4,401	641	--	--	41,767	--	--	--
2000	1	141	72	198	4,671	4,941	689	--	--	44,560	--	--	--
2001	1	120	61	181	3,285	3,527	453	--	--	44,380	--	--	--
2002	1	127	55	81	3,289	3,425	460	--	--	48,600	--	--	--
2003	0	130	38	66	3,528	3,632	484	--	--	48,174	--	--	--
2004	1	126	40	93	3,848	3,982	496	--	--	51,124	--	--	--
2005	4	125	42	68	3,134	3,243	R 628	--	--	52,827	--	--	--
2006	0	110	31	63	R 2,894	R 2,988	R 572	--	--	54,521	--	--	--
2007	(s)	112	28	39	2,921	2,988	630	--	--	56,223	--	--	--
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	363.9
1985	0.2	R 86.4	2.3	1.5	14.2	18.0	25.9	0.0	0.0	80.2	210.7	184.7	395.4
1990	0.1	R 92.7	1.7	0.6	12.3	14.7	11.0	(s)	0.1	102.1	220.7	236.2	456.8
1995	0.2	117.6	1.0	0.7	14.5	16.2	16.6	(s)	0.2	122.2	272.9	277.5	550.4
1996	(s)	R 130.0	0.9	0.8	14.7	16.4	17.2	(s)	0.2	128.8	292.7	293.0	585.7
1997	(s)	117.6	0.5	0.8	15.9	17.1	13.7	0.1	0.2	125.7	274.3	284.7	559.0
1998	(s)	110.3	0.5	1.0	13.6	15.1	12.2	0.1	0.2	141.7	279.6	321.3	600.9
1999	0.1	101.4	0.3	1.4	14.8	16.5	12.8	0.1	0.2	142.5	273.7	326.0	599.6
2000	(s)	143.4	0.4	1.1	16.8	18.4	13.8	0.1	0.2	152.0	327.9	345.8	673.7
2001	(s)	124.1	0.4	1.0	11.9	13.3	9.1	0.1	0.2	151.4	298.2	337.4	635.6
2002	(s)	129.8	0.3	0.5	11.9	12.7	9.2	0.1	0.3	165.8	317.8	369.6	687.4
2003	0.0	135.7	0.2	0.4	12.8	13.4	9.7	0.1	0.3	164.4	323.5	362.7	686.2
2004	(s)	132.1	0.2	0.5	13.9	14.7	9.9	0.1	0.3	174.4	331.6	386.0	R 717.6
2005	0.1	128.2	0.2	0.4	11.3	12.0	R 12.6	0.1	0.3	180.2	R 333.5	394.2	R 727.7
2006	0.0	113.4	0.2	0.4	R 10.4	R 11.0	R 11.4	0.1	0.3	186.0	R 322.3	402.3	R 724.5
2007	(s)	114.7	0.2	0.2	10.5	10.9	12.6	0.2	0.3	191.8	330.5	413.9	744.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

<sup>e</sup> 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 an explanation of estimation methodology.

<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	157	21	373	206	402	269	59	1,308	0	--	--	2,765	--	--	--	
1965	83	26	603	149	546	306	83	1,687	0	--	--	4,560	--	--	--	
1970	56	39	713	39	735	349	108	1,945	0	--	--	8,174	--	--	--	
1975	36	49	851	11	688	372	80	2,002	0	--	--	11,226	--	--	--	
1980	17	59	315	12	627	363	10	1,327	0	--	--	11,965	--	--	--	
1985	30	52	1,726	46	697	310	468	3,247	0	--	--	17,009	--	--	--	
1990	18	49	1,510	64	600	519	68	2,761	0	--	--	23,715	--	--	--	
1995	52	57	1,453	35	706	62	11	2,267	0	--	--	28,793	--	--	--	
1996	3	61	1,156	31	719	62	11	1,979	0	--	--	30,273	--	--	--	
1997	15	57	869	28	774	632	6	2,309	0	--	--	31,352	--	--	--	
1998	10	55	716	27	665	155	1	1,565	0	--	--	34,026	--	--	--	
1999	15	44	1,211	37	725	142	(s)	2,115	0	--	--	35,536	--	--	--	
2000	8	59	1,238	41	824	223	5	2,330	0	--	--	38,443	--	--	--	
2001	10	51	1,611	61	580	78	(s)	2,330	0	--	--	39,364	--	--	--	
2002	5	49	1,027	47	580	68	0	1,722	0	--	--	40,401	--	--	--	
2003	0	50	914	48	623	68	11	1,662	0	--	--	40,554	--	--	--	
2004	6	55	1,077	21	679	68	0	1,846	0	--	--	42,316	--	--	--	
2005	45	53	844	25	553	69	0	1,490	0	--	--	44,663	--	--	--	
2006	0	48	813	7	R 511	71	0	R 1,402	0	--	--	45,547	--	--	--	
2007	2	49	835	13	515	72	0	1,436	0	--	--	46,997	--	--	--	
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	R 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	0.0	1.2	(s)	80.9	147.8	187.1	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	223.1	394.5	
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	413.3	
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	263.3	446.1	
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	277.3	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	503.4	
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	299.3	500.1	
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	307.3	505.4	
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	305.3	506.2	
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	319.5	532.4	
2005	1.1	54.4	4.9	0.1	2.0	0.4	0.0	7.4	0.0	R 2.0	(s)	152.4	217.4	333.3	R 550.7	
2006	0.0	49.5	4.7	(s)	R 1.8	0.4	0.0	7.0	0.0	R 1.9	(s)	155.4	213.8	336.0	R 549.8	
2007	(s)	50.2	4.9	0.1	1.9	0.4	0.0	7.2	0.0	2.0	(s)	160.4	219.7	346.0	565.7	

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	548	76	2,043	1,507	936	4,909	3,759	13,153	63	--	--	4,713	--	--
1965	630	113	3,538	1,716	616	7,117	6,083	19,070	64	--	--	6,903	--	--
1970	506	141	4,014	2,430	124	8,457	5,717	20,741	58	--	--	10,853	--	--
1975	434	145	3,557	3,478	60	6,243	7,046	20,384	56	--	--	13,866	--	--
1980	679	155	3,993	3,188	26	5,361	11,148	23,717	54	--	--	19,195	--	--
1985	1,575	140	4,079	1,964	1,251	10,397	9,591	27,282	54	--	--	23,122	--	--
1990	2,232	162	4,833	1,916	1,288	2,002	12,150	22,189	36	--	--	26,717	--	--
1995	1,949	184	4,990	2,441	829	2,599	15,005	25,864	41	--	--	31,493	--	--
1996	1,985	182	5,484	2,579	907	3,445	13,287	25,702	41	--	--	33,175	--	--
1997	2,046	175	4,873	2,503	890	3,058	13,347	24,670	40	--	--	33,957	--	--
1998	1,978	164	5,246	1,711	954	1,209	14,253	23,373	26	--	--	35,077	--	--
1999	1,968	154	6,224	1,949	982	1,053	16,528	26,736	20	--	--	35,255	--	--
2000	1,990	166	6,475	3,498	981	1,300	14,147	26,401	22	--	--	36,085	--	--
2001	1,994	138	7,900	2,708	2,338	922	14,605	28,473	29	--	--	33,941	--	--
2002	1,828	143	6,556	2,823	2,387	1,812	14,937	28,515	29	--	--	34,603	--	--
2003	1,761	159	6,332	1,956	2,556	2,297	14,701	27,842	27	--	--	34,768	--	--
2004	1,771	161	6,167	1,788	2,811	2,853	16,464	30,084	24	--	--	35,846	--	--
2005	1,700	156	6,846	2,345	2,710	3,013	15,839	30,754	20	--	--	34,602	--	--
2006	1,587	R 160	5,896	R 2,427	2,808	1,912	16,020	R 29,064	23	--	--	34,588	--	--
2007	1,508	152	5,737	2,083	1,784	1,343	15,790	26,737	19	--	--	34,054	--	--
Trillion Btu														
1960	13.9	78.6	11.9	6.0	4.9	30.9	23.8	77.6	0.7	36.2	0.0	16.1	223.0	262.8
1965	15.9	117.0	20.6	6.9	3.2	44.7	38.2	113.7	0.7	50.3	0.0	23.6	321.1	377.4
1970	12.0	145.3	23.4	9.2	0.7	53.2	36.1	122.5	0.6	56.9	0.0	37.0	374.3	464.0
1975	10.2	149.4	20.7	12.9	0.3	39.2	43.9	117.1	0.6	62.9	0.0	47.3	387.4	501.2
1980	16.5	160.1	23.3	11.7	0.1	33.7	67.0	135.8	0.6	76.9	0.0	65.5	455.4	613.3
1985	39.1	R 143.9	23.8	7.1	6.6	65.4	58.0	160.8	0.6	90.1	0.0	78.9	513.3	695.0
1990	56.1	R 166.4	28.2	6.9	6.8	12.6	74.3	128.7	0.4	175.5	0.0	91.2	618.1	828.9
1995	49.1	R 188.5	29.1	8.8	4.3	16.3	88.9	147.4	0.4	186.5	0.0	107.5	679.3	923.4
1996	49.9	R 185.9	31.9	9.3	4.7	21.7	79.4	147.1	0.4	188.4	0.0	113.2	684.9	942.3
1997	51.3	R 179.6	28.4	9.0	4.6	19.2	79.4	140.7	0.4	201.0	0.0	115.9	688.9	951.4
1998	49.6	R 169.0	30.6	6.2	5.0	7.6	85.1	134.4	0.3	188.5	0.0	119.7	661.4	932.9
1999	49.4	R 158.0	36.3	7.0	5.1	6.6	99.7	154.7	0.2	187.8	(s)	120.3	670.4	945.6
2000	51.0	R 169.2	37.7	12.6	5.1	8.2	84.4	148.0	0.2	180.7	(s)	123.1	672.3	952.3
2001	51.3	R 142.7	46.0	9.8	12.2	5.8	87.3	161.1	0.3	154.0	(s)	115.8	625.1	883.2
2002	47.3	R 146.6	38.2	10.2	12.4	11.4	89.0	161.2	0.3	244.7	(s)	118.1	718.2	981.4
2003	45.5	166.5	36.9	7.1	13.3	14.4	87.4	159.2	0.3	167.8	(s)	118.6	657.9	919.7
2004	45.5	167.7	35.9	6.5	14.7	17.9	98.5	173.5	0.2	177.6	(s)	122.3	686.8	R 957.5
2005	43.5	160.7	39.9	8.5	14.1	18.9	94.9	176.4	0.2	167.5	(s)	118.1	666.4	924.6
2006	40.7	R 164.1	34.3	R 8.7	14.7	12.0	96.6	R 166.4	0.2	R 175.8	(s)	118.0	R 665.3	R 920.5
2007	38.8	156.1	33.4	7.5	9.3	8.4	95.2	153.8	0.2	171.6	(s)	116.2	636.7	887.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	9	4	262	2,592	2,306	66	530	30,875	1,544	38,175	0	43	--	--	--
1965	2	5	928	4,177	2,158	69	583	38,215	1,162	47,292	0	0	--	--	--
1970	1	7	600	7,747	10,506	100	549	53,608	172	73,283	0	0	--	--	--
1975	(s)	4	399	10,331	12,887	106	516	65,110	427	89,776	0	0	--	--	--
1980	0	7	386	14,135	16,421	76	618	65,116	2,995	99,747	0	16	--	--	--
1985	0	5	212	18,205	16,236	212	562	71,432	1,009	107,868	0	61	--	--	--
1990	0	7	196	22,069	18,439	105	632	81,341	1,307	124,089	205	75	--	--	--
1995	0	8	156	27,300	18,451	140	603	96,781	1,383	144,815	3	94	--	--	--
1996	0	9	168	33,077	17,293	120	586	100,094	1,237	152,574	0	96	--	--	--
1997	0	8	157	29,899	R 15,240	136	619	100,054	1,106	R 147,210	0	109	--	--	--
1998	0	8	138	30,055	R 15,148	41	648	105,751	912	R 152,692	0	98	--	--	--
1999	0	9	149	32,082	15,316	120	654	108,795	755	157,872	0	98	--	--	--
2000	0	6	106	33,804	13,046	118	644	109,916	823	158,456	0	96	--	--	--
2001	0	8	92	35,439	9,903	119	591	111,135	650	157,929	0	105	--	--	--
2002	0	9	114	33,867	7,430	128	584	114,419	1,795	158,337	0	186	--	--	--
2003	0	8	140	34,991	R 8,790	183	539	115,621	1,991	162,255	0	180	--	--	--
2004	0	7	209	38,197	9,177	188	547	117,872	3,812	170,002	0	180	--	--	--
2005	0	7	223	42,750	9,576	278	544	119,515	4,451	177,337	R 668	174	--	--	--
2006	0	7	184	41,060	6,552	258	530	117,561	7,968	174,113	R 963	179	--	--	--
2007	0	6	162	38,876	6,726	210	547	119,213	5,653	171,387	1,438	179	--	--	--
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	0.0	0.2	590.1	0.5	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	681.9	0.6	682.5
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	R 803.9
1998	0.0	8.2	0.7	175.1	R 85.9	0.1	3.9	551.2	5.7	822.6	0.0	0.3	831.1	0.8	R 831.9
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	1.1	222.5	52.0	0.7	3.3	614.7	24.0	918.3	0.0	0.6	926.1	1.4	927.5
2005	0.0	6.8	1.1	249.0	54.3	1.0	3.3	623.6	28.0	960.4	R 2.4	0.6	967.8	1.3	969.1
2006	0.0	7.3	0.9	239.2	37.1	0.9	3.2	613.4	50.1	944.9	R 3.4	0.6	952.8	1.3	954.1
2007	0.0	6.4	0.8	226.5	38.1	0.8	3.3	622.2	35.5	927.2	5.1	0.6	934.2	1.3	935.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Georgia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	39,137	72	184	287	0	470	31,534	4,012	--	0	0	0	0	--
2006	38,890	95	56	136	0	192	32,006	2,546	--	0	0	0	0	--
2007	40,803	122	34	159	0	193	32,545	2,217	--	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	0.0	0.0	0.0	0.0	0.0	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	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	1,138.6
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	<sup>R</sup> 789.4	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
2005	856.3	75.6	1.2	1.7	0.0	2.8	329.1	40.1	0.2	0.0	0.0	0.0	0.0	1,304.1
2006	852.0	99.2	0.4	0.8	0.0	1.1	333.9	25.2	0.2	0.0	0.0	0.0	0.0	1,311.8
2007	895.8	126.6	0.2	0.9	0.0	1.1	341.3	21.9	0.2	0.0	0.0	0.0	0.0	1,387.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.

<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.

<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>g</sup> Solar thermal and photovoltaic energy.

<sup>h</sup> Electricity traded with Canada and Mexico.

<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	0	0	886	4,321	112	3,429	4,766	3,331	16,844	0	27	--	--	--	--	--
1965	0	0	1,612	7,618	219	4,082	7,230	1,717	22,478	0	105	--	--	--	--	--
1970	0	0	1,695	14,273	938	5,691	10,154	1,354	34,105	0	108	--	--	--	--	--
1975	0	0	1,948	14,849	872	6,766	11,255	1,408	37,097	0	89	--	--	--	--	--
1980	0	3	5,987	14,116	1,573	7,231	13,196	1,459	43,562	0	86	--	--	--	--	--
1985	46	2	4,526	13,260	133	7,594	13,185	1,308	40,006	0	86	--	--	--	--	--
1990	29	3	6,489	12,646	178	8,670	19,067	2,965	50,015	0	80	--	--	--	--	--
1995	895	3	5,787	9,940	1,316	9,416	14,473	2,909	43,842	0	98	--	--	--	--	--
1996	930	3	4,950	10,087	1,319	9,374	12,667	3,233	41,631	0	104	--	--	--	--	--
1997	933	3	4,640	R 10,221	241	9,358	12,218	3,152	R 39,829	0	115	--	--	--	--	--
1998	822	3	4,451	R 9,999	844	9,342	13,243	2,613	R 40,493	0	121	--	--	--	--	--
1999	801	3	5,314	9,474	376	8,953	12,945	2,601	39,662	0	115	--	--	--	--	--
2000	816	3	5,094	9,438	562	9,289	13,520	2,688	40,591	0	103	--	--	--	--	--
2001	829	3	6,040	8,895	582	9,710	13,284	2,969	41,479	0	101	--	--	--	--	--
2002	748	3	8,086	R 10,189	770	10,419	12,738	2,569	R 44,772	0	95	--	--	--	--	--
2003	837	3	8,031	R 12,708	492	10,597	12,079	2,779	R 46,686	0	91	--	--	--	--	--
2004	857	3	8,634	R 13,379	462	10,741	13,110	2,772	R 49,098	0	94	--	--	--	--	--
2005	805	3	7,307	16,372	432	10,978	13,210	2,968	51,267	0	96	--	--	--	--	--
2006	797	3	6,691	15,334	R 471	11,533	14,687	2,839	R 51,554	0	120	--	--	--	--	--
2007	855	3	9,294	12,756	419	11,348	16,318	2,762	52,897	0	92	--	--	--	--	--
Trillion Btu																
1960	0.0	0.0	5.2	23.5	0.4	18.0	30.0	17.5	94.6	0.0	0.3	0.0	0.0	0.0	0.0	94.9
1965	0.0	0.0	9.4	42.3	0.9	21.4	45.5	9.9	129.3	0.0	1.1	0.2	0.0	0.0	0.0	130.6
1970	0.0	0.0	9.9	80.1	3.5	29.9	63.8	8.2	195.4	0.0	1.1	0.4	0.0	0.0	0.0	197.0
1975	0.0	0.0	11.3	83.5	3.2	35.5	70.8	8.6	212.9	0.0	0.9	0.6	0.0	0.0	0.0	214.4
1980	0.0	R 3.0	34.9	79.2	5.8	38.0	83.0	8.8	249.6	0.0	0.9	11.9	0.0	0.0	-3.0	262.4
1985	1.1	R 2.7	26.4	74.4	0.5	39.9	82.9	8.0	232.1	0.0	0.9	14.2	0.4	0.0	-2.7	248.7
1990	0.7	R 3.0	37.8	71.1	0.6	45.5	119.9	17.8	292.7	0.0	0.8	25.9	1.2	0.0	-3.0	321.4
1995	19.9	R 2.9	33.7	56.4	4.8	49.1	91.0	17.6	252.6	0.0	1.0	19.8	6.3	0.0	-2.9	299.6
1996	20.4	R 2.8	28.8	57.2	4.8	48.9	79.6	19.5	238.9	0.0	1.1	19.1	6.6	0.0	-2.8	285.9
1997	20.5	R 2.7	27.0	R 58.0	0.9	48.8	76.8	19.1	230.5	0.0	1.2	17.4	6.6	0.0	-2.7	276.2
1998	18.2	R 2.8	25.9	R 56.7	3.1	48.7	83.3	15.9	R 233.5	0.0	1.2	16.5	6.5	0.0	-2.8	R 276.0
1999	17.7	R 2.9	31.0	53.7	1.4	46.7	81.4	15.9	229.9	0.0	1.2	17.0	6.0	0.0	-2.9	271.7
2000	17.7	R 3.0	29.7	53.5	2.0	48.4	85.0	16.6	235.2	0.0	1.1	15.2	7.1	0.0	-2.9	276.2
2001	17.8	R 2.9	35.2	50.4	2.1	50.6	83.5	18.0	239.8	0.0	1.0	R 7.9	5.7	0.0	-2.8	272.4
2002	16.6	R 2.9	47.1	R 57.8	2.8	54.3	80.1	15.5	R 257.5	0.0	1.0	7.5	2.9	0.0	-2.8	R 285.6
2003	19.3	R 2.9	46.8	R 72.1	1.8	55.2	75.9	16.7	R 268.5	0.0	0.9	9.3	5.2	0.0	-2.7	R 303.3
2004	19.3	R 2.9	50.3	R 75.9	1.7	56.0	82.4	16.7	R 283.0	0.0	0.9	9.3	6.0	0.0	-2.8	R 318.7
2005	18.0	R 2.9	42.6	92.8	1.6	57.3	83.0	17.9	295.2	0.0	1.0	8.2	6.3	0.0	-2.7	328.8
2006	18.0	R 2.9	39.0	86.9	R 1.7	60.2	92.3	17.0	R 297.1	0.0	1.2	8.5	7.0	0.0	-2.7	R 332.1
2007	19.1	3.0	54.1	72.3	1.5	59.2	102.6	16.5	306.3	0.0	0.9	8.0	9.2	0.0	-2.8	343.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	0	0	(s)	0	57	58	0	--	--	514	--	--	--
1965	0	0	1	0	113	114	0	--	--	861	--	--	--
1970	0	0	1	0	447	449	0	--	--	1,285	--	--	--
1975	0	0	1	0	320	321	0	--	--	1,663	--	--	--
1980	0	1	1	0	430	431	0	--	--	1,841	--	--	--
1985	0	1	(s)	0	101	101	0	--	--	1,879	--	--	--
1990	0	1	(s)	0	127	128	0	--	--	2,324	--	--	--
1995	0	1	2	(s)	86	88	0	--	--	2,606	--	--	--
1996	0	1	(s)	(s)	107	107	0	--	--	2,676	--	--	--
1997	0	1	(s)	(s)	198	198	0	--	--	2,668	--	--	--
1998	0	1	(s)	(s)	563	563	0	--	--	2,641	--	--	--
1999	0	1	(s)	(s)	319	319	0	--	--	2,689	--	--	--
2000	0	1	(s)	(s)	436	437	0	--	--	2,765	--	--	--
2001	0	1	(s)	(s)	443	443	0	--	--	2,802	--	--	--
2002	0	1	(s)	(s)	444	445	0	--	--	2,898	--	--	--
2003	0	1	(s)	(s)	329	330	0	--	--	3,028	--	--	--
2004	0	1	(s)	(s)	336	336	0	--	--	3,162	--	--	--
2005	0	1	(s)	(s)	343	343	0	--	--	3,164	--	--	--
2006	0	1	3	(s)	R 351	R 354	0	--	--	3,182	--	--	--
2007	0	1	3	(s)	296	299	0	--	--	3,201	--	--	--
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	R 1.4	(s)	0.0	1.6	1.6	0.0	0.0	0.0	6.3	7.9	14.0	21.9
1985	0.0	R 0.7	(s)	0.0	0.4	0.4	0.0	0.0	0.0	6.4	6.8	13.4	20.2
1990	0.0	R 0.6	(s)	0.0	0.5	0.5	0.0	0.0	0.9	7.9	9.3	21.7	31.0
1995	0.0	R 0.6	(s)	(s)	0.3	0.3	0.0	0.0	1.2	8.9	10.4	21.7	32.2
1996	0.0	R 0.6	(s)	(s)	0.4	0.4	0.0	0.0	1.3	9.1	10.8	22.3	33.0
1997	0.0	R 0.5	(s)	(s)	0.7	0.7	0.0	0.0	1.3	9.1	11.1	22.2	33.3
1998	0.0	R 0.6	(s)	(s)	2.0	2.0	0.0	0.0	1.3	9.0	12.4	21.8	34.2
1999	0.0	R 0.6	(s)	(s)	1.2	1.2	0.0	0.0	1.4	9.2	11.7	22.0	33.7
2000	0.0	R 0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.4	9.4	12.4	22.3	34.7
2001	0.0	R 0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.3	9.6	12.5	21.2	33.8
2002	0.0	R 0.6	(s)	(s)	1.6	1.6	0.0	0.0	1.4	9.9	12.9	22.8	35.7
2003	0.0	R 0.6	(s)	(s)	1.2	1.2	0.0	0.0	1.4	10.3	13.0	22.0	35.0
2004	0.0	R 0.5	(s)	(s)	1.2	1.2	0.0	0.0	1.5	10.8	13.5	22.5	36.0
2005	0.0	R 0.5	(s)	(s)	1.2	1.2	0.0	0.0	1.6	10.8	13.7	22.9	36.6
2006	0.0	R 0.5	(s)	(s)	R 1.3	R 1.3	0.0	0.0	1.8	10.9	R 13.9	23.2	R 37.1
2007	0.0	0.5	(s)	(s)	1.1	1.1	0.0	0.0	2.0	10.9	14.1	23.7	37.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

<sup>e</sup> 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 an explanation of estimation methodology.

<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	0	48	23	10	55	41	177	0	--	--	306	--	--	--
1965	0	0	71	39	20	59	31	220	0	--	--	495	--	--	--
1970	0	0	174	87	79	133	38	511	0	--	--	771	--	--	--
1975	0	0	84	45	57	98	15	299	0	--	--	1,109	--	--	--
1980	0	2	398	0	76	54	25	552	0	--	--	1,462	--	--	--
1985	0	2	132	1	18	47	21	219	0	--	--	1,612	--	--	--
1990	0	2	453	(s)	22	59	825	1,360	0	--	--	2,253	--	--	--
1995	0	2	343	(s)	15	11	62	432	0	--	--	2,779	--	--	--
1996	0	2	224	(s)	19	11	13	266	0	--	--	2,819	--	--	--
1997	0	2	392	(s)	35	11	11	449	0	--	--	2,839	--	--	--
1998	0	2	211	(s)	99	11	1,704	2,025	0	--	--	2,833	--	--	--
1999	0	2	260	(s)	56	11	6	333	0	--	--	2,944	--	--	--
2000	0	2	218	(s)	77	11	8	315	0	--	--	3,092	--	--	--
2001	0	2	136	(s)	78	12	5	231	0	--	--	3,192	--	--	--
2002	0	2	310	(s)	78	12	(s)	400	0	--	--	3,223	--	--	--
2003	0	2	274	(s)	58	12	0	344	0	--	--	3,517	--	--	--
2004	0	2	382	(s)	59	12	4	457	0	--	--	3,632	--	--	--
2005	0	2	384	(s)	60	12	3	460	0	--	--	3,463	--	--	--
2006	0	2	392	(s)	R 62	12	1	R 467	0	--	--	3,490	--	--	--
2007	0	2	282	(s)	52	12	(s)	346	0	--	--	3,520	--	--	--
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	R 1.7	2.3	0.0	0.3	0.3	0.2	3.0	0.0	0.0	0.0	5.0	8.0	11.1	19.1
1985	0.0	R 2.0	0.8	(s)	0.1	0.2	0.1	1.2	0.0	0.0	0.0	5.5	6.7	11.5	18.2
1990	0.0	R 2.4	2.6	(s)	0.1	0.3	5.2	8.2	0.0	0.0	0.0	7.7	15.9	21.0	36.9
1995	0.0	R 2.3	2.0	(s)	0.1	0.1	0.4	2.5	0.0	0.0	0.0	9.5	12.0	23.2	35.2
1996	0.0	R 2.3	1.3	(s)	0.1	0.1	0.1	1.5	0.0	0.0	0.0	9.6	11.1	23.4	34.6
1997	0.0	R 1.8	2.3	(s)	0.1	0.1	0.1	2.5	0.0	0.0	0.0	9.7	12.2	23.6	35.9
1998	0.0	R 1.8	1.2	(s)	0.4	0.1	10.7	12.4	0.0	0.0	0.0	9.7	22.0	23.4	45.5
1999	0.0	R 1.8	1.5	(s)	0.2	0.1	(s)	1.8	0.0	0.0	(s)	10.0	11.9	24.1	36.0
2000	0.0	R 1.9	1.3	(s)	0.3	0.1	0.1	1.7	0.0	0.0	(s)	10.6	12.3	25.0	37.2
2001	0.0	R 1.8	0.8	(s)	0.3	0.1	(s)	1.2	0.0	0.0	(s)	10.9	12.2	24.2	36.3
2002	0.0	R 1.8	1.8	(s)	0.3	0.1	(s)	2.2	0.0	0.0	(s)	11.0	13.2	25.4	38.6
2003	0.0	R 1.8	1.6	(s)	0.2	0.1	0.0	1.9	0.0	0.0	(s)	12.0	14.0	25.6	39.5
2004	0.0	R 1.9	2.2	(s)	0.2	0.1	(s)	2.5	0.0	2.5	(s)	12.4	17.6	25.9	43.5
2005	0.0	R 1.9	2.2	(s)	0.2	0.1	(s)	2.5	0.0	2.2	(s)	11.8	16.7	25.1	41.8
2006	0.0	R 1.9	2.3	(s)	0.2	0.1	(s)	R 2.6	0.0	2.6	(s)	11.9	R 17.2	25.4	R 42.6
2007	0.0	1.9	1.6	(s)	0.2	0.1	(s)	1.9	0.0	2.3	(s)	12.0	16.3	26.0	42.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	0	0	554	43	83	1,038	649	2,367	0	--	--	465	--	--	--
1965	0	0	635	82	76	1,712	992	3,497	83	--	--	1,096	--	--	--
1970	0	0	701	386	49	1,671	1,066	3,874	86	--	--	1,720	--	--	--
1975	0	0	603	472	53	1,346	1,174	3,648	71	--	--	2,538	--	--	--
1980	0	0	1,369	1,041	49	1,491	1,186	5,135	67	--	--	3,028	--	--	--
1985	46	0	458	9	104	1,344	1,083	2,997	67	--	--	3,143	--	--	--
1990	28	0	725	15	133	1,740	2,617	5,231	57	--	--	3,734	--	--	--
1995	192	0	548	1,207	245	1,024	2,618	5,643	64	--	--	3,803	--	--	--
1996	169	0	475	1,191	259	957	2,998	5,880	65	--	--	3,884	--	--	--
1997	166	(s)	623	6	242	845	2,956	4,672	67	--	--	3,856	--	--	--
1998	146	(s)	584	181	266	305	2,428	3,765	75	--	--	3,787	--	--	--
1999	117	(s)	427	(s)	155	332	2,464	3,380	70	--	--	3,748	--	--	--
2000	110	1	473	49	160	438	2,566	3,685	60	--	--	3,834	--	--	--
2001	113	1	473	61	122	8	2,849	3,513	50	--	--	3,790	--	--	--
2002	50	(s)	459	247	145	446	2,481	3,779	60	--	--	3,770	--	--	--
2003	52	(s)	426	94	137	364	2,699	3,721	50	--	--	3,846	--	--	--
2004	53	(s)	407	67	169	395	2,667	3,704	37	--	--	3,937	--	--	--
2005	59	(s)	512	14	133	781	2,859	4,298	34	--	--	3,912	--	--	--
2006	77	(s)	456	R 41	141	811	2,734	R 4,184	38	--	--	3,896	--	--	--
2007	77	1	451	58	244	428	2,655	3,836	38	--	--	3,864	--	--	--
Trillion Btu															
1960	0.0	0.0	3.2	0.2	0.4	6.5	3.9	14.3	0.0	0.0	0.0	1.6	15.8	4.8	20.6
1965	0.0	0.0	3.7	0.3	0.4	10.8	6.1	21.3	0.9	0.2	0.0	3.7	26.1	8.6	34.7
1970	0.0	0.0	4.1	1.5	0.3	10.5	6.6	22.9	0.9	0.2	0.0	5.9	29.9	13.8	43.7
1975	0.0	0.0	3.5	1.8	0.3	8.5	7.3	21.3	0.7	0.3	0.0	8.7	31.0	19.4	50.4
1980	0.0	0.0	8.0	3.8	0.3	9.4	7.3	28.7	0.7	11.9	0.0	10.3	51.7	23.0	74.7
1985	1.1	0.0	2.7	(s)	0.5	8.4	6.8	18.5	0.7	14.0	0.0	10.7	45.0	22.4	67.4
1990	0.7	0.0	4.2	0.1	0.7	10.9	16.0	31.9	0.6	18.2	(s)	12.7	64.1	34.9	98.9
1995	4.1	0.0	3.2	4.4	1.3	6.4	16.1	31.4	0.7	13.3	(s)	13.0	62.4	31.7	94.1
1996	3.6	0.0	2.8	4.3	1.3	6.0	18.3	32.7	0.7	14.1	(s)	13.3	64.4	32.3	96.7
1997	3.7	R 0.4	3.6	(s)	1.3	5.3	18.0	28.2	0.7	11.8	(s)	13.2	57.6	32.1	89.8
1998	3.4	R 0.4	3.4	0.7	1.4	1.9	14.9	22.2	0.8	11.1	(s)	12.9	50.4	31.3	81.7
1999	2.7	R 0.5	2.5	(s)	0.8	2.1	15.1	20.5	0.7	11.6	(s)	12.8	48.2	30.7	78.9
2000	2.1	R 0.6	2.8	0.2	0.8	2.8	15.9	22.4	0.6	9.9	(s)	13.1	48.1	31.0	79.1
2001	2.0	R 0.6	2.8	0.2	0.6	0.1	17.3	21.0	0.5	5.1	(s)	12.9	41.6	28.7	70.3
2002	0.7	R 0.5	2.7	0.9	0.8	2.8	15.0	22.1	0.6	5.1	(s)	12.9	41.4	29.7	71.1
2003	1.4	R 0.5	2.5	0.3	0.7	2.3	16.3	22.1	0.5	1.7	(s)	13.1	38.8	28.0	66.8
2004	1.3	R 0.5	2.4	0.2	0.9	2.5	16.1	22.1	0.4	1.8	(s)	13.4	R 39.0	28.1	67.0
2005	1.4	R 0.5	3.0	0.1	0.7	4.9	17.3	25.9	0.3	1.7	(s)	13.3	42.7	28.3	71.1
2006	2.2	R 0.5	2.7	R 0.1	0.7	5.1	16.4	R 25.0	0.4	1.5	(s)	13.3	R 42.4	28.4	R 70.8
2007	1.9	0.5	2.6	0.2	1.3	2.7	15.9	22.7	0.4	1.5	(s)	13.2	39.7	28.6	68.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	0	0	2,640	247	4,321	2	19	3,290	968	11,487	0	0	--	--	--
1965	0	0	613	844	7,618	4	73	3,947	1,195	14,294	0	0	--	--	--
1970	0	0	133	722	14,273	26	68	5,508	1,744	22,473	0	0	--	--	--
1975	0	0	116	831	14,849	22	74	6,615	1,013	23,520	0	0	--	--	--
1980	0	0	199	3,331	14,116	26	74	7,129	1,441	26,317	0	0	--	--	--
1985	0	0	155	3,184	13,260	6	68	7,443	1,526	25,641	0	0	--	--	--
1990	0	0	272	3,498	12,646	13	76	8,477	2,657	27,639	0	0	--	--	--
1995	0	0	218	2,683	9,940	8	73	9,160	2,677	24,759	0	0	--	--	--
1996	0	0	165	1,928	10,087	2	71	9,104	702	22,058	0	0	--	--	--
1997	0	0	121	1,322	R 10,221	2	75	9,104	489	R 21,334	0	0	--	--	--
1998	0	0	107	1,242	R 9,999	1	78	9,065	383	R 20,876	0	0	--	--	--
1999	0	0	58	2,071	9,474	0	79	8,786	1,708	22,177	0	0	--	--	--
2000	0	0	45	1,627	9,438	0	78	9,118	2,226	22,532	0	0	--	--	--
2001	0	0	48	2,455	8,895	0	71	9,576	2,658	23,704	0	0	--	--	--
2002	0	0	18	3,329	R 10,189	0	70	10,262	1,437	R 25,306	0	0	--	--	--
2003	0	0	15	5,033	R 12,708	10	65	10,448	914	R 29,194	0	0	--	--	--
2004	0	(s)	39	5,359	R 13,379	0	66	10,560	1,493	R 30,897	0	0	--	--	--
2005	0	(s)	44	3,827	16,372	15	65	10,833	1,121	32,278	R 337	0	--	--	--
2006	0	(s)	41	3,387	15,334	17	64	11,379	2,375	32,597	R 384	0	--	--	--
2007	0	(s)	41	6,246	12,756	12	66	11,092	4,465	34,678	486	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	0.0	0.0	142.9	0.0	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	R 58.0	(s)	0.5	47.5	3.1	R 117.3	0.0	0.0	R 117.3	0.0	R 117.3
1998	0.0	0.0	0.5	7.2	R 56.7	(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	R 57.8	0.0	0.4	53.4	9.0	R 140.2	0.0	0.0	R 140.2	0.0	R 140.2
2003	0.0	0.0	0.1	29.3	R 72.1	(s)	0.4	54.4	5.7	R 162.0	0.0	0.0	R 162.0	0.0	R 162.0
2004	0.0	(s)	0.2	31.2	R 75.9	0.0	0.4	55.1	9.4	R 172.1	0.0	0.0	R 172.1	0.0	R 172.1
2005	0.0	(s)	0.2	22.3	92.8	0.1	0.4	56.5	7.0	179.4	R 1.2	0.0	179.4	0.0	179.4
2006	0.0	(s)	0.2	19.7	86.9	0.1	0.4	59.4	14.9	181.6	R 1.4	0.0	181.6	0.0	181.6
2007	0.0	(s)	0.2	36.4	72.3	(s)	0.4	57.9	28.1	195.3	1.7	0.0	195.3	0.0	195.3

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Hawaii

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	746	0	11,304	2,584	0	13,888	0	62	--	222	0	7	0	--
2006	720	0	11,499	2,453	0	13,952	0	82	--	212	0	80	0	--
2007	778	0	11,426	2,313	0	13,738	0	55	--	230	0	238	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	7.8	0.0	0.0	0.3	0.0	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	2.8	4.3	0.0	(s)	0.0	107.5
2002	16.0	0.0	68.2	23.2	0.0	91.5	0.0	0.4	2.4	1.5	0.0	(s)	0.0	111.7
2003	17.9	0.0	67.9	13.4	0.0	81.3	0.0	0.4	7.6	3.7	0.0	(s)	0.0	111.0
2004	18.0	0.0	70.5	14.5	0.0	85.0	0.0	0.6	5.0	4.5	0.0	0.1	0.0	113.1
2005	16.5	0.0	71.1	15.1	0.0	86.1	0.0	0.6	4.2	4.7	0.0	0.1	0.0	112.2
2006	15.9	0.0	72.3	14.3	0.0	86.6	0.0	0.8	4.4	4.5	0.0	0.8	0.0	113.0
2007	17.2	0.0	71.8	13.5	0.0	85.3	0.0	0.5	4.1	4.8	0.0	2.4	0.0	114.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Idaho

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	699	22	4,072	899	455	6,965	205	887	13,484	0	6,165	--	--	--	--	--
1965	673	34	4,803	870	560	7,654	356	1,576	15,819	0	6,641	--	--	--	--	--
1970	353	47	5,600	960	1,057	9,684	277	1,700	19,278	0	7,076	--	--	--	--	--
1975	647	60	7,560	950	1,184	11,288	684	1,307	22,973	0	10,274	--	--	--	--	--
1980	514	49	5,662	1,243	993	11,078	613	1,141	20,731	0	9,507	--	--	--	--	--
1985	486	39	5,287	1,122	778	10,672	86	884	18,829	0	10,863	--	--	--	--	--
1990	549	46	7,079	1,143	610	11,453	47	1,516	21,847	0	9,115	--	--	--	--	--
1995	465	64	7,567	1,568	758	13,521	7	2,280	25,702	0	10,989	--	--	--	--	--
1996	397	67	8,023	874	2,656	14,174	7	2,305	28,039	0	13,283	--	--	--	--	--
1997	361	69	8,478	760	550	14,462	2	2,376	26,627	0	14,676	--	--	--	--	--
1998	479	69	7,813	718	419	15,284	5	3,346	R 27,585	0	12,936	--	--	--	--	--
1999	430	71	8,925	856	954	15,886	6	3,345	29,972	0	13,499	--	--	--	--	--
2000	623	73	9,047	880	2,045	15,392	2	3,330	30,696	0	10,967	--	--	--	--	--
2001	553	80	9,126	724	1,495	15,098	23	2,112	28,578	0	7,223	--	--	--	--	--
2002	487	71	8,893	793	926	15,511	80	2,909	29,112	0	8,769	--	--	--	--	--
2003	503	70	8,389	686	871	14,711	(s)	993	25,649	0	8,354	--	--	--	--	--
2004	607	75	9,542	822	1,412	14,969	0	2,018	28,764	0	8,462	--	--	--	--	--
2005	548	75	10,198	819	1,512	14,806	221	1,988	29,545	0	8,542	--	--	--	--	--
2006	403	76	9,970	981	R 1,575	15,681	145	2,282	R 30,633	0	11,242	--	--	--	--	--
2007	499	82	10,014	903	1,670	16,174	37	1,792	30,590	0	9,022	--	--	--	--	--
Trillion Btu																
1960	16.8	22.8	23.7	4.8	1.8	36.6	1.3	5.5	73.7	0.0	66.3	11.4	0.0	-0.3	0.0	190.7
1965	15.9	36.1	28.0	4.7	2.2	40.2	2.2	9.6	86.9	0.0	69.4	10.4	0.0	16.2	(s)	234.9
1970	7.9	49.4	32.6	5.2	4.0	50.9	1.7	10.7	105.1	0.0	74.3	11.5	0.0	48.2	(s)	296.4
1975	13.4	63.8	44.0	5.2	4.4	59.3	4.3	8.3	125.5	0.0	106.9	11.1	0.0	38.4	0.0	359.1
1980	9.6	51.6	33.0	6.8	3.7	58.2	3.9	7.2	112.7	0.0	98.8	14.6	0.0	60.7	0.0	348.1
1985	8.9	41.1	30.8	6.1	2.8	56.1	0.5	5.6	101.9	0.0	113.5	18.3	0.0	71.1	0.3	355.1
1990	10.1	46.8	41.2	6.3	2.2	60.2	0.3	9.9	120.1	0.0	94.8	23.5	0.5	107.1	0.9	403.8
1995	8.9	65.7	44.1	8.6	2.7	70.5	(s)	14.9	140.9	0.0	113.3	25.2	0.5	104.3	(s)	458.9
1996	7.3	69.2	46.7	4.9	9.6	73.9	(s)	15.1	150.3	0.0	137.3	26.0	0.5	104.0	0.6	495.3
1997	6.4	70.8	49.4	4.3	2.0	75.4	(s)	15.5	146.6	0.0	149.9	28.4	0.5	95.9	0.6	499.1
1998	8.8	71.9	45.5	4.1	1.5	79.7	(s)	21.9	152.7	0.0	131.9	27.1	0.6	110.6	0.5	504.1
1999	8.0	73.4	52.0	4.9	3.5	82.8	(s)	21.9	165.1	0.0	138.0	27.9	1.3	114.1	0.2	527.9
2000	13.7	74.5	52.7	5.0	7.4	80.2	(s)	21.9	167.2	0.0	111.9	27.6	1.3	140.3	0.4	537.0
2001	11.4	81.8	53.2	4.1	5.4	78.7	0.1	13.8	155.3	0.0	74.6	28.1	1.5	146.2	(s)	498.9
2002	10.2	72.8	51.8	4.5	3.3	80.8	0.5	19.1	160.0	0.0	89.2	22.0	1.5	134.9	(s)	490.7
2003	10.2	71.4	48.9	3.9	3.2	76.6	(s)	6.4	138.9	0.0	85.6	22.5	1.3	135.5	(s)	465.4
2004	12.3	77.2	55.6	4.7	5.1	78.1	0.0	13.1	156.5	0.0	84.8	25.7	1.4	140.5	0.1	498.6
2005	11.3	R 78.2	59.4	4.6	5.5	77.3	1.4	12.9	161.1	0.0	85.4	R 28.3	1.5	138.7	0.3	R 504.9
2006	8.2	R 79.0	58.1	5.6	R 5.7	81.8	0.9	14.9	R 167.0	0.0	111.5	R 26.0	3.2	120.9	0.1	R 516.0
2007	10.2	83.9	58.3	5.1	6.0	84.4	0.2	11.7	165.8	0.0	89.2	26.6	3.3	150.7	0.2	529.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Idaho

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	279	2	663	0	314	977	278	--	--	1,463	--	--	--
1965	200	5	708	0	348	1,056	200	--	--	1,779	--	--	--
1970	102	8	837	0	711	1,548	146	--	--	2,354	--	--	--
1975	57	14	972	0	712	1,684	160	--	--	3,870	--	--	--
1980	24	7	485	0	316	801	144	--	--	4,936	--	--	--
1985	10	8	569	2	328	898	222	--	--	5,780	--	--	--
1990	12	9	535	5	318	859	102	--	--	5,626	--	--	--
1995	5	13	440	15	374	829	104	--	--	6,193	--	--	--
1996	3	15	391	13	449	852	107	--	--	6,508	--	--	--
1997	3	15	435	4	432	871	123	--	--	6,628	--	--	--
1998	6	16	372	14	177	563	109	--	--	6,610	--	--	--
1999	7	18	475	6	733	1,215	115	--	--	6,806	--	--	--
2000	2	19	396	10	1,460	1,866	123	--	--	7,006	--	--	--
2001	2	19	365	5	1,195	1,566	68	--	--	6,906	--	--	--
2002	2	20	350	3	754	1,107	69	--	--	7,056	--	--	--
2003	2	19	313	4	640	957	73	--	--	7,090	--	--	--
2004	1	21	414	7	1,098	1,519	75	--	--	7,314	--	--	--
2005	1	22	322	5	1,017	1,345	R 154	--	--	7,601	--	--	--
2006	1	22	373	3	R 1,036	R 1,412	R 140	--	--	8,057	--	--	--
2007	4	23	248	2	1,032	1,283	154	--	--	8,339	--	--	--
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	0.1	(s)	19.2	34.7	44.4	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	51.1	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	52.5	103.5
2002	(s)	20.8	2.0	(s)	2.7	4.8	1.4	0.1	(s)	24.1	51.2	53.7	104.8
2003	(s)	19.4	1.8	(s)	2.3	4.2	1.5	0.1	(s)	24.2	49.3	53.4	102.7
2004	(s)	21.2	2.4	(s)	4.0	6.4	1.5	0.1	(s)	25.0	54.1	55.2	109.3
2005	(s)	22.8	1.9	(s)	3.7	5.6	R 3.1	0.1	(s)	25.9	R 57.5	56.7	R 114.2
2006	(s)	23.5	2.2	(s)	R 3.7	R 5.9	R 2.8	0.1	(s)	27.5	R 59.8	59.4	R 119.3
2007	0.1	24.0	1.4	(s)	3.7	5.2	3.1	0.1	(s)	28.5	60.9	61.4	122.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Idaho

Year			Petroleum						Hydro- electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>	Million Kilowatthours		Net Energy <sup>f,h</sup>		
1960	194	3	232	102	55	45	0	435	0	--	--	1,261	--	--	--
1965	151	5	248	500	61	52	0	862	0	--	--	1,290	--	--	--
1970	80	6	294	116	125	65	0	600	0	--	--	2,088	--	--	--
1975	132	12	341	81	126	90	0	637	0	--	--	3,530	--	--	--
1980	89	6	218	0	56	100	487	860	0	--	--	3,973	--	--	--
1985	36	9	328	3	58	134	25	548	0	--	--	4,592	--	--	--
1990	48	9	344	1	56	148	19	568	0	--	--	5,212	--	--	--
1995	34	10	392	3	66	38	4	504	0	--	--	5,584	--	--	--
1996	25	12	455	4	79	167	4	709	0	--	--	6,231	--	--	--
1997	27	11	351	1	76	39	1	468	0	--	--	6,285	--	--	--
1998	51	12	412	3	31	33	3	483	0	--	--	6,273	--	--	--
1999	48	13	515	1	129	40	0	685	0	--	--	6,745	--	--	--
2000	17	13	432	2	258	32	0	724	0	--	--	7,420	--	--	--
2001	17	14	372	5	211	32	0	619	0	--	--	6,885	--	--	--
2002	16	14	328	1	133	26	0	488	0	--	--	7,292	--	--	--
2003	12	12	297	1	113	15	0	426	0	--	--	5,466	--	--	--
2004	6	13	401	4	194	16	0	615	0	--	--	5,484	--	--	--
2005	12	13	336	4	180	16	0	536	0	--	--	5,615	--	--	--
2006	11	14	286	2	R 183	52	0	R 522	0	--	--	5,813	--	--	--
2007	37	14	257	1	182	21	0	461	0	--	--	6,015	--	--	--
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	0.0	0.2	0.2	17.8	31.2	41.1	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	48.3	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	48.5	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	52.6	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	52.4	94.0
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	55.5	97.9
2003	0.3	12.3	1.7	(s)	0.4	0.1	0.0	2.2	0.0	0.3	0.6	18.7	34.3	41.2	75.5
2004	0.1	13.3	2.3	(s)	0.7	0.1	0.0	3.1	0.0	0.2	0.6	18.7	36.1	41.4	77.5
2005	0.2	13.9	2.0	(s)	0.6	0.1	0.0	2.7	0.0	R 0.5	0.6	19.2	R 37.2	41.9	R 79.1
2006	0.2	14.2	1.7	(s)	0.7	0.3	0.0	2.6	0.0	R 0.5	0.6	19.8	R 37.9	42.9	R 80.8
2007	0.8	14.6	1.5	(s)	0.7	0.1	0.0	2.3	0.0	0.5	0.6	20.5	39.3	44.3	83.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Idaho

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Retail Electricity Sales		Electrical System Energy Losses <sup>i</sup>	
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>	Geo-thermal <sup>f</sup>	Million kWh	Net Energy <sup>f,h</sup>	Total <sup>f,h</sup>	
1960	222	17	2,529	79	930	153	525	4,217	(s)	--	--	2,849	--	--	--
1965	321	23	2,768	146	859	301	771	4,846	(s)	--	--	4,340	--	--	--
1970	171	29	3,206	212	626	275	1,311	5,630	0	--	--	6,052	--	--	--
1975	459	30	3,935	325	801	684	988	6,734	0	--	--	5,112	--	--	--
1980	401	32	2,209	598	639	126	841	4,413	0	--	--	4,798	--	--	--
1985	439	19	1,568	333	511	61	674	3,147	0	--	--	6,029	--	--	--
1990	489	23	2,756	187	352	28	1,329	4,652	0	--	--	7,165	--	--	--
1995	426	34	2,265	291	400	3	2,079	5,038	0	--	--	7,843	--	--	--
1996	369	35	2,169	2,106	412	2	2,103	6,793	0	--	--	9,042	--	--	--
1997	330	35	2,351	31	425	1	2,161	4,970	0	--	--	9,481	--	--	--
1998	421	34	2,039	209	425	1	3,122	5,796	0	--	--	9,193	--	--	--
1999	376	34	2,450	82	335	6	3,124	5,998	0	--	--	9,171	--	--	--
2000	603	32	2,414	307	309	2	3,147	6,179	0	--	--	8,408	--	--	--
2001	534	30	2,535	86	562	23	1,914	5,119	0	--	--	7,305	--	--	--
2002	469	29	2,386	37	581	80	2,707	5,792	0	--	--	6,352	--	--	--
2003	490	25	2,077	106	603	(s)	811	3,597	0	--	--	8,663	--	--	--
2004	600	24	2,540	77	703	0	1,798	5,117	0	--	--	9,011	--	--	--
2005	536	23	2,972	282	674	221	1,779	5,929	0	--	--	8,636	--	--	--
2006	391	23	2,395	R 316	724	145	2,081	R 5,661	0	--	--	8,891	--	--	--
2007	458	24	2,307	428	670	37	1,591	5,033	0	--	--	9,401	--	--	--
Trillion Btu															
1960	5.0	17.1	14.7	0.3	4.9	1.0	3.5	24.4	(s)	5.7	0.0	9.7	61.9	24.0	86.0
1965	7.2	24.4	16.1	0.6	4.5	1.9	5.1	28.2	(s)	6.3	0.0	14.8	80.8	35.4	116.2
1970	3.6	30.6	18.7	0.8	3.3	1.7	8.6	33.0	0.0	8.5	0.0	20.6	96.4	50.0	146.3
1975	9.1	31.6	22.9	1.2	4.2	4.3	6.5	39.1	0.0	7.8	0.0	17.4	105.1	41.9	147.1
1980	7.1	33.3	12.9	2.2	3.4	0.8	5.6	24.8	0.0	11.7	0.0	16.4	93.3	39.5	132.7
1985	7.8	20.4	9.1	1.2	2.7	0.4	4.4	17.8	0.0	13.7	0.0	20.6	80.4	47.4	127.7
1990	8.7	24.0	16.1	0.7	1.9	0.2	8.8	27.5	0.0	20.0	0.3	24.4	105.0	56.5	161.5
1995	8.1	35.0	13.2	1.1	2.1	(s)	13.7	30.1	0.0	21.6	0.3	26.8	121.8	60.8	182.6
1996	6.7	35.6	12.6	7.6	2.1	(s)	13.9	36.3	0.0	22.4	0.3	30.9	132.1	70.2	202.3
1997	5.7	36.1	13.7	0.1	2.2	(s)	14.3	30.3	0.0	24.2	0.3	32.3	129.0	73.3	202.2
1998	7.6	35.6	11.9	0.8	2.2	(s)	20.7	35.5	0.0	23.2	0.3	31.4	133.6	71.1	204.8
1999	6.8	35.1	14.3	0.3	1.7	(s)	20.7	37.0	0.0	R 24.5	0.8	31.3	135.6	71.6	207.1
2000	13.3	33.3	14.1	1.1	1.6	(s)	20.8	37.6	0.0	R 24.1	0.8	28.7	137.7	65.3	203.0
2001	11.0	31.0	14.8	0.3	2.9	0.1	12.7	30.8	0.0	25.8	0.9	24.9	124.4	55.5	179.9
2002	9.8	29.3	13.9	0.1	3.0	0.5	17.9	35.5	0.0	19.1	0.9	21.7	116.3	48.3	164.6
2003	9.9	25.3	12.1	0.4	3.1	(s)	5.3	21.0	0.0	19.3	0.7	29.6	105.7	65.2	170.9
2004	12.2	24.5	14.8	0.3	3.7	0.0	11.9	30.6	0.0	22.5	0.7	30.7	121.3	68.0	189.4
2005	11.0	24.1	17.3	1.0	3.5	1.4	11.8	35.0	0.0	23.2	0.8	29.5	123.6	64.5	188.1
2006	8.0	24.6	14.0	R 1.1	3.8	0.9	13.8	R 33.6	0.0	21.2	0.9	30.3	R 118.5	65.6	R 184.1
2007	9.2	24.7	13.4	1.5	3.5	0.2	10.5	29.2	0.0	21.6	0.9	32.1	117.7	69.2	186.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Idaho

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	4	(s)	133	648	899	7	127	5,990	52	7,856	0	0	--	--	--
1965	1	1	177	1,079	870	4	128	6,743	55	9,055	0	0	--	--	--
1970	(s)	4	154	1,263	960	9	119	8,993	2	11,500	0	0	--	--	--
1975	(s)	4	120	2,306	950	21	119	10,396	0	13,912	0	0	--	--	--
1980	0	4	162	2,750	1,243	23	138	10,339	0	14,655	0	0	--	--	--
1985	0	3	80	2,821	1,122	59	126	10,026	0	14,234	37	0	--	--	--
1990	0	5	39	3,443	1,143	48	141	10,952	0	15,766	159	0	--	--	--
1995	0	6	48	4,470	1,568	27	135	13,083	0	19,331	10	0	--	--	--
1996	0	6	55	5,008	874	21	131	13,595	0	19,684	0	0	--	--	--
1997	0	5	72	5,341	760	10	138	13,998	0	20,318	0	0	--	--	--
1998	0	6	61	4,989	718	2	145	14,827	0	R 20,742	0	0	--	--	--
1999	0	5	67	5,484	856	10	146	15,511	0	22,075	0	0	--	--	--
2000	0	6	27	5,799	880	20	144	15,051	0	21,922	0	0	--	--	--
2001	0	7	56	5,847	724	4	132	14,505	0	21,267	0	0	--	--	--
2002	0	6	67	5,828	793	2	130	14,904	0	21,724	0	0	--	--	--
2003	0	5	57	5,701	686	12	121	14,092	0	20,669	0	0	--	--	--
2004	0	6	88	6,187	822	43	122	14,250	0	21,513	0	0	--	--	--
2005	0	5	78	6,568	819	33	122	14,116	0	21,735	R 322	0	--	--	--
2006	0	7	77	6,915	981	41	118	14,905	0	23,037	R 309	0	--	--	--
2007	0	8	76	7,201	903	27	122	15,483	0	23,813	518	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	0.1	0.0	79.8	0.0	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
2005	0.0	5.7	0.4	38.3	4.6	0.1	0.7	73.7	0.0	117.8	R 1.1	0.0	123.5	0.0	123.5
2006	0.0	6.9	0.4	40.3	5.6	0.1	0.7	77.8	0.0	124.9	R 1.1	0.0	131.8	0.0	131.8
2007	0.0	7.8	0.4	41.9	5.1	0.1	0.7	80.8	0.0	129.1	1.8	0.0	136.9	0.0	136.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Idaho

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	0	11	0	(s)	0	(s)	0	8,542	--	0	0	0	89	--
2006	0	10	0	(s)	0	(s)	0	11,242	--	0	0	170	40	--
2007	0	13	0	(s)	0	(s)	0	9,022	--	0	0	172	44	--
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	1.2	0.0	0.0	0.0	0.4	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
2005	0.0	11.7	0.0	(s)	0.0	(s)	0.0	85.4	1.5	0.0	0.0	0.0	0.3	98.9
2006	0.0	9.9	0.0	(s)	0.0	(s)	0.0	111.5	1.5	0.0	0.0	1.7	0.1	124.7
2007	0.0	12.8	0.0	(s)	0.0	(s)	0.0	89.2	1.4	0.0	0.0	1.7	0.2	105.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Illinois

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	39,673	518	42,592	4,356	14,958	78,026	26,533	32,744	199,209	254	185	--	--	--	--	--
1965	44,714	757	41,011	12,176	18,763	88,769	23,091	38,504	222,314	965	175	--	--	--	--	--
1970	42,136	1,174	44,495	22,644	28,481	107,084	27,949	43,905	274,558	2,514	166	--	--	--	--	--
1975	40,374	1,095	51,249	24,769	35,135	118,637	28,142	44,300	302,231	22,315	122	--	--	--	--	--
1980	40,147	1,090	36,704	19,664	38,811	109,062	28,271	43,517	276,030	27,742	138	--	--	--	--	--
1985	37,706	962	32,585	2,748	27,168	111,114	6,508	31,158	211,282	39,106	136	--	--	--	--	--
1990	33,904	940	43,227	3,952	12,471	105,948	3,594	43,042	212,234	71,887	144	--	--	--	--	--
1995	39,623	1,078	35,309	10,360	25,822	111,207	1,457	45,882	230,037	78,481	124	--	--	--	--	--
1996	44,431	1,119	37,003	12,076	25,109	111,554	1,996	43,195	230,933	69,774	106	--	--	--	--	--
1997	47,638	1,077	37,494	R 12,502	24,777	113,343	1,430	43,269	R 232,815	51,069	97	--	--	--	--	--
1998	46,067	957	40,520	R 13,164	15,783	113,707	1,046	44,365	R 228,585	55,596	138	--	--	--	--	--
1999	46,719	1,004	43,362	18,245	22,588	118,810	535	47,107	250,646	81,744	142	--	--	--	--	--
2000	51,865	1,031	42,945	22,699	20,131	119,985	1,144	41,723	248,628	89,438	144	--	--	--	--	--
2001	50,671	952	42,195	18,664	18,346	121,126	3,176	39,507	243,014	92,358	144	--	--	--	--	--
2002	53,619	1,050	39,798	13,583	20,185	122,661	392	41,037	237,656	90,860	129	--	--	--	--	--
2003	54,751	998	46,732	13,365	15,477	122,747	2,228	42,677	243,226	94,733	139	--	--	--	--	--
2004	58,523	953	46,746	21,547	17,553	125,954	1,512	42,383	255,695	92,047	154	--	--	--	--	--
2005	58,120	970	48,094	39,525	20,359	124,646	527	42,943	276,095	93,263	129	--	--	--	--	--
2006	58,288	R 894	49,150	28,578	20,751	125,393	257	41,385	265,514	94,154	173	--	--	--	--	--
2007	61,055	966	49,291	29,573	21,104	124,277	133	39,906	264,286	95,729	154	--	--	--	--	--
Trillion Btu																
1960	914.6	536.1	248.1	24.4	60.0	409.9	166.8	195.8	1,105.0	3.0	2.0	31.0	0.0	-64.7	0.0	2,527.0
1965	1,014.5	778.7	238.9	68.8	75.3	466.3	145.2	231.6	1,226.0	11.4	1.8	33.2	0.0	-29.9	0.0	3,035.6
1970	920.3	1,203.2	259.2	128.2	107.6	562.5	175.7	265.7	1,498.9	27.6	1.7	39.3	0.0	17.7	0.0	3,708.8
1975	845.6	1,123.6	298.5	140.2	130.5	623.2	176.9	267.6	1,637.0	245.8	1.3	41.6	0.0	-17.1	0.0	3,877.7
1980	844.5	R 1,113.7	213.8	111.3	142.6	572.9	177.7	259.7	1,478.1	302.6	1.4	90.9	0.0	7.4	-37.5	3,801.1
1985	811.1	R 1,000.5	189.8	15.4	97.9	583.7	40.9	188.1	1,115.8	415.4	1.4	99.2	0.0	13.0	-13.4	3,443.0
1990	748.2	R 960.2	251.8	22.3	45.2	556.5	22.6	256.1	1,154.5	760.7	1.5	69.6	0.3	-117.3	3.3	3,581.0
1995	826.7	R 1,099.7	205.7	58.7	93.6	579.9	9.2	270.0	1,217.0	824.6	1.3	52.2	0.4	-149.8	-6.4	3,865.7
1996	919.9	R 1,140.5	215.5	68.5	90.7	581.9	12.5	257.9	1,227.1	732.8	1.1	59.3	0.5	-135.9	-4.0	3,941.3
1997	974.9	R 1,099.8	218.4	70.9	89.6	590.9	9.0	257.8	1,236.5	535.9	1.0	53.2	0.5	2.8	-4.3	R 3,900.4
1998	949.0	R 978.3	236.0	74.6	57.0	592.6	6.6	265.4	1,232.3	583.3	1.4	46.6	0.6	15.9	-2.8	3,804.6
1999	958.8	R 1,026.4	252.6	103.4	81.7	619.1	3.4	281.7	1,341.9	854.2	1.5	49.8	0.7	-244.2	-14.5	3,974.5
2000	1,016.6	R 1,053.3	250.2	128.7	72.6	625.1	7.2	249.0	1,332.8	932.7	1.5	45.2	0.7	-370.0	-13.1	3,999.7
2001	983.7	R 970.6	245.8	105.8	66.3	631.1	20.0	236.3	1,305.3	965.0	1.5	42.0	0.7	-409.9	-12.2	3,846.7
2002	986.8	R 1,081.4	231.8	77.0	72.9	638.8	2.5	245.7	1,268.8	948.5	1.3	44.1	0.9	-404.7	-12.9	3,914.2
2003	1,010.1	R 998.5	272.2	75.8	56.2	639.1	14.0	256.0	1,313.3	987.2	1.4	44.4	1.3	-459.2	-12.3	3,884.6
2004	1,069.5	R 953.2	272.3	122.2	63.5	656.8	9.5	253.2	1,377.5	959.8	1.5	44.7	2.1	-455.8	-10.5	R 3,942.1
2005	1,047.5	R 984.2	280.1	224.1	73.7	650.4	3.3	257.0	1,488.7	973.2	1.3	R 51.3	3.1	-421.8	-11.5	R 4,116.0
2006	1,044.1	R 908.3	286.3	162.0	74.8	654.3	1.6	247.5	1,426.6	982.4	1.7	R 48.0	4.5	-449.5	-12.2	R 3,954.0
2007	1,090.3	979.3	287.1	167.7	75.8	648.6	0.8	238.1	1,418.1	1,004.0	1.5	52.3	9.0	-500.2	-11.2	4,043.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Illinois

Year			Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			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	--	--	--
1965	2,250	342	13,154	2,518	5,989	21,661	550	--	--	14,173	--	--	--
1970	1,231	439	11,980	1,336	8,616	21,932	634	--	--	22,533	--	--	--
1975	230	479	12,384	1,225	9,145	22,754	681	--	--	26,366	--	--	--
1980	39	478	3,512	161	4,051	7,724	2,534	--	--	29,930	--	--	--
1985	59	447	2,344	568	3,518	6,430	2,616	--	--	29,976	--	--	--
1990	53	442	1,394	101	3,209	4,704	1,608	--	--	32,871	--	--	--
1995	29	501	761	84	3,871	4,715	861	--	--	38,386	--	--	--
1996	22	539	746	96	5,216	6,058	894	--	--	37,554	--	--	--
1997	32	497	708	109	5,295	6,112	579	--	--	37,264	--	--	--
1998	26	410	418	120	4,498	5,036	515	--	--	39,707	--	--	--
1999	22	445	508	520	6,514	7,542	542	--	--	39,631	--	--	--
2000	25	467	412	121	5,434	5,968	582	--	--	40,146	--	--	--
2001	25	427	320	120	4,086	4,526	775	--	--	41,820	--	--	--
2002	21	459	264	142	5,429	5,835	786	--	--	45,030	--	--	--
2003	35	473	246	106	4,700	5,052	828	--	--	43,161	--	--	--
2004	25	443	304	100	4,416	4,820	848	--	--	43,443	--	--	--
2005	12	438	212	117	4,386	4,715	R 1,171	--	--	48,593	--	--	--
2006	R 12	398	180	68	R 4,681	R 4,929	R 1,066	--	--	46,381	--	--	--
2007	15	433	155	52	5,125	5,332	1,175	--	--	48,036	--	--	--
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	R 489.0	20.5	0.9	14.9	36.3	50.7	0.0	0.0	102.1	662.2	246.1	908.4
1985	1.3	R 464.5	13.7	3.2	12.7	29.5	52.3	0.0	0.0	102.3	640.2	235.6	875.8
1990	1.2	R 451.9	8.1	0.6	11.6	20.3	32.2	0.3	0.1	112.2	614.1	259.4	873.4
1995	0.7	R 510.9	4.4	0.5	14.0	18.9	17.2	0.3	0.1	131.0	676.1	297.4	973.5
1996	0.5	R 549.0	4.3	0.5	18.8	23.7	17.9	0.4	0.1	128.1	717.8	291.4	1,009.1
1997	0.7	R 507.8	4.1	0.6	19.1	23.9	11.6	0.4	0.1	127.1	669.7	288.1	957.7
1998	0.6	R 418.9	2.4	0.7	16.3	19.4	10.3	0.4	0.2	135.5	584.0	307.2	891.2
1999	0.5	R 455.0	3.0	2.9	23.6	29.5	10.8	0.4	0.2	135.2	625.1	309.3	934.4
2000	0.6	R 477.4	2.4	0.7	19.6	22.7	11.6	0.4	0.2	137.0	643.9	311.6	955.5
2001	0.6	R 435.6	1.9	0.7	14.8	17.3	15.5	0.5	0.3	142.7	606.9	318.0	924.9
2002	0.5	R 473.9	1.5	0.8	19.6	22.0	15.7	0.5	0.4	153.6	661.0	342.5	1,003.5
2003	0.8	R 473.2	1.4	0.6	17.1	19.1	16.6	0.7	0.4	147.3	652.4	325.0	977.4
2004	0.6	R 443.0	1.8	0.6	16.0	18.3	17.0	0.7	0.6	148.2	623.5	328.0	951.5
2005	0.3	R 444.0	1.2	0.7	15.9	17.8	R 23.4	0.8	0.8	165.8	R 647.7	362.6	R 1,010.3
2006	R 0.3	R 404.5	1.0	0.4	R 16.9	R 18.3	R 21.3	1.0	1.0	158.3	R 599.2	342.2	R 941.4
2007	0.3	438.9	0.9	0.3	18.4	19.6	23.5	1.2	1.3	163.9	643.5	353.6	997.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Illinois

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet							Thousand Barrels							
1960	2,614	47	4,834	78	916	358	8,336	14,523	0	--	--	10,002	--	--	--	
1965	1,697	129	4,148	96	1,057	469	7,453	13,223	0	--	--	15,059	--	--	--	
1970	967	193	3,778	51	1,520	533	7,627	13,509	0	--	--	22,406	--	--	--	
1975	536	216	3,905	47	1,614	678	4,960	11,203	0	--	--	28,097	--	--	--	
1980	147	228	2,100	16	715	1,008	2,633	6,471	0	--	--	31,579	--	--	--	
1985	210	214	4,127	96	621	549	343	5,735	0	--	--	32,578	--	--	--	
1990	212	200	1,799	26	566	560	204	3,155	0	--	--	38,999	--	--	--	
1995	194	204	1,870	80	683	138	45	2,816	5	--	--	45,201	--	--	--	
1996	165	218	1,818	67	921	184	190	3,180	5	--	--	45,586	--	--	--	
1997	263	203	2,205	108	934	224	129	3,600	5	--	--	46,426	--	--	--	
1998	211	175	1,862	39	794	228	115	3,038	4	--	--	48,191	--	--	--	
1999	159	189	1,466	84	1,150	152	78	2,930	3	--	--	50,642	--	--	--	
2000	205	202	1,602	68	959	223	14	2,866	2	--	--	53,152	--	--	--	
2001	203	189	1,815	65	721	253	58	2,913	3	--	--	52,976	--	--	--	
2002	152	205	1,640	37	958	379	13	3,027	(s)	--	--	53,654	--	--	--	
2003	231	212	1,389	37	829	365	7	2,627	(s)	--	--	49,561	--	--	--	
2004	225	204	837	45	779	397	49	2,107	3	--	--	47,358	--	--	--	
2005	134	202	833	53	774	249	60	1,969	0	--	--	49,977	--	--	--	
2006	R 122	196	923	33	R 826	427	1	R 2,211	0	--	--	50,631	--	--	--	
2007	133	203	744	36	904	240	0	1,924	0	--	--	52,043	--	--	--	
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	1.3	0.0	107.7	374.3	259.7	634.0	
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	366.4	256.0	622.4	
1990	4.8	204.7	10.5	0.1	2.1	2.9	1.3	16.9	0.0	3.5	0.0	133.1	361.2	307.7	668.9	
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	382.6	350.2	732.8	
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	399.6	353.7	753.3	
1997	6.0	207.2	12.8	0.6	3.4	1.2	0.8	18.8	(s)	1.9	0.0	158.4	391.5	358.9	750.4	
1998	4.6	178.6	10.8	0.2	2.9	1.2	0.7	15.8	(s)	1.7	0.0	164.4	364.7	372.9	737.6	
1999	3.5	192.7	8.5	0.5	4.2	0.8	0.5	14.5	(s)	1.9	0.0	172.8	382.5	395.2	777.8	
2000	4.5	206.2	9.3	0.4	3.5	1.2	0.1	14.4	(s)	2.0	0.0	181.4	405.9	412.5	818.5	
2001	4.7	192.9	10.6	0.4	2.6	1.3	0.4	15.2	(s)	2.8	0.0	180.8	394.0	402.8	796.8	
2002	3.5	211.0	9.6	0.2	3.5	2.0	0.1	15.3	(s)	2.9	0.0	183.1	413.3	408.1	821.4	
2003	5.3	211.6	8.1	0.2	3.0	1.9	(s)	13.3	(s)	2.9	0.0	169.1	399.7	373.1	772.8	
2004	5.1	203.9	4.9	0.3	2.8	2.1	0.3	10.3	(s)	2.8	0.0	161.6	381.6	357.5	739.1	
2005	3.1	204.8	4.9	0.3	2.8	1.3	0.4	9.6	0.0	R 3.7	0.0	170.5	389.4	373.0	R 762.4	
2006	2.8	199.4	5.4	0.2	3.0	2.2	(s)	10.8	0.0	R 3.5	0.0	172.8	386.5	373.6	R 760.1	
2007	3.0	206.1	4.3	0.2	3.2	1.3	0.0	9.0	0.0	3.7	0.0	177.6	397.0	383.1	780.1	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Illinois

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	13,842	186	13,545	8,534	6,476	16,835	25,548	70,939	19	--	--	13,722	--	--	--
1965	15,669	238	12,074	11,399	6,512	15,064	34,211	79,260	17	--	--	18,708	--	--	--
1970	10,928	381	10,836	17,818	6,017	16,694	41,014	92,380	20	--	--	25,647	--	--	--
1975	7,257	352	11,138	23,889	4,290	15,728	41,495	96,540	19	--	--	30,330	--	--	--
1980	5,350	349	7,842	33,867	3,505	12,598	41,694	99,506	17	--	--	35,158	--	--	--
1985	5,829	285	6,617	22,607	1,738	3,410	28,905	63,277	17	--	--	36,178	--	--	--
1990	6,243	276	8,848	8,368	1,264	1,717	41,201	61,398	0	--	--	39,299	--	--	--
1995	5,937	321	7,846	20,981	1,500	363	43,638	74,328	0	--	--	42,251	--	--	--
1996	6,154	322	7,691	18,725	1,464	592	41,154	69,625	0	--	--	42,423	--	--	--
1997	6,325	318	8,112	18,373	1,489	677	41,320	69,971	0	--	--	42,837	--	--	--
1998	6,170	303	9,535	10,222	1,347	150	42,105	63,359	0	--	--	43,377	--	--	--
1999	5,990	305	7,385	14,587	1,087	157	44,633	67,850	0	--	--	41,972	--	--	--
2000	5,590	301	7,798	13,521	1,032	243	39,798	62,392	0	--	--	40,939	--	--	--
2001	4,710	277	7,557	13,426	2,089	309	37,762	61,143	0	--	--	40,780	--	--	--
2002	4,180	291	7,394	13,574	2,248	87	39,242	62,546	0	--	--	39,288	--	--	--
2003	4,305	270	6,967	9,737	2,445	132	41,051	60,331	0	--	--	43,042	--	--	--
2004	4,195	264	8,056	12,168	2,714	335	40,525	63,797	0	--	--	48,008	--	--	--
2005	4,152	261	8,182	14,892	2,639	303	41,154	67,170	0	--	--	45,888	--	--	--
2006	4,216	R 246	8,362	R 14,790	2,745	180	39,849	R 65,927	0	--	--	44,916	--	--	--
2007	4,419	255	8,653	14,735	1,794	85	38,400	63,667	0	--	--	45,430	--	--	--

  

Trillion Btu															
1960	338.8	192.7	78.9	34.2	34.0	105.8	156.8	409.8	0.2	16.0	0.0	46.8	1,004.3	115.8	1,120.1
1965	381.7	244.6	70.3	45.7	34.2	94.7	206.9	451.9	0.2	22.0	0.0	63.8	1,164.2	152.4	1,316.6
1970	260.2	390.5	63.1	67.3	31.6	105.0	249.0	516.0	0.2	26.4	0.0	87.5	1,280.8	211.8	1,492.6
1975	172.9	361.4	64.9	88.7	22.5	98.9	251.1	526.2	0.2	27.7	0.0	103.5	1,192.0	248.9	1,440.8
1980	127.7	R 357.0	45.7	124.4	18.4	79.2	248.9	516.6	0.2	39.0	0.0	120.0	1,148.2	289.1	1,437.3
1985	142.3	R 296.3	38.5	81.5	9.1	21.4	174.9	325.5	0.2	45.7	0.0	123.4	927.4	284.3	1,211.7
1990	150.8	R 281.8	51.5	30.3	6.6	10.8	245.1	344.4	0.0	31.6	0.0	134.1	940.4	310.1	1,250.5
1995	144.6	R 327.4	45.7	76.0	7.8	2.3	256.7	388.5	0.0	28.3	0.0	144.2	1,031.0	327.4	1,358.4
1996	150.1	R 328.2	44.8	67.7	7.6	3.7	245.8	369.6	0.0	33.3	0.0	144.7	1,024.9	329.2	1,354.1
1997	155.4	R 324.4	47.3	66.4	7.8	4.3	246.3	372.0	0.0	29.7	0.0	146.2	1,026.4	331.1	1,357.5
1998	152.4	R 309.8	55.5	36.9	7.0	0.9	251.9	352.4	0.0	25.8	0.0	148.0	987.5	335.6	1,323.1
1999	148.4	R 311.9	43.0	52.7	5.7	1.0	267.1	369.6	0.0	25.9	0.0	143.2	994.5	327.6	1,322.1
2000	136.3	R 307.8	45.4	48.8	5.4	1.5	237.6	338.7	0.0	20.7	0.0	139.7	939.2	317.7	1,256.9
2001	111.3	R 282.9	44.0	48.5	10.9	1.9	225.9	331.3	0.0	14.6	0.0	139.1	875.6	310.1	1,185.6
2002	96.8	R 299.7	43.1	49.0	11.7	0.5	235.1	339.5	0.0	15.5	0.0	134.0	882.0	298.8	1,180.8
2003	98.1	R 270.2	40.6	35.3	12.7	0.8	246.3	335.8	0.0	15.2	0.0	146.9	863.0	324.1	1,187.1
2004	93.6	R 263.3	46.9	44.0	14.2	2.1	242.2	349.4	0.0	15.3	0.0	163.8	882.5	362.4	R 1,245.0
2005	92.5	R 264.4	47.7	53.9	13.8	1.9	246.4	363.6	0.0	16.0	0.0	156.6	890.1	342.5	1,232.5
2006	93.9	R 249.4	48.7	R 53.3	14.3	1.1	238.3	R 355.8	0.0	R 15.3	0.0	153.3	R 864.3	331.4	R 1,195.7
2007	98.7	258.3	50.4	52.9	9.4	0.5	229.1	342.3	0.0	16.8	0.0	155.0	868.0	334.4	1,202.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Illinois

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	238	10	3,733	8,721	4,356	316	1,333	71,193	1,168	90,819	0	308	--	--	--
1965	51	13	383	11,509	12,176	318	1,295	81,788	423	107,891	0	302	--	--	--
1970	17	28	264	15,234	22,644	526	1,239	100,534	408	140,850	0	296	--	--	--
1975	1	14	82	20,488	24,271	486	1,452	113,669	215	160,662	0	262	--	--	--
1980	0	15	132	22,560	19,508	178	1,514	104,550	279	148,721	0	282	--	--	--
1985	0	11	212	19,061	2,748	423	1,378	108,826	187	132,835	1,998	379	--	--	--
1990	0	12	164	30,695	3,952	328	1,550	104,123	51	140,863	3,221	408	--	--	--
1995	0	13	215	24,293	10,360	287	1,479	109,570	35	146,240	4,257	393	--	--	--
1996	0	15	202	26,201	12,076	247	1,435	109,906	30	150,097	3,089	427	--	--	--
1997	0	15	197	25,917	R 12,502	175	1,516	111,630	47	R 151,984	4,493	426	--	--	--
1998	0	13	168	28,110	R 13,164	269	1,587	112,132	37	R 155,468	5,330	422	--	--	--
1999	0	12	172	33,544	18,245	337	1,604	117,570	30	171,503	5,680	437	--	--	--
2000	0	14	156	32,770	22,699	217	1,580	118,731	92	176,244	6,835	459	--	--	--
2001	0	11	113	32,215	18,664	112	1,448	118,783	134	171,469	7,726	457	--	--	--
2002	0	13	185	30,265	13,583	224	1,430	120,034	74	165,796	7,124	475	--	--	--
2003	0	11	162	37,874	13,365	211	1,322	119,937	120	172,991	9,209	484	--	--	--
2004	0	12	177	37,340	21,547	191	1,340	122,842	16	183,452	9,508	445	--	--	--
2005	0	11	97	38,530	39,525	306	1,333	121,758	23	201,572	R 8,537	528	--	--	--
2006	0	R 11	83	39,486	28,578	453	1,298	122,220	47	R 8,422	519	--	--	--	--
2007	0	12	78	39,479	29,573	340	1,341	122,242	37	193,091	9,649	545	--	--	--
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	7.1	1.3	730.2	3.0	733.2
1990	0.0	12.4	0.8	178.8	22.3	1.2	9.4	547.0	0.3	759.8	11.4	1.4	784.9	3.2	788.1
1995	0.0	13.6	1.1	141.5	58.7	1.0	9.0	571.4	0.2	783.0	15.1	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	10.9	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	15.9	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	R 834.5	18.9	1.4	849.4	3.3	R 852.7
1999	0.0	11.8	0.9	195.4	103.4	1.2	9.7	612.7	0.2	923.5	20.1	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	24.2	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	27.3	1.6	935.9	3.5	939.3
2002	0.0	13.9	0.9	176.3	77.0	0.8	8.7	625.1	0.5	889.3	25.2	1.6	904.9	3.6	908.5
2003	0.0	10.8	0.8	220.6	75.8	0.8	8.0	624.5	0.8	931.3	32.6	1.7	943.7	3.6	947.4
2004	0.0	11.6	0.9	217.5	122.2	0.7	8.1	640.6	0.1	990.1	33.7	1.5	1,003.2	3.4	1,006.6
2005	0.0	11.3	0.5	224.4	224.1	1.1	8.1	635.3	0.1	1,093.7	R 30.2	1.8	1,106.8	3.9	1,110.8
2006	0.0	R 11.3	0.4	230.0	162.0	1.6	7.9	637.7	0.3	1,040.0	R 29.8	1.8	R 1,053.1	3.8	R 1,056.9
2007	0.0	12.0	0.4	230.0	167.7	1.2	8.1	638.0	0.2	1,045.6	34.1	1.9	1,059.5	4.0	1,063.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Illinois

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	53,822	58	141	338	190	669	93,263	129	--	0	0	141	-18	--
2006	53,939	43	30	200	54	284	94,154	173	--	0	0	255	(s)	--
2007	56,488	63	12	260	0	272	95,729	154	--	0	0	664	60	--
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	R 19.6	80.2	4.9	0.0	85.1	302.6	1.3	0.0	0.0	0.0	0.0	0.0	1,120.7
1985	662.8	R 6.0	16.2	2.5	0.0	18.7	415.4	1.2	0.0	0.0	0.0	0.0	0.0	1,104.0
1990	591.4	R 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	R 39.9	6.4	3.1	2.3	11.8	824.6	1.2	4.3	0.0	0.0	0.0	0.0	1,558.6
1996	765.5	R 26.3	7.4	3.2	1.5	12.1	732.8	1.0	5.6	0.0	0.0	0.0	0.0	1,543.3
1997	812.8	R 45.4	3.6	3.2	0.1	7.0	535.9	0.9	10.0	0.0	0.0	0.0	0.0	1,411.8
1998	791.5	R 57.6	4.7	3.5	2.1	10.2	583.3	1.4	8.7	0.0	0.0	0.0	0.0	1,452.5
1999	806.5	R 54.9	1.7	2.7	0.6	4.9	854.2	1.4	11.2	0.0	0.0	0.0	0.0	1,732.4
2000	875.2	R 48.1	5.0	2.1	0.0	7.1	932.7	1.4	10.9	0.0	0.0	0.0	0.0	1,874.9
2001	867.2	R 47.8	16.8	1.7	0.0	18.5	965.0	1.5	9.0	0.0	0.0	0.0	0.0	1,908.4
2002	886.1	R 82.8	1.4	1.4	0.0	2.7	948.5	1.3	10.0	0.0	0.0	0.0	-0.4	1,930.0
2003	905.8	R 32.6	12.4	1.5	0.0	13.9	987.2	1.4	9.7	0.0	0.0	0.2	-0.5	1,949.9
2004	970.2	R 31.4	7.0	1.2	1.2	9.4	959.8	1.5	9.6	0.0	0.0	0.8	-0.1	1,982.2
2005	951.6	R 59.6	0.9	2.0	1.1	4.0	973.2	1.3	8.1	0.0	0.0	1.4	-0.1	1,998.5
2006	947.1	R 43.7	0.2	1.2	0.3	1.7	982.4	1.7	8.0	0.0	0.0	2.5	(s)	1,986.5
2007	988.3	64.0	0.1	1.5	0.0	1.6	1,004.0	1.5	8.3	0.0	0.0	6.6	0.2	2,073.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Indiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	32,592	212	25,707	1,316	5,751	43,595	13,076	18,365	107,809	0	100	--	--	--	--	--
1965	37,349	358	25,948	1,848	6,654	48,051	13,033	21,854	117,388	0	94	--	--	--	--	--
1970	42,776	545	29,379	2,558	8,978	58,905	9,769	24,311	133,900	0	495	--	--	--	--	--
1975	46,210	477	32,655	2,619	12,335	64,639	15,007	22,683	149,938	0	444	--	--	--	--	--
1980	50,485	489	30,795	2,151	7,961	60,192	14,615	20,168	135,881	0	474	--	--	--	--	--
1985	53,291	433	31,046	15,445	4,947	57,936	3,768	18,879	132,022	0	426	--	--	--	--	--
1990	61,701	451	32,957	17,889	9,563	61,930	3,827	25,157	151,323	0	441	--	--	--	--	--
1995	62,631	535	33,345	17,344	6,788	70,100	1,833	24,702	154,113	0	467	--	--	--	--	--
1996	64,021	573	34,713	12,576	8,555	69,578	1,328	29,684	156,434	0	448	--	--	--	--	--
1997	66,051	557	36,839	R 10,996	7,379	69,828	1,478	30,989	R 157,509	0	562	--	--	--	--	--
1998	66,480	522	36,727	R 9,656	5,346	74,133	1,162	29,888	R 156,911	0	479	--	--	--	--	--
1999	67,364	557	39,274	11,198	6,730	72,552	562	32,196	162,512	0	407	--	--	--	--	--
2000	72,273	571	40,117	14,006	8,429	73,878	767	27,716	164,912	0	588	--	--	--	--	--
2001	71,082	502	32,921	11,763	6,230	75,199	564	25,376	152,054	0	571	--	--	--	--	--
2002	71,312	539	42,161	10,778	8,632	74,297	419	25,401	161,687	0	411	--	--	--	--	--
2003	72,156	527	45,163	R 9,358	9,013	76,844	453	25,928	166,759	0	424	--	--	--	--	--
2004	73,665	527	41,160	8,558	8,171	77,109	809	28,809	164,616	0	444	--	--	--	--	--
2005	72,834	531	43,742	6,950	6,899	77,008	858	27,726	163,182	0	438	--	--	--	--	--
2006	73,269	496	43,808	7,865	6,425	77,103	1,101	27,238	163,539	0	490	--	--	--	--	--
2007	72,807	536	43,154	7,450	7,474	76,610	605	25,452	160,744	0	450	--	--	--	--	--
Trillion Btu																
1960	794.9	219.8	149.7	7.1	23.1	229.0	82.2	110.6	601.7	0.0	1.1	23.5	0.0	-109.5	0.0	1,531.5
1965	900.6	357.5	151.1	10.2	26.7	252.4	81.9	130.9	653.3	0.0	1.0	22.1	0.0	-130.1	0.0	1,804.3
1970	1,006.8	548.6	171.1	14.2	33.9	309.4	61.4	147.6	737.7	0.0	5.2	23.3	0.0	-95.1	0.0	2,226.6
1975	1,061.2	472.6	190.2	14.6	45.8	339.6	94.3	138.5	823.0	0.0	4.6	26.7	0.0	-0.9	0.0	2,387.2
1980	1,157.0	R 483.9	179.4	12.0	29.2	316.2	91.9	122.6	751.3	0.0	4.9	51.2	0.0	-36.3	-1.6	2,410.4
1985	1,193.3	R 436.4	180.8	87.4	17.8	304.3	23.7	114.9	729.0	0.0	4.5	56.7	0.0	-105.0	1.9	2,316.7
1990	1,361.8	R 459.1	192.0	101.3	34.7	325.3	24.1	154.3	831.6	0.0	4.6	46.9	0.5	-189.9	2.3	2,516.8
1995	1,344.4	R 541.6	194.2	98.3	24.6	365.6	11.5	149.3	843.6	0.0	4.8	37.2	0.8	-124.8	-3.2	2,644.3
1996	1,374.5	R 579.5	202.2	71.3	30.9	362.9	8.3	178.6	854.3	0.0	4.6	38.6	0.8	-117.9	-3.2	2,731.2
1997	1,423.5	R 562.8	214.6	62.3	26.7	364.0	9.3	186.8	863.7	0.0	5.7	32.2	0.9	-168.9	-3.6	R 2,716.2
1998	1,448.0	R 530.6	213.9	54.7	19.3	386.4	7.3	179.2	860.8	0.0	4.9	30.2	1.0	-163.8	-3.2	R 2,708.5
1999	1,477.2	R 567.0	228.8	63.5	24.3	378.1	3.5	192.5	890.7	0.0	4.2	30.5	1.1	-134.7	-8.8	2,827.1
2000	1,595.0	R 584.8	233.7	79.4	30.4	384.9	4.8	165.1	898.4	0.0	6.0	28.1	1.1	-198.6	-8.7	2,906.1
2001	1,569.2	R 513.8	191.8	66.7	22.5	391.8	3.5	153.5	829.8	0.0	5.9	32.7	1.2	-162.2	-8.5	2,781.9
2002	1,547.5	R 512.1	245.6	61.1	31.2	386.9	2.6	153.9	881.3	0.0	4.2	33.8	1.3	-119.6	-4.7	2,855.9
2003	1,570.7	R 541.8	263.1	53.1	32.7	400.1	2.8	157.3	909.2	0.0	4.3	33.8	1.6	-153.3	-5.7	2,902.4
2004	1,614.2	R 542.5	239.8	48.5	29.6	402.1	5.1	174.8	899.8	0.0	4.4	34.6	1.8	-147.6	-5.2	2,944.6
2005	1,594.4	R 540.7	254.8	39.4	25.0	401.8	5.4	168.0	894.4	0.0	4.4	R 38.3	2.1	-156.3	-5.1	R 2,912.8
2006	1,595.9	R 504.7	255.2	44.6	23.2	402.3	6.9	164.7	896.9	0.0	4.9	R 39.1	2.4	-172.9	-4.9	R 2,866.1
2007	1,574.5	548.1	251.4	42.2	26.8	399.8	3.8	153.6	877.7	0.0	4.4	39.1	2.9	-138.8	-3.9	2,904.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

**Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Indiana**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	1,251	76	8,536	3,370	3,389	15,296	770	--	--	6,371	--	--	--
1965	618	114	8,146	2,498	3,993	14,637	580	--	--	8,651	--	--	--
1970	393	159	8,027	1,837	6,312	16,175	567	--	--	13,488	--	--	--
1975	270	163	8,647	717	6,665	16,029	562	--	--	16,375	--	--	--
1980	47	164	5,398	492	3,351	9,241	1,234	--	--	19,262	--	--	--
1985	115	146	2,656	466	2,340	5,462	1,284	--	--	19,803	--	--	--
1990	110	140	1,997	278	3,494	5,770	802	--	--	22,111	--	--	--
1995	37	161	1,476	215	3,768	5,459	435	--	--	26,560	--	--	--
1996	43	180	1,447	288	5,058	6,793	452	--	--	26,860	--	--	--
1997	44	169	1,264	303	5,003	6,569	301	--	--	26,550	--	--	--
1998	41	140	1,054	300	3,684	5,039	268	--	--	27,334	--	--	--
1999	41	152	1,047	1,328	4,466	6,841	282	--	--	28,806	--	--	--
2000	30	161	976	359	5,045	6,381	303	--	--	28,649	--	--	--
2001	28	147	779	358	3,705	4,842	405	--	--	29,420	--	--	--
2002	40	157	843	284	5,139	6,265	411	--	--	31,568	--	--	--
2003	46	157	1,140	206	5,398	6,745	432	--	--	30,726	--	--	--
2004	43	149	1,016	256	4,519	5,792	443	--	--	31,192	--	--	--
2005	21	149	898	262	3,815	4,975	R 620	--	--	33,629	--	--	--
2006	5	128	613	174	R 3,303	R 4,090	R 565	--	--	32,286	--	--	--
2007	16	143	477	129	4,087	4,693	623	--	--	34,646	--	--	--
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	R 161.9	31.4	2.8	12.3	46.5	24.7	0.0	0.0	65.7	299.3	158.4	457.7
1985	2.6	R 147.4	15.5	2.6	8.4	26.5	25.7	0.0	0.0	67.6	268.8	155.6	424.5
1990	2.5	R 143.1	11.6	1.6	12.7	25.9	16.0	0.5	(s)	75.4	262.4	174.5	436.9
1995	0.8	R 163.0	8.6	1.2	13.7	23.5	8.7	0.6	(s)	90.6	286.3	205.8	492.1
1996	1.0	R 181.9	8.4	1.6	18.3	28.3	9.0	0.7	(s)	91.6	311.5	208.4	519.9
1997	1.0	R 171.0	7.4	1.7	18.1	27.2	6.0	0.7	(s)	90.6	295.3	205.2	500.6
1998	0.9	R 142.5	6.1	1.7	13.3	21.2	5.4	0.7	(s)	93.3	263.1	211.5	474.6
1999	1.0	R 154.3	6.1	7.5	16.1	29.8	5.6	0.8	(s)	98.3	287.4	224.8	512.2
2000	0.7	R 165.3	5.7	2.0	18.2	25.9	6.1	0.8	(s)	97.7	294.1	222.3	516.4
2001	0.6	R 150.9	4.5	2.0	13.4	20.0	8.1	0.9	(s)	100.4	278.3	223.7	502.0
2002	0.9	R 148.1	4.9	1.6	18.6	25.1	8.2	1.0	(s)	107.7	289.7	240.1	529.8
2003	1.0	R 161.8	6.6	1.2	19.6	27.4	8.6	1.3	(s)	104.8	303.3	231.3	534.7
2004	1.0	R 153.1	5.9	1.5	16.3	23.7	8.9	1.4	0.1	106.4	293.1	235.5	528.6
2005	0.5	R 151.3	5.2	1.5	13.8	20.5	R 12.4	1.6	0.1	114.7	R 299.7	251.0	R 550.6
2006	0.1	R 129.8	3.6	1.0	R 11.9	R 16.5	R 11.3	1.8	0.1	110.2	R 268.5	238.2	R 506.7
2007	0.4	145.9	2.8	0.7	14.7	18.2	12.5	2.2	0.1	118.2	296.4	255.1	551.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Indiana

Year			Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	869	20	2,968	328	598	168	1,394	5,456	0	--	--	2,900	--	--	--
1965	466	42	2,832	243	705	171	1,520	5,472	0	--	--	4,243	--	--	--
1970	309	78	2,791	179	1,114	251	844	5,178	0	--	--	6,520	--	--	--
1975	630	71	3,007	70	1,176	120	1,645	6,017	0	--	--	9,071	--	--	--
1980	175	70	1,985	31	591	223	2,431	5,262	0	--	--	10,423	--	--	--
1985	408	70	2,738	133	413	352	388	4,024	0	--	--	12,257	--	--	--
1990	441	67	1,244	35	617	561	62	2,518	0	--	--	16,116	--	--	--
1995	249	83	1,104	70	665	175	32	2,045	0	--	--	18,654	--	--	--
1996	314	87	965	69	893	159	14	2,099	0	--	--	18,822	--	--	--
1997	352	82	1,095	87	883	171	9	2,244	0	--	--	19,030	--	--	--
1998	330	73	1,422	51	650	167	121	2,412	0	--	--	19,861	--	--	--
1999	302	74	1,289	41	788	183	2	2,303	0	--	--	20,685	--	--	--
2000	245	90	1,344	48	890	87	2	2,370	0	--	--	21,070	--	--	--
2001	223	78	1,576	44	654	254	1	2,528	0	--	--	26,219	--	--	--
2002	291	82	1,379	31	907	231	1	2,548	0	--	--	22,363	--	--	--
2003	311	87	1,682	33	953	247	63	2,977	0	--	--	22,441	--	--	--
2004	386	85	1,691	44	797	207	114	2,852	0	--	--	22,957	--	--	--
2005	236	76	1,274	47	673	239	112	2,345	0	--	--	23,959	--	--	--
2006	<sup>R</sup> 52	71	1,341	40	<sup>R</sup> 583	214	0	<sup>R</sup> 2,177	0	--	--	23,830	--	--	--
2007	144	76	996	28	721	276	4	2,025	0	--	--	24,768	--	--	--
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	<sup>R</sup> 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	<sup>R</sup> 69.3	11.6	0.2	2.2	1.2	15.3	30.4	0.0	0.6	0.0	35.6	139.4	85.7	225.1
1985	9.1	<sup>R</sup> 70.2	15.9	0.8	1.5	1.8	2.4	22.5	0.0	0.6	0.0	41.8	143.8	96.3	240.1
1990	9.9	<sup>R</sup> 68.4	7.2	0.2	2.2	2.9	0.4	13.0	0.0	8.9	0.0	55.0	154.9	127.2	282.0
1995	5.6	<sup>R</sup> 83.7	6.4	0.4	2.4	0.9	0.2	10.3	0.0	8.5	0.1	63.6	171.4	144.5	315.9
1996	7.0	<sup>R</sup> 88.4	5.6	0.4	3.2	0.8	0.1	10.2	0.0	8.6	0.1	64.2	178.0	146.0	324.1
1997	7.8	<sup>R</sup> 82.6	6.4	0.5	3.2	0.9	0.1	11.0	0.0	8.5	0.2	64.9	174.5	147.1	321.6
1998	7.5	<sup>R</sup> 74.4	8.3	0.3	2.3	0.9	0.8	12.6	0.0	8.2	0.2	67.8	170.1	153.7	323.8
1999	7.5	<sup>R</sup> 75.0	7.5	0.2	2.8	1.0	(s)	11.6	0.0	7.9	0.2	70.6	171.6	161.4	333.0
2000	5.8	<sup>R</sup> 92.7	7.8	0.3	3.2	0.5	(s)	11.8	0.0	7.9	0.2	71.9	188.8	163.5	352.3
2001	5.0	<sup>R</sup> 80.4	9.2	0.2	2.4	1.3	(s)	13.1	0.0	5.5	0.2	89.5	192.3	199.4	391.7
2002	6.5	<sup>R</sup> 77.9	8.0	0.2	3.3	1.2	(s)	12.7	0.0	5.5	0.3	76.3	178.3	170.1	348.4
2003	7.0	<sup>R</sup> 89.7	9.8	0.2	3.5	1.3	0.4	15.1	0.0	5.6	0.3	76.6	193.3	169.0	362.3
2004	8.6	<sup>R</sup> 87.5	9.8	0.2	2.9	1.1	0.7	14.8	0.0	5.5	0.4	78.3	194.3	173.3	367.6
2005	5.3	<sup>R</sup> 77.6	7.4	0.3	2.4	1.2	0.7	12.1	0.0	<sup>R</sup> 6.0	0.5	81.7	182.4	178.8	<sup>R</sup> 361.2
2006	1.2	<sup>R</sup> 72.3	7.8	0.2	2.1	1.1	0.0	11.3	0.0	<sup>R</sup> 5.9	0.5	81.3	171.7	175.8	<sup>R</sup> 347.5
2007	3.2	77.3	5.8	0.2	2.6	1.4	(s)	10.0	0.0	2.7	0.5	84.5	177.8	182.3	360.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Indiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	16,702	102	9,976	1,716	2,813	11,229	13,522	39,256	(s)	--	--	8,226	--	--	--
1965	18,093	180	9,766	1,904	2,686	10,866	17,388	42,611	0	--	--	12,360	--	--	--
1970	19,394	268	10,180	1,455	2,238	8,391	21,065	43,329	0	--	--	17,952	--	--	--
1975	18,006	223	9,324	4,369	1,263	11,688	20,917	47,560	0	--	--	26,675	--	--	--
1980	16,599	245	5,053	3,930	752	11,984	18,693	40,412	0	--	--	30,730	--	--	--
1985	14,457	211	4,675	2,046	901	3,348	17,257	28,227	0	--	--	31,784	--	--	--
1990	13,496	228	5,293	5,300	625	3,570	22,877	37,665	0	--	--	35,743	--	--	--
1995	10,255	275	4,766	2,250	849	1,567	23,515	32,947	0	--	--	41,777	--	--	--
1996	10,810	289	4,671	2,485	808	1,022	28,202	37,187	0	--	--	43,203	--	--	--
1997	10,811	290	5,028	1,427	847	1,075	28,863	37,240	0	--	--	43,550	--	--	--
1998	10,843	287	5,881	962	650	738	27,470	35,702	0	--	--	44,848	--	--	--
1999	10,703	312	5,668	1,442	655	314	28,900	36,979	0	--	--	47,230	--	--	--
2000	12,567	299	5,465	2,433	591	464	25,299	34,252	0	--	--	48,040	--	--	--
2001	13,434	251	6,234	1,798	1,086	392	23,900	33,411	0	--	--	42,080	--	--	--
2002	13,290	259	6,001	2,451	1,160	171	23,691	33,474	0	--	--	47,481	--	--	--
2003	13,306	249	6,348	2,500	1,181	312	24,522	34,863	0	--	--	47,284	--	--	--
2004	13,777	263	6,281	2,677	1,530	532	27,290	38,311	0	--	--	48,928	--	--	--
2005	12,567	264	6,965	2,240	1,394	554	26,455	37,608	0	--	--	48,944	--	--	--
2006	12,630	264	5,878	R 2,394	1,465	923	26,315	R 36,974	0	--	--	49,530	--	--	--
2007	11,891	273	6,192	2,526	2,533	314	24,567	36,133	0	--	--	49,988	--	--	--
Trillion Btu															
1960	431.8	106.1	58.1	6.9	14.8	70.6	83.1	233.5	(s)	7.8	0.0	28.1	807.2	69.4	876.6
1965	466.3	179.8	56.9	7.6	14.1	68.3	106.1	253.0	0.0	10.3	0.0	42.2	951.5	100.7	1,052.2
1970	490.9	270.1	59.3	5.5	11.8	52.8	129.1	258.4	0.0	11.7	0.0	61.3	1,092.4	148.3	1,240.7
1975	461.6	221.1	54.3	16.2	6.6	73.5	128.3	278.9	0.0	15.3	0.0	91.0	1,067.9	218.9	1,286.8
1980	423.9	R 242.0	29.4	14.4	3.9	75.3	114.1	237.3	0.0	25.9	0.0	104.9	1,033.2	252.7	1,285.9
1985	365.1	R 212.8	27.2	7.4	4.7	21.1	105.7	166.1	0.0	30.4	0.0	108.4	881.6	249.8	1,131.3
1990	342.8	R 232.3	30.8	19.2	3.3	22.4	140.9	216.7	0.0	21.9	0.0	122.0	934.1	282.0	1,216.1
1995	258.5	R 278.7	27.8	8.2	4.4	9.9	142.4	192.5	0.0	19.4	0.0	142.5	890.0	323.7	1,213.7
1996	269.3	R 292.1	27.2	9.0	4.2	6.4	169.9	216.7	0.0	20.1	0.0	147.4	944.0	335.2	1,279.2
1997	271.3	R 293.3	29.3	5.2	4.4	6.8	174.2	219.8	0.0	16.6	0.0	148.6	947.7	336.7	1,284.4
1998	279.0	R 292.2	34.3	3.5	3.4	4.6	164.8	210.6	0.0	15.6	0.0	153.0	948.6	347.0	1,295.6
1999	276.3	R 317.3	33.0	5.2	3.4	2.0	173.2	216.9	0.0	15.9	0.0	161.1	982.6	368.6	1,351.2
2000	329.4	R 306.1	31.8	8.8	3.1	2.9	150.8	197.4	0.0	13.1	0.0	163.9	1,005.2	372.8	1,378.1
2001	354.1	R 256.9	36.3	6.5	5.7	2.5	144.7	195.7	0.0	18.1	0.0	143.6	963.9	320.0	1,283.9
2002	349.6	R 244.8	35.0	8.9	6.0	1.1	143.8	194.7	0.0	19.0	0.0	162.0	967.9	361.1	1,329.0
2003	347.3	R 255.8	37.0	9.1	6.1	2.0	149.0	203.2	0.0	18.6	0.0	161.3	983.4	356.0	1,339.4
2004	360.1	R 271.0	36.6	9.7	8.0	3.3	165.8	223.4	0.0	R 19.2	0.0	166.9	R 1,038.1	369.4	1,407.4
2005	317.0	R 268.9	40.6	8.1	7.3	3.5	160.6	220.0	0.0	19.7	0.0	167.0	989.9	365.3	1,355.2
2006	317.6	R 268.4	34.2	R 8.6	7.6	5.8	159.3	R 215.6	0.0	R 19.8	0.0	169.0	R 987.8	365.4	R 1,353.2
2007	299.7	279.1	36.1	9.1	13.2	2.0	148.4	208.7	0.0	21.7	0.0	170.6	977.8	368.0	1,345.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Indiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	287	5	453	4,097	1,316	47	692	40,615	350	47,570	0	1	--	--	--
1965	59	8	1,110	5,124	1,848	52	615	45,194	583	54,526	0	0	--	--	--
1970	31	11	367	8,123	2,558	97	610	56,417	330	68,501	0	0	--	--	--
1975	3	10	217	11,200	2,619	125	763	63,256	331	78,510	0	0	--	--	--
1980	0	9	260	17,629	2,151	88	692	59,217	200	80,236	0	0	--	--	--
1985	0	5	393	20,564	15,445	148	630	56,684	31	93,895	1,280	0	--	--	--
1990	0	8	302	24,000	17,889	153	709	60,744	195	103,991	1,478	12	--	--	--
1995	0	8	144	25,658	17,344	104	676	69,076	235	113,238	2,190	15	--	--	--
1996	0	13	171	27,277	12,576	120	656	68,611	293	109,703	1,116	15	--	--	--
1997	0	11	136	29,130	R 10,996	66	693	68,809	395	R 110,225	1,497	16	--	--	--
1998	0	8	113	27,923	R 9,656	50	726	73,315	303	R 112,085	1,431	15	--	--	--
1999	0	8	119	30,715	11,198	35	733	71,714	246	114,760	2,508	15	--	--	--
2000	0	6	113	31,803	14,006	60	722	73,199	302	120,205	2,806	16	--	--	--
2001	0	7	67	23,947	11,763	73	662	73,859	171	110,541	2,590	16	--	--	--
2002	0	6	122	33,616	10,778	136	654	72,906	246	118,456	2,940	16	--	--	--
2003	0	7	106	35,637	R 9,358	162	604	75,417	77	121,360	3,150	16	--	--	--
2004	0	7	103	31,892	8,558	177	612	75,373	161	116,877	3,172	17	--	--	--
2005	0	7	162	34,281	6,950	171	609	75,375	192	117,740	R 3,581	17	--	--	--
2006	0	6	116	35,709	7,865	145	593	75,424	177	120,030	R 3,786	18	--	--	--
2007	0	7	115	35,204	7,450	139	613	73,801	287	117,609	4,561	19	--	--	--
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	4.5	0.0	520.8	0.0	520.8
1990	0.0	8.6	1.5	139.8	101.3	0.6	4.3	319.1	1.2	567.8	5.2	(s)	581.6	0.1	581.7
1995	0.0	7.8	0.7	149.5	98.3	0.4	4.1	360.2	1.5	614.7	7.7	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	3.9	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	5.3	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	R 606.6	5.1	0.1	R 614.3	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	8.9	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	9.9	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	9.2	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	10.4	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	11.1	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	11.2	0.1	640.9	0.1	641.0
2005	0.0	6.9	0.8	199.7	39.4	0.6	3.7	393.3	1.2	638.7	R 12.7	0.1	645.7	0.1	645.8
2006	0.0	6.6	0.6	208.0	44.6	0.5	3.6	393.6	1.1	652.0	R 13.4	0.1	658.6	0.1	R 658.7
2007	0.0	7.3	0.6	205.1	42.2	0.5	3.7	385.2	1.8	639.1	16.1	0.1	646.5	0.1	646.6

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Indiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	60,011	35	0	323	190	513	0	438	--	0	0	0	11	--
2006	60,582	27	0	267	0	267	0	490	--	0	0	0	30	--
2007	60,756	38	0	284	0	284	0	450	--	0	0	0	-23	--
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	R 0.9	0.0	0.0	0.0	0.0	1,111.0
1997	1,143.4	R 4.8	0.0	1.9	5.5	7.3	0.0	5.7	1.0	0.0	0.0	0.0	0.0	1,162.2
1998	1,160.5	R 13.9	0.0	2.6	7.4	10.0	0.0	4.9	1.0	0.0	0.0	0.0	0.0	1,190.2
1999	1,192.3	R 12.8	0.0	3.2	6.5	9.7	0.0	4.2	1.0	0.0	0.0	0.0	0.0	1,219.7
2000	1,259.2	R 14.8	0.0	3.1	7.1	10.2	0.0	6.0	1.1	0.0	0.0	0.0	0.0	1,291.0
2001	1,209.6	R 18.1	(s)	2.2	2.1	4.3	0.0	5.9	1.1	0.0	0.0	0.0	0.0	R 1,238.8
2002	1,190.6	R 36.0	(s)	1.9	3.7	5.6	0.0	4.2	1.1	0.0	0.0	0.0	(s)	1,237.1
2003	1,215.4	R 27.2	(s)	2.1	2.7	4.8	0.0	4.3	1.0	0.0	0.0	0.0	0.0	1,252.6
2004	1,244.5	R 23.3	(s)	1.6	3.0	4.7	0.0	4.4	1.0	0.0	0.0	0.0	0.0	1,277.7
2005	1,271.7	R 36.0	0.0	1.9	1.1	3.0	0.0	4.4	0.2	0.0	0.0	0.0	(s)	1,315.0
2006	1,277.0	R 27.6	0.0	1.6	0.0	1.6	0.0	4.9	2.2	0.0	0.0	0.0	0.1	1,313.0
2007	1,271.2	38.4	0.0	1.7	0.0	1.7	0.0	4.4	2.3	0.0	0.0	0.0	-0.1	1,317.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Iowa

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	5,258	187	11,163	195	5,017	29,463	1,071	6,288	53,197	0	881	--	--	--	--	--
1965	5,722	248	11,068	232	7,448	30,792	531	5,690	55,760	0	928	--	--	--	--	--
1970	6,166	349	13,677	725	11,038	35,701	401	4,986	66,528	0	935	--	--	--	--	--
1975	6,407	346	14,553	835	13,645	39,042	608	4,340	73,024	2,291	879	--	--	--	--	--
1980	12,340	270	15,930	813	11,167	35,394	415	8,003	71,721	2,563	946	--	--	--	--	--
1985	14,342	226	15,823	592	8,507	31,465	182	4,689	61,258	1,927	989	--	--	--	--	--
1990	18,080	219	15,784	891	6,355	31,684	124	3,385	58,223	3,012	875	--	--	--	--	--
1995	20,728	261	17,748	1,046	16,989	34,418	92	3,135	73,427	3,730	1,003	--	--	--	--	--
1996	21,301	272	19,793	819	11,344	35,909	94	5,134	73,092	3,924	935	--	--	--	--	--
1997	21,798	254	19,652	793	10,296	35,577	71	5,926	72,316	4,149	805	--	--	--	--	--
1998	23,275	232	20,058	R 1,186	14,882	36,973	88	5,586	R 78,772	3,768	913	--	--	--	--	--
1999	23,590	231	19,588	885	18,746	36,993	100	6,495	82,807	3,640	946	--	--	--	--	--
2000	24,480	233	19,261	771	19,621	36,753	143	5,868	82,417	4,453	904	--	--	--	--	--
2001	24,398	224	20,101	777	16,127	36,768	44	5,018	78,835	3,853	845	--	--	--	--	--
2002	24,676	226	19,706	782	18,317	38,004	62	5,566	82,437	4,574	946	--	--	--	--	--
2003	24,868	230	18,378	793	13,337	38,249	150	5,476	76,383	3,988	789	--	--	--	--	--
2004	24,975	227	20,407	910	18,974	39,445	282	6,490	86,508	4,929	946	--	--	--	--	--
2005	24,276	241	20,560	990	20,881	39,215	194	6,474	88,314	4,538	960	--	--	--	--	--
2006	24,607	238	21,313	1,033	21,192	40,429	47	5,907	89,921	5,095	909	--	--	--	--	--
2007	26,315	259	22,873	899	16,893	40,251	44	5,369	86,330	4,519	962	--	--	--	--	--
Trillion Btu																
1960	115.9	193.7	65.0	1.0	20.1	154.8	6.7	38.2	285.9	0.0	9.5	6.4	0.0	-8.5	0.0	602.9
1965	126.6	250.0	64.5	1.3	29.9	161.7	3.3	34.6	295.3	0.0	9.7	5.5	0.0	11.1	0.0	698.1
1970	130.9	351.8	79.7	4.1	41.7	187.5	2.5	31.0	346.4	0.0	9.8	6.3	0.0	5.4	0.0	850.6
1975	131.6	348.6	84.8	4.7	50.7	205.1	3.8	26.7	375.8	25.2	9.1	7.9	0.0	46.3	0.0	944.5
1980	234.4	R 270.4	92.8	4.6	41.0	185.9	2.6	46.2	373.1	28.0	9.8	48.7	0.0	42.7	-0.1	1,007.1
1985	268.8	R 228.4	92.2	3.3	30.7	165.3	1.1	28.3	320.8	20.5	10.3	58.1	0.0	24.7	-30.3	901.4
1990	335.0	R 220.4	91.9	5.0	23.0	166.4	0.8	20.7	307.9	31.9	9.1	47.8	0.1	11.6	-45.1	918.6
1995	372.3	R 262.5	103.4	5.9	61.5	179.5	0.6	19.4	370.3	39.2	10.3	40.8	0.2	15.8	-52.0	1,059.5
1996	383.7	R 274.0	115.3	4.6	41.0	187.3	0.6	30.6	379.4	41.2	9.7	48.3	0.2	23.3	-50.9	1,108.9
1997	391.7	R 256.8	114.5	4.5	37.2	185.5	0.4	35.7	377.8	43.5	8.2	40.4	0.3	27.2	-47.9	1,098.0
1998	424.9	R 234.6	116.8	6.7	53.8	192.7	0.6	33.3	403.9	39.5	9.3	37.3	0.3	1.9	-49.5	1,102.1
1999	432.0	R 235.1	114.1	5.0	67.8	192.8	0.6	39.1	419.4	38.0	9.7	37.7	3.7	9.8	-33.5	1,151.8
2000	445.9	R 233.7	112.2	4.4	70.8	191.5	0.9	35.1	414.8	46.4	9.2	31.7	5.4	-8.4	-30.7	1,148.0
2001	443.9	R 225.2	117.1	4.4	58.3	191.6	0.3	29.9	401.6	40.3	8.7	27.7	5.4	-5.0	-31.8	1,115.9
2002	441.5	R 228.3	114.8	4.4	66.2	197.9	0.4	33.5	417.2	47.7	9.6	30.8	9.7	2.2	-33.3	1,153.8
2003	444.6	R 232.2	107.0	4.5	48.4	199.2	0.9	32.9	392.9	41.6	8.1	30.5	10.6	7.9	-33.4	1,134.9
2004	443.2	R 228.6	118.9	5.2	68.6	205.7	1.8	39.3	439.4	51.4	9.5	R 30.6	11.1	-12.5	-29.6	R 1,171.7
2005	429.8	R 242.8	119.8	5.6	75.6	204.6	1.2	39.4	446.2	47.4	9.6	R 33.1	17.1	5.9	-32.0	R 1,199.8
2006	435.2	R 241.8	124.1	5.9	76.4	211.0	0.3	35.8	453.5	53.2	9.0	R 32.6	23.7	R -5.4	-34.2	R 1,209.3
2007	464.4	261.9	133.2	5.1	60.7	210.1	0.3	32.3	441.6	47.4	9.5	36.0	28.1	-21.6	-32.0	1,235.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Iowa

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	537	58	2,610	2,301	3,312	8,223	163	--	--	3,720	--	--	--
1965	279	77	2,347	1,327	4,741	8,416	108	--	--	5,044	--	--	--
1970	100	96	2,232	325	6,826	9,383	99	--	--	6,480	--	--	--
1975	42	94	1,802	138	6,799	8,740	115	--	--	8,338	--	--	--
1980	19	85	2,388	47	3,890	6,325	517	--	--	10,038	--	--	--
1985	61	79	1,490	115	2,996	4,601	644	--	--	9,851	--	--	--
1990	49	71	926	24	2,742	3,692	348	--	--	10,513	--	--	--
1995	12	82	781	25	3,964	4,769	303	--	--	11,640	--	--	--
1996	27	88	774	30	5,321	6,125	314	--	--	11,537	--	--	--
1997	41	82	725	28	4,935	5,687	242	--	--	11,673	--	--	--
1998	31	69	550	25	4,178	4,753	215	--	--	11,855	--	--	--
1999	47	71	537	24	5,230	5,791	227	--	--	11,867	--	--	--
2000	29	74	481	26	5,308	5,815	244	--	--	12,029	--	--	--
2001	31	71	415	37	3,412	3,863	236	--	--	12,430	--	--	--
2002	38	72	580	22	4,416	5,019	240	--	--	12,921	--	--	--
2003	38	74	377	20	4,612	5,009	252	--	--	12,768	--	--	--
2004	18	68	322	28	4,082	4,431	259	--	--	12,625	--	--	--
2005	22	67	226	22	4,254	4,503	R 307	--	--	13,571	--	--	--
2006	R 22	62	241	15	R 4,060	R 4,316	R 280	--	--	13,344	--	--	--
2007	30	68	229	10	4,140	4,379	308	--	--	14,060	--	--	--
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	R 79.6	8.7	0.7	10.8	20.1	12.9	0.0	0.0	33.6	134.1	77.4	211.5
1990	1.2	R 71.9	5.4	0.1	9.9	15.5	7.0	0.1	(s)	35.9	115.0	82.9	197.9
1995	0.3	R 82.6	4.5	0.1	14.4	19.0	6.1	0.1	(s)	39.7	130.7	90.2	220.9
1996	0.7	R 88.6	4.5	0.2	19.2	23.9	6.3	0.1	(s)	39.4	141.6	89.5	231.2
1997	1.0	R 82.4	4.2	0.2	17.8	22.2	4.8	0.1	(s)	39.8	134.1	90.2	224.4
1998	0.7	R 69.7	3.2	0.1	15.1	18.4	4.3	0.1	(s)	40.5	118.4	91.7	210.1
1999	1.2	R 72.8	3.1	0.1	18.9	22.2	4.5	0.1	(s)	40.5	130.6	92.6	223.2
2000	0.7	R 74.2	2.8	0.1	19.1	22.1	4.9	0.1	(s)	41.0	133.0	93.4	226.3
2001	0.7	R 71.3	2.4	0.2	12.3	15.0	4.7	0.1	(s)	42.4	123.8	94.5	218.3
2002	0.9	R 72.1	3.4	0.1	16.0	19.5	4.8	0.1	(s)	44.1	130.5	98.3	228.7
2003	0.9	R 74.7	2.2	0.1	16.7	19.0	5.0	0.2	(s)	43.6	132.2	96.1	228.3
2004	0.4	R 68.9	1.9	0.2	14.8	16.8	5.2	0.2	(s)	43.1	125.2	95.3	220.5
2005	0.5	R 67.7	1.3	0.1	15.4	16.8	R 6.1	0.2	(s)	46.3	R 128.3	101.3	R 229.6
2006	0.6	R 62.8	1.4	0.1	R 14.6	R 16.1	R 5.6	0.2	(s)	45.5	R 121.5	98.5	R 220.0
2007	0.7	68.4	1.3	0.1	14.9	16.3	6.2	0.3	(s)	48.0	131.0	103.5	234.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at <http://www.eia.doe.gov/emeu/states/iowa/seds.html> under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Iowa

Year			Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Million Kilowatthours					
1960	373	28	1,046	94	584	178	232	2,135	0	--	--	1,812	--	--	--	
1965	211	39	941	54	837	194	135	2,161	0	--	--	2,797	--	--	--	
1970	78	57	895	13	1,205	271	65	2,449	0	--	--	3,655	--	--	--	
1975	97	67	722	6	1,200	323	115	2,366	0	--	--	5,121	--	--	--	
1980	71	51	751	5	686	350	79	1,871	0	--	--	5,502	--	--	--	
1985	217	48	1,167	7	529	237	1	1,941	0	--	--	6,306	--	--	--	
1990	196	44	576	38	484	142	30	1,269	0	--	--	7,532	--	--	--	
1995	78	50	415	3	700	35	0	1,173	0	--	--	8,890	--	--	--	
1996	195	55	356	4	939	244	1	1,563	0	--	--	8,673	--	--	--	
1997	333	50	320	8	871	445	0	1,667	0	--	--	8,944	--	--	--	
1998	249	43	463	3	737	470	1	1,695	0	--	--	9,384	--	--	--	
1999	343	45	487	4	923	433	0	1,867	0	--	--	9,668	--	--	--	
2000	232	46	481	6	937	533	3	1,987	0	--	--	9,932	--	--	--	
2001	248	46	544	13	602	547	1	1,738	0	--	--	10,776	--	--	--	
2002	275	46	454	6	779	640	2	1,922	0	--	--	11,429	--	--	--	
2003	252	48	677	4	814	653	0	2,202	0	--	--	11,637	--	--	--	
2004	159	46	466	5	720	1,010	0	2,247	0	--	--	10,840	--	--	--	
2005	252	45	316	15	751	741	3	1,872	0	--	--	11,271	--	--	--	
2006	<sup>R</sup> 276	<sup>R</sup> 43	632	4	<sup>R</sup> 716	1,359	3	<sup>R</sup> 2,763	0	--	--	11,660	--	--	--	
2007	266	46	247	3	731	1,609	0	2,650	0	--	--	12,084	--	--	--	
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	80.4	45.2	125.7	
1985	4.6	<sup>R</sup> 48.2	6.8	(s)	1.9	1.2	(s)	10.0	0.0	0.3	0.0	21.5	76.5	49.6	126.1	
1990	4.7	<sup>R</sup> 44.3	3.4	0.2	1.8	0.7	0.2	6.3	0.0	0.8	0.0	25.7	71.6	59.4	131.0	
1995	1.9	<sup>R</sup> 50.6	2.4	(s)	2.5	0.2	0.0	5.3	0.0	1.0	0.1	30.3	78.7	68.9	147.6	
1996	4.8	<sup>R</sup> 54.9	2.1	(s)	3.4	1.3	(s)	6.9	0.0	1.0	0.1	29.6	86.6	67.3	153.9	
1997	7.8	<sup>R</sup> 50.6	1.9	(s)	3.1	2.3	0.0	7.5	0.0	2.8	0.2	30.5	89.5	69.1	158.6	
1998	6.1	<sup>R</sup> 43.5	2.7	(s)	2.7	2.4	(s)	8.0	0.0	1.3	0.2	32.0	81.5	72.6	154.1	
1999	8.9	<sup>R</sup> 45.8	2.8	(s)	3.3	2.3	0.0	8.6	0.0	1.0	0.2	33.0	90.7	75.5	166.1	
2000	6.1	<sup>R</sup> 45.8	2.8	(s)	3.4	2.8	(s)	9.2	0.0	1.0	0.2	33.9	90.0	77.1	167.1	
2001	5.9	<sup>R</sup> 46.1	3.2	0.1	2.2	2.8	(s)	8.5	0.0	1.1	0.2	36.8	91.7	81.9	173.7	
2002	6.7	<sup>R</sup> 46.8	2.6	(s)	2.8	3.3	(s)	9.1	0.0	1.2	0.3	39.0	95.8	86.9	182.7	
2003	6.1	<sup>R</sup> 48.5	3.9	(s)	3.0	3.4	0.0	10.6	0.0	1.5	0.3	39.7	<sup>R</sup> 99.5	87.6	187.1	
2004	3.7	<sup>R</sup> 46.5	2.7	(s)	2.6	5.3	0.0	10.9	0.0	1.6	0.4	37.0	93.8	81.8	175.6	
2005	5.9	<sup>R</sup> 45.4	1.8	0.1	2.7	3.9	(s)	8.8	0.0	<sup>R</sup> 1.9	0.5	38.5	<sup>R</sup> 94.7	84.1	<sup>R</sup> 178.8	
2006	6.5	<sup>R</sup> 44.1	3.7	(s)	2.6	7.1	(s)	13.7	0.0	<sup>R</sup> 1.8	0.5	39.8	<sup>R</sup> 99.7	86.0	<sup>R</sup> 185.8	
2007	6.2	47.0	1.4	(s)	2.6	8.4	0.0	12.8	0.0	1.7	0.5	41.2	103.5	89.0	192.4	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Iowa

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,193	43	5,536	1,098	5,797	573	3,011	16,016	2	--	--	2,676	--	--
1965	2,464	68	5,607	1,815	5,373	354	3,471	16,620	2	--	--	3,719	--	--
1970	1,955	99	5,884	2,949	5,391	261	3,913	18,398	1	--	--	5,338	--	--
1975	1,333	121	4,670	5,593	3,791	279	3,505	17,838	1	--	--	6,626	--	--
1980	1,505	115	4,698	6,557	2,612	273	7,245	21,385	1	--	--	9,318	--	--
1985	1,572	87	4,971	4,893	1,703	179	4,008	15,754	1	--	--	9,520	--	--
1990	2,353	90	4,807	3,087	1,072	94	2,689	11,749	0	--	--	11,392	--	--
1995	2,761	113	5,636	12,267	1,038	92	2,505	21,538	0	--	--	13,771	--	--
1996	3,085	114	6,247	4,986	1,105	93	4,515	16,947	0	--	--	14,789	--	--
1997	3,103	107	6,475	4,399	1,092	71	5,267	17,305	0	--	--	15,531	--	--
1998	2,832	105	6,572	9,946	900	88	4,917	22,423	0	--	--	16,079	--	--
1999	2,995	101	5,915	12,589	879	100	5,814	25,297	0	--	--	16,499	--	--
2000	2,902	100	6,027	13,368	784	140	5,185	25,504	0	--	--	17,127	--	--
2001	2,814	93	6,813	12,031	1,201	43	4,381	24,470	0	--	--	16,238	--	--
2002	2,860	92	6,209	13,111	1,265	60	4,895	25,540	0	--	--	16,548	--	--
2003	2,898	94	4,583	7,863	1,323	150	4,848	18,766	0	--	--	16,803	--	--
2004	2,925	94	4,571	14,128	1,698	282	5,801	26,480	0	--	--	17,437	--	--
2005	2,930	96	4,550	15,814	1,568	191	5,793	27,915	0	--	--	17,915	--	--
2006	3,067	101	4,418	16,355	1,702	44	5,140	27,659	0	--	--	18,331	--	--
2007	3,002	107	4,683	11,945	1,394	44	4,532	22,598	0	--	--	19,125	--	--
Trillion Btu														
1960	51.7	44.9	32.2	4.4	30.5	3.6	19.6	90.3	(s)	2.8	0.0	9.1	198.8	22.6
1965	57.5	68.9	32.7	7.3	28.2	2.2	22.0	92.4	(s)	2.9	0.0	12.7	234.5	30.3
1970	43.0	99.9	34.3	11.1	28.3	1.6	24.8	100.2	(s)	3.9	0.0	18.2	265.1	44.1
1975	28.4	122.5	27.2	20.8	19.9	1.8	21.9	91.6	(s)	5.1	0.0	22.6	270.2	54.4
1980	32.4	R 114.9	27.4	24.1	13.7	1.7	41.8	108.7	(s)	37.8	0.0	31.8	325.5	76.6
1985	35.6	R 88.0	29.0	17.6	8.9	1.1	24.3	80.9	(s)	44.3	0.0	32.5	266.6	74.8
1990	53.1	R 90.9	28.0	11.2	5.6	0.6	16.6	62.0	0.0	39.9	0.0	38.9	264.1	89.9
1995	57.9	R 113.5	32.8	44.4	5.4	0.6	15.7	98.9	0.0	33.1	0.0	47.0	326.9	106.7
1996	65.7	R 114.4	36.4	18.0	5.8	0.6	26.9	87.7	0.0	40.2	0.0	50.5	336.2	114.7
1997	65.0	R 108.1	37.7	15.9	5.7	0.4	31.8	91.6	0.0	32.0	0.0	53.0	328.2	120.1
1998	60.0	R 106.5	38.3	35.9	4.7	0.6	29.3	108.8	0.0	30.9	0.0	54.9	337.6	124.4
1999	63.4	R 103.3	34.5	45.5	4.6	0.6	35.1	120.2	0.0	31.3	0.0	56.3	359.2	128.8
2000	60.9	R 100.6	35.1	48.2	4.1	0.9	31.1	119.4	0.0	24.9	0.0	58.4	350.5	132.9
2001	59.1	R 92.9	39.7	43.5	6.3	0.3	26.2	115.9	0.0	20.9	0.0	55.4	330.4	123.5
2002	58.5	R 93.0	36.2	47.4	6.6	0.4	29.5	120.0	0.0	23.8	0.0	56.5	337.5	125.9
2003	60.2	R 94.7	26.7	28.5	6.9	0.9	29.2	92.2	0.0	23.0	0.0	57.3	313.2	126.5
2004	59.2	R 94.7	26.6	51.1	8.9	1.8	35.2	123.6	0.0	R 22.8	0.0	59.5	R 346.9	R 131.6
2005	59.1	R 96.6	26.5	57.2	8.2	1.2	35.4	128.5	0.0	24.1	0.0	61.1	356.1	133.7
2006	60.8	R 102.5	25.7	R 59.0	8.9	0.3	31.3	R 125.1	0.0	R 24.1	0.0	62.5	R 359.8	R 135.3
2007	60.7	107.7	27.3	42.9	7.3	0.3	27.3	105.0	0.0	26.6	0.0	65.3	351.4	140.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Iowa

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	38	9	366	1,711	195	23	516	23,488	227	26,526	0	0	--	--	--
1965	8	11	358	1,991	232	55	480	25,224	15	28,354	0	0	--	--	--
1970	3	18	256	4,339	725	58	480	30,039	26	35,923	0	0	--	--	--
1975	(s)	16	191	6,851	835	53	501	34,929	0	43,359	0	0	--	--	--
1980	0	13	184	7,924	813	34	522	32,432	0	41,909	0	0	--	--	--
1985	0	10	83	8,094	592	90	475	29,525	0	38,858	769	0	--	--	--
1990	0	9	99	9,352	891	42	534	30,470	(s)	41,389	851	0	--	--	--
1995	0	11	72	10,762	1,046	58	510	33,345	0	45,793	1,754	0	--	--	--
1996	0	13	71	12,275	819	98	495	34,561	0	48,318	1,115	0	--	--	--
1997	0	11	78	11,914	793	91	522	34,040	0	R 47,439	1,349	0	--	--	--
1998	0	9	72	12,198	R 1,186	21	547	35,603	0	R 49,626	1,679	(s)	--	--	--
1999	0	8	81	12,341	885	4	553	35,681	0	49,544	1,821	(s)	--	--	--
2000	0	8	78	12,049	771	9	544	35,436	0	48,888	2,138	(s)	--	--	--
2001	0	9	57	12,111	777	82	499	35,020	0	48,546	2,219	(s)	--	--	--
2002	0	11	109	12,327	782	10	493	36,099	0	49,820	2,271	(s)	--	--	--
2003	0	10	95	12,529	793	48	456	36,273	0	50,194	2,423	(s)	--	--	--
2004	0	10	87	14,871	910	44	462	36,738	0	53,110	2,516	(s)	--	--	--
2005	0	12	139	15,113	990	62	459	36,906	0	53,668	R 792	(s)	--	--	--
2006	0	R 13	52	15,752	1,033	61	447	37,368	0	54,713	R 707	1	--	--	--
2007	0	12	45	17,272	899	77	462	37,248	0	56,004	1,221	0	--	--	--
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	2.7	0.0	222.4	0.0	222.4
1990	0.0	9.2	0.5	54.5	5.0	0.2	3.2	160.1	(s)	223.5	3.0	0.0	235.7	0.0	235.7
1995	0.0	11.1	0.4	62.7	5.9	0.2	3.1	173.9	0.0	246.2	6.2	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	3.9	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	4.8	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	5.9	(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	6.4	(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	7.6	(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	7.9	(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	8.0	(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	8.6	(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	8.9	(s)	297.1	(s)	297.1
2005	0.0	11.7	0.7	88.0	5.6	0.2	2.8	192.6	0.0	289.9	R 2.8	(s)	301.6	(s)	301.6
2006	0.0	R 12.7	0.3	91.8	5.9	0.2	2.7	195.0	0.0	295.8	R 2.5	(s)	R 308.5	(s)	R 308.5
2007	0.0	12.6	0.2	100.6	5.1	0.3	2.8	194.4	0.0	303.4	4.3	0.0	316.0	0.0	316.0

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Iowa

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	21,072	21	0	355	0	355	4,538	960	--	0	0	1,647	-1	--
2006	21,236	20	0	270	199	470	5,095	909	--	0	0	2,318	(s)	--
2007	23,019	26	0	442	256	699	4,519	962	--	0	0	2,757	(s)	--
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	R 2.1	(s)	0.6	0.0	0.6	20.5	10.3	0.6	0.0	0.0	0.0	3.6	264.7
1990	276.0	R 4.2	0.0	0.7	0.0	0.7	31.9	9.1	0.2	0.0	0.0	0.0	0.0	321.1
1995	312.2	R 4.7	0.0	0.9	0.0	0.9	39.2	10.3	0.7	0.0	0.0	(s)	0.0	367.0
1996	312.5	R 3.4	0.0	0.8	0.0	0.8	41.2	9.7	0.7	0.0	0.0	(s)	0.0	367.7
1997	317.9	R 4.2	0.0	1.3	0.0	1.3	43.5	8.2	0.7	0.0	0.0	(s)	0.6	375.6
1998	358.1	R 6.0	0.0	1.6	0.0	1.6	39.5	9.3	0.8	0.0	0.0	(s)	0.2	414.2
1999	358.5	R 5.3	0.0	1.8	0.0	1.8	38.0	9.7	0.9	0.0	0.0	3.3	0.1	416.8
2000	378.2	R 4.8	0.0	1.3	0.0	1.3	46.4	9.2	0.8	0.0	0.0	5.0	(s)	445.2
2001	378.2	R 5.8	0.0	1.3	0.0	1.3	40.3	8.7	1.0	0.0	0.0	5.0	(s)	439.5
2002	375.4	R 5.3	0.0	0.8	0.0	0.8	47.7	9.6	1.0	0.0	0.0	9.3	0.0	448.4
2003	377.4	R 4.3	0.0	1.2	0.0	1.2	41.6	8.1	1.0	0.0	0.0	10.1	(s)	443.0
2004	379.9	R 8.3	0.0	1.0	0.4	1.4	51.4	9.5	1.0	0.0	0.0	10.5	(s)	460.8
2005	364.2	R 21.4	0.0	2.1	0.0	2.1	47.4	9.6	1.0	0.0	0.0	16.5	(s)	459.1
2006	367.3	R 19.7	0.0	1.6	1.2	2.8	53.2	9.0	1.1	0.0	0.0	23.0	(s)	473.1
2007	396.8	26.2	0.0	2.6	1.5	4.1	47.4	9.5	1.5	0.0	0.0	27.2	(s)	509.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>9</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	675	361	4,739	952	5,590	23,712	2,403	9,602	46,998	0	20	--	--	--	--	--
1965	644	443	5,257	1,053	6,521	25,525	1,066	12,322	51,744	0	13	--	--	--	--	--
1970	458	576	7,550	1,561	8,009	28,849	1,127	10,093	57,189	0	7	--	--	--	--	--
1975	3,117	499	11,273	1,310	8,857	32,004	6,365	11,780	71,589	0	5	--	--	--	--	--
1980	10,370	488	14,764	2,466	8,404	29,584	1,498	13,173	69,890	0	8	--	--	--	--	--
1985	14,715	355	14,902	4,424	24,510	28,209	86	8,520	80,652	3,856	9	--	--	--	--	--
1990	15,175	353	16,697	3,701	15,565	28,626	229	12,882	77,701	7,874	13	--	--	--	--	--
1995	16,521	367	18,223	2,414	4,924	29,402	31	10,945	65,938	10,062	11	--	--	--	--	--
1996	19,084	362	16,570	2,009	10,442	30,927	289	12,694	72,932	8,205	11	--	--	--	--	--
1997	17,673	338	16,375	R 2,131	14,557	30,695	257	11,551	R 75,566	8,430	14	--	--	--	--	--
1998	17,736	327	15,930	R 2,159	14,121	32,001	269	11,353	R 75,833	10,411	11	--	--	--	--	--
1999	19,003	303	15,660	3,476	21,741	33,550	570	11,615	86,611	9,157	12	--	--	--	--	--
2000	20,845	312	14,849	3,234	17,401	31,894	937	11,006	79,323	9,061	15	--	--	--	--	--
2001	20,316	273	15,550	2,259	11,122	30,297	1,301	13,160	73,689	10,347	26	--	--	--	--	--
2002	22,838	305	16,359	2,135	10,659	28,571	991	12,415	71,131	9,042	13	--	--	--	--	--
2003	22,738	281	16,600	3,228	16,944	32,721	2,160	12,127	83,780	8,890	12	--	--	--	--	--
2004	22,341	257	17,155	3,104	14,808	31,815	2,184	12,739	81,806	10,133	13	--	--	--	--	--
2005	22,251	255	18,147	1,758	2,768	28,162	2,055	11,876	64,766	8,821	11	--	--	--	--	--
2006	21,110	R 264	18,969	1,752	1,875	31,603	619	11,885	66,704	9,350	10	--	--	--	--	--
2007	23,020	286	19,391	1,543	17,592	31,979	464	11,659	82,628	10,369	11	--	--	--	--	--
Trillion Btu																
1960	15.7	373.7	27.6	5.1	22.4	124.6	15.1	58.7	253.4	0.0	0.2	3.9	0.0	-14.6	0.0	632.3
1965	15.3	440.8	30.6	5.7	26.2	134.1	6.7	74.8	278.0	0.0	0.1	3.4	0.0	-12.8	0.0	724.8
1970	10.7	574.5	44.0	8.6	30.3	151.5	7.1	61.3	302.8	0.0	0.1	3.7	0.0	-17.6	0.0	874.2
1975	62.3	490.7	65.7	7.2	32.9	168.1	40.0	71.7	385.6	0.0	(s)	5.8	0.0	-17.6	0.0	926.8
1980	191.6	482.0	86.0	13.8	30.9	155.4	9.4	80.2	375.7	0.0	0.1	9.0	0.0	-32.6	0.0	1,025.8
1985	259.5	354.8	86.8	24.8	88.3	148.2	0.5	52.0	400.7	41.0	0.1	11.5	(s)	-49.2	1.9	1,020.1
1990	271.7	352.6	97.3	20.7	56.4	150.4	1.4	78.9	405.1	83.3	0.1	11.8	0.1	-72.6	0.6	1,052.8
1995	289.7	367.7	106.2	13.7	17.8	153.3	0.2	67.7	358.9	105.7	0.1	10.3	0.2	-81.0	0.0	1,051.7
1996	338.3	360.9	96.5	11.4	37.7	161.3	1.8	76.7	385.5	86.2	0.1	10.5	0.2	-94.0	0.0	1,087.7
1997	310.9	338.6	95.4	12.1	52.6	160.0	1.6	68.8	390.5	88.5	0.1	8.4	0.2	-63.5	(s)	R 1,073.8
1998	309.4	325.0	92.8	12.2	51.0	166.8	1.7	68.2	392.7	109.2	0.1	7.7	0.3	-74.2	(s)	1,070.3
1999	329.3	302.0	91.2	19.7	78.6	174.8	3.6	69.3	437.3	95.7	0.1	8.0	0.3	-83.0	(s)	1,089.6
2000	362.8	314.9	86.5	18.3	62.8	166.2	5.9	65.9	405.5	94.5	0.2	7.7	0.3	-91.4	0.0	1,094.5
2001	354.6	273.9	90.6	12.8	40.2	157.8	8.2	80.1	389.7	108.1	0.3	8.0	0.7	-95.4	0.0	1,039.9
2002	391.7	304.4	95.3	12.1	38.5	148.8	6.2	75.5	376.4	94.4	0.1	8.1	5.1	-109.3	0.0	1,070.9
2003	389.5	292.6	96.7	18.3	61.5	170.4	13.6	73.3	433.7	92.6	0.1	8.3	4.2	-105.2	0.0	1,115.8
2004	385.5	267.1	99.9	17.6	53.6	165.9	13.7	77.1	427.9	105.7	0.1	8.4	4.1	-103.5	(s)	1,095.2
2005	379.8	258.7	105.7	10.0	10.0	147.0	12.9	71.1	356.7	92.0	0.1	R 9.5	4.8	-72.7	(s)	R 1,029.0
2006	364.2	R 269.5	110.5	9.9	6.8	164.9	3.9	71.4	367.3	97.6	0.1	R 9.0	10.4	-60.6	0.0	R 1,057.5
2007	396.3	291.6	113.0	8.7	63.2	166.9	2.9	69.8	424.5	108.8	0.1	9.8	12.1	-107.0	(s)	1,136.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	37	73	53	303	3,447	3,804	157	--	--	2,360	--	--	--
1965	10	87	50	1,285	3,991	5,327	102	--	--	3,251	--	--	--
1970	6	97	53	116	4,825	4,994	80	--	--	5,348	--	--	--
1975	0	98	96	60	4,563	4,719	93	--	--	5,695	--	--	--
1980	1	85	150	5	2,083	2,237	439	--	--	7,189	--	--	--
1985	(s)	78	68	27	1,469	1,564	560	--	--	8,195	--	--	--
1990	(s)	71	28	11	1,182	1,222	317	--	--	9,515	--	--	--
1995	5	76	14	13	1,469	1,496	278	--	--	10,356	--	--	--
1996	9	85	17	19	1,971	2,008	289	--	--	10,672	--	--	--
1997	(s)	69	35	12	2,382	2,429	225	--	--	10,862	--	--	--
1998	(s)	70	11	18	2,538	2,567	200	--	--	11,832	--	--	--
1999	1	68	14	346	3,342	3,702	211	--	--	11,347	--	--	--
2000	1	71	17	20	2,598	2,635	227	--	--	12,528	--	--	--
2001	(s)	70	44	14	1,871	1,929	218	--	--	12,062	--	--	--
2002	(s)	71	36	10	2,250	2,295	221	--	--	12,745	--	--	--
2003	(s)	70	18	11	2,406	2,435	232	--	--	12,602	--	--	--
2004	0	65	13	10	2,230	2,253	238	--	--	12,417	--	--	--
2005	0	65	4	10	2,157	2,170	R 281	--	--	13,406	--	--	--
2006	(s)	57	3	5	R 1,503	R 1,511	R 256	--	--	13,503	--	--	--
2007	0	63	2	2	2,026	2,031	282	--	--	13,806	--	--	--
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	187.7
1990	(s)	71.3	0.2	0.1	4.3	4.5	6.3	(s)	(s)	32.5	114.6	75.1	189.7
1995	0.1	76.1	0.1	0.1	5.3	5.5	5.6	(s)	(s)	35.3	122.6	80.2	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	97.2	225.3
2001	(s)	70.5	0.3	0.1	6.8	7.1	4.4	(s)	(s)	41.2	123.2	91.7	214.9
2002	(s)	70.7	0.2	0.1	8.1	8.4	4.4	(s)	(s)	43.5	127.1	96.9	224.0
2003	(s)	73.3	0.1	0.1	8.7	8.9	4.6	0.1	(s)	43.0	129.9	94.9	224.8
2004	0.0	67.7	0.1	0.1	8.1	8.2	4.8	0.1	(s)	42.4	123.2	93.7	216.9
2005	0.0	65.9	(s)	0.1	7.8	7.9	R 5.6	0.1	(s)	45.7	R 125.2	100.0	R 225.2
2006	(s)	58.2	(s)	(s)	R 5.4	R 5.5	R 5.1	0.1	(s)	46.1	R 115.0	99.6	R 214.6
2007	0.0	64.2	(s)	(s)	7.3	7.3	5.6	0.1	(s)	47.1	124.4	101.6	226.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	25	41	115	87	608	179	47	1,036	0	--	--	1,727	--	--	--
1965	7	38	109	367	704	204	19	1,403	0	--	--	2,597	--	--	--
1970	4	53	115	33	851	215	34	1,249	0	--	--	3,967	--	--	--
1975	0	52	209	17	805	268	36	1,335	0	--	--	5,614	--	--	--
1980	4	59	360	10	368	279	0	1,016	0	--	--	6,806	--	--	--
1985	1	57	725	10	259	177	0	1,172	0	--	--	8,174	--	--	--
1990	(s)	56	329	6	209	162	27	732	0	--	--	9,547	--	--	--
1995	33	53	562	6	259	74	12	913	0	--	--	10,645	--	--	--
1996	69	57	554	5	348	99	2	1,008	0	--	--	11,388	--	--	--
1997	2	41	473	28	420	90	0	1,011	0	--	--	12,043	--	--	--
1998	(s)	42	441	9	448	94	79	1,071	0	--	--	12,546	--	--	--
1999	6	39	474	4	590	61	0	1,129	0	--	--	12,258	--	--	--
2000	10	40	571	5	458	85	3	1,123	0	--	--	13,171	--	--	--
2001	(s)	38	807	7	330	78	7	1,229	0	--	--	13,215	--	--	--
2002	(s)	39	636	5	397	43	9	1,090	0	--	--	13,773	--	--	--
2003	(s)	38	636	5	425	108	0	1,173	0	--	--	13,751	--	--	--
2004	0	37	576	8	393	82	0	1,059	0	--	--	13,831	--	--	--
2005	0	30	244	14	381	74	0	713	0	--	--	14,453	--	--	--
2006	(s)	28	290	9	R 265	131	0	R 695	0	--	--	14,786	--	--	--
2007	0	31	267	4	358	74	0	702	0	--	--	15,474	--	--	--
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	90.9	64.2	155.1
1990	(s)	56.0	1.9	(s)	0.8	0.9	0.2	3.7	0.0	0.7	(s)	32.6	93.0	75.3	168.3
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	181.6
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	182.5
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	194.4
2001	(s)	37.7	4.7	(s)	1.2	0.4	(s)	6.4	0.0	0.8	0.2	45.1	90.2	100.5	190.7
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	104.8	197.0
2003	(s)	39.4	3.7	(s)	1.5	0.6	0.0	5.8	0.0	0.8	0.4	46.9	93.3	103.5	196.8
2004	0.0	38.3	3.4	(s)	1.4	0.4	0.0	5.3	0.0	0.8	0.4	47.2	92.0	104.4	196.4
2005	0.0	30.0	1.4	0.1	1.4	0.4	0.0	3.3	0.0	R 0.9	0.5	49.3	R 84.0	107.9	R 191.9
2006	(s)	28.1	1.7	(s)	R 1.0	0.7	0.0	R 3.4	0.0	R 0.8	0.5	50.5	R 83.2	109.1	R 192.3
2007	0.0	31.1	1.6	(s)	1.3	0.4	0.0	3.2	0.0	0.9	0.5	52.8	88.6	113.9	202.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	175	121	1,405	1,321	4,557	1,924	8,535	17,742	0	--	--	2,932	--	--	--
1965	148	155	1,553	1,530	3,535	755	9,711	17,084	0	--	--	3,902	--	--	--
1970	103	184	2,515	1,985	2,777	701	9,170	17,149	0	--	--	4,548	--	--	--
1975	134	152	3,532	3,125	2,406	2,178	11,003	22,244	0	--	--	6,214	--	--	--
1980	331	191	3,476	5,844	1,198	1,004	12,334	23,856	0	--	--	7,845	--	--	--
1985	363	161	4,058	22,687	1,064	66	7,797	35,671	0	--	--	7,167	--	--	--
1990	157	158	4,545	14,032	765	181	12,111	31,634	0	--	--	8,087	--	--	--
1995	138	175	4,818	3,140	995	18	10,191	19,162	0	--	--	9,356	--	--	--
1996	154	158	4,825	8,100	1,021	133	11,922	26,000	0	--	--	9,231	--	--	--
1997	137	162	5,268	11,657	1,055	168	10,660	28,807	0	--	--	9,365	--	--	--
1998	109	145	4,850	11,109	1,156	184	10,495	27,793	0	--	--	9,762	--	--	--
1999	108	128	4,824	17,786	725	223	10,386	33,945	0	--	--	10,215	--	--	--
2000	134	139	4,478	14,315	716	401	10,137	30,047	0	--	--	10,222	--	--	--
2001	165	116	4,902	8,865	969	317	12,366	27,420	0	--	--	10,569	--	--	--
2002	178	138	4,470	7,962	1,017	172	11,703	25,325	0	--	--	10,195	--	--	--
2003	158	125	4,801	14,066	1,094	624	11,482	32,067	0	--	--	10,382	--	--	--
2004	203	116	5,402	12,142	1,289	667	12,071	31,570	0	--	--	10,879	--	--	--
2005	205	118	4,936	153	1,195	333	11,108	17,725	0	--	--	11,165	--	--	--
2006	237	R 132	5,498	R 66	1,275	619	11,137	R 18,595	0	--	--	11,462	--	--	--
2007	240	142	4,901	15,167	1,020	464	10,578	32,130	0	--	--	10,885	--	--	--
Trillion Btu															
1960	4.0	125.7	8.2	5.3	23.9	12.1	52.5	102.0	0.0	0.7	0.0	10.0	242.3	24.7	267.1
1965	3.3	154.3	9.0	6.1	18.6	4.7	60.1	98.6	0.0	1.3	0.0	13.3	270.8	31.8	302.6
1970	2.2	184.1	14.7	7.5	14.6	4.4	56.1	97.3	0.0	2.0	0.0	15.5	301.1	37.6	338.7
1975	2.7	148.8	20.6	11.6	12.6	13.7	67.2	125.7	0.0	3.9	0.0	21.2	302.3	51.0	353.3
1980	7.1	189.7	20.2	21.5	6.3	6.3	75.3	129.7	0.0	0.0	0.0	26.8	353.3	64.5	417.8
1985	7.8	161.3	23.6	81.7	5.6	0.4	47.8	159.1	0.0	0.0	0.0	24.5	352.8	56.3	409.1
1990	3.8	157.7	26.5	50.9	4.0	1.1	74.4	156.8	0.0	4.7	0.0	27.6	350.7	63.8	414.5
1995	3.3	176.0	28.1	11.4	5.2	0.1	63.3	108.0	0.0	4.0	0.0	31.9	323.3	72.5	395.8
1996	3.9	157.9	28.1	29.3	5.3	0.8	72.2	135.7	0.0	3.9	0.0	31.5	332.9	71.6	404.6
1997	3.4	162.8	30.7	42.2	5.5	1.1	63.7	143.1	0.0	3.2	0.0	32.0	344.3	72.4	416.7
1998	2.7	144.0	28.2	40.1	6.0	1.2	63.2	138.8	0.0	3.0	0.0	33.3	321.8	75.5	397.3
1999	2.7	127.6	28.1	64.3	3.8	1.4	62.2	159.8	0.0	3.1	0.0	34.9	328.0	79.7	407.7
2000	3.2	139.7	26.1	51.6	3.7	2.5	60.8	144.8	0.0	2.5	0.0	34.9	325.1	79.3	404.4
2001	3.9	116.4	28.6	32.0	5.1	2.0	75.5	143.2	0.0	2.9	0.0	36.1	302.3	80.4	382.7
2002	4.3	137.5	26.0	28.8	5.3	1.1	71.3	132.5	0.0	2.9	0.0	34.8	312.0	77.5	389.5
2003	3.8	130.6	28.0	51.0	5.7	3.9	69.5	158.1	0.0	2.8	0.0	35.4	330.8	78.2	409.0
2004	5.0	120.7	31.5	43.9	6.7	4.2	73.2	159.5	0.0	2.8	0.0	37.1	325.2	82.1	407.3
2005	5.0	119.4	28.8	0.6	6.2	2.1	66.7	104.3	0.0	3.0	0.0	38.1	269.8	83.3	353.1
2006	5.7	R 134.8	32.0	R 0.2	6.7	3.9	67.0	R 109.8	0.0	R 3.0	0.0	39.1	R 292.5	84.6	R 377.1
2007	5.8	145.0	28.5	54.5	5.3	2.9	63.5	154.7	0.0	3.3	0.0	37.1	345.9	80.1	426.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	3	43	170	3,056	952	215	507	18,976	190	24,065	0	0	--	--	--
1965	(s)	50	493	3,473	1,053	295	467	21,786	137	27,704	0	0	--	--	--
1970	(s)	73	326	4,691	1,561	348	448	25,857	8	33,238	0	0	--	--	--
1975	(s)	69	177	5,898	1,310	364	520	29,331	17	37,615	0	0	--	--	--
1980	0	52	221	10,397	2,466	110	603	28,107	2	41,906	0	0	--	--	--
1985	0	38	137	9,856	4,424	95	549	26,968	0	42,031	506	0	--	--	--
1990	0	41	136	11,665	3,701	142	618	27,700	0	43,962	169	0	--	--	--
1995	0	35	146	12,678	2,414	56	589	28,333	0	44,217	106	0	--	--	--
1996	0	38	177	10,998	2,009	23	572	29,807	0	43,586	65	0	--	--	--
1997	0	39	247	10,435	R 2,131	97	604	29,551	0	R 43,066	65	0	--	--	--
1998	0	33	199	10,333	R 2,159	26	633	30,751	3	R 44,104	80	0	--	--	--
1999	0	32	240	10,054	3,476	23	639	32,764	8	47,203	137	0	--	--	--
2000	0	29	215	9,513	3,234	30	630	31,094	0	44,715	60	0	--	--	--
2001	0	26	196	9,603	2,259	56	577	29,249	1	41,942	56	0	--	--	--
2002	0	36	127	11,097	2,135	50	570	27,511	7	41,498	678	0	--	--	--
2003	0	33	102	10,998	3,228	47	527	31,519	8	46,430	962	0	--	--	--
2004	0	29	115	11,059	3,104	43	534	30,445	8	45,308	96	0	--	--	--
2005	0	29	214	12,827	1,758	77	531	26,893	0	42,300	R 714	0	--	--	--
2006	0	25	218	13,056	1,752	40	517	30,198	0	45,782	R 719	0	--	--	--
2007	0	25	165	14,127	1,543	41	534	30,885	0	47,295	1,398	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	1.8	0.0	268.2	0.0	268.2
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)	R 237.7	0.3	0.0	R 270.4	0.0	R 270.4
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	25.7	1.0	55.9	12.8	0.2	3.5	152.4	(s)	225.8	0.2	0.0	251.6	0.0	251.6
2002	0.0	36.1	0.6	64.6	12.1	0.2	3.5	143.3	(s)	224.4	2.4	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	3.4	0.0	285.2	0.0	285.2
2004	0.0	29.8	0.6	64.4	17.6	0.2	3.2	158.8	(s)	244.8	0.3	0.0	274.6	0.0	274.6
2005	0.0	29.2	1.1	74.7	10.0	0.3	3.2	140.3	0.0	229.6	R 2.5	0.0	258.8	0.0	258.8
2006	0.0	R 25.6	1.1	76.0	9.9	0.1	3.1	157.6	0.0	247.9	R 2.5	0.0	R 273.5	0.0	R 273.5
2007	0.0	25.2	0.8	82.3	8.7	0.1	3.2	161.2	0.0	256.4	4.9	0.0	281.7	0.0	281.7

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Kansas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	(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)	--
2005	22,046	14	1,722	135	0	1,857	8,821	11	--	0	0	426	(s)	--
2006	20,874	22	0	122	0	122	9,350	10	--	0	0	992	0	--
2007	22,780	26	0	94	376	470	10,369	11	--	0	0	1,153	(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	0.0	0.0	0.0	(s)	0.0	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	23.5	6.1	1.1	0.0	7.3	108.1	0.3	0.0	0.0	0.0	0.4	0.0	490.3
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
2005	374.8	14.2	10.8	0.8	0.0	11.6	92.0	0.1	0.0	0.0	0.0	4.3	(s)	497.1
2006	358.5	22.8	0.0	0.7	0.0	0.7	97.6	0.1	0.0	0.0	0.0	9.8	0.0	489.5
2007	390.6	26.1	0.0	0.5	2.3	2.8	108.8	0.1	0.0	0.0	0.0	11.4	(s)	539.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	12,010	149	4,850	497	4,152	21,535	337	6,457	37,827	0	2,633	--	--	--	--	--
1965	17,585	172	5,567	1,284	5,869	25,780	600	10,228	49,327	0	2,464	--	--	--	--	--
1970	23,558	248	8,211	3,089	9,564	33,581	1,063	14,392	69,900	0	3,174	--	--	--	--	--
1975	25,556	208	10,924	2,150	10,977	40,816	2,169	14,435	81,471	0	3,463	--	--	--	--	--
1980	27,728	202	22,906	2,897	10,223	39,829	1,012	19,666	96,533	0	2,940	--	--	--	--	--
1985	31,066	173	22,088	3,434	5,539	39,924	622	11,767	83,374	0	2,941	--	--	--	--	--
1990	34,449	184	24,226	5,713	6,154	43,040	537	13,559	93,228	0	3,160	--	--	--	--	--
1995	39,516	224	27,325	6,305	5,607	48,104	201	22,676	110,217	0	3,423	--	--	--	--	--
1996	40,862	236	27,693	5,590	7,207	43,543	243	32,103	116,379	0	3,497	--	--	--	--	--
1997	41,889	228	28,052	R 4,558	8,757	50,174	165	33,957	R 125,663	0	3,380	--	--	--	--	--
1998	41,153	205	28,104	R 5,351	7,517	50,222	55	36,182	R 127,432	0	3,116	--	--	--	--	--
1999	42,378	218	27,466	6,962	9,278	50,950	77	38,068	132,803	0	2,557	--	--	--	--	--
2000	42,585	225	29,641	6,651	9,959	48,912	90	35,515	130,767	0	2,325	--	--	--	--	--
2001	43,907	209	30,721	6,001	9,928	51,268	143	24,775	122,836	0	3,856	--	--	--	--	--
2002	40,920	228	33,820	6,353	10,917	50,827	94	31,054	133,065	0	4,025	--	--	--	--	--
2003	40,827	223	25,934	8,046	8,830	52,702	123	30,050	125,685	0	3,948	--	--	--	--	--
2004	41,874	225	30,286	9,042	9,621	55,268	64	34,871	139,153	0	3,780	--	--	--	--	--
2005	42,881	234	31,426	8,284	9,977	53,899	140	34,479	138,204	0	2,961	--	--	--	--	--
2006	44,435	211	32,777	7,105	9,754	53,898	118	35,094	138,745	0	2,592	--	--	--	--	--
2007	43,659	230	33,482	7,979	9,841	54,131	103	31,726	137,262	0	1,669	--	--	--	--	--
Trillion Btu																
1960	286.7	153.8	28.2	2.7	16.7	113.1	2.1	38.4	201.3	0.0	28.3	22.4	0.0	131.5	0.0	824.1
1965	415.5	176.7	32.4	7.2	23.5	135.4	3.8	59.7	262.1	0.0	25.8	21.7	0.0	4.2	0.0	905.9
1970	527.1	252.3	47.8	17.4	36.1	176.4	6.7	84.9	369.3	0.0	33.3	23.7	0.0	-89.1	0.0	1,116.5
1975	558.3	209.2	63.6	12.1	40.8	214.4	13.6	85.4	429.9	0.0	36.0	30.8	0.0	29.5	0.0	1,293.8
1980	641.7	204.1	133.4	16.3	37.6	209.2	6.4	113.4	516.3	0.0	30.5	25.3	0.0	-13.3	(s)	1,404.6
1985	716.9	177.7	128.7	19.3	20.0	209.7	3.9	70.1	451.7	0.0	30.7	38.8	0.0	-80.2	3.7	1,339.3
1990	803.5	191.7	141.1	32.3	22.3	226.1	3.4	81.9	507.1	0.0	32.9	17.4	0.2	-56.6	3.0	1,499.1
1995	929.4	245.6	159.2	35.7	20.3	250.9	1.3	130.6	597.9	0.0	35.3	15.5	0.4	-37.8	(s)	1,786.3
1996	952.1	R 248.1	161.3	31.7	26.0	227.1	1.5	181.0	628.7	0.0	36.2	18.5	0.5	-35.0	(s)	1,848.9
1997	977.8	239.3	163.4	25.8	31.7	261.6	1.0	192.2	675.7	0.0	34.5	13.0	0.5	-68.9	(s)	R 1,871.9
1998	959.0	212.1	163.7	30.3	27.2	261.8	0.3	205.6	688.9	0.0	31.8	11.1	0.6	-80.2	(s)	1,823.3
1999	987.6	225.4	160.0	39.5	33.5	265.5	0.5	216.7	715.7	0.0	26.1	11.6	0.6	-61.0	(s)	1,906.0
2000	997.6	234.2	172.7	37.7	35.9	254.8	0.6	201.3	703.0	0.0	23.7	11.9	0.6	-87.8	(s)	1,883.2
2001	1,013.1	216.7	179.0	34.0	35.9	267.1	0.9	146.3	663.1	0.0	39.8	12.7	0.7	-108.8	(s)	1,837.2
2002	950.9	235.0	197.0	36.0	39.4	264.7	0.6	184.1	721.9	0.0	40.9	21.2	0.7	-26.0	(s)	1,944.6
2003	943.7	R 230.4	151.1	45.6	32.0	274.4	0.8	178.2	682.2	0.0	40.4	24.6	1.0	-30.8	-0.1	1,891.4
2004	961.8	231.8	176.4	51.3	34.8	288.2	0.4	206.6	757.8	0.0	37.9	26.4	1.1	-34.2	0.0	1,982.5
2005	986.3	240.9	183.1	47.0	36.1	281.2	0.9	204.9	753.2	0.0	29.6	R 29.4	1.3	-41.7	(s)	R 1,998.9
2006	1,023.3	217.2	190.9	40.3	35.2	281.2	0.7	208.9	757.2	0.0	25.7	R 28.6	1.4	-81.0	(s)	R 1,972.4
2007	1,020.4	236.0	195.0	45.2	35.3	282.5	0.7	188.6	747.4	0.0	16.5	30.4	1.7	-29.1	-0.1	2,023.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	428	63	242	897	1,396	2,534	744	--	--	2,760	--	--	--
1965	274	64	278	1,653	1,594	3,526	562	--	--	3,763	--	--	--
1970	296	86	403	2,077	3,356	5,836	505	--	--	6,987	--	--	--
1975	88	79	442	1,073	3,740	5,255	542	--	--	9,586	--	--	--
1980	60	74	820	1,751	2,063	4,633	759	--	--	13,075	--	--	--
1985	55	60	856	833	1,586	3,276	1,338	--	--	14,539	--	--	--
1990	30	56	748	321	1,825	2,895	683	--	--	16,814	--	--	--
1995	17	66	723	415	2,260	3,397	542	--	--	20,537	--	--	--
1996	14	70	662	438	3,033	4,134	563	--	--	21,353	--	--	--
1997	39	66	658	486	3,018	4,162	294	--	--	20,998	--	--	--
1998	26	56	585	611	2,289	3,485	261	--	--	21,669	--	--	--
1999	48	59	523	864	2,797	4,184	275	--	--	22,548	--	--	--
2000	21	65	527	316	2,775	3,618	295	--	--	23,374	--	--	--
2001	24	57	456	271	1,841	2,568	237	--	--	23,698	--	--	--
2002	30	59	405	169	1,997	2,571	241	--	--	25,347	--	--	--
2003	26	62	485	182	2,321	2,989	253	--	--	24,704	--	--	--
2004	27	56	440	207	2,256	2,903	260	--	--	25,187	--	--	--
2005	23	56	370	251	2,089	2,710	R 371	--	--	26,947	--	--	--
2006	R 12	47	255	160	R 1,923	R 2,338	R 338	--	--	25,949	--	--	--
2007	12	52	245	100	2,002	2,347	372	--	--	28,004	--	--	--

  

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	107.5	265.9
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	0.2	(s)	57.4	143.1	132.7	275.8
1995	0.4	72.5	4.2	2.4	8.2	14.7	10.8	0.3	(s)	70.1	168.9	159.1	328.0
1996	0.3	R 73.7	3.9	2.5	11.0	17.3	11.3	0.3	(s)	72.9	175.8	165.7	341.4
1997	0.9	R 69.4	3.8	2.8	10.9	17.5	5.9	0.3	(s)	71.6	165.6	162.3	327.9
1998	0.7	57.5	3.4	3.5	8.3	15.1	5.2	0.3	(s)	73.9	152.7	167.7	320.4
1999	1.3	61.1	3.0	4.9	10.1	18.1	5.5	0.4	(s)	76.9	163.3	176.0	339.2
2000	0.6	67.3	3.1	1.8	10.0	14.9	5.9	0.4	(s)	79.8	168.7	181.4	350.2
2001	0.6	59.1	2.7	1.5	6.7	10.8	4.7	0.4	(s)	80.9	156.6	180.2	336.7
2002	0.7	61.0	2.4	1.0	7.2	10.5	4.8	0.5	(s)	86.5	164.0	192.8	356.8
2003	0.6	R 63.9	2.8	1.0	8.4	12.3	5.1	0.6	(s)	84.3	166.7	186.0	352.7
2004	0.7	58.0	2.6	1.2	8.2	11.9	5.2	0.7	(s)	85.9	162.4	190.1	352.6
2005	R 0.6	57.8	2.2	1.4	7.6	11.1	R 7.4	0.8	(s)	91.9	R 169.6	201.1	R 370.7
2006	R 0.3	48.8	1.5	0.9	R 6.9	R 9.3	R 6.8	0.9	0.1	88.5	R 154.6	191.5	R 346.0
2007	0.3	52.9	1.4	0.6	7.2	9.2	7.4	1.1	0.1	95.5	166.5	206.2	372.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	298	18	501	176	246	336	4	1,263	0	--	--	1,590	--	--	--
1965	206	21	576	325	281	268	8	1,459	0	--	--	2,166	--	--	--
1970	233	42	835	408	592	263	11	2,110	0	--	--	3,465	--	--	--
1975	204	38	915	211	660	275	7	2,069	0	--	--	6,489	--	--	--
1980	227	39	2,632	622	364	250	19	3,887	0	--	--	8,432	--	--	--
1985	194	34	1,579	92	280	377	1	2,329	0	--	--	9,465	--	--	--
1990	121	32	762	94	322	445	(s)	1,623	0	--	--	11,740	--	--	--
1995	113	39	1,114	117	399	42	0	1,672	0	--	--	13,521	--	--	--
1996	103	41	1,193	111	535	40	(s)	1,879	0	--	--	13,736	--	--	--
1997	315	39	934	113	533	40	0	1,619	0	--	--	15,238	--	--	--
1998	206	32	1,059	130	404	80	0	1,673	0	--	--	15,921	--	--	--
1999	353	36	1,097	67	494	39	1	1,697	0	--	--	16,496	--	--	--
2000	170	39	1,082	70	490	40	8	1,689	0	--	--	17,252	--	--	--
2001	194	35	1,123	58	325	42	6	1,553	0	--	--	17,601	--	--	--
2002	222	36	1,068	32	352	42	0	1,494	0	--	--	18,107	--	--	--
2003	177	38	766	39	410	42	0	1,256	0	--	--	17,946	--	--	--
2004	247	37	804	32	398	42	0	1,276	0	--	--	18,443	--	--	--
2005	266	37	773	27	369	42	1	1,212	0	--	--	19,091	--	--	--
2006	R 119	33	749	20	R 339	43	0	R 1,152	0	--	--	18,941	--	--	--
2007	112	34	661	10	353	43	0	1,068	0	--	--	20,035	--	--	--
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	69.3	165.2
1985	4.7	34.8	9.2	0.5	1.0	2.0	(s)	12.7	0.0	0.6	0.0	32.3	85.2	74.4	159.6
1990	2.9	33.1	4.4	0.5	1.2	2.3	(s)	8.5	0.0	1.5	0.0	40.1	86.1	92.6	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	210.3
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	227.0
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	128.7	241.1
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	133.8	244.6
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	137.7	251.1
2003	4.3	39.4	4.5	0.2	1.5	0.2	0.0	6.4	0.0	0.9	0.4	61.2	112.6	135.1	247.7
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	114.7	139.2	253.9
2005	6.4	38.0	4.5	0.2	1.3	0.2	(s)	6.2	0.0	R 1.2	0.5	65.1	117.4	142.5	R 259.8
2006	2.8	33.5	4.4	0.1	1.2	0.2	0.0	5.9	0.0	R 1.1	0.5	64.6	108.5	139.7	R 248.3
2007	2.7	35.3	3.8	0.1	1.3	0.2	0.0	5.4	0.0	1.2	0.5	68.4	113.4	147.5	260.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	3,754	46	1,558	2,476	485	289	4,326	9,134	0	--	--	23,818	--	--
1965	4,879	58	1,987	3,957	430	536	6,788	13,698	0	--	--	20,893	--	--
1970	4,325	75	2,078	5,562	209	786	11,208	19,843	0	--	--	20,586	--	--
1975	2,898	66	3,346	6,511	195	2,059	12,493	24,603	0	--	--	31,006	--	--
1980	3,058	66	6,433	7,784	89	857	16,663	31,825	0	--	--	28,280	--	--
1985	3,732	63	5,838	3,574	843	621	10,305	21,180	0	--	--	26,564	--	--
1990	3,431	72	6,054	3,941	848	537	12,562	23,942	0	--	--	32,543	--	--
1995	3,679	93	6,120	2,902	1,168	201	21,593	31,983	0	--	--	40,490	--	--
1996	3,674	97	6,097	3,589	1,199	243	31,016	42,144	0	--	--	41,930	--	--
1997	3,254	98	5,682	5,148	1,230	165	32,811	45,037	0	--	--	40,600	--	--
1998	2,724	96	5,889	4,805	821	55	34,114	45,684	0	--	--	38,260	--	--
1999	2,382	101	4,946	5,962	820	77	36,555	48,360	0	--	--	40,054	--	--
2000	2,214	104	4,436	6,638	827	81	34,557	46,540	0	--	--	37,689	--	--
2001	2,384	97	5,340	7,698	1,720	136	23,861	38,754	0	--	--	38,676	--	--
2002	2,063	107	5,252	8,429	1,739	92	23,380	38,893	0	--	--	43,812	--	--
2003	2,103	105	4,240	6,043	1,919	120	23,563	35,885	0	--	--	42,570	--	--
2004	2,257	117	4,154	6,886	2,196	58	27,008	40,302	0	--	--	42,891	--	--
2005	2,240	116	4,609	7,427	2,141	136	26,528	40,842	0	--	--	43,314	--	--
2006	R 2,366	112	5,012	R 7,376	2,307	118	27,843	R 42,655	0	--	--	43,853	--	--
2007	2,471	113	4,750	7,393	1,147	103	25,769	39,163	0	--	--	44,366	--	--
Trillion Btu														
1960	95.9	47.7	9.1	9.9	2.5	1.8	26.6	50.0	0.0	7.3	0.0	81.3	282.1	483.1
1965	123.9	60.0	11.6	15.9	2.3	3.4	40.7	73.8	0.0	10.2	0.0	71.3	339.3	509.5
1970	105.9	76.1	12.1	21.0	1.1	4.9	66.9	106.0	0.0	13.4	0.0	70.2	371.7	541.7
1975	71.1	66.6	19.5	24.2	1.0	12.9	74.2	131.9	0.0	19.8	0.0	105.8	395.2	649.6
1980	76.1	66.4	37.5	28.6	0.5	5.4	96.2	168.2	0.0	9.7	0.0	96.5	416.9	649.5
1985	94.2	65.1	34.0	12.9	4.4	3.9	61.6	116.8	0.0	11.4	0.0	90.6	378.2	587.0
1990	87.1	74.4	35.3	14.3	4.5	3.4	76.1	133.4	0.0	2.2	0.0	111.0	408.2	665.0
1995	94.2	102.4	35.6	10.5	6.1	1.3	124.3	177.8	0.0	3.2	0.0	138.2	515.7	829.5
1996	93.7	101.7	35.5	13.0	6.3	1.5	174.6	230.9	0.0	5.7	0.0	143.1	575.0	900.4
1997	82.8	103.1	33.1	18.6	6.4	1.0	185.5	244.7	0.0	6.1	0.0	138.5	575.2	889.1
1998	70.9	98.8	34.3	17.4	4.3	0.3	193.4	249.7	0.0	5.1	0.0	130.5	555.1	851.1
1999	62.3	104.3	28.8	21.6	4.3	0.5	207.9	263.1	0.0	5.2	0.0	136.7	571.5	884.1
2000	59.6	107.9	25.8	23.9	4.3	0.5	195.7	250.3	0.0	5.0	0.0	128.6	551.4	843.9
2001	63.6	101.0	31.1	27.8	9.0	0.9	140.9	209.7	0.0	7.1	0.0	132.0	R 513.3	807.3
2002	55.8	110.5	30.6	30.5	9.1	0.6	138.0	208.7	0.0	15.5	0.0	149.5	539.9	873.1
2003	56.2	R 108.5	24.7	21.9	10.0	0.8	139.3	196.7	0.0	18.7	0.0	145.2	525.2	845.7
2004	60.4	120.2	24.2	24.9	11.5	0.4	159.4	220.3	0.0	19.6	0.0	146.3	566.9	890.7
2005	58.5	118.9	26.8	26.9	11.2	0.9	157.1	222.9	0.0	20.0	0.0	147.8	568.0	891.3
2006	61.7	115.5	29.2	R 26.6	12.0	0.7	165.3	R 233.9	0.0	19.7	0.0	149.6	R 580.4	R 903.9
2007	63.8	115.7	27.7	26.5	6.0	0.7	152.8	213.6	0.0	20.6	0.0	151.4	565.0	891.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emu/states/\\_seds.html](http://www.eia.doe.gov/emu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	64	19	652	2,549	497	34	405	20,715	35	24,886	0	0	--	--	--
1965	16	28	1,052	2,725	1,284	36	409	25,082	42	30,630	0	0	--	--	--
1970	7	36	330	4,891	3,089	54	368	33,109	145	41,986	0	0	--	--	--
1975	(s)	24	129	6,215	2,150	66	530	40,346	2	49,437	0	0	--	--	--
1980	0	21	112	12,795	2,897	13	518	39,490	136	55,961	0	0	--	--	--
1985	0	14	66	13,546	3,434	98	471	38,704	0	56,319	1,014	0	--	--	--
1990	0	25	51	16,449	5,713	65	531	41,748	0	64,555	815	0	--	--	--
1995	0	25	44	19,086	6,305	47	506	46,894	0	72,882	126	0	--	--	--
1996	0	27	47	19,433	5,590	50	491	42,303	0	67,914	131	0	--	--	--
1997	0	23	28	20,512	R 4,558	58	519	48,904	0	R 74,580	155	0	--	--	--
1998	0	16	62	20,278	R 5,351	19	543	49,322	0	R 75,576	93	0	--	--	--
1999	0	17	33	20,637	6,962	26	549	50,091	0	78,298	86	0	--	--	--
2000	0	14	32	23,286	6,651	56	541	48,045	0	78,610	66	0	--	--	--
2001	0	15	90	23,577	6,001	65	495	49,506	1	79,735	93	0	--	--	--
2002	0	12	69	26,760	6,353	139	490	49,046	2	82,858	608	0	--	--	--
2003	0	14	60	20,134	8,046	56	453	50,741	3	79,493	1,355	0	--	--	--
2004	0	10	70	24,634	9,042	81	458	53,030	6	87,322	1,179	0	--	--	--
2005	0	8	70	25,444	8,284	92	456	51,716	3	86,065	R 2,637	0	--	--	--
2006	0	7	65	26,569	7,105	115	444	51,548	0	85,845	R 2,721	0	--	--	--
2007	0	12	64	27,584	7,979	92	459	52,941	0	89,118	3,365	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	3.6	0.0	323.4	0.0	323.4
1990	0.0	25.6	0.3	95.8	32.3	0.2	3.2	219.3	0.0	351.1	2.9	0.0	379.6	0.0	379.6
1995	0.0	27.4	0.2	111.2	35.7	0.2	3.1	244.6	0.0	394.9	0.4	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	0.5	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	4.8	0.0	445.2	0.0	445.2
2004	0.0	10.5	0.4	143.5	51.3	0.3	2.8	276.6	(s)	474.8	4.2	0.0	485.3	0.0	485.3
2005	0.0	8.5	0.4	148.2	47.0	0.3	2.8	269.9	(s)	468.5	R 9.3	0.0	477.0	0.0	477.0
2006	0.0	6.7	0.3	154.8	40.3	0.4	2.7	269.0	0.0	467.5	R 9.6	0.0	474.2	0.0	474.2
2007	0.0	12.2	0.3	160.7	45.2	0.3	2.8	276.3	0.0	485.6	11.9	0.0	497.9	0.0	497.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Kentucky

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	40,352	17	0	230	7,146	7,376	0	2,961	--	0	0	0	(s)	--
2006	41,938	12	0	193	6,562	6,755	0	2,592	--	0	0	0	0	--
2007	41,064	19	0	242	5,323	5,566	0	1,669	--	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	0.0	0.0	0.0	0.0	0.0	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	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	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	R (s)	0.0	0.0	0.0	0.0	963.2
2004	894.7	5.0	0.0	1.5	42.7	44.2	0.0	37.9	0.8	0.0	0.0	0.0	0.0	982.6
2005	920.9	17.7	0.0	1.3	43.0	44.4	0.0	29.6	0.8	0.0	0.0	0.0	(s)	1,013.4
2006	958.5	12.6	0.0	1.1	39.5	40.7	0.0	25.7	1.1	0.0	0.0	0.0	0.0	1,038.6
2007	953.7	19.9	0.0	1.4	32.1	33.5	0.0	16.5	1.1	0.0	0.0	0.0	0.0	1,024.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	0	970	10,710	3,207	21,646	22,550	8,769	21,897	88,779	0	0	--	--	--	--	--
1965	(s)	1,110	8,357	6,097	31,150	27,404	7,889	28,260	109,158	0	0	--	--	--	--	--
1970	0	1,841	11,799	5,879	47,555	34,850	11,118	39,255	150,456	0	0	--	--	--	--	--
1975	0	1,789	21,502	6,082	52,953	43,192	28,410	58,036	210,174	0	0	--	--	--	--	--
1980	111	1,794	22,579	8,644	52,872	47,157	64,084	98,408	293,743	0	0	--	--	--	--	--
1985	9,217	1,386	26,702	12,803	70,430	49,302	24,717	56,821	240,776	2,457	0	--	--	--	--	--
1990	12,547	1,588	30,065	25,879	47,504	43,967	22,982	89,137	259,533	14,197	656	--	--	--	--	--
1995	13,357	1,679	36,584	28,853	66,974	47,247	23,059	86,281	288,998	15,686	952	--	--	--	--	--
1996	12,534	1,616	42,641	29,030	66,649	50,871	26,543	63,557	279,292	15,765	964	--	--	--	--	--
1997	13,874	1,661	43,942	R 30,472	47,298	46,918	21,535	68,139	R 258,303	13,511	1,036	--	--	--	--	--
1998	13,891	1,569	40,826	R 28,670	46,693	50,105	21,955	59,872	R 248,121	16,428	1,063	--	--	--	--	--
1999	13,953	1,495	36,166	34,016	75,103	49,717	22,123	61,800	278,926	13,112	802	--	--	--	--	--
2000	15,737	1,537	38,779	35,399	111,059	54,489	29,246	58,721	327,692	15,796	532	--	--	--	--	--
2001	14,934	R 1,306	42,485	34,460	75,798	53,482	13,596	106,008	325,828	17,336	732	--	--	--	--	--
2002	14,676	1,426	41,229	37,678	80,954	55,065	11,749	104,847	331,522	17,305	891	--	--	--	--	--
2003	15,592	1,308	32,632	R 38,124	45,831	57,453	14,218	112,641	300,899	16,126	892	--	--	--	--	--
2004	16,059	1,346	33,189	35,840	52,196	55,756	15,277	118,245	310,503	17,080	1,099	--	--	--	--	--
2005	15,856	1,310	34,060	28,255	49,250	56,846	16,322	113,170	297,902	15,676	811	--	--	--	--	--
2006	16,410	R 1,293	36,107	23,264	R 58,859	63,493	16,961	122,696	R 321,381	16,735	713	--	--	--	--	--
2007	15,524	1,378	32,670	22,416	56,446	57,866	15,841	116,947	302,186	17,078	827	--	--	--	--	--
Trillion Btu																
1960	0.0	1,003.8	62.4	17.4	86.8	118.5	55.1	131.6	471.8	0.0	0.0	39.0	0.0	-7.5	0.0	1,507.0
1965	(s)	1,156.4	48.7	33.8	124.9	144.0	49.6	168.8	569.8	0.0	0.0	38.3	0.0	1.3	0.0	1,765.8
1970	0.0	1,894.2	68.7	32.6	179.7	183.1	69.9	232.5	766.5	0.0	0.0	41.6	0.0	0.8	0.0	2,703.1
1975	0.0	1,854.8	125.2	33.9	196.7	226.9	178.6	339.8	1,101.1	0.0	0.0	42.4	0.0	6.1	0.0	3,004.4
1980	2.5	1,862.2	131.5	48.4	194.3	247.7	402.9	564.2	1,589.0	0.0	0.0	64.7	0.0	121.4	0.0	3,639.7
1985	159.1	1,441.8	155.5	72.0	253.8	259.0	155.4	334.1	1,229.8	26.1	0.0	78.5	0.0	210.0	0.8	3,146.1
1990	208.9	1,654.7	175.1	146.1	172.2	231.0	144.5	512.1	1,381.0	150.2	6.8	118.2	0.2	69.3	0.3	3,589.6
1995	216.8	1,737.3	213.1	163.6	242.6	246.4	145.0	497.3	1,508.0	164.8	9.8	141.4	0.3	70.6	0.0	3,849.1
1996	205.4	1,687.6	248.4	164.6	240.8	265.3	166.9	378.2	1,464.2	165.6	10.0	142.1	0.4	175.2	0.0	3,850.4
1997	226.1	1,857.1	256.0	R 172.8	171.0	244.6	135.4	407.7	R 1,387.4	141.8	10.6	138.7	0.4	152.2	0.0	R 3,914.2
1998	225.3	1,679.0	237.8	R 162.6	168.7	261.1	138.0	357.1	R 1,325.4	172.3	10.8	136.2	0.5	98.1	0.0	R 3,647.7
1999	227.7	1,558.3	210.7	192.9	271.6	259.1	139.1	368.1	1,441.4	137.0	8.2	139.7	0.5	148.1	0.0	3,661.0
2000	253.3	1,625.9	225.9	200.7	400.6	283.9	183.9	350.1	1,645.0	164.7	5.4	136.5	0.5	140.0	0.0	3,971.4
2001	240.0	1,341.8	247.5	195.4	273.9	278.6	85.5	610.2	1,691.1	181.1	7.6	128.0	0.6	103.7	0.0	3,693.8
2002	232.1	1,526.3	240.2	213.6	292.5	286.8	73.9	603.9	1,710.8	180.7	9.1	131.3	0.6	99.1	0.0	3,889.9
2003	248.0	1,359.9	190.1	216.2	166.3	299.2	89.4	649.3	1,610.4	168.1	9.1	138.8	0.8	151.9	0.0	3,686.9
2004	256.7	1,400.3	193.3	203.2	188.8	290.8	96.0	678.9	1,651.1	178.1	11.0	173.8	0.9	R 136.8	0.0	R 3,808.7
2005	253.5	1,367.3	198.4	160.2	178.3	296.6	102.6	651.4	1,587.6	163.6	8.1	145.3	1.0	83.5	0.0	3,609.9
2006	265.2	R 1,341.9	210.3	131.9	R 212.2	331.3	106.6	712.2	R 1,704.6	174.6	7.1	R 141.9	1.1	163.8	0.0	R 3,800.2
2007	249.8	1,423.1	190.3	127.1	202.7	302.0	99.6	678.2	1,599.9	179.1	8.2	141.2	1.2	163.8	0.0	3,766.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	0	56	11	7	1,567	1,585	453	--	--	3,014	--	--	--
1965	0	61	6	14	2,159	2,178	304	--	--	5,161	--	--	--
1970	0	86	6	20	2,709	2,735	219	--	--	9,334	--	--	--
1975	0	96	10	21	2,086	2,117	257	--	--	11,923	--	--	--
1980	1	73	5	0	1,147	1,152	178	--	--	16,832	--	--	--
1985	0	61	6	18	989	1,012	342	--	--	20,168	--	--	--
1990	0	53	6	13	774	794	271	--	--	21,434	--	--	--
1995	1	53	1	9	626	637	388	--	--	24,116	--	--	--
1996	0	57	1	17	791	809	403	--	--	24,311	--	--	--
1997	(s)	53	(s)	92	871	963	195	--	--	24,502	--	--	--
1998	0	48	1	69	1,270	1,340	173	--	--	26,709	--	--	--
1999	0	45	3	62	1,889	1,955	182	--	--	26,426	--	--	--
2000	0	50	1	26	2,246	2,274	196	--	--	27,719	--	--	--
2001	0	49	1	27	2,100	2,128	175	--	--	25,800	--	--	--
2002	0	49	9	13	1,112	1,134	177	--	--	28,157	--	--	--
2003	0	47	4	9	908	921	186	--	--	28,572	--	--	--
2004	0	43	4	10	836	849	191	--	--	28,863	--	--	--
2005	0	41	5	8	982	995	R 208	--	--	28,654	--	--	--
2006	0	33	6	8	R 936	R 949	R 190	--	--	28,113	--	--	--
2007	(s)	37	5	6	643	654	209	--	--	28,878	--	--	--
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	138.4	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	300.8
1990	0.0	55.6	(s)	0.1	2.8	2.9	5.4	0.1	0.1	73.1	137.3	169.1	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	333.8
1996	0.0	59.1	(s)	0.1	2.9	3.0	8.1	0.2	0.1	82.9	153.3	188.6	342.0
1997	(s)	59.8	(s)	0.5	3.1	3.7	3.9	0.2	0.1	83.6	151.2	189.4	340.6
1998	0.0	51.2	(s)	0.4	4.6	5.0	3.5	0.2	0.1	91.1	151.1	206.7	357.7
1999	0.0	47.0	(s)	0.4	6.8	7.2	3.6	0.2	0.1	90.2	148.3	206.2	354.6
2000	0.0	52.9	(s)	0.1	8.1	8.3	3.9	0.2	0.1	94.6	159.9	215.1	375.1
2001	0.0	50.2	(s)	0.2	7.6	7.7	3.5	0.2	0.1	88.0	149.7	196.2	345.9
2002	0.0	53.2	0.1	0.1	4.0	4.1	3.5	0.2	0.1	96.1	157.3	214.2	371.4
2003	0.0	49.3	(s)	0.1	3.3	3.4	3.7	0.3	0.1	97.5	154.3	215.1	369.4
2004	0.0	44.6	(s)	0.1	3.0	3.1	3.8	0.3	0.1	98.5	150.4	217.9	368.3
2005	0.0	43.1	(s)	(s)	3.6	3.6	4.2	0.4	0.1	97.8	149.2	213.8	363.0
2006	0.0	34.7	(s)	(s)	3.4	3.5	3.8	0.5	0.1	95.9	R 138.4	207.4	R 345.8
2007	(s)	38.1	(s)	(s)	2.3	2.4	4.2	0.5	0.1	98.5	143.8	212.6	356.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	23	1,604	156	276	259	304	2,599	0	--	--	2,493	--	--	--
1965	0	23	815	305	381	299	206	2,006	0	--	--	4,890	--	--	--
1970	0	70	838	445	478	381	502	2,645	0	--	--	8,427	--	--	--
1975	0	51	1,458	467	368	465	1,830	4,588	0	--	--	9,225	--	--	--
1980	3	40	399	549	202	168	13,466	14,784	0	--	--	12,809	--	--	--
1985	0	30	2,647	65	174	235	575	3,698	0	--	--	16,548	--	--	--
1990	0	25	741	21	137	318	40	1,256	0	--	--	16,528	--	--	--
1995	4	24	257	6	110	41	0	415	0	--	--	18,016	--	--	--
1996	0	26	134	7	140	41	1	323	0	--	--	18,411	--	--	--
1997	(s)	26	311	3	154	41	0	508	0	--	--	18,888	--	--	--
1998	0	24	303	5	224	41	0	573	0	--	--	20,005	--	--	--
1999	0	25	550	9	333	41	0	933	0	--	--	20,354	--	--	--
2000	0	26	337	8	396	2,166	0	2,907	0	--	--	21,018	--	--	--
2001	0	25	277	16	371	951	0	1,615	0	--	--	20,315	--	--	--
2002	0	26	380	7	196	784	(s)	1,367	0	--	--	21,439	--	--	--
2003	0	25	345	6	160	2,122	71	2,705	0	--	--	21,944	--	--	--
2004	0	25	293	77	147	1,483	61	2,062	0	--	--	22,568	--	--	--
2005	0	25	354	38	173	1,057	54	1,676	0	--	--	21,692	--	--	--
2006	0	22	346	29	R 165	43	0	R 584	0	--	--	21,979	--	--	--
2007	(s)	25	612	7	113	2,800	0	3,532	0	--	--	22,887	--	--	--
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	105.3	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	130.0	239.3
1990	0.0	26.0	4.3	0.1	0.5	1.7	0.2	6.8	0.0	0.6	0.0	56.4	89.8	130.4	220.2
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	229.1
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	142.8	235.3
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	146.0	242.9
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	252.5
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	163.1	277.7
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	154.5	257.8
2002	0.0	27.6	2.2	(s)	0.7	4.1	(s)	7.0	0.0	0.6	0.3	73.2	108.7	163.1	271.8
2003	0.0	26.2	2.0	(s)	0.6	11.1	0.4	14.1	0.0	0.7	0.4	74.9	116.2	165.2	281.4
2004	0.0	25.8	1.7	0.4	0.5	7.7	0.4	10.8	0.0	0.6	0.4	77.0	114.6	170.4	285.0
2005	0.0	26.3	2.1	0.2	0.6	5.5	0.3	8.8	0.0	R 0.7	0.5	74.0	110.2	161.9	272.1
2006	0.0	23.1	2.0	0.2	0.6	0.2	0.0	3.0	0.0	0.6	0.5	75.0	102.2	162.2	264.4
2007	(s)	25.9	3.6	(s)	0.4	14.6	0.0	18.6	0.0	0.7	0.5	78.1	123.8	168.5	292.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	0	739	3,383	19,606	562	485	20,187	44,222	0	--	--	4,326	--	--	--
1965	0	797	3,129	28,451	548	353	26,225	58,706	0	--	--	5,905	--	--	--
1970	0	1,281	4,241	44,017	302	819	37,804	87,183	0	--	--	11,637	--	--	--
1975	0	1,224	6,391	50,191	173	4,046	56,727	117,528	0	--	--	14,969	--	--	--
1980	107	1,182	8,543	51,364	62	12,363	96,883	169,215	0	--	--	23,233	--	--	--
1985	457	968	6,748	69,158	486	6,806	55,911	139,109	0	--	--	23,952	--	--	--
1990	799	1,168	9,143	46,519	337	1,131	88,132	145,261	0	--	--	25,862	--	--	--
1995	422	1,213	11,348	66,176	771	382	82,446	161,123	0	--	--	30,692	--	--	--
1996	84	1,212	12,525	65,673	773	745	59,815	139,531	0	--	--	32,544	--	--	--
1997	67	1,232	12,565	46,228	825	1,013	63,984	124,616	0	--	--	32,493	--	--	--
1998	41	1,117	12,260	45,178	655	733	55,711	114,537	0	--	--	30,999	--	--	--
1999	37	1,055	10,720	72,855	570	1,194	57,938	143,277	0	--	--	31,484	--	--	--
2000	57	1,106	11,517	108,408	607	1,368	55,080	176,979	0	--	--	31,950	--	--	--
2001	80	942	12,192	73,311	1,162	992	101,681	189,338	0	--	--	28,574	--	--	--
2002	53	977	12,728	79,573	1,220	1,315	100,875	195,711	0	--	--	29,662	--	--	--
2003	130	952	5,224	44,727	1,306	2,854	108,499	162,610	0	--	--	27,251	--	--	--
2004	84	989	5,281	51,159	1,497	1,369	114,109	173,415	0	--	--	28,290	--	--	--
2005	66	917	6,080	48,025	1,410	2,773	109,119	167,408	0	--	--	27,031	--	--	--
2006	74	R 993	5,072	R 57,708	1,398	3,201	118,663	R 186,042	0	--	--	27,373	--	--	--
2007	71	1,039	5,081	55,650	1,643	590	112,650	175,615	0	--	--	27,799	--	--	--
Trillion Btu															
1960	0.0	764.9	19.7	78.6	3.0	3.0	122.2	226.5	0.0	29.8	0.0	14.8	1,035.9	36.5	1,072.4
1965	0.0	830.0	18.2	114.1	2.9	2.2	157.7	295.1	0.0	32.1	0.0	20.1	1,177.4	48.1	1,225.5
1970	0.0	1,318.4	24.7	166.3	1.6	5.1	224.3	422.1	0.0	37.2	0.0	39.7	1,817.4	96.1	1,913.5
1975	0.0	1,263.1	37.2	186.5	0.9	25.4	332.4	582.4	0.0	37.1	0.0	51.1	1,933.7	122.8	2,056.5
1980	2.4	1,225.4	49.8	188.7	0.3	77.7	555.4	872.0	0.0	61.1	0.0	79.3	2,240.1	191.1	2,431.2
1985	11.0	1,005.1	39.3	249.2	2.6	42.8	328.8	662.6	0.0	71.5	0.0	81.7	1,832.0	188.2	2,020.2
1990	16.0	1,216.4	53.3	168.6	1.8	7.1	506.2	736.9	0.0	110.8	0.0	88.2	2,168.4	204.1	2,372.4
1995	7.7	1,252.9	66.1	239.8	4.0	2.4	474.3	786.6	0.0	131.3	0.0	104.7	2,283.2	237.8	2,521.0
1996	2.1	1,266.0	73.0	237.3	4.0	4.7	355.7	674.6	0.0	131.8	0.0	111.0	2,185.6	252.5	2,438.1
1997	1.7	1,398.0	73.2	167.2	4.3	6.4	382.8	633.8	0.0	132.9	0.0	110.9	2,277.2	251.2	2,528.4
1998	1.0	1,203.2	71.4	163.3	3.4	4.6	332.1	574.8	0.0	130.9	0.0	105.8	2,015.8	239.9	2,255.6
1999	0.9	1,100.5	62.4	263.4	3.0	7.5	345.0	681.3	0.0	134.1	(s)	107.4	2,024.4	245.7	2,270.1
2000	1.4	1,176.4	67.1	391.0	3.2	8.6	328.2	798.1	0.0	130.9	(s)	109.0	2,215.8	248.0	2,463.7
2001	2.0	964.0	71.0	264.9	6.1	6.2	584.4	932.7	0.0	122.9	(s)	97.5	2,119.1	217.3	2,336.4
2002	1.3	1,057.9	74.1	287.5	6.4	8.3	580.0	956.3	0.0	126.1	(s)	101.2	2,242.8	225.6	2,468.4
2003	3.1	991.2	30.4	162.3	6.8	17.9	624.4	841.9	0.0	133.4	(s)	93.0	2,062.6	205.2	2,267.8
2004	2.1	R 1,030.7	30.8	185.1	7.8	8.6	654.1	886.4	0.0	168.1	(s)	96.5	R 2,183.8	213.6	R 2,397.4
2005	1.6	960.6	35.4	173.9	7.4	17.4	627.1	861.2	0.0	139.4	(s)	92.2	2,055.0	201.7	2,256.7
2006	1.8	R 1,031.0	29.5	R 208.0	7.3	20.1	688.0	R 953.0	0.0	R 136.5	(s)	93.4	R 2,215.7	202.0	R 2,417.6
2007	1.7	1,073.4	29.6	199.8	8.6	3.7	652.3	894.0	0.0	135.1	(s)	94.8	2,199.1	204.6	2,403.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	0	32	847	5,690	3,207	197	700	21,729	7,944	40,314	0	25	--	--	--
1965	0	54	1,055	4,387	6,097	159	661	26,557	7,297	46,213	0	7	--	--	--
1970	0	71	447	6,655	5,879	350	539	34,167	9,699	57,736	0	4	--	--	--
1975	0	61	295	13,554	6,082	307	527	42,554	16,835	80,154	0	3	--	--	--
1980	0	74	255	12,457	8,644	159	721	46,927	31,159	100,321	0	3	--	--	--
1985	0	42	171	17,168	12,803	109	656	48,581	17,277	96,767	229	3	--	--	--
1990	0	56	108	20,015	25,879	73	738	43,312	21,737	111,863	90	3	--	--	--
1995	0	65	87	24,900	28,853	61	704	46,434	22,664	123,704	183	3	--	--	--
1996	0	68	81	29,783	29,030	45	683	50,057	25,489	135,168	44	3	--	--	--
1997	0	72	98	30,980	R 30,472	45	722	46,053	19,497	R 127,866	18	3	--	--	--
1998	0	60	78	28,180	R 28,670	21	756	49,410	20,255	R 127,368	16	3	--	--	--
1999	0	48	87	24,841	34,016	26	764	49,106	20,336	129,177	39	3	--	--	--
2000	0	51	84	26,583	35,399	8	752	51,716	27,170	141,711	6	3	--	--	--
2001	0	48	286	29,362	34,460	17	689	51,368	10,243	126,424	(s)	3	--	--	--
2002	0	51	62	28,006	37,678	73	681	53,061	10,400	129,961	866	3	--	--	--
2003	0	47	102	26,848	R 38,124	36	630	54,025	9,670	129,433	1,076	3	--	--	--
2004	0	45	55	27,420	35,840	54	638	52,776	10,875	127,658	1,097	16	--	--	--
2005	0	42	60	27,476	28,255	69	634	54,379	10,456	121,330	R 46	12	--	--	--
2006	0	48	60	30,634	23,264	51	618	62,052	13,385	130,064	R 44	3	--	--	--
2007	0	52	25	26,908	22,416	40	638	53,422	14,782	118,231	130	3	--	--	--
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	0.8	(s)	585.8	(s)	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	0.6	(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	R 172.8	0.2	4.4	240.1	122.6	R 720.9	0.1	(s)	R 802.2	(s)	R 802.2
1998	0.0	65.1	0.4	164.1	R 162.6	0.1	4.6	257.5	127.3	R 716.6	0.1	(s)	R 781.8	(s)	R 781.8
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	49.5	1.4	171.0	195.4	0.1	4.2	267.6	64.4	704.1	(s)	(s)	753.6	(s)	753.7
2002	0.0	55.0	0.3	163.1	213.6	0.3	4.1	276.3	65.4	723.2	3.1	(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	3.8	(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	3.9	0.1	R 757.9	0.1	758.1
2005	0.0	43.9	0.3	160.0	160.2	0.3	3.8	283.8	65.7	674.1	R 0.2	(s)	718.0	0.1	718.1
2006	0.0	49.8	0.3	178.4	131.9	0.2	3.7	323.8	84.2	722.5	R 0.2	(s)	772.4	(s)	772.4
2007	0.0	54.0	0.1	156.7	127.1	0.1	3.9	278.8	92.9	659.7	0.5	(s)	713.7	(s)	713.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Louisiana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	15,790	285	3,038	144	3,311	6,493	15,676	811	--	0	0	0	0	--
2006	16,337	196	375	49	3,318	3,742	16,735	713	--	0	0	0	0	--
2007	15,453	224	469	64	3,621	4,154	17,078	827	--	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	1.3	0.0	0.0	0.0	0.0	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	252.9	14.8	3.8	19.9	38.6	181.1	7.6	0.9	0.0	0.0	0.0	0.0	719.1
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	<sup>R</sup> 252.3	18.7	1.1	20.2	40.0	178.1	11.0	1.2	0.0	0.0	0.0	0.0	<sup>R</sup> 737.2
2005	251.9	293.5	19.1	0.8	19.9	39.9	163.6	8.1	1.1	0.0	0.0	0.0	0.0	758.1
2006	263.4	203.3	2.4	0.3	20.0	22.6	174.6	7.1	1.0	0.0	0.0	0.0	0.0	672.0
2007	248.1	231.7	3.0	0.4	21.8	25.1	179.1	8.2	1.3	0.0	0.0	0.0	0.0	693.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	794	0	7,415	1,904	442	8,378	5,408	3,265	26,811	0	2,844	--	--	--	--	--
1965	316	0	9,220	1,812	550	9,131	6,340	3,079	30,132	0	2,069	--	--	--	--	--
1970	91	1	11,822	2,300	635	11,025	11,605	2,819	40,206	0	2,853	--	--	--	--	--
1975	56	2	11,505	1,988	963	12,645	9,929	1,970	39,001	4,502	2,664	--	--	--	--	--
1980	124	2	10,628	1,875	874	11,768	8,557	1,217	34,919	4,404	2,417	--	--	--	--	--
1985	206	3	10,370	1,639	674	12,548	7,900	3,447	36,578	5,354	2,691	--	--	--	--	--
1990	401	5	13,331	2,528	1,391	14,126	10,630	1,565	43,572	4,861	4,091	--	--	--	--	--
1995	436	6	14,744	841	1,545	14,368	9,417	2,388	43,303	198	3,354	--	--	--	--	--
1996	390	6	14,950	891	1,832	14,959	9,576	3,539	45,747	5,062	4,157	--	--	--	--	--
1997	353	6	14,666	954	1,242	15,987	9,880	3,793	46,522	0	3,648	--	--	--	--	--
1998	291	6	15,242	R 930	1,403	15,319	8,943	4,215	R 46,053	0	3,716	--	--	--	--	--
1999	274	7	14,913	864	1,131	16,158	11,263	3,748	48,077	0	3,756	--	--	--	--	--
2000	388	45	15,317	908	1,321	16,328	9,499	3,776	47,149	0	3,591	--	--	--	--	--
2001	307	96	14,300	712	1,710	14,290	7,012	2,677	40,701	0	2,645	--	--	--	--	--
2002	311	102	14,567	671	1,236	16,871	6,095	1,833	41,273	0	2,768	--	--	--	--	--
2003	285	71	18,911	922	1,828	18,270	5,044	2,289	47,265	0	3,173	--	--	--	--	--
2004	286	73	19,539	1,088	1,240	17,005	4,731	2,983	46,585	0	3,430	--	--	--	--	--
2005	276	58	16,974	1,425	2,329	17,320	6,934	2,600	47,581	0	4,091	--	--	--	--	--
2006	259	50	15,610	1,790	2,109	16,996	4,543	1,837	R 42,885	0	4,278	--	--	--	--	--
2007	251	45	15,882	1,765	2,807	16,773	4,075	1,676	42,977	0	3,738	--	--	--	--	--
Trillion Btu																
1960	20.4	0.0	43.2	10.2	1.8	44.0	34.0	19.3	152.4	0.0	30.6	29.2	0.0	-0.7	0.5	232.4
1965	8.0	0.0	53.7	9.7	2.2	48.0	39.9	18.2	171.6	0.0	21.6	30.0	0.0	0.3	0.8	232.4
1970	2.2	1.3	68.9	12.5	2.4	57.9	73.0	16.7	231.3	0.0	29.9	29.5	0.0	6.8	1.8	302.7
1975	1.3	2.0	67.0	10.8	3.6	66.4	62.4	11.9	222.1	49.6	27.7	32.7	0.0	-15.6	4.9	324.7
1980	3.0	R 2.3	61.9	10.2	3.2	61.8	53.8	7.3	198.3	48.0	25.1	96.0	0.0	-3.7	12.7	381.8
1985	5.1	2.6	60.4	8.9	2.4	65.9	49.7	21.7	209.0	56.9	28.1	107.9	0.0	11.8	2.3	423.8
1990	10.4	4.6	77.7	14.0	5.0	74.2	66.8	9.5	247.3	51.4	42.5	109.0	0.1	-5.3	7.6	467.6
1995	11.0	R 5.6	85.9	4.8	5.6	74.9	59.2	14.1	244.5	2.1	34.6	126.2	0.1	54.6	15.6	494.2
1996	9.8	R 5.9	87.1	5.1	6.6	78.0	60.2	20.2	257.2	53.2	43.0	124.1	0.1	1.0	14.6	508.9
1997	9.0	6.5	85.4	5.4	4.5	83.3	62.1	21.9	262.6	0.0	37.3	124.5	0.1	56.4	11.7	508.0
1998	7.3	5.8	88.8	5.3	5.1	79.8	56.2	24.0	259.2	0.0	37.9	113.2	0.1	44.3	13.4	R 481.3
1999	6.9	R 6.7	86.9	4.9	4.1	84.2	70.8	21.4	272.2	0.0	38.4	120.7	0.1	28.9	13.1	487.1
2000	10.0	48.0	89.2	5.1	4.8	85.1	59.7	21.5	265.4	0.0	36.6	126.4	0.1	19.5	13.1	519.2
2001	7.9	101.2	83.3	4.0	6.2	74.4	44.1	15.7	227.8	0.0	27.3	118.7	0.1	-23.5	9.6	469.1
2002	8.0	107.8	84.9	3.8	4.5	87.9	38.3	10.9	230.2	0.0	28.2	112.1	0.1	-34.6	7.1	459.0
2003	7.5	75.1	110.2	5.2	6.6	95.1	31.7	13.5	262.4	0.0	32.5	100.1	0.1	-10.6	8.3	475.3
2004	7.3	76.3	113.8	6.2	4.5	88.7	29.7	17.7	260.6	0.0	34.4	102.3	0.1	-16.0	13.0	477.9
2005	7.1	61.1	98.9	8.1	8.4	90.4	43.6	15.2	264.5	0.0	40.9	R 114.2	0.1	-20.7	13.7	R 480.9
2006	6.6	53.3	90.9	10.1	7.6	88.7	28.6	10.5	236.4	0.0	42.4	R 108.1	0.2	-1.3	10.9	R 456.5
2007	6.6	47.9	92.5	10.0	10.1	87.5	25.6	9.9	235.6	0.0	36.9	115.5	1.2	0.4	11.5	455.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.

<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	122	0	4,727	2,091	342	7,160	426	--	--	993	--	--	--
1965	71	0	6,139	1,691	381	8,210	322	--	--	1,224	--	--	--
1970	24	1	7,877	1,649	383	9,909	222	--	--	1,723	--	--	--
1975	7	1	7,646	932	604	9,182	292	--	--	2,487	--	--	--
1980	5	1	6,372	405	395	7,173	478	--	--	2,998	--	--	--
1985	11	1	5,451	910	348	6,709	338	--	--	3,419	--	--	--
1990	9	1	5,987	563	863	7,412	215	--	--	3,932	--	--	--
1995	(s)	1	7,627	1,089	1,120	9,836	235	--	--	3,629	--	--	--
1996	(s)	1	7,549	1,370	1,315	10,234	244	--	--	3,679	--	--	--
1997	(s)	1	7,407	1,310	971	9,688	177	--	--	3,659	--	--	--
1998	(s)	1	7,553	1,880	1,074	10,507	157	--	--	3,589	--	--	--
1999	(s)	1	7,443	1,539	948	9,930	165	--	--	3,704	--	--	--
2000	(s)	1	6,957	1,681	1,046	9,684	178	--	--	3,737	--	--	--
2001	(s)	1	6,850	1,674	1,284	9,809	144	--	--	3,903	--	--	--
2002	(s)	1	6,749	1,002	789	8,540	146	--	--	4,043	--	--	--
2003	(s)	1	8,830	1,392	1,471	11,693	153	--	--	4,219	--	--	--
2004	(s)	1	9,881	1,740	1,023	12,644	157	--	--	4,331	--	--	--
2005	(s)	1	8,428	1,711	1,735	11,874	R 111	--	--	4,503	--	--	--
2006	(s)	1	7,431	1,391	R 1,459	R 10,281	R 101	--	--	4,351	--	--	--
2007	(s)	1	7,253	957	2,136	10,346	111	--	--	4,413	--	--	--
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	R 0.6	37.1	2.3	1.5	40.9	9.6	0.0	0.0	10.2	61.3	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	0.0	0.1	13.4	59.9	31.0	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	28.5	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	99.5
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	29.7	101.2
2002	(s)	1.3	39.3	5.7	2.9	47.8	2.9	(s)	0.1	13.8	66.0	30.8	96.8
2003	(s)	1.5	51.4	7.9	5.3	64.7	3.1	(s)	0.1	14.4	83.7	31.8	115.5
2004	(s)	1.3	57.6	9.9	3.7	71.1	3.1	(s)	0.1	14.8	90.5	32.7	123.2
2005	(s)	1.2	49.1	9.7	6.3	65.1	R 2.2	(s)	0.1	15.4	R 84.0	33.6	R 117.6
2006	(s)	1.1	43.3	7.9	R 5.3	R 56.4	R 2.0	(s)	0.1	14.8	R 74.6	32.1	R 106.7
2007	(s)	1.3	42.2	5.4	7.7	55.3	2.2	(s)	0.2	15.1	74.1	32.5	106.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	84	0	996	100	60	29	145	1,331	0	--	--	542	--	--	--
1965	54	0	1,294	81	67	34	72	1,549	0	--	--	819	--	--	--
1970	19	(s)	1,660	79	68	40	292	2,139	0	--	--	975	--	--	--
1975	17	1	1,611	45	107	40	334	2,136	0	--	--	1,568	--	--	--
1980	20	1	1,840	70	70	48	682	2,710	0	--	--	1,717	--	--	--
1985	38	1	1,082	99	61	104	1,040	2,386	0	--	--	2,338	--	--	--
1990	34	2	2,006	68	152	101	2,137	4,463	0	--	--	2,847	--	--	--
1995	3	2	2,285	161	198	12	369	3,025	0	--	--	2,973	--	--	--
1996	4	3	2,424	148	232	12	508	3,323	0	--	--	3,276	--	--	--
1997	4	3	2,351	157	171	12	587	3,278	0	--	--	3,343	--	--	--
1998	3	2	2,748	242	190	12	281	3,473	0	--	--	3,388	--	--	--
1999	3	3	2,792	135	167	12	109	3,214	0	--	--	3,553	--	--	--
2000	3	3	3,223	136	185	12	253	3,809	0	--	--	3,876	--	--	--
2001	3	3	2,516	152	227	12	187	3,094	0	--	--	3,836	--	--	--
2002	2	5	2,721	112	139	12	396	3,381	0	--	--	3,848	--	--	--
2003	2	5	3,670	161	260	20	319	4,428	0	--	--	3,959	--	--	--
2004	2	5	3,478	251	181	24	348	4,282	0	--	--	4,325	--	--	--
2005	3	5	2,882	217	306	14	494	3,913	0	--	--	4,157	--	--	--
2006	3	5	2,608	150	R 257	31	280	R 3,326	0	--	--	4,134	--	--	--
2007	2	6	2,931	117	377	48	408	3,880	0	--	--	4,195	--	--	--
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	R 0.9	10.7	0.4	0.3	0.3	4.3	15.9	0.0	0.2	0.0	5.9	23.3	14.1	37.4
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	0.0	3.1	0.0	9.7	41.9	22.5	64.4
1995	0.1	R 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	62.2
1997	0.1	R 2.8	13.7	0.9	0.6	0.1	3.7	19.0	0.0	3.9	0.0	11.4	37.0	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	64.4
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	2.1	0.0	13.1	36.0	29.2	65.2
2002	(s)	6.5	15.9	0.6	0.5	0.1	2.5	19.5	0.0	2.3	0.0	13.1	41.6	29.3	70.9
2003	(s)	5.7	21.4	0.9	0.9	0.1	2.0	25.3	0.0	2.4	0.0	13.5	47.0	29.8	76.8
2004	(s)	5.4	20.3	1.4	0.7	0.1	2.2	24.7	0.0	2.2	0.0	14.8	47.1	32.7	79.8
2005	0.1	5.2	16.8	1.2	1.1	0.1	3.1	22.3	0.0	R 2.1	0.0	14.2	R 43.8	31.0	R 74.9
2006	0.1	5.4	15.2	0.8	0.9	0.2	1.8	18.9	0.0	R 2.1	0.0	14.1	R 40.6	30.5	R 71.1
2007	0.1	6.5	17.1	0.7	1.4	0.3	2.6	21.9	0.0	2.1	0.0	14.3	44.9	30.9	75.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	562	0	402	38	166	2,639	884	4,130	906	--	--	1,246	--	--
1965	191	0	500	100	145	1,270	1,103	3,117	697	--	--	1,715	--	--
1970	48	(s)	805	182	137	5,128	883	7,134	940	--	--	2,370	--	--
1975	32	1	682	250	79	5,848	814	7,674	832	--	--	2,477	--	--
1980	99	1	762	400	76	4,047	528	5,812	974	--	--	3,470	--	--
1985	157	1	509	249	124	3,407	2,278	6,567	974	--	--	4,067	--	--
1990	222	2	841	358	94	4,789	738	6,821	1,344	--	--	4,750	--	--
1995	279	2	1,201	216	169	7,378	729	9,693	1,155	--	--	4,959	--	--
1996	230	2	1,336	278	176	7,722	1,602	11,115	1,378	--	--	4,772	--	--
1997	190	3	1,253	87	179	6,682	1,909	10,109	1,285	--	--	4,957	--	--
1998	138	2	1,352	133	117	5,423	1,665	8,690	1,299	--	--	4,622	--	--
1999	117	3	1,033	11	86	5,281	1,643	8,054	1,303	--	--	4,687	--	--
2000	219	13	969	89	87	5,315	1,657	8,118	1,296	--	--	4,551	--	--
2001	124	11	798	198	216	4,419	666	6,297	935	--	--	4,413	--	--
2002	88	4	818	307	228	4,156	558	6,068	937	--	--	3,550	--	--
2003	119	3	1,258	87	241	2,706	583	4,875	1,022	--	--	3,793	--	--
2004	116	3	1,484	28	281	3,155	842	5,792	563	--	--	3,711	--	--
2005	127	3	1,059	278	265	3,972	517	6,091	625	--	--	3,702	--	--
2006	109	3	820	R 385	292	3,287	131	R 4,914	779	--	--	3,800	--	--
2007	112	3	950	287	261	2,772	434	4,703	694	--	--	3,252	--	--
Trillion Btu														
1960	14.5	0.0	2.3	0.2	0.9	16.6	5.7	25.7	9.7	20.5	0.0	4.3	74.7	85.3
1965	4.9	0.0	2.9	0.4	0.8	8.0	7.0	19.0	7.3	23.5	0.0	5.9	60.6	74.5
1970	1.2	0.4	4.7	0.7	0.7	32.2	5.7	44.0	9.9	25.0	0.0	8.1	88.4	108.0
1975	0.8	0.7	4.0	0.9	0.4	36.8	5.3	47.4	8.7	26.8	0.0	8.5	92.7	113.1
1980	2.4	R 0.8	4.4	1.5	0.4	25.4	3.4	35.2	10.1	86.2	0.0	11.8	146.5	175.0
1985	3.9	0.9	3.0	0.9	0.7	21.4	15.0	41.0	10.2	101.0	0.0	13.9	170.8	202.8
1990	5.5	2.0	4.9	1.3	0.5	30.1	4.8	41.6	14.0	80.1	0.0	16.2	159.5	197.0
1995	7.0	2.0	7.0	0.8	0.9	46.4	4.6	59.6	11.9	98.4	0.0	16.9	195.8	234.2
1996	5.8	2.2	7.8	1.0	0.9	48.6	9.1	67.4	14.2	94.8	0.0	16.3	200.7	237.7
1997	4.7	R 2.6	7.3	0.3	0.9	42.0	11.0	61.6	13.1	97.6	0.0	16.9	196.5	234.8
1998	3.4	2.3	7.9	0.5	0.6	34.1	9.4	52.5	13.2	83.5	0.0	15.8	170.7	206.5
1999	2.9	2.6	6.0	(s)	0.4	33.2	9.3	49.0	13.3	88.9	0.0	16.0	172.7	209.3
2000	5.7	15.0	5.6	0.3	0.5	33.4	9.4	49.2	13.2	92.8	0.0	15.5	191.4	226.8
2001	3.2	12.9	4.6	0.7	1.1	27.8	4.3	38.6	9.7	82.7	0.0	15.1	162.1	195.6
2002	2.3	4.6	4.8	1.1	1.2	26.1	3.6	36.8	9.5	76.6	0.0	12.1	142.0	169.0
2003	3.1	4.0	7.3	0.3	1.3	17.0	3.8	29.7	10.5	64.1	0.0	12.9	124.3	152.8
2004	3.0	3.0	8.6	0.1	1.5	19.8	5.5	35.6	5.6	65.4	0.0	12.7	R 125.3	153.3
2005	3.2	2.9	6.2	1.0	1.4	25.0	3.3	36.8	6.2	67.8	0.0	12.6	129.6	157.2
2006	2.8	3.6	4.8	R 1.4	1.5	20.7	0.8	R 29.1	7.7	63.1	0.0	13.0	R 119.3	R 147.4
2007	2.9	3.4	5.5	1.0	1.4	17.4	2.8	28.2	6.9	70.3	0.0	11.1	122.7	146.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	10	0	57	1,251	1,904	1	133	8,183	776	12,305	0	0	--	--	--
1965	1	0	89	1,199	1,812	2	116	8,952	625	12,794	0	0	--	--	--
1970	(s)	0	93	1,385	2,300	3	114	10,848	1,415	16,158	0	0	--	--	--
1975	(s)	0	71	1,524	1,988	3	108	12,526	934	17,155	0	0	--	--	--
1980	0	(s)	82	1,593	1,875	9	132	11,644	209	15,544	0	0	--	--	--
1985	0	(s)	41	3,300	1,639	15	120	12,320	21	17,455	0	0	--	--	--
1990	0	(s)	62	4,474	2,528	17	135	13,931	147	21,295	0	0	--	--	--
1995	0	(s)	35	3,598	841	11	129	14,187	204	19,004	0	0	--	--	--
1996	0	(s)	28	3,624	891	7	125	14,771	202	19,648	0	(s)	--	--	--
1997	0	(s)	36	3,634	954	13	132	15,796	107	20,673	0	(s)	--	--	--
1998	0	(s)	25	3,572	R 930	6	138	15,190	281	R 20,142	0	(s)	--	--	--
1999	0	(s)	34	3,617	864	5	140	16,061	187	20,908	0	(s)	--	--	--
2000	0	1	25	4,126	908	1	138	16,229	697	22,122	0	(s)	--	--	--
2001	0	1	58	4,128	712	(s)	126	14,062	544	19,630	0	(s)	--	--	--
2002	0	1	37	4,228	671	1	124	16,631	832	22,524	0	(s)	--	--	--
2003	0	1	38	5,022	922	11	115	18,010	3	24,121	0	(s)	--	--	--
2004	0	1	33	4,566	1,088	8	117	16,699	27	22,537	0	(s)	--	--	--
2005	0	1	40	4,576	1,425	9	116	17,040	950	24,157	R 108	(s)	--	--	--
2006	0	(s)	52	4,734	1,790	8	113	16,674	817	24,189	R 159	(s)	--	--	--
2007	0	1	51	4,722	1,765	7	117	16,464	198	23,325	227	0	--	--	--
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	0.0	0.0	94.0	0.0	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)	R 110.8	(s)	R 110.8
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
2005	0.0	0.6	0.2	26.7	8.1	(s)	0.7	88.9	6.0	130.6	R 0.4	(s)	131.2	(s)	131.2
2006	0.0	0.6	0.3	27.6	10.1	(s)	0.7	87.0	5.1	130.8	R 0.6	(s)	131.4	(s)	131.4
2007	0.0	0.8	0.3	27.5	10.0	(s)	0.7	85.9	1.2	125.7	0.8	0.0	126.5	0.0	126.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Maine

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	146	49	1,518	28	0	1,546	0	3,466	--	0	0	0	4,023	--
2006	147	40	158	17	0	175	0	3,499	--	0	0	0	3,183	--
2007	136	34	697	26	0	723	0	3,044	--	0	0	99	3,365	--
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	21.5	0.0	0.0	0.0	7.6	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	R 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	31.0	0.0	0.0	0.0	9.6	157.4
2002	5.7	94.2	4.5	0.3	0.0	4.8	0.0	18.6	30.2	0.0	0.0	0.0	7.1	160.6
2003	4.3	62.9	12.7	0.8	0.0	13.4	0.0	22.0	30.6	0.0	0.0	0.0	8.3	141.6
2004	4.3	65.7	7.5	0.8	0.0	8.3	0.0	28.7	31.5	0.0	0.0	0.0	13.0	151.6
2005	3.8	51.2	9.5	0.2	0.0	9.7	0.0	34.7	42.1	0.0	0.0	0.0	13.7	155.2
2006	3.8	42.6	1.0	0.1	0.0	1.1	0.0	34.7	40.8	0.0	0.0	0.0	10.9	133.9
2007	3.6	35.8	4.4	0.2	0.0	4.5	0.0	30.1	40.9	0.0	0.0	1.0	11.5	127.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	8,528	71	12,870	2,457	1,051	22,552	16,835	6,079	61,844	0	1,358	--	--	--	--	--
1965	12,372	99	16,967	2,856	1,473	27,510	15,510	8,458	72,774	0	1,141	--	--	--	--	--
1970	12,216	156	19,817	4,477	1,841	37,159	22,046	8,958	94,297	0	1,907	--	--	--	--	--
1975	7,761	140	21,034	3,049	2,395	43,688	26,941	7,574	104,680	4,386	2,311	--	--	--	--	--
1980	9,312	160	21,908	3,522	2,060	44,003	16,480	7,208	95,181	10,947	1,270	--	--	--	--	--
1985	10,012	151	18,958	3,901	1,805	45,632	7,916	9,142	87,354	9,926	1,524	--	--	--	--	--
1990	11,193	176	18,327	3,637	1,965	47,415	10,542	9,889	91,775	1,251	2,299	--	--	--	--	--
1995	11,198	194	19,176	3,430	2,687	51,475	4,065	9,447	90,280	12,938	1,442	--	--	--	--	--
1996	11,366	196	21,670	3,897	2,995	51,800	4,517	9,108	93,988	12,093	2,457	--	--	--	--	--
1997	11,239	212	19,586	R 4,098	2,856	53,594	4,212	10,974	R 95,320	13,213	1,588	--	--	--	--	--
1998	11,790	189	20,657	R 3,924	2,410	54,585	7,572	11,654	R 100,802	13,331	1,740	--	--	--	--	--
1999	11,824	196	21,741	3,938	2,143	56,886	9,084	11,518	105,310	13,312	1,424	--	--	--	--	--
2000	12,221	212	22,387	4,108	2,406	57,157	5,154	10,870	102,083	13,827	1,733	--	--	--	--	--
2001	12,519	178	23,134	2,929	2,544	59,263	5,776	10,286	103,931	13,656	1,184	--	--	--	--	--
2002	12,571	196	21,479	1,718	2,367	60,445	4,571	10,154	100,735	12,128	1,661	--	--	--	--	--
2003	13,039	197	21,827	2,343	3,498	61,908	6,299	8,790	104,665	13,691	2,647	--	--	--	--	--
2004	13,006	195	22,830	3,140	2,872	63,614	6,567	9,773	108,796	14,580	2,508	--	--	--	--	--
2005	13,091	203	23,649	4,362	3,188	64,553	7,432	9,325	112,510	14,703	1,704	--	--	--	--	--
2006	12,939	182	22,607	4,144	3,111	65,673	2,622	5,196	103,353	13,830	2,104	--	--	--	--	--
2007	13,135	201	21,699	3,522	2,834	66,263	2,447	6,284	103,049	14,353	1,652	--	--	--	--	--
Trillion Btu																
1960	226.6	73.3	75.0	13.5	4.2	118.5	105.8	36.4	353.4	0.0	14.6	23.8	0.0	5.8	0.0	697.5
1965	327.4	101.0	98.8	15.7	5.9	144.5	97.5	50.9	413.4	0.0	11.9	27.1	0.0	-17.7	0.0	863.1
1970	311.3	159.6	115.4	25.0	7.0	195.2	138.6	53.3	534.4	0.0	20.0	31.8	0.0	16.5	0.0	1,073.6
1975	197.2	141.9	122.5	16.9	8.9	229.5	169.4	46.4	593.6	48.3	24.0	31.8	0.0	33.2	0.0	1,069.9
1980	235.7	R 163.4	127.6	19.5	7.6	231.1	103.6	43.5	533.0	119.4	13.2	32.6	0.0	60.6	-0.5	1,157.5
1985	256.2	R 156.0	110.4	21.7	6.5	239.7	49.8	56.4	484.4	105.4	15.9	39.2	0.0	104.8	-0.4	1,161.6
1990	286.5	R 180.6	106.8	20.3	7.1	249.1	66.3	61.0	510.5	13.2	23.9	26.5	0.1	218.6	(s)	1,260.0
1995	289.6	R 199.2	111.7	19.4	9.7	268.4	25.6	57.7	492.6	135.9	14.9	36.8	0.1	165.1	-0.6	1,333.6
1996	292.5	R 201.7	126.2	22.1	10.8	270.2	28.4	55.0	512.8	127.0	25.4	40.5	0.1	169.2	-0.9	1,368.2
1997	289.7	R 219.2	114.1	23.2	10.3	279.4	26.5	67.4	R 521.0	138.7	16.2	36.5	0.2	155.1	-0.2	1,376.3
1998	303.9	R 195.5	120.3	22.2	8.7	284.5	47.6	70.7	554.1	139.9	17.7	34.6	0.2	129.3	-0.1	1,375.0
1999	305.2	R 203.0	126.6	22.3	7.7	296.4	57.1	69.6	579.8	139.1	14.6	36.2	0.2	138.6	-0.5	1,416.1
2000	312.2	R 219.4	130.4	23.3	8.7	297.8	32.4	66.0	558.6	144.2	17.7	36.3	0.2	157.1	-0.3	1,445.2
2001	318.9	R 185.0	134.8	16.6	9.2	308.8	36.3	63.5	569.1	142.7	12.2	20.8	0.2	181.0	-0.1	1,429.7
2002	325.8	R 201.8	125.1	9.7	8.6	314.8	28.7	62.8	549.8	126.6	16.9	21.0	0.2	262.1	(s)	1,504.1
2003	329.6	R 202.9	127.1	13.3	12.7	322.4	39.6	54.0	569.1	142.7	27.1	27.1	0.2	255.4	-0.2	1,554.0
2004	327.2	R 200.6	133.0	17.8	10.4	331.7	41.3	59.9	594.1	152.0	25.1	28.0	0.3	209.9	-0.1	1,537.2
2005	329.3	R 212.2	137.8	24.7	11.5	336.8	46.7	57.0	614.6	153.4	17.0	R 29.8	0.3	208.3	-0.4	R 1,564.5
2006	324.7	R 188.9	131.7	23.5	11.2	342.7	16.5	32.2	557.7	144.3	20.9	R 30.1	0.4	186.5	(s)	R 1,453.3
2007	327.8	208.5	126.4	20.0	10.2	345.8	15.4	39.5	557.3	150.5	16.3	30.2	0.4	197.8	-0.3	1,488.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	169	46	6,053	2,234	617	8,903	406	--	--	2,772	--	--	--
1965	133	57	7,191	2,177	893	10,261	328	--	--	4,384	--	--	--
1970	46	73	8,234	2,166	1,007	11,407	377	--	--	7,690	--	--	--
1975	10	69	8,453	1,014	1,242	10,708	452	--	--	9,660	--	--	--
1980	8	68	8,797	830	740	10,367	794	--	--	12,119	--	--	--
1985	27	68	5,609	1,113	987	7,709	972	--	--	14,319	--	--	--
1990	10	66	5,090	385	1,088	6,563	393	--	--	19,102	--	--	--
1995	39	77	4,923	535	1,647	7,104	588	--	--	22,234	--	--	--
1996	5	86	5,811	593	1,853	8,257	611	--	--	22,986	--	--	--
1997	6	77	5,016	597	1,989	7,602	458	--	--	21,937	--	--	--
1998	6	68	4,314	720	1,814	6,848	407	--	--	22,407	--	--	--
1999	6	75	4,668	523	1,661	6,853	428	--	--	23,342	--	--	--
2000	9	84	4,865	505	1,346	6,717	460	--	--	23,949	--	--	--
2001	8	71	4,798	471	1,619	6,887	290	--	--	24,294	--	--	--
2002	(s)	80	4,400	305	1,686	6,391	294	--	--	25,489	--	--	--
2003	1	91	4,119	404	2,350	6,873	310	--	--	26,671	--	--	--
2004	6	86	4,098	550	2,025	6,673	318	--	--	27,952	--	--	--
2005	3	86	4,096	617	2,001	6,715	R 379	--	--	28,440	--	--	--
2006	R 4	71	3,385	437	R 1,843	R 5,666	R 345	--	--	26,905	--	--	--
2007	3	83	3,351	225	1,824	5,400	381	--	--	28,195	--	--	--
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	R 69.4	51.2	4.7	2.7	58.7	15.9	0.0	0.0	41.4	185.3	99.7	285.0
1985	0.7	R 70.7	32.7	6.3	3.6	42.5	19.4	0.0	0.0	48.9	182.1	112.5	294.6
1990	0.2	68.2	29.6	2.2	3.9	35.8	7.9	0.1	(s)	65.2	177.4	150.7	328.1
1995	1.0	R 78.5	28.7	3.0	6.0	37.7	11.8	0.1	0.1	75.9	204.6	172.3	376.9
1996	0.1	R 88.0	33.9	3.4	6.7	43.9	12.2	0.1	0.1	78.4	222.4	178.3	400.8
1997	0.2	R 80.1	29.2	3.4	7.2	39.8	9.2	0.1	0.1	74.8	204.1	169.6	373.7
1998	0.1	R 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	R 77.4	27.2	3.0	6.0	36.2	8.6	0.1	(s)	79.6	201.8	182.2	384.0
2000	0.2	R 86.8	28.3	2.9	4.9	36.1	9.2	0.1	(s)	81.7	214.1	185.9	400.0
2001	0.2	73.3	27.9	2.7	5.9	36.5	5.8	0.1	(s)	82.9	198.8	184.7	383.5
2002	(s)	82.2	25.6	1.7	6.1	33.5	5.9	0.1	(s)	87.0	208.7	193.9	402.6
2003	(s)	93.3	24.0	2.3	8.5	34.8	6.2	0.2	(s)	91.0	225.5	200.8	426.3
2004	0.1	88.9	23.9	3.1	7.3	34.3	6.4	0.2	0.1	95.4	225.3	211.0	436.3
2005	0.1	R 89.9	23.9	3.5	7.2	34.6	R 7.6	0.2	0.1	97.0	R 229.3	212.2	R 441.6
2006	0.1	73.8	19.7	2.5	R 6.6	R 28.8	R 6.9	0.3	0.1	91.8	R 201.8	198.5	R 400.3
2007	0.1	86.5	19.5	1.3	6.6	27.3	7.6	0.3	0.1	96.2	218.0	207.6	425.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/md\\_seds.html](http://www.eia.doe.gov/emeu/states/md_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	117	8	2,357	72	109	72	2,442	5,052	0	--	--	2,696	--	--	--	
1965	100	13	2,800	70	158	90	1,920	5,039	0	--	--	3,937	--	--	--	
1970	36	26	3,206	70	178	103	1,498	5,054	0	--	--	6,347	--	--	--	
1975	24	25	3,291	33	219	120	1,169	4,833	0	--	--	8,573	--	--	--	
1980	29	29	2,865	20	131	121	1,159	4,296	0	--	--	9,387	--	--	--	
1985	94	24	2,169	89	174	170	252	2,855	0	--	--	9,621	--	--	--	
1990	38	24	2,489	48	192	231	548	3,508	0	--	--	11,021	--	--	--	
1995	258	47	3,097	210	291	32	119	3,749	0	--	--	23,730	--	--	--	
1996	36	46	3,270	151	327	32	108	3,886	0	--	--	23,780	--	--	--	
1997	49	50	2,481	227	351	31	50	3,140	0	--	--	24,070	--	--	--	
1998	47	57	2,555	313	320	31	42	3,262	0	--	--	24,950	--	--	--	
1999	41	58	2,212	254	293	31	52	2,843	0	--	--	25,662	--	--	--	
2000	74	56	2,582	363	238	116	87	3,385	0	--	--	26,506	--	--	--	
2001	67	60	2,513	347	286	33	34	3,212	0	--	--	26,995	--	--	--	
2002	3	64	2,499	171	298	33	63	3,064	0	--	--	21,845	--	--	--	
2003	5	71	2,232	195	415	33	280	3,155	0	--	--	16,950	--	--	--	
2004	51	70	2,108	126	357	33	87	2,711	0	--	--	17,264	--	--	--	
2005	29	70	1,785	126	353	34	98	2,395	0	--	--	17,932	--	--	--	
2006	<sup>R</sup> 38	63	1,802	62	<sup>R</sup> 325	34	48	<sup>R</sup> 2,271	0	--	--	29,729	--	--	--	
2007	30	71	1,188	41	322	34	18	1,604	0	--	--	30,691	--	--	--	
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	87.4	77.2	164.6	
1985	2.3	<sup>R</sup> 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	0.0	1.6	0.0	37.6	85.0	87.0	171.9	
1995	6.4	<sup>R</sup> 48.0	18.0	1.2	1.1	0.2	0.7	21.2	0.0	3.6	0.0	81.0	160.1	183.9	344.0	
1996	0.9	<sup>R</sup> 47.2	19.0	0.9	1.2	0.2	0.7	21.9	0.0	3.8	0.0	81.1	154.8	184.5	339.3	
1997	1.2	<sup>R</sup> 51.5	14.5	1.3	1.3	0.2	0.3	17.5	0.0	3.9	0.0	82.1	156.1	186.1	342.2	
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	360.4	
1999	1.0	<sup>R</sup> 60.1	12.9	1.4	1.1	0.2	0.3	15.9	0.0	3.2	0.0	87.6	167.5	200.3	367.8	
2000	1.9	<sup>R</sup> 57.5	15.0	2.1	0.9	0.6	0.5	19.1	0.0	3.4	0.0	90.4	172.3	205.7	378.0	
2001	1.7	62.0	14.6	2.0	1.0	0.2	0.2	18.0	0.0	2.3	0.0	92.1	176.1	205.3	381.4	
2002	0.1	65.7	14.6	1.0	1.1	0.2	0.4	17.2	0.0	2.0	0.0	74.5	159.4	166.2	325.6	
2003	0.1	72.6	13.0	1.1	1.5	0.2	1.8	17.5	0.0	2.3	0.0	57.8	150.4	127.6	278.0	
2004	1.2	<sup>R</sup> 72.3	12.3	0.7	1.3	0.2	0.5	15.0	0.0	2.8	0.0	58.9	150.1	130.3	280.5	
2005	0.7	<sup>R</sup> 73.1	10.4	0.7	1.3	0.2	0.6	13.2	0.0	<sup>R</sup> 3.2	0.0	61.2	151.2	133.8	<sup>R</sup> 285.0	
2006	1.0	65.0	10.5	0.4	1.2	0.2	0.3	12.5	0.0	<sup>R</sup> 3.3	0.0	101.4	183.2	219.3	<sup>R</sup> 402.5	
2007	0.7	73.4	6.9	0.2	1.2	0.2	0.1	8.6	0.0	3.1	0.0	104.7	190.5	225.9	416.4	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	5,067	16	2,093	317	670	10,333	3,177	16,589	1	--	--	3,269	--	--	--
1965	6,101	28	3,177	412	439	8,296	5,426	17,750	1	--	--	5,073	--	--	--
1970	6,174	44	3,248	624	261	6,672	6,113	16,918	(s)	--	--	8,469	--	--	--
1975	3,854	43	3,434	888	293	4,983	6,015	15,614	0	--	--	9,069	--	--	--
1980	3,367	54	3,297	1,163	145	2,669	5,874	13,148	0	--	--	13,057	--	--	--
1985	2,846	55	2,844	584	299	1,022	7,581	12,329	0	--	--	15,312	--	--	--
1990	2,200	62	2,059	633	297	1,224	9,065	13,277	0	--	--	19,308	--	--	--
1995	760	49	1,737	701	328	728	8,352	11,847	0	--	--	10,057	--	--	--
1996	785	50	2,057	767	343	1,361	8,035	12,563	0	--	--	10,098	--	--	--
1997	768	66	1,711	414	363	839	9,796	13,122	0	--	--	10,128	--	--	--
1998	769	39	2,723	263	294	636	10,240	14,155	0	--	--	10,344	--	--	--
1999	798	37	2,366	176	238	592	10,373	13,745	0	--	--	9,936	--	--	--
2000	810	40	2,109	747	251	547	9,639	13,293	0	--	--	10,066	--	--	--
2001	1,286	27	2,334	633	787	540	9,067	13,361	0	--	--	10,177	--	--	--
2002	1,323	27	1,767	371	860	413	9,285	12,697	0	--	--	20,875	--	--	--
2003	1,254	22	1,986	704	946	593	7,832	12,061	0	--	--	27,176	--	--	--
2004	1,375	23	2,057	456	1,037	719	8,740	13,008	0	--	--	21,195	--	--	--
2005	1,349	24	2,062	788	976	847	8,185	12,858	0	--	--	21,517	--	--	--
2006	1,259	23	2,137	R 899	1,034	758	4,323	R 9,150	0	--	--	6,057	--	--	--
2007	1,218	20	1,542	647	1,040	654	5,636	9,520	0	--	--	5,980	--	--	--
Trillion Btu															
1960	135.0	16.6	12.2	1.3	3.5	65.0	20.0	102.0	(s)	15.6	0.0	11.2	280.2	27.6	307.8
1965	162.4	28.3	18.5	1.7	2.3	52.2	33.9	108.5	(s)	20.4	0.0	17.3	336.9	41.3	378.2
1970	162.7	44.9	18.9	2.4	1.4	41.9	37.2	101.8	(s)	24.1	0.0	28.9	362.3	69.9	432.3
1975	102.2	R 43.6	20.0	3.3	1.5	31.3	37.6	93.7	0.0	22.6	0.0	30.9	293.0	74.4	367.4
1980	88.6	R 55.5	19.2	4.3	0.8	16.8	35.9	76.9	0.0	16.4	0.0	44.6	281.7	107.4	389.1
1985	74.8	R 56.5	16.6	2.1	1.6	6.4	47.4	74.1	0.0	19.2	0.0	52.2	276.7	120.3	397.0
1990	57.4	R 63.5	12.0	2.3	1.6	7.7	56.2	79.8	0.0	9.7	0.0	65.9	276.3	152.3	428.6
1995	19.2	R 50.2	10.1	2.5	1.7	4.6	51.4	70.3	0.0	11.3	0.0	34.3	185.3	77.9	263.2
1996	19.7	R 51.5	12.0	2.8	1.8	8.6	48.8	73.9	0.0	12.3	0.0	34.5	191.6	78.4	270.0
1997	19.3	R 68.2	10.0	1.5	1.9	5.3	60.7	79.3	0.0	11.8	0.0	34.6	213.1	78.3	291.3
1998	19.2	R 40.0	15.9	1.0	1.5	4.0	62.6	84.9	0.0	11.1	0.0	35.3	190.4	80.0	270.5
1999	19.9	R 38.5	13.8	0.6	1.2	3.7	63.0	82.3	0.0	11.7	0.0	33.9	186.2	77.5	263.8
2000	20.3	R 41.4	12.3	2.7	1.3	3.4	59.0	78.7	0.0	11.3	0.0	34.3	186.0	78.1	264.1
2001	33.6	R 28.4	13.6	2.3	4.1	3.4	56.5	79.9	0.0	5.7	0.0	34.7	182.3	77.4	259.7
2002	34.1	27.9	10.3	1.3	4.5	2.6	57.8	76.5	0.0	5.8	0.0	71.2	215.5	158.8	374.3
2003	31.8	22.5	11.6	2.6	4.9	3.7	48.5	71.3	0.0	11.5	0.0	92.7	229.8	204.6	434.4
2004	34.5	24.0	12.0	1.6	5.4	4.5	54.0	77.5	0.0	11.6	0.0	72.3	220.0	160.0	R 380.1
2005	33.0	24.9	12.0	2.9	5.1	5.3	50.5	75.7	0.0	11.7	0.0	73.4	218.7	160.6	379.3
2006	30.4	23.8	12.4	R 3.2	5.4	4.8	27.2	R 53.0	0.0	12.3	0.0	20.7	R 140.2	44.7	R 184.9
2007	29.8	21.1	9.0	2.3	5.4	4.1	35.8	56.7	0.0	12.0	0.0	20.4	140.0	44.0	184.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	87	1	279	2,352	2,457	9	318	21,810	3,893	31,117	0	19	--	--	--
1965	20	1	474	3,774	2,856	10	310	26,981	5,024	39,429	0	0	--	--	--
1970	10	2	309	4,184	4,477	32	299	36,795	3,931	50,027	0	0	--	--	--
1975	1	2	205	5,244	2,973	46	307	43,275	2,807	54,856	0	0	--	--	--
1980	0	4	173	5,848	3,512	26	310	43,737	4,514	58,121	0	23	--	--	--
1985	0	2	76	7,506	3,901	60	282	45,163	1,511	58,499	1	75	--	--	--
1990	0	2	74	8,091	3,637	52	318	46,887	1,825	60,883	0	102	--	--	--
1995	0	3	48	8,744	3,430	48	303	51,115	931	64,619	76	137	--	--	--
1996	0	3	35	9,740	3,897	49	294	51,425	755	66,196	64	133	--	--	--
1997	0	3	43	9,729	R 4,098	102	311	53,200	724	R 68,206	73	130	--	--	--
1998	0	3	56	10,372	R 3,924	13	325	54,260	1,141	R 70,090	60	134	--	--	--
1999	0	3	39	11,960	3,938	12	329	56,617	977	73,872	61	146	--	--	--
2000	0	3	40	12,248	4,108	76	324	56,790	787	74,373	68	156	--	--	--
2001	0	3	105	12,513	2,929	7	297	58,442	613	74,905	7	174	--	--	--
2002	0	3	100	12,104	1,718	12	293	59,552	694	74,472	868	171	--	--	--
2003	0	3	88	12,336	2,343	30	271	60,929	404	76,400	6	461	--	--	--
2004	0	3	82	13,430	3,140	34	274	62,544	1,245	80,749	7	481	--	--	--
2005	0	3	123	14,510	4,362	46	273	63,544	1,160	84,018	R 1,387	477	--	--	--
2006	0	3	108	14,835	4,144	44	266	64,605	1,221	85,222	R 3,893	482	--	--	--
2007	0	3	107	14,853	3,522	41	275	65,189	730	84,717	4,869	524	--	--	--
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	(s)	0.3	317.0	0.6	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	R 364.3	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	415.2
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	3.6	440.3
2005	0.0	2.9	0.6	84.5	24.7	0.2	1.7	331.6	7.3	450.6	R 4.9	1.6	455.1	3.6	458.7
2006	0.0	R 3.3	0.5	86.4	23.5	0.2	1.6	337.1	7.7	457.0	R 13.8	1.6	R 462.0	3.6	R 465.6
2007	0.0	3.4	0.5	86.5	20.0	0.1	1.7	340.2	4.6	453.7	17.2	1.8	458.8	3.9	462.7

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Maryland

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	11,710	20	5,328	1,196	0	6,524	14,703	1,704	--	0	0	0	0	--
2006	11,638	22	594	449	0	1,044	13,830	2,104	--	0	0	0	0	--
2007	11,884	23	1,044	764	0	1,808	14,353	1,652	--	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	R 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	R 21.7	43.7	3.5	0.0	47.1	13.2	23.9	7.3	0.0	0.0	0.0	0.0	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	461.6
1996	271.7	R 12.3	14.4	4.6	0.0	19.0	127.0	25.4	12.1	0.0	0.0	0.0	0.0	467.5
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	R 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	7.0	0.0	0.0	0.0	0.1	498.0
2002	291.7	23.2	21.4	4.1	0.0	25.5	126.6	16.9	7.3	0.0	0.0	0.0	0.0	491.3
2003	297.6	11.4	31.6	6.7	0.0	38.3	142.7	27.1	7.1	0.0	0.0	0.0	0.0	524.2
2004	291.3	12.5	28.4	6.6	0.0	35.0	152.0	25.1	7.3	0.0	0.0	0.0	0.0	523.3
2005	295.5	R 21.5	33.5	7.0	0.0	40.5	153.4	17.0	7.3	0.0	0.0	0.0	0.0	535.2
2006	293.2	22.8	3.7	2.6	0.0	6.4	144.3	20.9	7.6	0.0	0.0	0.0	0.0	495.2
2007	297.2	24.1	6.6	4.4	0.0	11.0	150.5	16.3	7.5	0.0	0.0	0.0	0.0	506.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass		Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh							
1960	4,559	78	51,240	1,209	1,148	34,993	39,108	11,024	138,722	34	982	--	--	--	--	--	
1965	4,932	114	55,825	3,166	1,511	39,752	54,207	10,100	164,561	966	664	--	--	--	--	--	
1970	910	147	59,239	7,864	1,820	49,527	86,130	7,290	211,870	1,209	753	--	--	--	--	--	
1975	1,016	154	58,665	8,009	2,315	54,630	65,975	4,839	194,432	3,781	417	--	--	--	--	--	
1980	874	183	37,613	8,573	2,125	51,443	54,143	5,355	159,253	3,232	158	--	--	--	--	--	
1985	4,176	219	36,020	6,984	1,719	54,847	36,075	4,956	140,600	6,133	262	--	--	--	--	--	
1990	4,370	264	38,606	9,806	2,631	56,125	31,948	4,941	144,056	5,070	1,249	--	--	--	--	--	
1995	4,149	382	37,278	6,636	2,143	58,775	13,869	4,700	123,401	4,486	869	--	--	--	--	--	
1996	4,498	377	34,449	6,873	2,563	59,794	15,396	7,277	126,352	5,324	1,189	--	--	--	--	--	
1997	4,891	403	34,545	R 7,301	2,109	60,912	22,386	7,409	R 134,663	4,310	1,032	--	--	--	--	--	
1998	4,373	359	32,837	R 7,736	1,969	62,284	25,658	7,483	R 137,966	5,698	1,030	--	--	--	--	--	
1999	4,509	345	32,766	8,081	2,295	63,433	19,248	7,833	133,657	4,518	975	--	--	--	--	--	
2000	4,556	343	37,019	8,204	2,923	65,029	16,653	8,407	138,235	5,512	1,065	--	--	--	--	--	
2001	4,429	349	38,599	7,003	2,910	65,358	16,347	5,186	135,404	5,144	703	--	--	--	--	--	
2002	4,735	393	37,750	5,609	2,315	67,106	12,843	5,155	130,777	5,769	875	--	--	--	--	--	
2003	4,498	404	38,654	6,396	2,608	66,973	13,762	4,743	133,135	4,978	1,075	--	--	--	--	--	
2004	4,446	373	37,923	8,235	1,962	68,242	14,152	4,967	135,480	5,939	998	--	--	--	--	--	
2005	5,136	378	37,668	9,025	2,875	68,048	14,379	4,813	136,809	5,475	1,042	--	--	--	--	--	
2006	4,843	371	32,642	8,387	3,681	68,400	6,504	4,779	R 124,392	5,830	1,513	--	--	--	--	--	
2007	5,227	409	32,524	8,235	3,362	70,647	7,011	4,045	125,825	5,120	797	--	--	--	--	--	
Trillion Btu																	
1960	118.7	80.6	298.5	6.7	4.6	183.8	245.9	64.8	804.3	0.4	10.6	42.8	0.0	-3.0	0.0	1,054.3	
1965	127.9	115.7	325.2	17.8	6.1	208.8	340.8	59.0	957.7	11.4	6.9	48.7	0.0	-21.7	0.0	1,246.7	
1970	21.4	149.1	345.1	44.5	6.9	260.2	541.5	43.9	1,242.0	13.3	7.9	57.1	0.0	-24.8	0.0	1,466.0	
1975	24.5	154.6	341.7	45.3	8.6	287.0	414.8	29.1	1,126.5	41.6	4.3	49.0	0.0	22.3	0.0	1,422.8	
1980	22.8	R 185.5	219.1	48.5	7.8	270.2	340.4	31.2	917.2	35.3	1.6	70.9	0.0	37.1	-15.6	1,254.8	
1985	110.2	R 224.8	209.8	39.5	6.2	288.1	226.8	28.6	799.1	65.1	2.7	62.7	0.0	45.5	10.9	1,321.1	
1990	114.0	R 273.9	224.9	55.5	9.5	294.8	200.9	29.0	814.5	53.6	13.0	52.1	0.2	90.5	6.2	1,418.1	
1995	105.4	R 391.6	217.1	37.6	7.8	306.5	87.2	27.5	683.7	47.1	9.0	63.3	0.3	129.1	5.7	1,435.1	
1996	113.7	R 387.4	200.7	39.0	9.3	311.9	96.8	41.2	698.8	55.9	12.3	65.8	0.4	142.6	5.0	1,481.8	
1997	122.9	R 411.6	201.2	41.4	7.6	317.5	140.7	41.7	750.2	45.2	10.5	61.4	0.4	85.6	6.2	1,494.1	
1998	109.9	R 367.1	191.3	R 43.9	7.1	324.6	161.3	42.1	R 770.3	59.8	10.5	55.5	0.4	73.6	5.9	R 1,453.0	
1999	113.6	R 361.4	190.9	45.8	8.3	330.6	121.0	44.0	740.5	47.2	10.0	55.1	0.4	141.3	6.5	1,476.0	
2000	114.7	357.7	215.6	46.5	10.5	338.8	104.7	48.0	764.2	57.5	10.9	58.5	0.4	178.3	6.0	1,548.2	
2001	109.0	364.1	224.8	39.7	10.5	340.5	102.8	30.8	749.2	53.7	7.3	40.3	0.4	199.3	3.9	1,527.2	
2002	118.4	R 408.9	219.9	31.8	8.4	349.5	80.7	30.7	721.0	60.2	8.9	37.4	0.4	189.1	1.6	1,545.9	
2003	109.4	R 420.2	225.2	36.3	9.5	348.7	86.5	27.9	734.0	51.9	11.0	38.9	0.5	168.5	0.4	1,534.8	
2004	105.1	R 387.4	220.9	46.7	7.1	355.9	89.0	29.2	748.7	61.9	10.0	40.5	0.6	185.5	1.6	1,541.3	
2005	119.3	R 385.3	219.4	51.2	10.4	355.1	90.4	28.2	754.7	57.1	10.4	R 35.7	0.7	190.8	2.0	R 1,556.0	
2006	112.2	R 376.2	190.1	47.6	13.3	356.9	40.9	28.4	677.2	60.8	15.0	R 34.9	0.7	194.7	1.9	R 1,473.7	
2007	120.1	417.3	189.5	46.7	12.1	368.7	44.1	23.6	684.6	53.7	7.9	35.1	0.8	192.5	2.5	1,514.6	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	487	45	34,305	4,858	752	39,915	427	--	--	4,190	--	--	--
1965	210	65	37,082	2,682	926	40,689	378	--	--	5,766	--	--	--
1970	104	83	38,530	1,434	933	40,897	459	--	--	9,335	--	--	--
1975	30	90	37,860	591	1,006	39,456	491	--	--	10,648	--	--	--
1980	21	94	22,712	323	675	23,710	2,099	--	--	11,571	--	--	--
1985	30	98	20,064	577	1,021	21,663	1,470	--	--	12,907	--	--	--
1990	13	107	20,540	163	1,358	22,061	904	--	--	15,581	--	--	--
1995	4	106	20,064	130	1,451	21,644	976	--	--	15,993	--	--	--
1996	4	114	18,362	148	1,720	20,230	1,014	--	--	16,256	--	--	--
1997	3	112	18,332	190	1,614	20,136	726	--	--	16,278	--	--	--
1998	3	102	16,979	197	1,478	18,654	646	--	--	16,388	--	--	--
1999	4	106	17,825	179	1,522	19,526	680	--	--	17,392	--	--	--
2000	2	114	20,445	191	1,883	22,518	731	--	--	17,562	--	--	--
2001	2	107	22,293	197	1,709	24,199	575	--	--	17,984	--	--	--
2002	11	109	22,066	127	1,383	23,576	583	--	--	18,695	--	--	--
2003	7	126	20,202	244	2,022	22,467	614	--	--	19,591	--	--	--
2004	4	113	19,337	279	1,583	21,199	630	--	--	19,769	--	--	--
2005	3	119	18,425	299	2,095	20,819	R 437	--	--	20,539	--	--	--
2006	1	104	15,645	238	R 2,092	R 17,976	R 398	--	--	19,624	--	--	--
2007	2	115	15,882	161	2,075	18,118	439	--	--	20,138	--	--	--
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	R 96.0	132.3	1.8	2.5	136.6	42.0	0.0	0.0	39.5	306.4	95.2	401.6
1985	0.7	R 100.1	116.9	3.3	3.7	123.8	29.4	0.0	0.0	44.0	296.4	101.4	397.9
1990	0.3	R 110.6	119.6	0.9	4.9	125.5	18.1	0.0	0.2	53.2	307.7	122.9	430.6
1995	0.1	R 108.5	116.9	0.7	5.3	122.9	19.5	0.0	0.2	54.6	305.7	123.9	429.6
1996	0.1	R 117.3	107.0	0.8	6.2	114.0	20.3	0.0	0.2	55.5	307.3	126.1	433.4
1997	0.1	R 114.5	106.8	1.1	5.8	113.7	14.5	0.0	0.2	55.5	298.5	125.8	424.3
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	R 112.1	103.8	1.0	5.5	110.3	13.6	(s)	0.2	59.3	295.6	135.7	431.4
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)	111.5	129.9	1.1	6.2	137.1	11.5	(s)	0.2	61.4	321.7	136.7	458.4
2002	0.3	R 114.9	128.5	0.7	5.0	134.3	11.7	(s)	0.2	63.8	325.0	142.2	467.2
2003	0.2	R 132.0	117.7	1.4	7.3	126.4	12.3	(s)	0.2	66.8	337.8	147.5	485.3
2004	0.1	117.9	112.6	1.6	5.7	119.9	12.6	(s)	0.2	67.5	318.1	149.2	467.4
2005	0.1	R 119.8	107.3	1.7	7.6	116.6	R 8.7	(s)	0.2	70.1	R 315.5	153.3	R 468.8
2006	(s)	103.9	91.1	1.4	R 7.5	R 100.0	R 8.0	(s)	0.2	67.0	R 279.2	144.8	R 424.0
2007	0.1	116.2	92.5	0.9	7.5	100.9	8.8	(s)	0.3	68.7	294.9	148.2	443.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	338	10	11,965	404	133	135	10,036	22,672	0	--	--	3,011	--	--	--
1965	159	16	12,933	223	163	92	14,503	27,914	0	--	--	4,302	--	--	--
1970	82	35	13,438	119	165	102	14,872	28,696	0	--	--	7,782	--	--	--
1975	71	38	13,204	49	178	109	9,122	22,662	0	--	--	11,397	--	--	--
1980	79	53	7,510	30	119	191	4,854	12,704	0	--	--	13,047	--	--	--
1985	107	41	6,369	108	180	188	3,157	10,001	0	--	--	15,566	--	--	--
1990	50	51	7,409	127	240	69	4,473	12,317	0	--	--	19,520	--	--	--
1995	23	82	6,478	110	256	65	3,069	9,978	0	--	--	20,255	--	--	--
1996	29	96	5,637	47	303	65	2,430	8,483	0	--	--	20,711	--	--	--
1997	26	106	5,678	47	285	48	2,239	8,297	0	--	--	21,203	--	--	--
1998	23	90	5,404	70	261	66	1,417	7,218	0	--	--	21,773	--	--	--
1999	33	65	3,830	225	269	63	1,184	5,571	0	--	--	21,815	--	--	--
2000	14	64	5,205	107	332	279	1,388	7,311	0	--	--	23,439	--	--	--
2001	14	62	4,218	156	302	84	523	5,282	0	--	--	24,510	--	--	--
2002	77	65	3,835	59	244	117	642	4,896	4	--	--	24,685	--	--	--
2003	44	63	5,569	72	357	104	1,811	7,912	6	--	--	25,648	--	--	--
2004	32	57	4,312	91	279	70	2,771	7,523	3	--	--	26,020	--	--	--
2005	40	57	4,712	78	370	58	2,663	7,881	(s)	--	--	26,415	--	--	--
2006	15	52	3,265	39	R 369	73	1,170	R 4,915	5	--	--	26,237	--	--	--
2007	19	62	3,253	25	366	80	835	4,559	6	--	--	27,148	--	--	--
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	R 54.3	43.7	0.2	0.4	1.0	30.5	75.9	0.0	1.0	0.0	44.5	173.0	107.3	280.3
1985	2.5	R 42.4	37.1	0.6	0.6	1.0	19.8	59.2	0.0	0.7	0.0	53.1	157.2	122.3	279.5
1990	1.3	R 52.4	43.2	0.7	0.9	0.4	28.1	73.2	0.0	2.0	(s)	66.6	195.4	154.0	349.4
1995	0.6	R 84.4	37.7	0.6	0.9	0.3	19.3	58.9	0.0	2.7	0.1	69.1	215.7	156.9	372.7
1996	0.7	R 98.7	32.8	0.3	1.1	0.3	15.3	49.8	0.0	2.8	0.1	70.7	222.7	160.7	383.4
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	396.0
1998	0.6	R 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	379.3
1999	0.9	R 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	181.9	374.5
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	181.6	186.4	368.0
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	187.7	373.4
2003	1.1	65.6	32.4	0.4	1.3	0.5	11.4	46.1	0.1	2.9	0.3	87.5	203.6	193.1	396.7
2004	0.8	59.4	25.1	0.5	1.0	0.4	17.4	44.4	(s)	3.8	0.4	88.8	197.7	196.4	394.1
2005	1.0	57.2	27.4	0.4	1.3	0.3	16.7	46.3	(s)	R 2.3	0.5	90.1	197.4	197.1	R 394.5
2006	0.4	52.3	19.0	0.2	R 1.3	0.4	7.4	28.3	0.1	R 2.3	0.5	89.5	173.3	193.6	R 366.9
2007	0.5	62.0	18.9	0.1	1.3	0.4	5.3	26.1	0.1	2.4	0.5	92.6	184.2	199.9	384.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	1,266	12	2,322	260	133	17,875	4,351	24,942	117	--	--	5,075	--	--	--
1965	496	20	2,841	401	206	25,076	5,084	33,607	100	--	--	6,546	--	--	--
1970	149	23	2,897	693	111	25,742	5,020	34,463	72	--	--	7,418	--	--	--
1975	110	24	2,654	1,099	81	15,891	3,538	23,264	67	--	--	7,330	--	--	--
1980	98	29	1,886	1,305	91	2,663	4,265	10,209	63	--	--	8,486	--	--	--
1985	176	33	1,165	448	367	8,399	3,715	14,094	63	--	--	9,454	--	--	--
1990	73	44	2,585	973	414	2,604	4,080	10,657	11	--	--	10,157	--	--	--
1995	42	64	1,278	387	373	1,458	3,923	7,418	11	--	--	10,026	--	--	--
1996	38	62	1,219	495	372	1,690	6,553	10,329	20	--	--	10,085	--	--	--
1997	37	65	1,130	163	392	1,723	6,622	10,029	17	--	--	10,148	--	--	--
1998	35	63	1,011	185	316	1,780	6,644	9,935	11	--	--	10,212	--	--	--
1999	33	78	1,217	348	297	900	6,843	9,605	12	--	--	9,966	--	--	--
2000	55	75	944	651	306	1,099	7,510	10,511	12	--	--	10,533	--	--	--
2001	54	81	1,283	859	913	2,153	4,310	9,517	8	--	--	9,757	--	--	--
2002	44	86	978	649	916	1,732	4,454	8,729	6	--	--	10,087	--	--	--
2003	57	44	1,903	193	937	969	3,943	7,945	5	--	--	9,984	--	--	--
2004	54	44	1,947	67	969	720	4,091	7,795	2	--	--	9,947	--	--	--
2005	68	48	1,895	371	909	767	3,911	7,853	(s)	--	--	9,871	--	--	--
2006	77	43	1,591	R 1,186	929	1,115	4,055	8,876	3	--	--	9,602	--	--	--
2007	85	46	1,360	892	791	968	3,361	7,372	14	--	--	9,450	--	--	--
Trillion Btu															
1960	33.2	12.0	13.5	1.0	0.7	112.4	27.4	155.0	1.3	34.1	0.0	17.3	252.8	42.8	295.6
1965	12.8	20.0	16.5	1.6	1.1	157.6	31.4	208.3	1.0	41.0	0.0	22.3	305.6	53.3	358.9
1970	3.6	22.8	16.9	2.6	0.6	161.8	31.0	213.0	0.8	47.8	0.0	25.3	313.3	61.3	374.5
1975	2.6	24.1	15.5	4.1	0.4	99.9	21.7	141.6	0.7	39.0	0.0	25.0	233.0	60.1	293.1
1980	2.4	R 29.4	11.0	4.8	0.5	16.7	25.0	58.0	0.7	27.8	0.0	29.0	144.7	69.8	214.5
1985	4.4	R 33.9	6.8	1.6	1.9	52.8	21.5	84.7	0.7	32.6	0.0	32.3	187.9	74.3	262.2
1990	1.8	R 45.9	15.1	3.5	2.2	16.4	24.0	61.1	0.1	7.6	0.0	34.7	151.1	80.1	231.3
1995	1.1	R 65.2	7.4	1.4	1.9	9.2	22.9	42.9	0.1	9.6	0.0	34.2	153.0	77.7	230.7
1996	0.9	63.4	7.1	1.8	1.9	10.6	37.0	58.4	0.2	9.8	0.0	34.4	167.1	78.3	245.4
1997	0.9	66.1	6.6	0.6	2.0	10.8	37.1	57.2	0.2	10.1	0.0	34.6	169.1	78.4	247.5
1998	0.9	64.0	5.9	0.7	1.6	11.2	37.2	56.6	0.1	6.8	0.0	34.8	163.2	79.0	242.2
1999	0.8	R 82.8	7.1	1.3	1.5	5.7	38.2	53.8	0.1	7.0	0.0	34.0	178.5	77.8	256.3
2000	1.5	78.2	5.5	2.3	1.6	6.9	42.8	59.1	0.1	6.7	0.0	35.9	181.6	81.7	263.3
2001	1.5	84.9	7.5	3.1	4.8	13.5	25.7	54.6	0.1	5.0	0.0	33.3	179.3	74.2	253.5
2002	1.2	R 90.4	5.7	2.3	4.8	10.9	26.6	50.3	0.1	3.2	0.0	34.4	179.5	76.7	256.2
2003	1.5	R 46.3	11.1	0.7	4.9	6.1	23.2	46.0	0.1	3.3	0.0	34.1	131.2	75.2	206.4
2004	1.5	45.5	11.3	0.2	5.1	4.5	24.1	45.3	(s)	3.5	0.0	33.9	129.7	75.1	204.8
2005	1.9	48.2	11.0	1.3	4.7	4.8	23.0	44.9	(s)	3.5	0.0	33.7	132.3	73.7	205.9
2006	2.0	43.3	9.3	R 4.3	4.8	7.0	24.2	R 49.6	(s)	3.7	0.0	32.8	R 131.4	70.8	R 202.3
2007	2.2	46.7	7.9	3.2	4.1	6.1	19.6	40.9	0.1	3.8	0.0	32.2	126.1	69.6	195.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	22	(s)	968	2,371	1,209	4	443	34,725	1,207	40,927	0	105	--	--	--
1965	2	(s)	1,702	2,632	3,166	22	408	39,454	2,472	49,856	0	105	--	--	--
1970	(s)	1	276	3,198	7,864	29	441	49,314	3,215	64,336	0	105	--	--	--
1975	(s)	1	228	4,485	7,967	33	433	54,440	1,049	68,634	0	105	--	--	--
1980	0	1	274	4,900	8,563	26	463	51,161	900	66,287	0	167	--	--	--
1985	0	1	134	7,600	6,984	70	422	54,292	874	70,375	0	193	--	--	--
1990	0	1	97	7,457	9,806	59	475	55,642	1,366	74,901	0	183	--	--	--
1995	0	2	84	8,780	6,636	50	453	58,337	199	74,540	0	236	--	--	--
1996	0	2	90	8,628	6,873	45	439	59,356	2,002	77,434	0	241	--	--	--
1997	0	2	87	8,945	R 7,301	47	464	60,472	1,380	R 78,696	0	252	--	--	--
1998	0	2	87	8,884	R 7,736	45	486	61,902	30	R 79,169	0	234	--	--	--
1999	0	3	96	9,301	8,081	156	491	63,073	21	81,220	0	234	--	--	--
2000	0	3	116	10,050	8,204	56	484	64,443	539	83,891	0	239	--	--	--
2001	0	3	80	10,480	7,003	41	443	64,362	287	82,697	0	246	--	--	--
2002	0	4	77	10,431	5,609	39	438	66,073	314	82,981	21	241	--	--	--
2003	0	2	81	10,028	6,396	36	405	65,931	7	82,884	21	292	--	--	--
2004	0	2	95	11,721	8,235	32	410	67,203	2	87,699	197	406	--	--	--
2005	0	3	117	12,255	9,025	40	408	67,081	646	89,572	R 1,735	402	--	--	--
2006	0	2	49	11,986	8,387	34	397	67,399	374	88,626	R 4,690	386	--	--	--
2007	0	2	87	11,885	8,235	29	410	69,776	281	90,704	6,029	403	--	--	--
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	0.0	0.7	380.0	1.5	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	R 43.9	0.2	2.9	322.6	0.2	R 422.0	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
2005	0.0	2.6	0.6	71.4	51.2	0.1	2.5	350.0	4.1	479.9	R 6.1	1.4	483.8	3.0	486.8
2006	0.0	R 2.2	0.2	69.8	47.6	0.1	2.4	351.7	2.4	474.2	R 16.6	1.3	R 477.7	2.8	R 480.6
2007	0.0	2.5	0.4	69.2	46.7	0.1	2.5	364.2	1.8	484.9	21.3	1.4	488.8	3.0	491.7

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Massachusetts

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	865	--	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	--
2005	5,025	152	10,304	381	0	10,685	5,475	1,041	--	0	0	0	613	--
2006	4,750	169	3,844	155	0	3,999	5,830	1,504	--	0	0	0	580	--
2007	5,120	183	4,928	144	0	5,072	5,120	778	--	0	0	0	734	--
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	R 5.1	287.5	3.6	0.0	291.1	35.3	1.0	0.0	0.0	0.0	0.0	0.0	350.1
1985	102.6	R 46.9	148.7	4.8	0.0	153.4	65.1	2.1	0.0	0.0	0.0	0.0	14.7	384.1
1990	110.6	R 63.8	147.8	3.6	0.0	151.4	53.6	12.9	24.4	0.0	0.0	0.0	6.6	423.1
1995	103.6	R 131.6	57.5	3.9	0.0	61.4	47.1	8.8	31.4	0.0	0.0	0.0	6.1	390.0
1996	111.9	R 105.7	58.3	3.5	0.0	61.8	55.9	12.1	33.0	0.0	0.0	0.0	5.4	385.7
1997	121.3	R 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	99.8	84.1	1.9	0.0	86.0	53.7	7.2	21.2	0.0	0.0	0.0	3.9	379.0
2002	115.0	131.0	63.8	2.6	0.0	66.4	60.2	8.8	19.5	0.0	0.0	0.0	1.7	402.6
2003	106.6	R 174.0	69.0	5.5	0.0	74.5	51.9	10.9	20.4	0.0	0.0	0.0	0.7	438.9
2004	102.7	R 162.6	67.0	3.5	0.0	70.5	61.9	10.0	20.6	0.0	0.0	0.0	1.6	429.9
2005	116.4	157.4	64.8	2.2	0.0	67.0	57.1	10.4	21.1	0.0	0.0	0.0	2.1	431.5
2006	109.7	174.4	24.2	0.9	0.0	25.1	60.8	14.9	21.0	0.0	0.0	0.0	2.0	407.9
2007	117.4	189.9	31.0	0.8	0.0	31.8	53.7	7.7	20.1	0.0	0.0	0.0	2.5	423.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	25,930	370	30,235	3,369	2,827	65,782	11,840	14,867	128,920	0	2,030	--	--	--	--	--
1965	33,132	556	30,287	4,377	3,716	78,044	8,594	21,864	146,882	181	1,813	--	--	--	--	--
1970	34,065	809	38,141	7,365	6,202	96,831	10,056	20,655	179,250	375	1,704	--	--	--	--	--
1975	31,198	884	42,170	5,776	7,475	108,255	18,291	18,577	200,545	7,176	1,110	--	--	--	--	--
1980	31,110	865	27,643	6,646	6,736	97,025	13,289	26,014	177,353	15,891	1,200	--	--	--	--	--
1985	32,793	709	26,024	6,570	14,225	93,447	3,109	14,727	158,101	13,452	997	--	--	--	--	--
1990	34,817	879	24,357	10,057	14,901	99,913	2,728	18,745	170,701	21,611	1,628	--	--	--	--	--
1995	36,037	976	27,444	8,818	14,497	110,546	1,602	22,883	185,790	24,448	1,597	--	--	--	--	--
1996	36,958	1,027	28,754	9,045	18,306	110,520	1,777	24,118	192,519	26,829	1,784	--	--	--	--	--
1997	36,116	994	29,692	R 9,487	14,524	112,389	1,553	29,319	R 196,965	21,914	1,712	--	--	--	--	--
1998	38,255	876	29,895	R 9,033	13,108	114,913	2,113	28,334	R 197,396	12,494	1,397	--	--	--	--	--
1999	38,510	951	31,573	9,116	15,339	121,027	2,491	28,429	207,974	14,591	1,458	--	--	--	--	--
2000	37,294	963	30,824	7,214	16,308	118,160	2,358	26,667	201,530	18,882	1,428	--	--	--	--	--
2001	37,730	906	29,515	6,219	18,876	119,472	1,590	18,346	194,018	26,711	1,562	--	--	--	--	--
2002	36,413	966	28,994	6,016	21,039	121,745	1,992	18,324	198,111	31,087	1,669	--	--	--	--	--
2003	36,973	925	29,463	2,695	20,578	119,019	2,153	19,469	193,377	27,954	1,386	--	--	--	--	--
2004	38,503	917	31,139	3,733	20,826	118,967	2,098	20,621	197,385	30,562	1,540	--	--	--	--	--
2005	39,442	914	30,315	3,431	23,157	119,584	2,209	19,658	198,354	32,872	1,462	--	--	--	--	--
2006	37,965	R 803	29,929	4,124	15,036	118,106	1,201	18,594	186,990	29,066	1,520	--	--	--	--	--
2007	39,618	829	29,371	5,270	16,217	116,059	1,783	18,773	187,473	31,517	1,270	--	--	--	--	--
Trillion Btu																
1960	653.1	383.0	176.1	18.2	11.3	345.6	74.4	88.2	713.9	0.0	21.8	37.3	0.0	38.8	4.3	1,852.2
1965	830.2	563.6	176.4	24.0	14.9	410.0	54.0	125.4	804.7	2.1	19.0	36.9	0.0	36.4	-1.4	2,291.4
1970	828.9	821.3	222.2	41.0	23.4	508.7	63.2	120.7	979.1	4.1	17.9	36.4	0.0	39.7	-1.4	2,726.0
1975	751.0	894.8	245.6	32.1	27.8	568.7	115.0	109.7	1,098.9	79.0	11.6	35.9	0.0	17.2	1.1	2,889.4
1980	759.0	874.7	161.0	37.1	24.7	509.7	83.6	149.2	965.4	173.3	12.5	90.6	0.0	-9.8	19.4	2,885.0
1985	781.9	R 719.9	151.6	36.7	51.3	490.9	19.5	86.0	836.0	142.9	10.4	100.2	0.0	67.9	2.2	2,661.4
1990	788.0	R 898.8	141.9	56.6	54.0	524.8	17.2	110.1	904.5	228.7	16.9	80.2	0.8	-26.5	-52.5	2,839.1
1995	786.7	R 992.7	159.9	50.0	52.5	576.5	10.1	133.6	982.6	256.9	16.5	88.2	1.1	-38.7	-2.1	3,083.8
1996	796.3	R 1,039.2	167.5	51.3	66.1	576.5	11.2	138.4	1,010.9	281.8	18.4	102.9	1.2	-65.0	-15.6	3,170.0
1997	781.1	R 1,010.2	173.0	53.8	52.5	585.9	9.8	172.1	1,047.0	230.0	17.5	95.0	1.2	-0.6	-17.9	3,163.5
1998	826.9	R 894.0	174.1	51.2	47.4	598.9	13.3	165.3	1,050.2	131.1	14.2	90.4	1.3	91.4	-27.6	3,071.9
1999	832.6	R 968.3	183.9	51.7	55.5	630.7	15.7	165.1	1,102.5	152.5	14.9	91.9	1.4	118.4	-22.0	3,260.5
2000	799.8	R 984.3	179.5	40.9	58.8	615.6	14.8	154.3	1,064.0	196.9	14.6	94.8	1.4	103.1	-13.8	3,245.2
2001	789.7	R 928.7	171.9	35.3	68.2	622.4	10.0	108.9	1,016.8	279.1	16.1	76.6	1.5	-15.7	-11.3	3,081.3
2002	739.9	966.4	168.9	34.1	76.0	634.0	12.5	108.4	1,033.9	324.5	17.0	70.7	1.6	-26.0	-7.6	3,120.3
2003	747.9	924.8	171.6	15.3	74.7	619.7	13.5	115.4	1,010.2	291.3	14.2	81.1	2.0	86.2	-12.2	3,145.6
2004	773.8	918.5	181.4	21.2	75.3	620.4	13.2	122.5	1,034.0	318.7	15.4	84.3	2.2	R -15.6	-10.9	R 3,120.3
2005	799.5	928.4	176.6	19.5	83.8	624.0	13.9	116.9	1,034.7	343.0	14.6	R 87.3	2.6	R -31.2	-9.2	R 3,169.6
2006	770.9	R 817.8	174.3	23.4	54.2	616.3	7.6	110.5	986.3	303.3	15.1	R 84.4	3.0	23.2	-7.2	R 2,996.7
2007	799.9	847.8	171.1	29.9	58.2	605.7	11.2	111.2	987.3	330.5	12.6	86.0	3.6	-36.7	-4.1	3,026.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	1,414	202	17,380	765	1,940	20,084	1,103	--	--	8,728	--	--	--
1965	1,007	271	16,334	1,279	2,346	19,959	890	--	--	11,309	--	--	--
1970	481	340	18,839	545	4,493	23,877	829	--	--	17,103	--	--	--
1975	119	335	19,420	302	5,219	24,942	796	--	--	20,886	--	--	--
1980	65	387	9,195	83	3,375	12,653	2,115	--	--	22,260	--	--	--
1985	56	341	6,192	425	4,427	11,045	2,193	--	--	22,302	--	--	--
1990	54	327	4,842	217	6,538	11,597	1,373	--	--	25,319	--	--	--
1995	33	380	3,815	233	8,015	12,062	739	--	--	28,623	--	--	--
1996	32	400	3,859	230	10,758	14,847	768	--	--	28,901	--	--	--
1997	21	380	3,662	254	10,166	14,082	503	--	--	28,726	--	--	--
1998	16	320	2,653	272	9,500	12,426	447	--	--	29,808	--	--	--
1999	2	351	2,994	606	10,763	14,364	471	--	--	30,661	--	--	--
2000	2	368	2,902	356	11,080	14,338	506	--	--	30,707	--	--	--
2001	1	344	2,654	222	13,848	16,724	673	--	--	32,305	--	--	--
2002	32	368	2,212	160	14,789	17,161	683	--	--	34,336	--	--	--
2003	4	386	2,216	264	14,776	17,255	719	--	--	33,669	--	--	--
2004	18	362	2,040	221	13,021	15,283	737	--	--	33,104	--	--	--
2005	12	359	1,945	219	13,915	16,079	R 1,018	--	--	36,095	--	--	--
2006	1	316	1,504	153	R 8,839	R 10,495	R 927	--	--	34,622	--	--	--
2007	16	328	1,371	95	10,052	11,519	1,022	--	--	35,366	--	--	--
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	764.2
1985	1.4	R 348.9	36.1	2.4	16.0	54.4	43.9	0.0	0.0	76.1	523.2	175.3	698.5
1990	1.3	R 341.9	28.2	1.2	23.7	53.1	27.5	0.6	0.2	86.4	503.4	199.8	703.1
1995	0.8	R 395.4	22.2	1.3	29.0	52.6	14.8	0.7	0.3	97.7	553.2	221.8	775.0
1996	0.8	R 413.2	22.5	1.3	38.9	62.6	15.4	0.8	0.3	98.6	582.5	224.2	806.8
1997	0.5	R 395.1	21.3	1.4	36.8	59.5	10.1	0.8	0.3	98.0	555.2	222.1	777.2
1998	0.4	R 334.7	15.5	1.5	34.3	51.3	8.9	0.8	0.3	101.7	489.5	230.6	720.2
1999	0.1	R 365.3	17.4	3.4	38.9	59.8	9.4	0.9	0.3	104.6	532.1	239.3	771.4
2000	(s)	R 381.1	16.9	2.0	40.0	58.9	10.1	0.9	0.2	104.8	551.0	238.3	789.3
2001	(s)	R 354.4	15.5	1.3	50.0	66.8	13.5	1.0	0.2	110.2	544.4	245.6	790.1
2002	0.8	367.2	12.9	0.9	53.4	67.2	13.7	1.1	0.2	117.2	567.4	261.2	828.5
2003	0.1	385.0	12.9	1.5	53.6	68.0	14.4	1.4	0.2	114.9	584.0	253.5	837.5
2004	0.4	361.8	11.9	1.3	47.1	60.2	14.7	1.5	0.3	112.9	552.0	249.9	801.9
2005	0.3	364.4	11.3	1.2	50.4	62.9	R 20.4	1.8	0.3	123.2	R 573.3	269.4	R 842.6
2006	(s)	321.8	8.8	0.9	R 31.9	R 41.5	R 18.5	2.1	0.4	118.1	R 502.5	255.4	R 757.9
2007	0.4	336.5	8.0	0.5	36.1	44.6	20.4	2.5	0.6	120.7	525.6	260.4	786.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Million Kilowatthours					
1960	982	43	3,212	566	342	324	1,175	5,619	0	--	--	6,381	--	--	--
1965	760	85	3,019	946	414	536	839	5,754	0	--	--	9,124	--	--	--
1970	378	133	3,482	403	793	804	558	6,040	0	--	--	13,021	--	--	--
1975	279	182	3,589	224	921	954	390	6,078	0	--	--	14,596	--	--	--
1980	243	190	3,123	15	596	823	225	4,781	0	--	--	16,765	--	--	--
1985	197	158	2,449	11	781	699	274	4,216	0	--	--	18,421	--	--	--
1990	214	159	2,010	18	1,154	770	71	4,023	0	--	--	21,986	--	--	--
1995	221	194	1,638	102	1,414	77	5	3,236	0	--	--	32,153	--	--	--
1996	238	201	1,766	149	1,899	77	5	3,896	0	--	--	32,896	--	--	--
1997	167	192	1,917	56	1,794	76	55	3,897	0	--	--	33,231	--	--	--
1998	129	163	1,506	66	1,676	208	2	3,458	0	--	--	34,710	--	--	--
1999	18	179	1,401	37	1,899	171	3	3,511	0	--	--	36,040	--	--	--
2000	12	187	1,577	33	1,955	159	5	3,728	0	--	--	36,793	--	--	--
2001	8	174	1,525	35	2,444	433	17	4,453	0	--	--	35,925	--	--	--
2002	234	176	966	28	2,610	247	64	3,915	0	--	--	36,835	--	--	--
2003	28	186	1,149	19	2,607	203	90	4,069	0	--	--	35,391	--	--	--
2004	161	175	1,063	22	2,298	191	49	3,623	0	--	--	38,632	--	--	--
2005	141	175	1,267	28	2,456	207	4	3,963	0	--	--	39,600	--	--	--
2006	8	154	1,337	26	<sup>R</sup> 1,560	91	2	<sup>R</sup> 3,015	0	--	--	39,299	--	--	--
2007	142	164	1,128	8	1,774	82	0	2,992	0	--	--	40,047	--	--	--
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	252.0	144.8	396.8
1990	5.3	166.5	11.7	0.1	4.2	4.0	0.4	20.5	0.0	7.3	0.0	75.0	270.9	173.5	444.4
1995	5.4	201.9	9.5	0.6	5.1	0.4	(s)	15.7	0.0	9.0	0.1	109.7	337.3	249.1	586.5
1996	5.9	208.3	10.3	0.8	6.9	0.4	(s)	18.4	0.0	10.8	0.1	112.2	351.2	255.2	606.4
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	342.7	256.9	599.6
1998	3.2	171.1	8.8	0.4	6.1	1.1	(s)	16.3	0.0	9.4	0.2	118.4	314.2	268.6	582.8
1999	0.4	186.8	8.2	0.2	6.9	0.9	(s)	16.1	0.0	9.4	0.2	123.0	331.8	281.3	613.0
2000	0.3	193.6	9.2	0.2	7.1	0.8	(s)	17.3	0.0	8.6	0.2	125.5	343.0	285.5	628.5
2001	0.2	179.1	8.9	0.2	8.8	2.3	0.1	20.3	0.0	2.6	0.2	122.6	324.2	273.2	597.3
2002	5.5	175.8	5.6	0.2	9.4	1.3	0.4	16.9	0.0	6.5	0.3	125.7	330.6	280.2	610.8
2003	0.7	185.8	6.7	0.1	9.5	1.1	0.6	17.9	0.0	6.5	0.4	120.8	332.0	266.5	598.5
2004	3.9	175.1	6.2	0.1	8.3	1.0	0.3	15.9	0.0	7.0	0.4	131.8	334.2	291.7	<sup>R</sup> 625.9
2005	3.4	177.4	7.4	0.2	8.9	1.1	(s)	17.5	0.0	<sup>R</sup> 7.4	0.5	135.1	341.4	295.5	<sup>R</sup> 636.9
2006	0.2	156.8	7.8	0.1	<sup>R</sup> 5.6	0.5	(s)	<sup>R</sup> 14.0	0.0	<sup>R</sup> 7.6	0.5	134.1	313.2	290.0	<sup>R</sup> 603.2
2007	3.5	167.7	6.6	(s)	6.4	0.4	0.0	13.4	0.0	7.8	0.5	136.6	329.6	294.8	624.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	13,011	117	7,091	524	3,151	9,574	10,949	31,288	212	--	--	12,482	--	--
1965	15,193	192	7,518	923	2,694	6,660	15,894	33,689	146	--	--	19,350	--	--
1970	13,061	262	8,502	854	2,758	4,557	17,665	34,336	123	--	--	25,169	--	--
1975	9,885	300	8,749	1,239	1,889	3,343	16,383	31,603	121	--	--	28,866	--	--
1980	8,652	249	4,804	2,637	967	3,213	23,951	35,572	117	--	--	30,656	--	--
1985	6,645	190	4,408	8,725	1,192	2,213	12,744	29,283	117	--	--	33,704	--	--
1990	4,719	290	3,957	6,926	976	1,416	16,782	30,058	23	--	--	35,062	--	--
1995	4,383	254	3,457	4,826	1,310	402	20,874	30,869	27	--	--	33,921	--	--
1996	4,283	260	3,889	5,425	1,418	415	22,120	33,267	29	--	--	34,499	--	--
1997	3,770	255	3,986	2,361	1,271	415	27,333	35,366	26	--	--	35,430	--	--
1998	3,857	224	4,122	1,127	1,097	400	26,178	32,924	25	--	--	35,983	--	--
1999	4,636	248	4,909	2,323	1,017	332	25,870	34,452	26	--	--	37,276	--	--
2000	4,004	247	4,055	3,006	1,060	622	24,523	33,267	27	--	--	37,268	--	--
2001	3,793	233	3,494	2,434	1,835	352	16,595	24,711	26	--	--	34,174	--	--
2002	2,781	250	2,767	3,457	1,931	344	16,499	24,998	29	--	--	33,537	--	--
2003	2,840	222	3,134	2,999	2,018	713	17,746	26,610	75	--	--	39,813	--	--
2004	3,012	219	3,651	5,110	2,308	687	18,974	30,730	30	--	--	34,867	--	--
2005	3,017	222	3,475	6,279	2,237	909	17,856	30,756	29	--	--	34,745	--	--
2006	3,030	R 199	3,020	R 4,407	2,378	736	16,862	R 27,404	32	--	--	34,093	--	--
2007	2,887	187	3,154	4,112	2,218	967	17,033	27,484	26	--	--	33,879	--	--
Trillion Btu														
1960	332.0	121.3	41.3	2.1	16.5	60.2	66.3	186.5	2.3	14.8	0.0	42.6	699.4	804.7
1965	385.6	195.1	43.8	3.7	14.2	41.9	92.7	196.2	1.5	18.8	0.0	66.0	863.2	1,020.9
1970	320.9	265.7	49.5	3.2	14.5	28.7	103.6	199.5	1.3	19.5	0.0	85.9	892.8	1,100.7
1975	246.7	307.7	51.0	4.6	9.9	21.0	97.0	183.5	1.3	19.7	0.0	98.5	857.4	1,094.2
1980	219.4	253.7	28.0	9.7	5.1	20.2	137.2	200.2	1.2	47.2	0.0	104.6	826.3	1,078.5
1985	169.9	R 194.2	25.7	31.4	6.3	13.9	74.4	151.7	1.2	55.3	0.0	115.0	686.6	951.4
1990	117.9	R 302.6	23.1	25.1	5.1	8.9	98.5	160.7	0.2	36.5	0.0	119.6	731.0	1,007.6
1995	109.2	R 264.4	20.1	17.5	6.8	2.5	121.8	168.8	0.3	44.7	0.0	115.7	697.3	960.1
1996	107.5	R 268.8	22.7	19.6	7.4	2.6	126.6	178.9	0.3	53.3	0.0	117.7	720.8	988.5
1997	95.1	R 265.7	23.2	8.5	6.6	2.6	160.4	201.3	0.3	51.4	0.0	120.9	728.8	1,002.7
1998	97.9	R 234.9	24.0	4.1	5.7	2.5	152.5	188.9	0.3	49.6	0.0	122.8	688.5	966.9
1999	120.0	R 258.6	28.6	8.4	5.3	2.1	150.1	194.5	0.3	51.4	0.0	127.2	746.2	1,037.1
2000	104.8	R 256.2	23.6	10.8	5.5	3.9	141.7	185.6	0.3	50.4	0.0	127.2	721.0	1,010.3
2001	99.0	R 240.5	20.4	8.8	9.6	2.2	98.5	139.4	0.3	35.5	0.0	116.6	630.1	890.0
2002	72.8	249.1	16.1	12.5	10.1	2.2	97.5	138.4	0.3	25.7	0.0	114.4	600.7	855.8
2003	74.6	222.0	18.3	10.9	10.5	4.5	105.1	149.2	0.8	35.4	0.0	135.8	617.8	917.6
2004	78.2	R 218.6	21.3	18.5	12.0	4.3	112.6	168.7	0.3	R 37.3	0.0	119.0	R 622.1	885.3
2005	77.5	225.7	20.2	22.7	11.7	5.7	106.2	166.6	0.3	36.3	0.0	118.5	624.8	884.1
2006	77.3	R 202.6	17.6	R 15.9	12.4	4.6	100.2	R 150.7	0.3	R 35.1	0.0	116.3	R 582.3	R 833.9
2007	74.7	191.5	18.4	14.8	11.6	6.1	100.8	151.6	0.3	35.6	0.0	115.6	569.2	818.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	223	3	1,312	2,475	3,369	21	1,277	62,307	728	71,489	0	9	--	--	--
1965	50	5	2,619	3,348	4,377	34	1,126	74,814	779	87,097	0	0	--	--	--
1970	21	10	718	6,353	7,365	62	1,324	93,269	427	109,518	0	0	--	--	--
1975	2	10	347	8,949	5,700	95	1,321	105,412	423	122,248	0	0	--	--	--
1980	0	12	488	9,741	6,646	128	1,477	95,235	232	113,946	0	0	--	--	--
1985	0	11	201	12,328	6,570	291	1,344	91,556	99	112,389	1,011	0	--	--	--
1990	0	18	215	13,207	10,057	283	1,513	98,167	92	123,533	1,184	0	--	--	--
1995	0	25	231	18,125	8,818	241	1,443	109,159	94	138,111	1,204	4	--	--	--
1996	0	26	215	18,940	9,045	224	1,401	109,025	123	138,970	507	5	--	--	--
1997	0	24	197	19,815	R 9,487	204	1,480	111,042	52	R 142,276	646	4	--	--	--
1998	0	21	167	21,145	R 9,033	804	1,549	113,608	82	R 146,388	835	5	--	--	--
1999	0	23	286	21,764	9,116	352	1,565	119,839	36	152,958	947	4	--	--	--
2000	0	27	205	21,915	7,214	266	1,542	116,941	48	148,131	2,243	4	--	--	--
2001	0	22	79	21,472	6,219	151	1,412	117,204	71	146,608	1,368	5	--	--	--
2002	0	27	167	22,514	6,016	183	1,396	119,567	47	149,891	2,900	5	--	--	--
2003	0	27	89	22,480	2,695	196	1,290	116,798	198	143,747	3,637	3	--	--	--
2004	0	28	80	23,993	3,733	397	1,307	116,468	251	146,228	3,758	3	--	--	--
2005	0	28	84	23,256	3,431	509	1,300	117,139	197	145,916	R 4,987	5	--	--	--
2006	0	26	67	23,767	4,124	231	1,267	115,637	232	R 5,246	5,246	4	--	--	--
2007	0	26	76	23,422	5,270	278	1,308	113,760	288	144,401	6,442	5	--	--	--
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	3.6	0.0	614.7	0.0	614.7
1990	0.0	18.7	1.1	76.9	56.6	1.0	9.2	515.7	0.6	661.0	4.2	0.0	683.9	0.0	683.9
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	R 780.2	3.0	(s)	R 802.1	(s)	802.1
1999	0.0	23.5	1.4	126.8	51.7	1.3	9.5	624.5	0.2	815.4	3.3	(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	7.9	(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	4.8	(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	10.3	(s)	825.2	(s)	825.2
2003	0.0	27.4	0.5	130.9	15.3	0.7	7.8	608.2	1.2	764.6	12.9	(s)	792.0	(s)	792.1
2004	0.0	27.5	0.4	139.8	21.2	1.4	7.9	607.4	1.6	779.6	13.3	(s)	807.2	(s)	807.2
2005	0.0	28.3	0.4	135.5	19.5	1.8	7.9	611.2	1.2	777.5	R 17.6	(s)	805.9	(s)	805.9
2006	0.0	26.1	0.3	138.4	23.4	0.8	7.7	603.4	1.5	775.5	R 18.6	(s)	801.7	(s)	801.7
2007	0.0	26.7	0.4	136.4	29.9	1.0	7.9	593.7	1.8	771.2	22.8	(s)	797.9	(s)	797.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Michigan

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	36,273	131	1,099	372	170	1,641	32,872	1,433	--	0	0	2	-2,699	--
2006	34,926	109	231	302	218	751	29,066	1,488	--	0	0	2	-2,117	--
2007	36,574	124	529	295	252	1,076	31,517	1,244	--	0	0	3	-1,206	--
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	R 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	R 69.1	7.2	2.0	0.0	9.2	228.7	16.7	9.0	0.0	0.0	0.0	-37.3	957.4
1995	671.2	R 105.1	6.9	2.4	0.0	9.3	256.9	16.2	19.7	0.0	0.0	0.0	19.7	1,095.6
1996	682.1	R 122.1	7.8	1.7	(s)	9.5	281.8	18.1	23.4	0.0	0.0	0.0	6.5	1,140.8
1997	681.4	R 124.5	6.5	1.8	0.0	8.3	230.0	17.2	22.6	0.0	0.0	0.0	4.7	1,085.8
1998	725.3	R 131.4	10.2	2.7	0.6	13.6	131.1	14.0	22.5	0.0	0.0	0.0	-5.2	1,029.2
1999	712.2	R 134.1	13.3	2.9	0.4	16.7	152.5	14.6	21.7	0.0	0.0	0.0	-0.7	1,047.9
2000	694.7	R 126.0	10.6	2.2	0.1	12.8	196.9	14.3	25.6	0.0	0.0	0.0	-1.1	1,067.5
2001	690.5	R 131.7	7.2	2.2	(s)	9.4	279.1	15.9	25.0	0.0	0.0	(s)	-7.2	1,143.8
2002	660.8	147.3	9.7	3.1	0.4	13.2	324.5	16.7	24.8	0.0	0.0	(s)	-7.6	1,179.7
2003	672.6	104.6	7.2	2.8	0.4	10.4	291.3	13.4	24.8	0.0	0.0	(s)	-12.2	1,105.0
2004	691.2	135.5	7.0	2.3	0.1	9.4	318.7	15.1	25.3	0.0	0.0	(s)	-10.9	R 1,184.2
2005	718.2	132.6	6.9	2.2	1.0	10.1	343.0	14.3	23.2	0.0	0.0	(s)	-9.2	1,232.3
2006	693.4	110.4	1.5	1.8	1.3	4.5	303.3	14.8	23.2	0.0	0.0	(s)	-7.2	1,142.3
2007	721.3	125.5	3.3	1.7	1.5	6.6	330.5	12.3	22.1	0.0	0.0	(s)	-4.1	1,214.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	5,976	180	16,151	472	4,525	32,583	6,658	9,046	69,435	0	887	--	--	--	--	--
1965	7,259	249	18,960	2,624	5,781	35,278	4,980	9,886	77,507	143	1,093	--	--	--	--	--
1970	8,787	342	22,356	3,491	8,887	44,122	5,159	10,420	94,435	0	894	--	--	--	--	--
1975	10,120	331	24,369	5,629	9,187	48,253	4,326	10,887	102,651	9,750	917	--	--	--	--	--
1980	13,810	286	21,382	5,142	7,697	46,211	3,183	8,630	92,244	10,027	786	--	--	--	--	--
1985	12,744	257	19,891	7,781	5,353	45,285	859	9,245	88,414	11,572	973	--	--	--	--	--
1990	18,377	291	19,576	5,099	5,966	47,760	961	12,912	92,275	12,139	857	--	--	--	--	--
1995	18,947	353	23,038	9,969	9,758	54,303	647	14,541	112,256	13,243	1,098	--	--	--	--	--
1996	19,703	368	24,016	10,625	12,018	54,866	783	15,694	118,003	12,095	1,187	--	--	--	--	--
1997	19,086	354	23,757	R 10,892	10,269	55,755	695	15,862	R 117,230	10,819	1,035	--	--	--	--	--
1998	19,958	331	24,606	R 10,709	7,410	58,106	515	15,174	R 116,520	11,644	955	--	--	--	--	--
1999	19,082	345	23,920	12,591	8,705	59,894	552	16,455	122,119	13,316	1,179	--	--	--	--	--
2000	20,735	362	24,846	13,301	9,844	61,120	930	15,570	125,610	12,960	931	--	--	--	--	--
2001	19,683	341	24,995	11,588	8,974	62,236	1,146	16,021	124,959	11,789	832	--	--	--	--	--
2002	20,455	372	24,636	11,064	11,302	63,503	992	14,756	126,254	13,685	809	--	--	--	--	--
2003	21,998	371	24,601	11,977	10,862	64,638	1,063	16,026	129,168	13,414	815	--	--	--	--	--
2004	21,382	360	26,457	12,505	11,662	64,804	1,461	16,133	133,021	13,296	738	--	--	--	--	--
2005	21,381	368	26,439	12,656	11,161	64,697	1,710	17,392	134,055	12,835	775	--	--	--	--	--
2006	20,935	353	26,035	11,773	10,363	64,432	851	16,614	130,067	13,183	572	--	--	--	--	--
2007	20,587	389	27,334	11,275	10,401	64,627	1,348	16,006	130,992	13,103	654	--	--	--	--	--
Trillion Btu																
1960	131.3	186.1	94.1	2.6	18.1	171.2	41.9	54.3	382.1	0.0	9.5	25.4	0.0	-10.9	0.3	723.9
1965	160.0	248.2	110.4	14.8	23.2	185.3	31.3	60.1	425.1	1.7	11.4	23.4	0.0	-3.9	0.4	866.4
1970	179.7	343.0	130.2	19.7	33.6	231.8	32.4	64.4	512.2	0.0	9.4	23.4	0.0	39.5	0.4	1,107.7
1975	191.5	331.5	141.9	31.9	34.1	253.5	27.2	67.6	556.2	107.4	9.5	27.4	0.0	21.8	0.6	1,246.0
1980	242.4	R 285.0	124.5	29.1	28.3	242.7	20.0	53.7	498.4	109.4	8.2	46.6	0.0	32.0	3.2	1,225.2
1985	226.1	258.5	115.9	44.1	19.3	237.9	5.4	58.9	481.4	122.9	10.2	56.3	0.0	92.9	11.4	1,259.7
1990	325.5	291.8	114.0	28.9	21.6	250.9	6.0	81.1	502.6	128.5	8.9	48.8	0.5	78.5	4.5	1,389.6
1995	338.0	R 357.7	134.2	56.5	35.4	283.2	4.1	90.8	604.1	139.1	11.3	56.2	1.2	96.3	28.6	1,632.5
1996	354.6	R 375.0	139.9	60.2	43.4	286.2	4.9	98.1	632.8	127.0	12.3	57.1	1.1	113.2	29.4	1,702.5
1997	341.6	R 360.4	138.4	R 61.8	37.1	290.6	4.4	99.1	631.4	113.5	10.6	55.6	1.1	128.1	33.6	1,676.0
1998	357.0	337.1	143.3	60.7	26.8	302.8	3.2	95.3	632.2	122.2	9.7	50.9	2.1	126.1	27.0	R 1,664.3
1999	341.5	351.1	139.3	71.4	31.5	312.1	3.5	103.4	661.2	139.1	12.1	50.7	5.5	136.5	20.4	1,718.2
2000	373.8	R 367.5	144.7	75.4	35.5	318.4	5.8	98.0	678.0	135.2	9.5	54.6	7.9	131.4	26.8	1,784.6
2001	353.3	R 345.0	145.6	65.7	32.4	324.2	7.2	99.8	675.0	123.2	8.6	54.4	9.8	148.6	28.1	1,746.0
2002	360.8	R 374.9	143.5	62.7	40.8	330.7	6.2	91.6	675.7	142.9	8.2	46.3	9.7	148.3	14.2	1,781.0
2003	390.7	R 375.0	143.3	67.9	39.4	336.6	6.7	99.7	693.6	139.8	8.3	43.9	10.6	138.4	-8.6	1,791.7
2004	378.8	R 363.5	154.1	70.9	42.2	338.0	9.2	100.5	714.9	138.6	7.4	R 52.8	8.7	149.5	8.8	1,823.0
2005	379.1	R 372.2	154.0	71.8	40.4	337.6	10.7	108.6	723.1	133.9	7.7	R 57.0	16.4	138.2	26.3	R 1,854.1
2006	370.8	358.6	151.7	66.8	37.4	336.2	5.3	103.7	701.0	137.6	5.7	R 55.5	21.1	146.1	27.0	R 1,823.3
2007	366.0	396.5	159.2	63.9	37.4	337.3	8.5	99.9	706.2	137.4	6.5	65.3	26.9	146.4	23.3	1,874.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	557	61	5,414	1,748	3,108	10,270	878	--	--	4,186	--	--	--
1965	352	86	6,309	1,556	4,043	11,908	682	--	--	6,063	--	--	--
1970	320	102	7,197	1,195	6,390	14,782	560	--	--	9,031	--	--	--
1975	70	114	7,242	558	6,040	13,840	563	--	--	10,189	--	--	--
1980	30	103	5,946	114	2,929	8,989	745	--	--	11,749	--	--	--
1985	48	107	3,973	137	2,400	6,509	957	--	--	13,261	--	--	--
1990	36	107	3,743	30	2,933	6,707	562	--	--	14,858	--	--	--
1995	34	129	3,085	50	4,447	7,582	498	--	--	16,974	--	--	--
1996	19	142	3,451	61	5,969	9,481	517	--	--	17,157	--	--	--
1997	12	129	2,932	52	5,650	8,634	404	--	--	17,073	--	--	--
1998	5	110	2,542	73	3,927	6,542	359	--	--	17,378	--	--	--
1999	2	119	2,102	32	4,853	6,987	378	--	--	17,998	--	--	--
2000	1	130	2,294	33	5,436	7,763	406	--	--	18,629	--	--	--
2001	(s)	125	2,288	188	4,761	7,237	399	--	--	19,400	--	--	--
2002	13	135	2,216	16	4,581	6,813	405	--	--	20,451	--	--	--
2003	(s)	138	2,342	18	5,823	8,183	427	--	--	20,638	--	--	--
2004	(s)	133	2,351	28	5,199	7,577	437	--	--	20,507	--	--	--
2005	6	129	1,956	27	5,020	7,004	R 529	--	--	21,743	--	--	--
2006	R 8	117	1,541	18	R 4,738	R 6,298	R 482	--	--	21,909	--	--	--
2007	6	129	1,544	11	4,838	6,393	531	--	--	22,646	--	--	--
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	96.6	301.3
1985	0.9	R 107.1	23.1	0.8	8.6	32.6	19.1	0.0	0.0	45.2	204.9	104.2	309.1
1990	0.6	R 107.4	21.8	0.2	10.6	32.6	11.2	0.1	0.3	50.7	203.0	117.2	320.3
1995	0.7	R 130.4	18.0	0.3	16.1	34.4	10.0	0.2	0.4	57.9	233.8	131.5	365.4
1996	0.3	R 144.9	20.1	0.3	21.6	42.0	10.3	0.2	0.4	58.5	256.4	133.1	389.5
1997	0.2	R 131.2	17.1	0.3	20.4	37.8	8.1	0.2	0.4	58.3	236.1	132.0	368.0
1998	0.1	112.5	14.8	0.4	14.2	29.4	7.2	0.2	0.4	59.3	209.0	134.5	343.5
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	381.7
2001	(s)	126.3	13.3	1.1	17.2	31.6	8.0	0.3	0.3	66.2	232.6	147.5	380.1
2002	0.2	136.4	12.9	0.1	16.6	29.6	8.1	0.3	0.3	69.8	244.6	155.5	400.2
2003	(s)	139.4	13.6	0.1	21.1	34.9	8.5	0.4	0.2	70.4	253.8	155.4	409.1
2004	(s)	134.2	13.7	0.2	18.8	32.7	8.7	0.4	0.2	70.0	246.2	154.8	401.0
2005	0.1	R 130.2	11.4	0.2	18.2	29.7	R 10.6	0.4	0.2	74.2	R 245.4	162.3	R 407.6
2006	0.1	119.2	9.0	0.1	R 17.1	R 26.2	R 9.6	0.5	0.2	74.8	R 230.6	161.6	R 392.3
2007	0.1	131.6	9.0	0.1	17.4	26.4	10.6	0.6	0.2	77.3	246.8	166.7	413.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	387	20	1,323	378	548	142	634	3,026	0	--	1,540	--	--	--
1965	265	27	1,542	337	713	158	414	3,164	0	--	2,026	--	--	--
1970	252	77	1,759	259	1,128	235	393	3,774	0	--	3,178	--	--	--
1975	163	90	1,770	121	1,066	355	223	3,536	0	--	4,845	--	--	--
1980	113	64	1,443	0	517	340	32	2,331	0	--	5,724	--	--	--
1985	171	77	2,845	24	424	335	223	3,851	0	--	7,469	--	--	--
1990	143	78	1,091	5	518	1,568	259	3,441	0	--	8,813	--	--	--
1995	229	91	862	23	785	50	111	1,831	0	--	10,407	--	--	--
1996	137	99	1,014	27	1,053	50	138	2,282	0	--	10,850	--	--	--
1997	94	92	873	26	997	1,010	160	3,066	0	--	10,888	--	--	--
1998	37	82	843	31	693	988	161	2,716	0	--	11,152	--	--	--
1999	13	88	889	20	856	50	155	1,970	0	--	11,637	--	--	--
2000	5	95	889	54	959	50	137	2,089	0	--	12,311	--	--	--
2001	1	94	1,134	35	840	52	218	2,279	0	--	20,520	--	--	--
2002	93	104	821	22	808	52	195	1,899	0	--	20,197	--	--	--
2003	1	101	738	14	1,028	794	342	2,915	0	--	20,533	--	--	--
2004	(s)	97	804	10	917	52	449	2,234	0	--	20,407	--	--	--
2005	67	96	1,002	14	886	53	306	2,260	0	--	21,985	--	--	--
2006	R 83	87	666	12	R 836	1,378	235	R 3,127	0	--	22,175	--	--	--
2007	52	91	727	10	854	941	88	2,620	0	--	22,523	--	--	--
Trillion Btu														
1960	8.5	21.0	7.7	2.1	2.2	0.7	4.0	16.8	0.0	0.3	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	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	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	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	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	25.5	128.0	58.7	186.6
1990	2.6	78.3	6.4	(s)	1.9	8.2	1.6	18.1	0.0	1.9	30.1	131.0	69.5	200.5
1995	4.6	91.8	5.0	0.1	2.8	0.3	0.7	9.0	0.0	2.0	35.5	142.9	80.6	223.6
1996	2.4	100.3	5.9	0.2	3.8	0.3	0.9	11.0	0.0	2.1	37.0	152.6	84.2	236.8
1997	1.7	93.9	5.1	0.1	3.6	5.3	1.0	15.1	0.0	2.0	37.1	149.9	84.2	234.0
1998	0.7	83.9	4.9	0.2	2.5	5.2	1.0	13.8	0.0	1.9	38.1	138.2	86.3	224.5
1999	0.2	89.7	5.2	0.1	3.1	0.3	1.0	9.6	0.0	1.9	39.7	141.2	90.8	232.0
2000	0.1	96.8	5.2	0.3	3.5	0.3	0.9	10.1	0.0	2.0	42.0	150.9	95.5	246.5
2001	(s)	94.9	6.6	0.2	3.0	0.3	1.4	11.5	0.0	1.8	70.0	178.3	156.0	334.3
2002	1.6	105.3	4.8	0.1	2.9	0.3	1.2	9.3	0.0	1.8	68.9	187.0	153.6	340.6
2003	(s)	102.5	4.3	0.1	3.7	4.1	2.1	14.4	0.0	1.9	70.1	188.8	154.6	343.4
2004	(s)	97.5	4.7	0.1	3.3	0.3	2.8	11.2	0.0	1.9	69.6	180.1	154.1	334.2
2005	1.3	R 97.1	5.8	0.1	3.2	0.3	1.9	11.3	0.0	R 2.1	75.0	186.8	164.1	R 350.8
2006	1.5	88.7	3.9	0.1	R 3.0	7.2	1.5	R 15.6	0.0	R 2.2	75.7	183.6	163.6	R 347.2
2007	1.0	93.2	4.2	0.1	3.1	4.9	0.6	12.8	0.0	2.2	76.8	186.1	165.8	351.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,555	49	6,062	841	4,266	5,690	5,024	21,884	156	--	--	3,095	--	--
1965	2,776	83	7,651	988	3,947	4,213	6,593	23,392	178	--	--	4,677	--	--
1970	2,020	98	7,784	1,275	3,608	3,894	7,919	24,480	168	--	--	8,506	--	--
1975	2,292	101	7,991	1,985	3,132	2,675	9,183	24,965	189	--	--	11,280	--	--
1980	1,057	101	5,708	4,183	1,336	1,818	7,527	20,573	145	--	--	15,525	--	--
1985	1,027	66	4,985	2,406	1,718	481	8,206	17,796	145	--	--	17,934	--	--
1990	1,283	88	5,483	2,459	1,117	700	11,122	20,880	172	--	--	23,497	--	--
1995	1,401	106	6,031	4,392	1,192	536	12,791	24,942	224	--	--	26,577	--	--
1996	2,088	102	6,510	4,855	670	643	13,673	26,352	250	--	--	26,934	--	--
1997	1,490	107	6,404	3,485	1,846	519	13,610	25,864	227	--	--	27,713	--	--
1998	2,014	105	6,298	2,777	1,240	353	13,102	23,769	204	--	--	28,214	--	--
1999	1,954	104	5,291	2,989	1,026	394	14,158	23,858	272	--	--	27,764	--	--
2000	2,092	106	4,857	3,442	996	570	13,437	23,302	248	--	--	28,842	--	--
2001	1,254	92	5,154	3,359	1,465	698	13,962	24,638	186	--	--	20,767	--	--
2002	1,261	96	5,010	5,899	1,412	530	12,775	25,626	45	--	--	21,515	--	--
2003	1,268	95	5,451	3,932	1,360	610	13,894	25,247	93	--	--	21,916	--	--
2004	1,312	97	5,854	5,448	1,400	654	14,094	27,449	132	--	--	22,415	--	--
2005	1,300	95	5,741	5,156	1,299	1,092	15,438	28,727	130	--	--	22,266	--	--
2006	1,271	103	5,296	R 4,702	1,228	396	15,058	R 26,680	96	--	--	22,664	--	--
2007	1,350	114	5,150	4,618	1,476	789	14,857	26,890	96	--	--	23,041	--	--
Trillion Btu														
1960	55.2	51.0	35.3	3.4	22.4	35.8	31.9	128.8	1.7	7.4	0.0	10.6	254.6	280.7
1965	60.8	82.6	44.6	4.0	20.7	26.5	41.7	137.4	1.9	9.3	0.0	16.0	308.0	346.1
1970	42.1	97.8	45.3	4.8	19.0	24.5	50.1	143.7	1.8	11.8	0.0	29.0	326.1	396.4
1975	50.8	100.8	46.5	7.4	16.5	16.8	57.8	145.0	2.0	15.9	0.0	38.5	352.8	445.4
1980	18.1	101.2	33.3	15.4	7.0	11.4	47.3	114.3	1.5	31.3	0.0	53.0	319.4	447.0
1985	21.3	66.6	29.0	8.7	9.0	3.0	52.9	102.6	1.5	36.7	0.0	61.2	289.9	430.9
1990	23.8	88.7	31.9	8.9	5.9	4.4	70.5	121.6	1.8	28.0	0.0	80.2	344.2	529.5
1995	26.7	R 107.6	35.1	15.9	6.2	3.4	80.4	141.0	2.3	35.6	0.0	90.7	403.9	609.8
1996	40.0	R 104.3	37.9	17.5	3.5	4.0	86.1	149.1	2.6	35.9	0.0	91.9	423.5	632.5
1997	28.1	R 109.3	37.3	12.6	9.6	3.3	85.7	148.5	2.3	36.1	0.0	94.6	418.8	633.0
1998	37.5	106.6	36.7	10.0	6.5	2.2	82.9	138.3	2.1	33.3	0.0	96.3	414.0	632.3
1999	36.4	106.2	30.8	10.8	5.3	2.5	89.7	139.2	2.8	33.0	0.0	94.7	412.2	628.9
2000	40.4	R 107.5	28.3	12.4	5.2	3.6	85.3	134.8	2.5	35.7	0.0	98.4	419.2	643.0
2001	24.4	93.5	30.0	12.1	7.6	4.4	87.5	141.7	1.9	39.1	0.0	70.9	371.5	529.4
2002	24.4	96.5	29.2	21.3	7.4	3.3	79.8	141.0	0.5	28.6	0.0	73.4	364.4	528.0
2003	24.0	95.7	31.7	14.3	7.1	3.8	86.9	143.8	1.0	23.1	0.0	74.8	362.4	527.5
2004	24.9	98.1	34.1	19.7	7.3	4.1	88.3	153.5	1.3	34.2	0.0	76.5	388.6	557.8
2005	24.7	R 96.2	33.4	18.7	6.8	6.9	96.9	162.6	1.3	35.1	0.0	76.0	395.8	561.9
2006	24.1	104.8	30.8	R 17.0	6.4	2.5	94.3	R 151.0	1.0	R 34.8	0.0	77.3	R 393.0	R 560.3
2007	25.7	115.9	30.0	16.6	7.7	5.0	93.1	152.3	0.9	35.3	0.0	78.6	408.8	578.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	44	(s)	1,199	3,194	472	27	697	28,176	95	33,860	0	0	--	--	--
1965	9	1	803	3,276	2,624	37	596	31,173	75	38,584	0	0	--	--	--
1970	3	7	277	5,064	3,491	95	628	40,279	29	49,863	0	0	--	--	--
1975	(s)	4	215	6,691	5,629	97	752	44,766	577	58,726	0	0	--	--	--
1980	0	9	193	8,117	5,142	68	796	44,535	971	59,822	0	0	--	--	--
1985	0	6	154	8,038	7,781	123	724	43,232	155	60,209	628	0	--	--	--
1990	0	12	214	9,168	5,099	57	815	45,075	0	60,427	544	0	--	--	--
1995	0	19	129	12,926	9,969	134	778	53,061	0	76,997	3,877	0	--	--	--
1996	0	20	124	12,901	10,625	140	755	54,146	0	78,692	2,984	0	--	--	--
1997	0	20	137	13,295	R 10,892	137	797	52,898	10	R 78,166	4,291	0	--	--	--
1998	0	20	92	14,740	R 10,709	13	835	55,878	0	R 82,268	4,869	0	--	--	--
1999	0	22	141	15,422	12,591	7	843	58,819	1	87,824	5,401	0	--	--	--
2000	0	21	136	16,559	13,301	7	831	60,074	222	91,129	5,494	0	--	--	--
2001	0	19	95	16,221	11,588	13	761	60,719	179	89,576	5,579	0	--	--	--
2002	0	23	137	16,495	11,064	14	752	62,039	262	90,762	6,047	0	--	--	--
2003	0	20	93	15,864	11,977	79	695	62,484	70	91,264	6,512	0	--	--	--
2004	0	21	92	17,319	12,505	98	704	63,352	296	94,365	6,259	11	--	--	--
2005	0	22	102	17,508	12,656	99	701	63,344	234	94,645	R 4,911	25	--	--	--
2006	0	20	86	18,383	11,773	87	683	61,825	199	93,035	R 4,434	21	--	--	--
2007	0	20	87	19,515	11,275	92	705	62,210	402	94,285	5,629	21	--	--	--
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	2.2	0.0	333.1	0.0	333.1
1990	0.0	12.1	1.1	53.4	28.9	0.2	4.9	236.8	0.0	325.3	1.9	0.0	339.3	0.0	339.3
1995	0.0	19.4	0.7	75.3	56.5	0.5	4.7	276.7	0.0	414.4	13.7	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	10.6	0.0	443.7	0.0	443.7
1997	0.0	19.9	0.7	77.4	R 61.8	0.5	4.8	275.8	0.1	421.0	15.2	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	R 443.4	17.2	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	19.1	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	19.4	0.0	513.4	0.0	513.4
2001	0.0	19.3	0.5	94.5	65.7	(s)	4.6	316.3	1.1	482.8	19.7	0.0	502.1	0.0	502.1
2002	0.0	23.3	0.7	96.1	62.7	(s)	4.6	323.1	1.6	488.9	21.4	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	23.0	0.0	511.6	0.0	511.6
2004	0.0	20.8	0.5	100.9	70.9	0.4	4.3	330.4	1.9	509.1	22.2	(s)	529.9	0.1	530.0
2005	0.0	22.5	0.5	102.0	71.8	0.4	4.2	330.5	1.5	510.9	R 17.4	0.1	533.5	0.2	533.7
2006	0.0	20.7	0.4	107.1	66.8	0.3	4.1	322.6	1.2	502.6	R 15.7	0.1	523.3	0.2	523.5
2007	0.0	20.7	0.4	113.7	63.9	0.3	4.3	324.7	2.5	509.8	19.9	0.1	530.7	0.2	530.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Minnesota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	(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	1,396	13,296	607	--	0	0	812	2,610	--
2005	20,008	26	78	232	1,109	1,420	12,835	645	--	0	0	1,582	7,754	--
2006	19,573	25	21	149	757	928	13,183	475	--	0	0	2,055	7,925	--
2007	19,178	35	70	397	336	803	13,103	558	--	0	0	2,639	6,858	--
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	7.7	0.0	0.0	(s)	2.5	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	328.9	10.8	0.3	1.2	5.9	7.4	123.2	6.7	5.5	0.0	0.0	9.3	28.2	519.9
2002	334.6	13.3	(s)	0.6	6.4	6.9	142.9	7.8	7.8	0.0	0.0	9.2	14.2	536.6
2003	366.7	16.8	0.3	1.2	7.9	9.4	139.8	7.4	10.4	0.0	0.0	10.0	-8.6	551.8
2004	353.8	<sup>R</sup> 12.9	0.4	0.8	7.3	8.4	138.6	6.1	7.9	0.0	0.0	8.1	8.9	544.8
2005	353.0	<sup>R</sup> 26.3	0.5	1.4	6.7	8.5	133.9	6.5	9.3	0.0	0.0	15.8	26.5	579.7
2006	345.1	25.1	0.1	0.9	4.6	5.6	137.6	4.7	8.9	0.0	0.0	20.4	27.0	574.3
2007	339.2	35.1	0.4	2.3	2.0	4.8	137.4	5.5	17.2	0.0	0.0	26.1	23.4	588.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh		Wood and Waste <sup>f,g</sup>				
1960	30	182	2,375	1,465	4,220	16,096	311	2,950	27,417	0	0	--	--	--	--	--
1965	40	244	2,796	1,460	4,720	18,539	489	5,232	33,237	0	0	--	--	--	--	--
1970	549	360	5,991	1,614	8,645	24,316	703	10,682	51,951	0	0	--	--	--	--	--
1975	1,440	230	9,852	1,475	8,180	27,811	12,063	9,813	69,194	0	0	--	--	--	--	--
1980	3,127	264	9,648	1,530	5,694	26,781	16,010	9,130	68,793	0	0	--	--	--	--	--
1985	4,519	227	13,461	4,111	4,672	27,586	1,319	6,940	58,088	4,332	0	--	--	--	--	--
1990	4,159	254	13,221	6,922	7,093	29,080	3,658	9,612	69,585	7,422	0	--	--	--	--	--
1995	4,606	288	14,065	7,573	6,810	34,017	2,607	9,424	74,494	8,013	0	--	--	--	--	--
1996	5,791	269	14,851	7,157	8,945	34,178	3,491	10,681	79,302	9,225	0	--	--	--	--	--
1997	6,273	256	16,654	R 7,916	3,091	35,393	5,317	11,227	R 79,597	10,813	0	--	--	--	--	--
1998	5,897	241	16,937	R 7,690	2,787	36,708	9,507	10,587	R 84,216	9,191	0	--	--	--	--	--
1999	6,206	307	17,510	9,658	5,312	38,422	5,843	10,786	87,531	8,428	0	--	--	--	--	--
2000	6,386	301	16,517	9,004	6,545	37,193	5,906	9,843	85,008	10,695	0	--	--	--	--	--
2001	8,488	333	16,995	8,411	7,526	36,481	9,883	9,810	89,106	9,924	0	--	--	--	--	--
2002	8,018	344	18,228	7,223	5,647	38,010	1,368	9,940	80,415	10,059	0	--	--	--	--	--
2003	9,691	266	19,610	9,193	6,672	38,676	3,592	11,405	89,147	10,902	0	--	--	--	--	--
2004	10,110	282	21,131	6,119	3,872	39,206	6,448	11,692	88,469	10,233	0	--	--	--	--	--
2005	9,882	302	20,143	5,902	3,198	39,765	3,282	11,923	84,213	10,078	0	--	--	--	--	--
2006	10,528	307	21,407	7,097	R 3,614	40,097	1,418	13,268	R 86,901	10,419	0	--	--	--	--	--
2007	10,037	364	22,909	4,366	3,080	40,534	1,449	13,191	85,528	9,359	0	--	--	--	--	--
Trillion Btu																
1960	0.8	187.9	13.8	7.8	16.9	84.6	2.0	17.9	143.0	0.0	0.0	46.6	0.0	27.5	0.0	405.7
1965	1.0	250.6	16.3	7.8	18.9	97.4	3.1	31.6	175.1	0.0	0.0	37.8	0.0	48.0	0.0	512.5
1970	13.2	369.4	34.9	8.7	32.7	127.7	4.4	64.1	272.6	0.0	0.0	33.5	0.0	58.2	0.0	746.9
1975	33.4	235.3	57.4	8.0	30.4	146.1	75.8	59.9	377.6	0.0	0.0	31.2	0.0	94.8	0.0	772.2
1980	75.0	270.9	56.2	8.3	20.9	140.7	100.7	55.8	382.6	0.0	0.0	38.1	0.0	67.9	0.0	834.5
1985	109.4	233.0	78.4	22.9	16.8	144.9	8.3	43.7	315.1	46.0	0.0	50.9	0.0	83.7	0.0	838.1
1990	103.9	261.9	77.0	39.0	25.7	152.8	23.0	59.0	376.4	78.5	0.0	84.8	(s)	111.8	0.0	1,017.5
1995	103.8	295.4	81.9	42.9	24.7	177.4	16.4	57.5	400.8	84.2	0.0	94.1	0.1	126.2	0.0	1,104.6
1996	127.8	277.5	86.5	40.6	32.3	178.3	21.9	64.8	424.4	96.9	0.0	85.6	0.2	126.4	0.0	1,138.7
1997	132.2	264.2	97.0	44.9	11.2	184.5	33.4	68.3	439.3	113.5	0.0	84.1	0.2	105.7	0.0	1,139.2
1998	125.9	252.4	98.7	43.6	10.1	191.3	59.8	64.7	468.1	96.4	0.0	63.9	0.2	125.2	0.0	1,132.2
1999	137.6	317.8	102.0	54.8	19.2	200.2	36.7	65.8	478.7	88.1	0.0	64.9	0.3	131.8	0.0	1,219.2
2000	147.5	312.1	96.2	51.1	23.6	193.8	37.1	60.0	461.8	111.5	0.0	75.2	0.3	119.0	0.0	1,227.4
2001	198.3	340.9	99.0	47.7	27.2	190.1	62.1	59.2	485.3	103.7	0.0	55.8	0.3	-16.9	0.0	1,167.4
2002	154.3	362.5	106.2	41.0	20.4	198.0	8.6	60.1	434.2	105.0	0.0	49.3	0.3	76.9	0.0	1,182.6
2003	178.9	265.8	114.2	52.1	24.2	201.4	22.6	69.4	484.0	113.6	0.0	44.9	0.4	93.5	0.0	1,181.2
2004	185.0	293.6	123.1	34.7	14.0	204.5	40.5	71.2	488.0	106.7	0.0	60.8	0.5	R 77.7	0.0	1,212.2
2005	176.3	310.7	117.3	33.5	11.6	207.5	20.6	72.8	463.3	105.2	0.0	R 62.2	0.6	65.2	0.0	R 1,183.4
2006	190.1	314.4	124.7	40.2	R 13.0	209.2	8.9	81.4	R 477.5	108.7	0.0	R 63.5	0.6	62.6	0.0	R 1,217.4
2007	184.9	374.9	133.4	24.8	11.1	211.5	9.1	81.0	470.9	98.2	0.0	63.9	0.6	46.0	0.0	1,239.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	0	24	23	13	2,450	2,486	1,375	--	--	2,089	--	--	--
1965	0	24	32	27	2,865	2,923	923	--	--	3,705	--	--	--
1970	0	37	89	75	5,129	5,293	515	--	--	6,880	--	--	--
1975	0	30	196	127	4,231	4,554	507	--	--	8,091	--	--	--
1980	(s)	29	7	44	2,201	2,252	507	--	--	9,964	--	--	--
1985	(s)	26	1	27	1,915	1,943	900	--	--	10,447	--	--	--
1990	(s)	25	1	12	2,158	2,171	458	--	--	12,266	--	--	--
1995	0	27	(s)	20	1,946	1,966	360	--	--	14,181	--	--	--
1996	0	30	1	22	2,397	2,420	374	--	--	14,965	--	--	--
1997	(s)	28	(s)	21	2,240	2,261	195	--	--	14,817	--	--	--
1998	0	25	1	24	2,124	2,150	174	--	--	16,392	--	--	--
1999	0	25	2	21	2,328	2,351	183	--	--	16,321	--	--	--
2000	0	27	1	35	3,998	4,035	196	--	--	17,193	--	--	--
2001	0	28	5	32	4,141	4,178	158	--	--	16,856	--	--	--
2002	0	26	1	9	2,942	2,952	160	--	--	17,844	--	--	--
2003	0	27	1	11	2,368	2,380	168	--	--	17,670	--	--	--
2004	0	24	5	15	2,191	2,211	173	--	--	17,580	--	--	--
2005	0	24	8	17	1,864	1,889	R 245	--	--	17,953	--	--	--
2006	0	21	(s)	14	R 1,881	R 1,895	R 223	--	--	18,276	--	--	--
2007	0	22	(s)	13	1,836	1,849	246	--	--	18,566	--	--	--
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	81.9	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	169.1
1990	(s)	25.9	(s)	0.1	7.8	7.9	9.2	(s)	(s)	41.9	84.8	96.8	181.5
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	114.5	205.9
1998	0.0	26.1	(s)	0.1	7.7	7.8	3.5	(s)	(s)	55.9	93.4	126.8	220.2
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	133.4	238.9
2001	0.0	28.5	(s)	0.2	15.0	15.2	3.2	(s)	(s)	57.5	104.4	128.2	232.6
2002	0.0	28.6	(s)	0.1	10.6	10.7	3.2	(s)	(s)	60.9	103.4	135.7	239.1
2003	0.0	26.1	(s)	0.1	8.6	8.7	3.4	(s)	(s)	60.3	98.4	133.0	231.5
2004	0.0	25.3	(s)	0.1	7.9	8.0	3.5	(s)	(s)	60.0	96.8	132.7	229.5
2005	0.0	25.2	(s)	0.1	6.7	6.9	R 4.9	(s)	(s)	61.3	R 98.2	134.0	R 232.2
2006	0.0	21.8	(s)	0.1	R 6.8	R 6.9	R 4.5	(s)	(s)	62.4	R 95.5	134.8	R 230.4
2007	0.0	22.8	(s)	0.1	6.6	6.7	4.9	(s)	(s)	63.3	97.8	136.7	234.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	0	15	28	0	432	79	18	557	0	--	--	1,278	--	--	--
1965	0	12	39	0	506	88	33	665	0	--	--	1,968	--	--	--
1970	0	24	108	0	905	91	45	1,149	0	--	--	3,019	--	--	--
1975	0	24	239	0	747	105	898	1,988	0	--	--	3,982	--	--	--
1980	2	21	24	0	388	122	3,405	3,940	0	--	--	5,110	--	--	--
1985	1	17	755	39	338	134	11	1,277	0	--	--	6,131	--	--	--
1990	(s)	18	400	6	381	165	0	952	0	--	--	7,407	--	--	--
1995	0	20	318	7	343	49	0	717	0	--	--	8,210	--	--	--
1996	0	22	397	6	423	57	0	883	0	--	--	8,615	--	--	--
1997	(s)	22	330	13	395	47	0	785	0	--	--	10,649	--	--	--
1998	0	21	366	7	375	49	0	796	0	--	--	11,519	--	--	--
1999	0	20	260	44	411	44	0	758	0	--	--	11,923	--	--	--
2000	0	22	261	8	706	45	0	1,019	0	--	--	12,287	--	--	--
2001	0	22	332	10	731	40	50	1,162	0	--	--	12,163	--	--	--
2002	0	21	262	8	519	33	0	822	0	--	--	12,588	--	--	--
2003	0	23	432	44	418	34	2	931	0	--	--	12,593	--	--	--
2004	0	22	207	9	387	38	9	649	0	--	--	12,750	--	--	--
2005	0	21	193	8	329	194	0	723	0	--	--	12,666	--	--	--
2006	0	19	200	6	R 332	32	0	R 570	0	--	--	12,949	--	--	--
2007	0	21	1,137	4	324	32	0	1,498	0	--	--	13,400	--	--	--
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	0.3	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	0.0	1.0	(s)	25.3	49.0	58.4	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	116.4
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	66.8	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	89.1	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	69.5	92.5	162.0
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	95.7	166.1
2003	0.0	22.5	2.5	0.2	1.5	0.2	(s)	4.5	0.0	0.6	0.4	43.0	70.9	94.8	165.7
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	70.6	96.3	166.8
2005	0.0	21.5	1.1	(s)	1.2	1.0	0.0	3.4	0.0	R 0.8	0.5	43.2	R 69.3	94.5	R 163.9
2006	0.0	19.7	1.2	(s)	1.2	0.2	0.0	2.6	0.0	R 0.7	0.5	44.2	R 67.7	95.5	R 163.3
2007	0.0	21.3	6.6	(s)	1.2	0.2	0.0	8.0	0.0	0.8	0.6	45.7	76.3	98.6	175.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	21	77	1,441	1,118	738	218	2,475	5,990	0	--	--	2,004	--	--	--
1965	31	105	1,590	1,117	610	149	4,430	7,896	0	--	--	3,517	--	--	--
1970	48	141	3,100	2,139	311	240	10,006	15,795	0	--	--	5,101	--	--	--
1975	24	107	4,455	2,739	218	778	9,176	17,366	0	--	--	6,814	--	--	--
1980	53	79	3,527	2,952	73	2,172	8,566	17,290	0	--	--	8,184	--	--	--
1985	251	105	3,814	2,187	751	89	6,480	13,321	0	--	--	9,147	--	--	--
1990	271	108	3,851	4,423	578	947	9,140	18,937	0	--	--	12,454	--	--	--
1995	287	88	3,881	4,448	427	81	8,989	17,826	0	--	--	15,477	--	--	--
1996	233	84	3,858	6,061	430	112	10,294	20,755	0	--	--	16,043	--	--	--
1997	238	88	4,643	397	488	31	10,812	16,371	0	--	--	14,622	--	--	--
1998	213	82	4,051	280	370	153	10,127	14,981	0	--	--	14,599	--	--	--
1999	184	124	3,926	2,232	733	11	10,308	17,211	0	--	--	15,735	--	--	--
2000	155	120	3,275	1,727	758	7	9,373	15,140	0	--	--	15,856	--	--	--
2001	154	103	3,700	2,631	1,086	195	9,362	16,974	0	--	--	15,268	--	--	--
2002	149	106	3,497	2,113	1,176	121	9,546	16,454	0	--	--	15,021	--	--	--
2003	146	94	3,246	3,843	1,239	169	11,005	19,503	0	--	--	15,281	--	--	--
2004	160	106	4,175	1,251	1,415	310	11,275	18,426	0	--	--	15,702	--	--	--
2005	121	99	3,188	960	1,383	294	11,577	17,402	0	--	--	15,282	--	--	--
2006	R 151	104	2,845	R 1,369	1,483	66	12,869	R 18,631	0	--	--	15,712	--	--	--
2007	142	111	3,113	891	628	115	12,787	17,532	0	--	--	16,187	--	--	--
Trillion Btu															
1960	0.5	79.3	8.4	4.5	3.9	1.4	15.2	33.4	0.0	18.5	0.0	6.8	138.5	16.9	155.4
1965	0.8	108.5	9.3	4.5	3.2	0.9	27.2	45.1	0.0	19.0	0.0	12.0	185.3	28.7	214.0
1970	1.2	144.4	18.1	8.1	1.6	1.5	60.3	89.6	0.0	23.0	0.0	17.4	275.6	42.1	317.7
1975	0.6	109.1	26.0	10.2	1.1	4.9	56.3	98.4	0.0	20.8	0.0	23.3	252.1	55.9	308.0
1980	1.2	81.5	20.5	10.8	0.4	13.7	52.6	98.0	0.0	27.7	0.0	27.9	236.4	67.3	303.7
1985	5.9	108.1	22.2	7.9	3.9	0.6	41.0	75.6	0.0	32.5	0.0	31.2	253.2	71.9	325.1
1990	6.3	111.6	22.4	16.0	3.0	6.0	56.3	103.7	0.0	74.7	0.0	42.5	338.8	98.3	437.1
1995	6.9	89.9	22.6	16.1	2.2	0.5	55.0	96.4	0.0	85.9	0.0	52.8	331.9	119.9	451.8
1996	5.6	87.0	22.5	21.9	2.2	0.7	62.6	109.9	0.0	77.1	0.0	54.7	334.2	124.5	458.7
1997	5.6	90.8	27.0	1.4	2.5	0.2	65.9	97.1	0.0	79.6	0.0	49.9	323.0	113.0	436.0
1998	5.1	86.6	23.6	1.0	1.9	1.0	62.0	89.5	0.0	59.9	0.0	49.8	291.0	113.0	404.0
1999	4.4	129.2	22.9	8.1	3.8	0.1	63.0	97.9	0.0	60.7	(s)	53.7	346.0	122.8	468.8
2000	3.7	125.6	19.1	6.2	3.9	(s)	57.3	86.6	0.0	70.6	(s)	54.1	340.7	123.1	463.7
2001	3.7	105.6	21.5	9.5	5.7	1.2	56.6	94.6	0.0	52.1	(s)	52.1	308.2	116.1	424.2
2002	3.6	114.0	20.4	7.6	6.1	0.8	57.8	92.7	0.0	45.5	(s)	51.3	307.1	114.2	421.4
2003	3.5	92.4	18.9	13.9	6.5	1.1	67.1	107.5	0.0	41.0	(s)	52.1	296.6	115.1	411.6
2004	3.7	111.5	24.3	4.5	7.4	1.9	68.8	107.0	0.0	56.7	(s)	53.6	332.5	118.5	451.1
2005	2.9	102.1	18.6	3.5	7.2	1.9	70.7	101.8	0.0	56.5	(s)	52.1	315.5	114.0	429.5
2006	3.6	105.9	16.6	R 4.9	7.7	0.4	79.1	R 108.8	0.0	58.3	(s)	53.6	R 330.3	115.9	R 446.2
2007	3.4	114.1	18.1	3.2	3.3	0.7	78.7	104.0	0.0	58.2	(s)	55.2	335.0	119.2	454.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	(s)	31	170	882	1,465	220	292	15,279	11	18,320	0	0	--	--	--
1965	(s)	45	463	1,136	1,460	233	312	17,842	301	21,747	0	0	--	--	--
1970	(s)	59	318	2,690	1,614	472	283	23,914	3	29,293	0	0	--	--	--
1975	(s)	38	203	4,696	1,475	464	307	27,489	1,184	35,817	0	0	--	--	--
1980	0	39	206	6,020	1,530	152	315	26,585	5,355	40,163	0	0	--	--	--
1985	0	25	108	8,830	4,111	232	286	26,701	1,110	41,379	0	0	--	--	--
1990	0	38	132	8,920	6,922	131	322	28,337	1,532	46,296	0	0	--	--	--
1995	0	42	100	9,825	7,573	72	307	33,540	2,519	53,937	54	0	--	--	--
1996	0	49	61	10,506	7,157	64	298	33,690	1,675	53,451	6	0	--	--	--
1997	0	45	66	11,629	R 7,916	58	315	34,858	1,251	R 56,094	0	0	--	--	--
1998	0	36	99	12,458	R 7,690	7	330	36,290	1,040	R 57,913	0	0	--	--	--
1999	0	32	80	13,260	9,658	341	333	37,644	916	62,232	0	0	--	--	--
2000	0	31	98	12,927	9,004	114	328	36,391	1,366	60,228	0	0	--	--	--
2001	0	30	106	12,909	8,411	24	301	35,355	1,291	58,397	0	0	--	--	--
2002	0	27	79	14,436	7,223	72	297	36,801	1,224	60,133	0	0	--	--	--
2003	0	26	69	15,896	9,193	43	275	37,402	821	63,699	0	(s)	--	--	--
2004	0	22	114	16,700	6,119	43	278	37,753	1,681	62,689	0	(s)	--	--	--
2005	0	22	45	16,664	5,902	45	277	38,188	600	61,721	R 33	(s)	--	--	--
2006	0	22	109	18,333	7,097	32	270	38,582	703	65,127	R 30	(s)	--	--	--
2007	0	27	108	18,590	4,366	30	279	39,874	684	63,931	97	(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	0.0	0.0	250.7	0.0	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	R 304.7	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	R 314.4	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	30.9	0.5	75.2	47.7	0.1	1.8	184.2	8.1	317.6	0.0	0.0	348.6	0.0	348.6
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
2005	0.0	22.1	0.2	97.1	33.5	0.2	1.7	199.3	3.8	335.6	R 0.1	(s)	357.8	(s)	357.8
2006	0.0	22.5	0.6	106.8	40.2	0.1	1.6	201.3	4.4	355.1	R 0.1	(s)	377.6	(s)	377.6
2007	0.0	28.1	0.5	108.3	24.8	0.1	1.7	208.1	4.3	347.8	0.3	(s)	375.9	(s)	375.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Mississippi

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	0	--	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	--
2005	9,760	136	2,388	90	0	2,478	10,078	0	--	0	0	0	0	--
2006	10,378	140	650	28	0	678	10,419	0	--	0	0	0	0	--
2007	9,895	183	650	69	0	719	9,359	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	194.6	153.7	52.5	0.3	0.0	52.8	103.7	0.0	0.0	0.0	0.0	0.0	0.0	504.7
2002	150.7	167.8	0.1	0.2	0.0	0.3	105.0	0.0	0.0	0.0	0.0	0.0	0.0	423.9
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
2005	173.4	139.9	15.0	0.5	0.0	15.5	105.2	0.0	0.0	0.0	0.0	0.0	0.0	434.0
2006	186.4	144.4	4.1	0.2	0.0	4.2	108.7	0.0	0.0	0.0	0.0	0.0	0.0	443.8
2007	181.5	188.7	4.1	0.4	0.0	4.5	98.2	0.0	0.0	0.0	0.0	0.0	0.0	472.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	7,509	261	12,817	1,249	5,994	40,807	3,179	10,815	74,860	0	726	--	--	--	--	--
1965	8,534	341	13,803	3,625	7,692	45,015	3,449	13,310	86,894	0	802	--	--	--	--	--
1970	12,863	430	16,235	8,074	11,771	56,041	3,570	13,097	108,789	0	927	--	--	--	--	--
1975	19,955	370	17,819	8,311	12,995	62,342	2,521	11,952	115,940	0	1,280	--	--	--	--	--
1980	24,845	318	18,390	6,268	9,121	58,966	1,427	17,466	111,638	0	558	--	--	--	--	--
1985	24,733	260	19,987	5,889	5,583	60,036	732	13,699	105,926	8,030	2,993	--	--	--	--	--
1990	25,836	239	21,188	6,647	6,874	63,994	620	15,629	114,952	7,998	2,192	--	--	--	--	--
1995	31,753	279	24,122	11,425	11,085	68,930	354	12,675	128,592	8,242	1,919	--	--	--	--	--
1996	34,382	294	27,137	12,133	12,965	69,947	360	10,787	133,330	8,890	1,314	--	--	--	--	--
1997	36,860	283	28,760	R 12,325	11,200	70,581	253	9,219	R 132,338	8,955	1,593	--	--	--	--	--
1998	38,549	259	36,172	R 12,758	8,134	71,675	233	10,619	R 139,592	8,517	2,347	--	--	--	--	--
1999	37,975	266	36,225	12,760	12,671	71,189	140	12,484	145,470	8,587	1,853	--	--	--	--	--
2000	38,300	285	28,818	4,906	10,820	73,852	109	10,318	128,823	9,992	600	--	--	--	--	--
2001	39,812	284	29,913	7,493	12,897	72,510	141	13,904	136,858	8,384	1,104	--	--	--	--	--
2002	40,885	276	29,381	9,535	12,722	73,737	112	12,979	138,465	8,390	1,357	--	--	--	--	--
2003	45,028	263	31,143	8,048	12,360	76,754	118	12,033	140,456	9,700	652	--	--	--	--	--
2004	45,635	264	33,955	3,999	12,234	77,040	161	15,370	142,759	7,831	1,480	--	--	--	--	--
2005	R 47,033	268	33,124	6,599	10,795	76,998	110	14,590	142,215	8,031	1,159	--	--	--	--	--
2006	R 46,884	R 253	33,474	6,574	8,917	77,084	70	14,933	141,051	10,117	199	--	--	--	--	--
2007	45,357	272	34,364	6,339	10,573	77,817	38	12,803	141,934	9,372	1,204	--	--	--	--	--
Trillion Btu																
1960	170.9	270.1	74.7	7.0	24.0	214.4	20.0	64.6	404.6	0.0	7.8	33.6	0.0	13.9	0.0	900.9
1965	189.6	348.0	80.4	20.4	30.9	236.5	21.7	78.6	468.4	0.0	8.4	27.0	0.0	8.1	0.0	1,049.5
1970	279.2	432.5	94.6	45.7	44.5	294.4	22.4	79.8	581.3	0.0	9.7	23.6	0.0	-7.4	0.0	1,319.0
1975	430.2	R 371.8	103.8	47.0	48.3	327.5	15.9	73.6	616.0	0.0	13.3	27.1	0.0	-42.5	0.0	1,416.0
1980	531.4	R 322.9	107.1	35.5	33.5	309.8	9.0	102.2	597.0	0.0	5.8	25.1	0.0	-22.0	-0.1	1,460.1
1985	529.7	R 264.3	116.4	33.3	20.1	315.4	4.6	80.7	570.6	85.3	31.3	31.1	0.0	-82.3	-0.2	1,429.8
1990	539.6	241.3	123.4	37.6	24.9	336.2	3.9	92.2	618.2	84.6	22.8	17.9	0.2	-5.8	2.2	1,521.1
1995	593.7	281.1	140.5	64.8	40.2	359.5	2.2	77.7	684.8	86.6	19.8	16.3	0.2	3.4	(s)	1,685.9
1996	631.1	R 297.2	158.1	68.8	46.8	364.8	2.3	66.9	707.7	93.4	13.6	17.0	0.2	9.7	-0.8	1,769.1
1997	670.6	R 286.1	167.5	69.9	40.5	367.9	1.6	56.6	R 704.1	94.0	16.3	14.3	0.2	-20.4	-0.7	1,764.4
1998	695.7	261.5	210.7	72.3	29.4	373.6	1.5	64.8	R 752.3	89.3	23.9	13.3	0.2	-29.2	(s)	R 1,807.0
1999	687.2	R 269.3	211.0	72.3	45.8	371.0	0.9	76.5	777.6	89.7	18.9	13.6	0.2	-13.1	-0.2	1,843.2
2000	688.9	R 289.0	167.9	27.8	39.0	384.8	0.7	63.2	683.3	104.2	6.1	14.2	0.2	3.0	-1.0	1,788.1
2001	716.4	288.6	174.2	42.5	46.6	377.8	0.9	85.8	727.8	87.6	11.4	17.8	0.2	-24.1	(s)	1,825.7
2002	725.7	R 277.0	171.1	54.1	46.0	384.0	0.7	79.7	735.6	87.6	13.8	16.6	0.2	-9.4	-0.1	1,846.9
2003	795.6	R 267.0	181.4	45.6	44.9	399.7	0.7	74.2	746.5	101.1	6.7	17.1	0.2	-87.2	-1.1	1,845.9
2004	807.5	R 268.4	197.8	22.7	44.3	401.8	1.0	95.0	762.5	81.7	14.8	17.6	0.2	-90.5	-1.0	1,861.2
2005	835.7	273.4	192.9	37.4	39.1	401.8	0.7	90.1	762.0	83.8	11.6	R 19.8	0.2	-56.5	(s)	R 1,930.0
2006	829.1	R 258.0	195.0	37.3	32.1	402.2	0.4	92.0	759.1	105.6	2.0	R 18.9	0.2	-56.6	-0.1	R 1,916.1
2007	802.4	277.6	200.2	35.9	38.0	406.1	0.2	78.5	758.9	98.3	11.9	20.5	0.2	-5.7	-0.1	1,964.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	699	111	1,330	240	4,687	6,257	1,293	--	--	4,223	--	--	--
1965	172	130	1,056	138	6,139	7,332	898	--	--	5,977	--	--	--
1970	52	157	1,312	69	8,934	10,315	674	--	--	9,672	--	--	--
1975	47	155	1,435	28	9,528	10,992	704	--	--	13,654	--	--	--
1980	17	143	1,246	57	4,991	6,294	911	--	--	18,648	--	--	--
1985	34	128	847	95	3,496	4,437	1,155	--	--	18,483	--	--	--
1990	57	116	412	29	4,193	4,634	669	--	--	21,652	--	--	--
1995	27	125	436	32	5,841	6,309	586	--	--	25,409	--	--	--
1996	25	137	330	56	7,840	8,227	609	--	--	26,448	--	--	--
1997	29	128	311	45	7,148	7,504	478	--	--	26,595	--	--	--
1998	18	111	294	49	5,105	5,449	424	--	--	28,265	--	--	--
1999	27	112	306	55	6,848	7,210	447	--	--	27,766	--	--	--
2000	19	115	308	69	5,986	6,363	480	--	--	29,581	--	--	--
2001	23	116	404	78	8,994	9,476	470	--	--	30,168	--	--	--
2002	23	114	290	51	6,788	7,129	477	--	--	31,684	--	--	--
2003	25	115	200	72	6,550	6,822	502	--	--	31,422	--	--	--
2004	19	110	192	87	5,591	5,871	515	--	--	31,351	--	--	--
2005	17	107	161	79	4,594	4,834	R 610	--	--	34,412	--	--	--
2006	R 19	95	151	66	R 4,344	R 4,561	R 555	--	--	33,880	--	--	--
2007	18	102	143	54	4,763	4,960	612	--	--	35,872	--	--	--
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	R 130.3	4.9	0.5	12.6	18.1	23.1	0.0	0.0	63.1	235.2	145.2	380.4
1990	1.2	117.2	2.4	0.2	15.2	17.8	13.4	(s)	0.2	73.9	223.7	170.8	394.5
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	446.0
1996	0.6	R 138.7	1.9	0.3	28.3	30.6	12.2	0.1	0.2	90.2	272.1	205.2	477.3
1997	0.7	R 128.9	1.8	0.3	25.8	27.9	9.6	0.1	0.2	90.7	257.6	205.6	463.2
1998	0.4	R 112.0	1.7	0.3	18.5	20.4	8.5	0.1	0.1	96.4	237.9	218.7	456.6
1999	0.6	R 113.5	1.8	0.3	24.8	26.9	8.9	0.1	0.1	94.7	244.8	216.7	461.5
2000	0.4	R 117.2	1.8	0.4	21.6	23.8	9.6	0.1	0.1	100.9	251.7	229.6	481.3
2001	0.5	116.9	2.4	0.4	32.5	35.3	9.4	0.1	0.1	102.9	265.3	229.4	494.6
2002	0.5	114.7	1.7	0.3	24.5	26.5	9.5	0.1	0.1	108.1	259.5	241.0	500.5
2003	0.6	R 116.5	1.2	0.4	23.8	25.3	10.0	0.1	0.1	107.2	259.4	236.6	496.0
2004	0.4	R 111.6	1.1	0.5	20.2	21.8	10.3	0.1	0.1	107.0	250.9	236.7	487.6
2005	0.4	109.0	0.9	0.4	16.6	18.0	R 12.2	0.1	(s)	117.4	R 257.2	256.8	R 514.0
2006	R 0.5	97.3	0.9	0.4	R 15.7	R 16.9	R 11.1	0.2	(s)	115.6	R 241.6	250.0	R 491.6
2007	0.4	103.5	0.8	0.3	17.1	18.2	12.2	0.2	(s)	122.4	257.0	264.1	521.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	486	33	1,101	1,507	827	113	1,366	4,914	0	--	--	3,314	--	--	--
1965	129	41	873	865	1,083	133	1,508	4,463	0	--	--	4,473	--	--	--
1970	41	88	1,085	433	1,577	153	1,654	4,901	0	--	--	6,168	--	--	--
1975	109	91	1,187	179	1,681	159	764	3,971	0	--	--	7,639	--	--	--
1980	65	76	1,001	171	881	223	554	2,830	0	--	--	12,986	--	--	--
1985	122	60	1,521	33	617	262	121	2,554	0	--	--	15,205	--	--	--
1990	227	59	1,026	8	740	239	60	2,073	0	--	--	19,335	--	--	--
1995	183	65	1,190	10	1,031	99	1	2,331	0	--	--	22,514	--	--	--
1996	180	73	1,309	27	1,383	116	6	2,841	0	--	--	23,462	--	--	--
1997	237	70	1,169	21	1,261	145	33	2,629	0	--	--	23,831	--	--	--
1998	148	62	1,160	18	901	122	34	2,235	0	--	--	24,925	--	--	--
1999	199	63	1,023	17	1,209	305	26	2,580	0	--	--	25,138	--	--	--
2000	157	63	1,118	22	1,056	263	31	2,490	0	--	--	26,962	--	--	--
2001	189	65	1,558	23	1,587	332	29	3,530	0	--	--	27,210	--	--	--
2002	165	62	994	18	1,198	290	30	2,530	0	--	--	27,946	--	--	--
2003	167	62	816	21	1,156	286	22	2,301	0	--	--	27,987	--	--	--
2004	174	62	851	31	987	236	16	2,120	0	--	--	28,391	--	--	--
2005	198	60	520	30	811	290	17	1,668	0	--	--	29,640	--	--	--
2006	R 197	57	435	17	R 767	57	9	R 1,285	0	--	--	29,800	--	--	--
2007	161	59	368	9	841	58	6	1,282	0	--	--	31,126	--	--	--
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	R 77.3	5.8	1.0	3.2	1.2	3.5	14.7	0.0	0.5	0.0	44.3	138.1	106.8	244.9
1985	2.8	R 61.4	8.9	0.2	2.2	1.4	0.8	13.4	0.0	0.5	0.0	51.9	129.9	119.5	249.4
1990	5.0	60.0	6.0	(s)	2.7	1.3	0.4	10.3	0.0	1.5	0.0	66.0	142.8	152.6	295.3
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	174.4	333.8
1996	4.1	R 73.6	7.6	0.2	5.0	0.6	(s)	13.4	0.0	1.7	0.0	80.1	172.6	182.0	354.7
1997	5.4	R 70.5	6.8	0.1	4.6	0.8	0.2	12.5	0.0	1.7	0.0	81.3	171.2	184.2	355.4
1998	3.3	R 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	356.2
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	364.0
2000	3.5	R 63.6	6.5	0.1	3.8	1.4	0.2	12.0	0.0	1.6	0.0	92.0	172.5	209.3	381.7
2001	4.3	65.3	9.1	0.1	5.7	1.7	0.2	16.9	0.0	1.7	0.0	92.8	181.0	206.9	387.9
2002	3.8	62.2	5.8	0.1	4.3	1.5	0.2	11.9	0.0	1.7	0.0	95.4	175.0	212.6	387.5
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	174.2	210.7	384.9
2004	4.0	R 62.8	5.0	0.2	3.6	1.2	0.1	10.0	0.0	1.7	0.0	96.9	175.2	214.3	389.5
2005	4.6	61.6	3.0	0.2	2.9	1.5	0.1	7.8	0.0	R 1.9	0.0	101.1	177.0	221.2	R 398.2
2006	4.6	57.9	2.5	0.1	2.8	0.3	0.1	5.8	0.0	R 1.8	0.0	101.7	171.7	219.9	R 391.5
2007	3.7	60.3	2.1	0.1	3.0	0.3	(s)	5.6	0.0	1.9	0.0	106.2	177.7	229.1	406.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,605	79	5,722	437	3,074	1,630	6,556	17,419	0	--	--	3,890	--	--
1965	2,534	114	5,097	423	3,224	1,710	9,284	19,739	0	--	--	5,872	--	--
1970	1,921	110	5,689	1,175	2,767	1,620	11,681	22,932	0	--	--	9,939	--	--
1975	2,065	90	5,765	1,712	2,707	1,242	10,753	22,178	0	--	--	11,782	--	--
1980	1,595	78	4,782	3,182	1,866	703	16,042	26,575	0	--	--	11,018	--	--
1985	1,798	66	4,146	1,333	1,076	557	12,587	19,699	0	--	--	12,625	--	--
1990	1,321	55	3,494	1,823	663	519	14,511	21,011	0	--	--	12,937	--	--
1995	1,102	69	3,018	4,102	1,676	319	10,498	19,614	0	--	--	14,321	--	--
1996	1,118	71	3,181	3,644	1,677	309	9,711	18,523	0	--	--	14,915	--	--
1997	1,401	71	3,550	2,733	1,688	180	8,060	16,211	0	--	--	15,267	--	--
1998	1,218	64	3,785	2,108	1,033	182	9,438	16,546	0	--	--	15,801	--	--
1999	1,203	64	4,869	4,555	915	109	11,349	21,798	0	--	--	16,122	--	--
2000	941	68	3,641	3,712	902	72	9,156	17,484	0	--	--	16,080	--	--
2001	1,015	68	4,128	2,053	1,745	108	11,846	19,881	0	--	--	15,815	--	--
2002	994	67	4,627	4,658	1,848	71	11,144	22,348	0	--	--	15,341	--	--
2003	1,001	62	4,753	4,538	1,944	84	10,933	22,251	0	--	--	14,831	--	--
2004	1,063	64	5,774	5,545	2,254	126	14,083	27,781	0	--	--	14,303	--	--
2005	1,052	66	5,293	5,277	2,144	79	13,359	26,153	0	--	--	16,869	--	--
2006	1,065	R 66	5,187	R 3,645	2,247	51	13,922	R 25,052	0	--	--	18,316	--	--
2007	1,083	68	5,804	4,810	1,214	29	11,788	23,645	0	--	--	18,515	--	--
Trillion Btu														
1960	62.2	81.7	33.3	1.8	16.1	10.2	41.3	102.8	0.0	7.3	0.0	13.3	267.2	300.1
1965	59.9	116.4	29.7	1.7	16.9	10.8	56.9	116.0	0.0	8.7	0.0	20.0	321.1	368.9
1970	43.8	110.4	33.1	4.4	14.5	10.2	71.5	133.8	0.0	9.9	0.0	33.9	331.8	413.8
1975	45.7	90.7	33.6	6.4	14.2	7.8	66.6	128.5	0.0	12.7	0.0	40.2	317.9	414.5
1980	36.0	79.3	27.9	11.7	9.8	4.4	93.8	147.6	0.0	6.4	0.0	37.6	306.9	397.5
1985	41.2	R 66.8	24.2	4.8	5.7	3.5	74.2	112.3	0.0	7.5	0.0	43.1	270.8	370.0
1990	30.4	55.1	20.4	6.6	3.5	3.3	85.5	119.2	0.0	3.1	0.0	44.1	252.0	354.1
1995	25.5	69.4	17.6	14.9	8.7	2.0	64.7	107.8	0.0	2.7	0.0	48.9	254.3	365.3
1996	25.9	R 72.0	18.5	13.2	8.7	1.9	60.5	102.9	0.0	2.8	0.0	50.9	254.3	370.0
1997	32.0	R 71.6	20.7	9.9	8.8	1.1	49.8	90.3	0.0	2.6	0.0	52.1	248.3	366.3
1998	27.9	65.0	22.0	7.6	5.4	1.1	57.8	94.0	0.0	2.5	0.0	53.9	243.3	365.6
1999	27.6	65.2	28.4	16.5	4.8	0.7	69.8	120.0	0.0	2.6	0.0	55.0	270.4	396.3
2000	21.8	R 69.5	21.2	13.4	4.7	0.5	56.3	96.0	0.0	2.2	0.0	54.9	244.2	368.9
2001	23.3	68.3	24.0	7.4	9.1	0.7	73.5	114.8	0.0	6.8	0.0	54.0	267.1	387.3
2002	23.0	67.3	27.0	16.8	9.6	0.4	68.8	122.6	0.0	5.3	0.0	52.3	270.6	387.3
2003	23.1	R 62.6	27.7	16.5	10.1	0.5	67.6	122.4	0.0	5.3	0.0	50.6	263.8	375.4
2004	24.4	R 65.5	33.6	20.1	11.8	0.8	87.4	153.6	0.0	5.6	0.0	48.8	297.7	405.7
2005	24.0	67.7	30.8	19.1	11.2	0.5	82.9	144.5	0.0	5.7	0.0	57.6	299.4	425.3
2006	24.2	R 67.0	30.2	R 13.1	11.7	0.3	86.0	R 141.4	0.0	R 5.9	0.0	62.5	R 301.0	R 436.1
2007	24.3	69.0	33.8	17.3	6.3	0.2	72.4	130.1	0.0	6.1	0.0	63.2	292.6	428.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	45	8	1,844	4,485	1,249	43	669	37,620	34	45,943	0	2	--	--	--
1965	8	9	2,323	6,685	3,625	47	701	41,658	154	55,191	0	0	--	--	--
1970	3	13	179	7,990	8,074	85	735	53,122	163	70,349	0	0	--	--	--
1975	(s)	7	184	8,721	8,311	74	793	59,476	141	77,698	0	0	--	--	--
1980	0	6	162	10,824	6,268	68	932	56,877	142	75,272	0	0	--	--	--
1985	0	4	135	13,271	5,889	138	848	58,698	38	79,017	34	0	--	--	--
1990	0	5	126	16,049	6,647	117	955	63,092	34	87,019	623	0	--	--	--
1995	0	7	109	19,195	11,425	112	911	67,155	21	98,928	561	16	--	--	--
1996	0	7	108	22,090	12,133	98	884	68,154	18	103,484	295	19	--	--	--
1997	0	7	160	23,455	R 12,325	57	934	68,748	15	R 105,694	163	18	--	--	--
1998	0	6	136	30,232	R 12,758	20	977	70,520	4	R 114,648	186	19	--	--	--
1999	0	7	75	29,324	12,760	59	988	69,969	5	113,179	399	20	--	--	--
2000	0	8	98	23,159	4,906	66	973	72,687	6	101,894	685	19	--	--	--
2001	0	2	146	23,509	7,493	263	891	70,433	4	102,738	614	20	--	--	--
2002	0	3	119	23,249	9,535	78	881	71,599	10	105,471	1,476	29	--	--	--
2003	0	3	104	25,134	8,048	116	814	74,523	13	108,752	2,098	30	--	--	--
2004	0	3	124	26,985	3,999	111	825	74,551	18	106,612	2,230	10	--	--	--
2005	0	3	188	26,907	6,599	113	821	74,563	14	109,206	R 2,751	19	--	--	--
2006	0	2	128	27,563	6,574	161	800	74,780	9	110,014	R 2,749	19	--	--	--
2007	0	3	126	27,909	6,339	159	826	76,546	3	111,907	3,856	20	--	--	--
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	0.1	0.0	430.0	0.0	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	1.0	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	R 571.7	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)	R 622.7	0.7	0.1	R 628.4	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	2.4	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	5.2	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	7.4	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	7.9	(s)	578.3	0.1	578.3
2005	0.0	2.7	0.9	156.7	37.4	0.4	5.0	389.1	0.1	589.6	R 9.7	0.1	592.4	0.1	592.5
2006	0.0	2.5	0.6	160.6	37.3	0.6	4.8	390.2	0.1	594.2	R 9.7	0.1	596.8	0.1	596.9
2007	0.0	2.8	0.6	162.6	35.9	0.6	5.0	399.5	(s)	604.2	13.6	0.1	607.1	0.1	607.3

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Missouri

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	45,765	32	0	242	113	355	8,031	1,159	--	0	0	0	10	--
2006	45,603	32	0	138	0	138	10,117	199	--	0	0	0	3	--
2007	44,094	41	0	139	0	139	9,372	1,204	--	0	0	0	1	--
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)	752.5
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	R 30.9	(s)	3.4	0.0	3.4	104.2	6.1	0.7	0.0	0.0	0.0	0.0	808.6
2001	688.2	R 36.1	(s)	1.8	5.5	7.4	87.6	11.4	R (s)	0.0	0.0	0.0	0.0	830.6
2002	698.3	30.2	(s)	1.3	4.6	5.9	87.6	13.8	(s)	0.0	0.0	0.0	0.0	835.8
2003	768.1	R 22.1	0.0	1.4	0.5	1.9	101.1	6.7	(s)	0.0	0.0	0.0	(s)	899.8
2004	778.5	R 25.1	0.0	0.9	1.3	2.2	81.7	14.8	(s)	0.0	0.0	0.0	(s)	R 902.3
2005	806.7	32.5	0.0	1.4	0.7	2.1	83.8	11.6	0.0	0.0	0.0	0.0	(s)	936.7
2006	799.8	33.3	0.0	0.8	0.0	0.8	105.6	2.0	0.1	0.0	0.0	0.0	(s)	941.6
2007	774.0	42.0	0.0	0.8	0.0	0.8	98.3	11.9	0.2	0.0	0.0	0.0	(s)	927.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	253	56	4,898	265	737	6,922	2,063	4,234	19,118	0	5,801	--	--	--	--	--
1965	370	71	4,962	384	926	7,709	1,241	4,587	19,809	0	8,389	--	--	--	--	--
1970	763	88	4,827	649	1,326	9,262	1,268	5,338	22,670	0	8,745	--	--	--	--	--
1975	1,149	80	7,586	818	1,370	10,630	2,178	5,105	27,687	0	10,166	--	--	--	--	--
1980	3,520	61	7,509	920	1,806	10,416	4,025	4,585	29,262	0	9,966	--	--	--	--	--
1985	5,713	47	10,444	678	1,576	10,188	133	4,301	27,320	0	10,175	--	--	--	--	--
1990	9,850	43	7,280	708	1,740	10,328	218	5,518	25,792	0	10,717	--	--	--	--	--
1995	10,272	58	8,049	1,052	918	11,328	236	6,425	28,008	0	10,746	--	--	--	--	--
1996	8,210	61	8,070	999	1,618	11,753	181	7,412	30,032	0	13,795	--	--	--	--	--
1997	9,653	60	9,037	R 793	277	11,480	162	6,782	R 28,530	0	13,406	--	--	--	--	--
1998	11,046	60	7,863	R 798	271	11,596	106	7,697	28,331	0	11,118	--	--	--	--	--
1999	11,074	62	7,921	836	527	11,768	20	9,540	30,614	0	13,822	--	--	--	--	--
2000	10,554	68	8,069	747	1,324	11,559	1	8,009	29,709	0	9,623	--	--	--	--	--
2001	11,000	65	8,476	756	1,400	11,640	2	6,213	28,488	0	6,613	--	--	--	--	--
2002	9,841	70	8,145	768	1,502	11,871	39	6,953	29,278	0	9,567	--	--	--	--	--
2003	11,127	68	7,721	832	2,151	11,846	6	6,009	28,566	0	8,702	--	--	--	--	--
2004	11,522	67	9,988	1,008	2,384	11,991	42	6,774	32,187	0	8,856	--	--	--	--	--
2005	11,822	68	11,465	1,112	2,455	11,770	106	6,617	33,527	0	9,587	--	--	--	--	--
2006	11,531	74	12,232	1,045	R 2,409	11,960	125	7,740	R 35,511	0	10,130	--	--	--	--	--
2007	12,041	74	13,880	1,026	2,993	12,079	0	8,261	38,239	0	9,364	--	--	--	--	--
Trillion Btu																
1960	4.0	57.6	28.5	1.4	3.0	36.4	13.0	24.9	107.1	0.0	62.4	7.5	0.0	-11.1	(s)	227.6
1965	5.5	70.8	28.9	2.1	3.7	40.5	7.8	27.8	110.8	0.0	87.7	7.8	0.0	-23.7	(s)	259.0
1970	12.0	90.6	28.1	3.6	5.0	48.7	8.0	32.8	126.1	0.0	91.8	6.6	0.0	-4.4	(s)	322.8
1975	18.6	81.2	44.2	4.6	5.1	55.8	13.7	31.2	154.6	0.0	105.8	6.2	0.0	-20.9	(s)	345.5
1980	60.2	61.5	43.7	5.2	6.6	54.7	25.3	28.1	163.6	0.0	103.5	11.1	0.0	-39.5	(s)	360.5
1985	99.1	47.3	60.8	3.8	5.7	53.5	0.8	27.0	151.7	0.0	106.3	14.4	(s)	-48.4	0.3	370.6
1990	168.8	44.4	42.4	4.0	6.3	54.3	1.4	34.0	142.3	0.0	111.5	11.7	0.1	-128.7	0.2	350.3
1995	175.3	59.6	46.9	5.9	3.3	59.1	1.5	39.5	156.1	0.0	110.8	16.4	0.1	-133.0	(s)	385.3
1996	138.8	63.3	47.0	5.7	5.8	61.3	1.1	45.6	166.5	0.0	142.6	15.7	0.1	-132.3	0.1	394.8
1997	162.6	61.7	52.6	4.5	1.0	59.8	1.0	41.6	160.6	0.0	136.9	16.2	0.1	-171.0	(s)	367.1
1998	186.1	61.4	45.8	4.5	1.0	60.4	0.7	47.3	159.7	0.0	113.4	14.7	0.1	-147.0	0.1	388.5
1999	186.8	63.6	46.1	4.7	1.9	61.3	0.1	59.0	173.2	0.0	141.3	15.4	0.3	-184.5	-0.1	396.0
2000	176.8	69.6	47.0	4.2	4.8	60.2	(s)	49.5	165.8	0.0	98.2	15.3	0.3	-117.9	(s)	407.9
2001	184.4	66.5	49.4	4.3	5.1	60.6	(s)	37.8	157.2	0.0	68.3	11.9	0.3	-132.8	(s)	355.8
2002	166.3	68.9	47.4	4.4	5.4	61.8	0.2	42.4	161.7	0.0	97.3	11.0	0.3	-128.8	0.2	376.9
2003	189.0	67.7	45.0	4.7	7.8	61.7	(s)	36.2	155.5	0.0	89.1	12.0	0.3	-144.0	(s)	369.6
2004	195.6	66.7	58.2	5.7	8.6	62.5	0.3	41.3	176.6	0.0	88.8	12.5	0.3	-147.3	-0.1	393.0
2005	199.5	71.1	66.8	6.3	8.9	61.4	0.7	40.2	184.2	0.0	95.9	R 13.4	0.3	-152.8	(s)	R 411.6
2006	194.3	75.1	71.2	5.9	R 8.7	62.4	0.8	47.4	R 196.4	0.0	100.5	R 13.4	4.6	-153.9	-0.7	R 429.8
2007	202.5	75.0	80.8	5.8	10.7	63.0	0.0	50.2	210.6	0.0	92.6	15.9	5.2	-139.4	-0.2	462.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	18	17	262	0	506	768	237	--	--	935	--	--	--
1965	13	20	277	0	636	914	182	--	--	1,216	--	--	--
1970	7	25	249	0	887	1,137	139	--	--	1,534	--	--	--
1975	3	24	589	0	973	1,562	153	--	--	2,143	--	--	--
1980	3	19	421	0	829	1,250	125	--	--	2,916	--	--	--
1985	2	19	309	9	604	923	195	--	--	3,614	--	--	--
1990	11	17	291	1	813	1,106	89	--	--	3,358	--	--	--
1995	1	20	218	1	473	691	86	--	--	3,640	--	--	--
1996	1	22	325	1	519	845	90	--	--	3,911	--	--	--
1997	9	21	685	2	152	838	95	--	--	3,804	--	--	--
1998	(s)	19	404	3	86	492	84	--	--	3,722	--	--	--
1999	(s)	20	225	1	342	569	89	--	--	3,664	--	--	--
2000	(s)	20	170	(s)	922	1,092	95	--	--	3,908	--	--	--
2001	(s)	20	170	1	940	1,110	52	--	--	3,886	--	--	--
2002	(s)	22	122	1	963	1,086	53	--	--	4,031	--	--	--
2003	(s)	20	190	4	1,637	1,831	56	--	--	4,120	--	--	--
2004	11	20	187	1	1,865	2,052	57	--	--	4,053	--	--	--
2005	12	20	169	1	1,824	1,994	R 110	--	--	4,221	--	--	--
2006	R 13	19	196	1	R 1,759	R 1,956	R 101	--	--	4,394	--	--	--
2007	(s)	20	197	1	1,960	2,157	111	--	--	4,542	--	--	--

  

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	(s)	(s)	11.5	35.5	26.5	61.9
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	65.6
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	29.5	68.9
2002	(s)	21.5	0.7	(s)	3.5	4.2	1.1	0.1	(s)	13.8	40.6	30.7	71.3
2003	(s)	20.2	1.1	(s)	5.9	7.1	1.1	0.1	(s)	14.1	42.5	31.0	73.5
2004	0.2	19.9	1.1	(s)	6.7	7.8	1.1	0.1	(s)	13.8	42.9	30.6	73.5
2005	0.2	20.6	1.0	(s)	6.6	7.6	R 2.2	0.1	(s)	14.4	R 45.1	31.5	R 76.6
2006	0.2	19.8	1.1	(s)	R 6.3	R 7.5	R 2.0	0.1	(s)	15.0	R 44.6	32.4	R 77.0
2007	(s)	20.0	1.1	(s)	7.0	8.2	2.2	0.1	(s)	15.5	46.0	33.4	79.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	12	12	297	466	89	135	2	989	0	--	--	688	--	--	--	
1965	10	14	315	227	112	144	1	800	0	--	--	925	--	--	--	
1970	5	19	283	94	157	220	1	755	0	--	--	1,187	--	--	--	
1975	7	19	668	54	172	174	2	1,071	0	--	--	1,645	--	--	--	
1980	11	14	346	0	146	92	7	591	0	--	--	2,094	--	--	--	
1985	6	15	772	(s)	107	72	126	1,077	0	--	--	4,245	--	--	--	
1990	46	12	154	(s)	143	84	11	392	0	--	--	3,237	--	--	--	
1995	9	13	102	(s)	83	13	3	202	0	--	--	3,411	--	--	--	
1996	4	15	229	(s)	92	19	2	343	0	--	--	3,603	--	--	--	
1997	74	14	162	(s)	27	12	1	201	0	--	--	3,577	--	--	--	
1998	4	13	114	(s)	15	14	1	144	0	--	--	3,649	--	--	--	
1999	3	12	142	(s)	60	14	2	219	0	--	--	3,359	--	--	--	
2000	3	14	143	(s)	163	14	1	320	0	--	--	4,104	--	--	--	
2001	3	13	197	(s)	166	14	0	377	0	--	--	4,190	--	--	--	
2002	3	15	137	1	170	15	0	323	0	--	--	4,338	--	--	--	
2003	2	15	167	2	289	15	1	474	0	--	--	4,438	--	--	--	
2004	97	13	294	3	329	15	0	641	0	--	--	4,330	--	--	--	
2005	R 133	13	163	7	322	15	0	508	0	--	--	4,473	--	--	--	
2006	R 127	13	215	(s)	R 310	16	0	R 541	0	--	--	4,686	--	--	--	
2007	2	13	175	(s)	346	15	0	536	0	--	--	4,828	--	--	--	
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	42.1	
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	0.0	0.2	0.1	11.0	26.6	25.5	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	31.9	61.9	
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	33.0	64.2	
2003	(s)	15.0	1.0	(s)	1.0	0.1	(s)	2.1	0.0	0.2	0.2	15.1	32.6	33.4	66.0	
2004	1.8	13.4	1.7	(s)	1.2	0.1	0.0	3.0	0.0	0.2	0.2	14.8	33.3	32.7	66.0	
2005	2.4	13.7	0.9	(s)	1.2	0.1	0.0	2.2	0.0	R 0.4	0.2	15.3	R 34.1	33.4	R 67.5	
2006	2.3	13.4	1.3	(s)	1.1	0.1	0.0	2.5	0.0	R 0.3	0.2	16.0	R 34.6	34.6	R 69.2	
2007	(s)	13.4	1.0	(s)	1.2	0.1	0.0	2.3	0.0	0.3	0.1	16.5	32.8	35.5	68.3	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	36	26	1,500	112	816	1,684	2,624	6,737	0	--	--	2,951	--	--
1965	52	34	1,693	164	887	914	3,901	7,559	0	--	--	3,939	--	--
1970	28	41	1,274	246	635	1,123	5,047	8,324	0	--	--	6,029	--	--
1975	50	34	2,494	174	774	1,963	4,810	10,215	0	--	--	5,160	--	--
1980	154	20	1,925	786	619	4,018	4,229	11,577	0	--	--	5,815	--	--
1985	225	10	5,192	814	677	7	4,022	10,712	0	--	--	5,841	--	--
1990	220	12	2,778	717	615	207	5,205	9,522	0	--	--	6,529	--	--
1995	622	20	2,283	333	646	233	4,933	8,428	0	--	--	6,368	--	--
1996	130	21	2,569	991	663	178	6,000	10,401	0	--	--	6,306	--	--
1997	105	21	2,422	90	686	161	5,357	8,716	0	--	--	4,537	--	--
1998	145	23	1,955	108	437	106	6,211	8,817	0	--	--	6,774	--	--
1999	168	24	1,982	112	420	18	7,883	10,416	0	--	--	6,258	--	--
2000	166	26	1,904	227	406	0	6,315	8,852	0	--	--	6,568	--	--
2001	159	24	1,907	275	546	2	4,487	7,217	0	--	--	3,370	--	--
2002	92	25	1,842	358	566	39	5,406	8,211	0	--	--	4,463	--	--
2003	93	24	2,433	213	585	6	4,543	7,781	0	--	--	4,267	--	--
2004	92	25	3,237	164	681	42	5,220	9,344	0	--	--	4,574	--	--
2005	89	27	3,519	287	638	106	5,130	9,681	0	--	--	4,784	--	--
2006	89	33	3,673	R 322	694	95	6,205	R 10,989	0	--	--	4,735	--	--
2007	110	32	4,474	676	501	0	6,773	12,424	0	--	--	6,163	--	--
Trillion Btu														
1960	0.8	27.0	8.7	0.5	4.3	10.6	16.3	40.4	0.0	2.7	0.0	10.1	80.9	105.8
1965	1.2	34.3	9.9	0.7	4.7	5.7	24.1	45.0	0.0	3.7	0.0	13.4	97.6	129.7
1970	0.6	42.5	7.4	0.9	3.3	7.1	31.1	49.8	0.0	3.0	0.0	20.6	116.5	166.3
1975	1.0	34.6	14.5	0.6	4.1	12.3	29.5	61.1	0.0	3.0	0.0	17.6	117.3	159.6
1980	2.9	20.3	11.2	2.9	3.3	25.3	26.1	68.7	0.0	8.3	0.0	19.8	120.1	167.9
1985	4.1	10.3	30.2	2.9	3.6	(s)	25.4	62.2	0.0	9.8	0.0	19.9	106.3	152.2
1990	4.0	12.0	16.2	2.6	3.2	1.3	32.3	55.6	0.0	8.9	(s)	22.3	102.8	154.3
1995	11.2	21.0	13.3	1.2	3.4	1.5	30.5	49.9	0.0	14.4	(s)	21.7	118.3	167.7
1996	2.4	21.1	15.0	3.6	3.5	1.1	37.2	60.3	0.0	13.7	(s)	21.5	119.0	167.9
1997	1.9	21.7	14.1	0.3	3.6	1.0	33.1	52.1	0.0	14.0	(s)	15.5	105.2	140.3
1998	2.6	24.0	11.4	0.4	2.3	0.7	38.4	53.2	0.0	12.7	(s)	23.1	115.7	168.1
1999	3.0	24.6	11.5	0.4	2.2	0.1	49.1	63.4	0.0	13.3	0.1	21.4	125.8	174.6
2000	2.7	27.1	11.1	0.8	2.1	0.0	39.4	53.5	0.0	13.1	0.1	22.4	118.7	169.7
2001	2.6	24.5	11.1	1.0	2.8	(s)	27.5	42.5	0.0	10.7	0.1	11.5	91.8	117.4
2002	1.3	25.0	10.7	1.3	2.9	0.2	33.2	48.4	0.0	9.7	0.1	15.2	99.8	133.7
2003	1.4	24.0	14.2	0.8	3.0	(s)	27.5	45.5	0.0	10.6	(s)	14.6	96.1	128.3
2004	1.4	25.0	18.9	0.6	3.6	0.3	32.0	55.2	0.0	11.2	0.1	15.6	108.4	142.9
2005	1.3	28.3	20.5	1.0	3.3	0.7	31.3	56.8	0.0	10.8	0.1	16.3	113.6	149.3
2006	1.3	33.7	21.4	R 1.2	3.6	0.6	38.2	R 65.0	0.0	11.1	0.1	16.2	R 127.3	R 162.2
2007	1.6	32.6	26.1	2.4	2.6	0.0	41.3	72.4	0.0	13.3	0.1	21.0	141.0	186.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	1	(s)	1,006	2,839	265	29	137	5,972	377	10,624	0	0	--	--	--
1965	(s)	(s)	312	2,676	384	13	148	6,678	325	10,536	0	0	--	--	--
1970	(s)	1	43	3,020	649	36	154	8,407	119	12,428	0	0	--	--	--
1975	(s)	2	79	3,835	818	50	162	9,682	160	14,786	0	0	--	--	--
1980	0	3	159	4,759	920	45	196	9,705	0	15,786	0	0	--	--	--
1985	0	2	91	4,132	678	51	179	9,439	(s)	14,569	14	0	--	--	--
1990	0	2	111	3,993	708	67	201	9,630	0	14,709	3	0	--	--	--
1995	0	4	78	5,390	1,052	28	192	10,669	0	17,409	16	0	--	--	--
1996	0	3	99	4,886	999	16	186	11,070	0	17,256	0	0	--	--	--
1997	0	3	71	5,718	R 793	8	197	10,782	0	R 17,569	0	0	--	--	--
1998	0	4	102	5,350	R 798	62	206	11,145	0	R 17,664	10	0	--	--	--
1999	0	6	121	5,536	836	12	208	11,334	0	18,047	11	0	--	--	--
2000	0	8	134	5,812	747	11	205	11,139	0	18,047	13	0	--	--	--
2001	0	8	109	6,200	756	20	188	11,079	0	18,353	34	0	--	--	--
2002	0	8	115	6,018	768	11	185	11,290	0	18,388	34	0	--	--	--
2003	0	8	101	4,903	832	12	171	11,246	0	R 17,265	29	0	--	--	--
2004	0	8	42	6,237	1,008	26	174	11,295	0	18,782	36	0	--	--	--
2005	0	8	47	7,597	1,112	22	173	11,117	0	20,069	R 246	0	--	--	--
2006	0	8	87	8,122	1,045	18	168	11,251	30	20,722	R 293	0	--	--	--
2007	0	8	70	9,013	1,026	12	174	11,563	0	21,858	503	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	(s)	0.0	81.5	0.0	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	58.9	0.0	102.3	0.1	0.0	110.6	0.0	110.6
2005	0.0	8.3	0.2	44.3	6.3	0.1	1.0	58.0	0.0	109.9	R 0.9	0.0	118.2	0.0	118.2
2006	0.0	7.7	0.4	47.3	5.9	0.1	1.0	58.7	0.2	113.7	R 1.0	0.0	121.4	0.0	121.4
2007	0.0	7.9	0.4	52.5	5.8	(s)	1.1	60.3	0.0	120.1	1.8	0.0	128.1	0.0	128.1

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Montana

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	11,588	(s)	0	18	1,258	1,276	0	9,587	--	0	0	0	9	--
2006	11,302	1	0	25	1,279	1,303	0	10,130	--	0	0	436	-214	--
2007	11,929	1	0	21	1,244	1,264	0	9,364	--	0	0	496	-54	--
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	0.8	0.0	0.0	0.0	0.2	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
2005	195.6	0.2	0.0	0.1	7.6	7.7	0.0	95.9	0.0	0.0	0.0	0.0	(s)	299.3
2006	190.5	0.5	0.0	0.1	7.7	7.8	0.0	100.5	0.0	0.0	0.0	4.3	-0.7	303.0
2007	200.8	1.0	0.0	0.1	7.5	7.6	0.0	92.6	0.0	0.0	0.0	4.9	-0.2	306.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	888	136	4,151	1,202	2,650	14,998	415	2,314	25,731	0	959	--	--	--	--	--
1965	896	166	3,689	1,371	3,407	15,745	332	2,331	26,875	-5	1,116	--	--	--	--	--
1970	1,283	222	7,449	1,783	5,616	18,525	793	2,499	36,665	0	1,371	--	--	--	--	--
1975	1,595	219	8,507	1,679	5,740	20,636	1,092	2,092	39,745	5,916	1,213	--	--	--	--	--
1980	4,990	163	9,149	1,588	4,499	19,100	228	1,512	36,076	5,783	1,336	--	--	--	--	--
1985	6,653	126	12,411	1,357	2,590	17,737	62	1,073	35,229	4,134	1,441	--	--	--	--	--
1990	8,266	111	12,848	1,501	2,912	18,451	257	2,227	38,196	7,511	1,140	--	--	--	--	--
1995	10,396	136	14,599	1,001	3,020	19,302	121	1,433	39,475	7,485	1,426	--	--	--	--	--
1996	10,379	133	16,644	1,007	3,831	19,474	167	2,263	43,386	9,457	1,602	--	--	--	--	--
1997	11,210	132	16,848	1,075	3,130	19,825	110	1,978	42,966	9,269	1,672	--	--	--	--	--
1998	11,889	131	18,646	R 1,081	3,300	20,305	116	1,918	R 45,366	8,259	1,683	--	--	--	--	--
1999	11,625	121	17,754	1,564	3,665	20,487	77	2,383	45,930	10,091	1,719	--	--	--	--	--
2000	11,910	127	14,937	1,231	3,830	20,457	142	1,441	42,038	8,629	1,501	--	--	--	--	--
2001	13,130	122	14,207	1,113	3,615	20,392	127	1,591	41,046	8,726	1,124	--	--	--	--	--
2002	12,605	120	13,936	1,527	4,943	20,846	124	1,528	42,903	10,122	1,097	--	--	--	--	--
2003	13,115	119	14,954	1,205	4,328	20,673	142	2,041	43,344	7,997	980	--	--	--	--	--
2004	13,023	115	16,435	918	4,039	20,840	231	2,021	44,485	10,241	913	--	--	--	--	--
2005	13,283	119	16,299	934	3,768	20,148	145	1,936	43,230	8,802	871	--	--	--	--	--
2006	13,307	R 130	16,534	1,060	3,762	20,163	77	1,741	43,338	9,003	893	--	--	--	--	--
2007	12,698	144	17,242	968	3,537	20,336	70	1,590	43,742	11,042	347	--	--	--	--	--
Trillion Btu																
1960	20.0	140.4	24.2	6.4	10.6	78.8	2.6	13.8	136.5	0.0	10.3	3.1	0.0	-2.0	0.0	308.3
1965	20.8	164.7	21.5	7.4	13.7	82.7	2.1	13.8	141.1	-0.1	11.7	1.9	0.0	9.1	0.0	349.2
1970	29.7	224.1	43.4	9.8	21.2	97.3	5.0	15.4	192.1	0.0	14.4	1.6	0.0	25.5	0.0	487.3
1975	32.9	217.5	49.6	9.2	21.3	108.4	6.9	12.7	208.1	65.2	12.6	2.8	0.0	-13.3	0.0	525.7
1980	93.9	159.5	53.3	8.7	16.5	100.3	1.4	9.3	189.6	63.1	13.9	5.9	0.0	-18.3	(s)	507.5
1985	115.5	R 123.9	72.3	7.4	9.3	93.2	0.4	6.6	189.2	43.9	15.1	7.4	0.0	6.1	-1.0	500.0
1990	142.0	R 109.2	74.8	8.3	10.6	96.9	1.6	14.0	206.2	79.5	11.9	4.5	0.1	-30.6	0.2	522.9
1995	179.5	133.7	85.0	5.7	10.9	100.7	0.8	9.1	212.2	78.6	14.7	4.2	0.2	-36.5	(s)	586.5
1996	178.9	R 133.8	97.0	5.7	13.8	101.6	1.1	14.6	233.8	99.3	16.6	7.8	0.2	-51.9	-0.3	618.1
1997	193.3	R 132.1	98.1	6.1	11.3	103.3	0.7	12.7	232.3	97.3	17.1	6.3	0.3	-51.6	-0.1	626.9
1998	204.8	131.1	108.6	6.1	11.9	105.8	0.7	12.3	245.6	86.6	17.2	5.8	0.3	-48.8	-0.2	642.4
1999	198.5	121.4	103.4	8.9	13.3	106.8	0.5	15.4	248.2	105.5	17.6	6.0	0.3	-63.0	-0.1	634.3
2000	206.9	R 127.6	87.0	7.0	13.8	106.6	0.9	9.2	224.5	90.0	15.3	5.7	0.3	-38.2	-0.3	631.8
2001	226.7	124.1	82.8	6.3	13.1	106.2	0.8	9.9	219.1	91.2	11.6	7.6	0.4	-51.8	(s)	628.9
2002	217.9	120.3	81.2	8.7	17.9	108.6	0.8	9.5	226.5	105.7	11.2	8.2	0.5	-49.2	(s)	641.1
2003	227.3	118.9	87.1	6.8	15.7	107.6	0.9	12.9	231.1	83.3	10.0	8.6	0.9	-35.8	(s)	644.3
2004	223.6	R 114.6	95.7	5.2	14.6	108.7	1.5	12.7	238.4	106.8	9.2	8.6	1.0	-52.7	(s)	R 649.4
2005	228.7	R 120.3	94.9	5.3	13.6	105.1	0.9	12.2	232.1	91.8	8.7	R 9.6	1.7	-37.8	(s)	R 655.0
2006	227.4	R 131.6	96.3	6.0	13.6	105.2	0.5	10.9	232.5	93.9	8.9	R 9.3	3.3	-38.8	(s)	R 668.1
2007	216.8	146.4	100.4	5.5	12.7	106.1	0.4	9.9	235.1	115.8	3.4	10.3	3.0	-37.9	(s)	692.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	129	39	140	337	1,790	2,267	108	--	--	1,907	--	--	--
1965	35	48	111	453	2,545	3,110	69	--	--	2,816	--	--	--
1970	20	58	196	379	3,889	4,464	52	--	--	4,107	--	--	--
1975	3	54	173	372	3,143	3,688	60	--	--	4,693	--	--	--
1980	4	49	360	10	1,406	1,775	287	--	--	5,521	--	--	--
1985	3	47	353	40	998	1,392	361	--	--	6,195	--	--	--
1990	1	41	196	4	978	1,178	201	--	--	6,800	--	--	--
1995	1	45	88	4	1,173	1,265	176	--	--	7,597	--	--	--
1996	(s)	49	113	4	1,575	1,691	183	--	--	7,741	--	--	--
1997	13	47	90	7	1,265	1,362	142	--	--	7,989	--	--	--
1998	0	41	65	10	1,674	1,748	126	--	--	8,160	--	--	--
1999	0	41	77	6	1,713	1,796	133	--	--	7,929	--	--	--
2000	0	43	110	8	1,744	1,862	143	--	--	8,346	--	--	--
2001	1	47	81	10	1,629	1,720	139	--	--	8,638	--	--	--
2002	1	44	68	3	1,974	2,045	141	--	--	8,956	--	--	--
2003	1	42	87	4	1,878	1,969	149	--	--	8,852	--	--	--
2004	(s)	39	96	5	1,575	1,676	152	--	--	8,757	--	--	--
2005	(s)	38	88	7	1,700	1,796	R 180	--	--	9,309	--	--	--
2006	(s)	36	102	2	R 1,393	R 1,497	R 164	--	--	9,294	--	--	--
2007	(s)	39	53	6	1,667	1,726	181	--	--	9,748	--	--	--
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	R 45.8	2.1	0.2	3.6	5.9	7.2	0.0	0.0	21.1	79.1	48.7	127.8
1990	(s)	R 40.8	1.1	(s)	3.5	4.7	4.0	(s)	(s)	23.2	71.9	53.6	125.6
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)	R 49.3	0.7	(s)	5.7	6.4	3.7	0.1	(s)	26.4	85.7	60.1	145.8
1997	0.2	R 47.0	0.5	(s)	4.6	5.1	2.8	0.1	(s)	27.3	82.5	61.8	144.2
1998	0.0	40.9	0.4	0.1	6.1	6.5	2.5	0.1	(s)	27.8	77.8	63.1	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	R 42.7	0.6	(s)	6.3	7.0	2.9	0.1	(s)	28.5	81.0	64.8	145.8
2001	(s)	47.4	0.5	0.1	5.9	6.4	2.8	0.1	(s)	29.5	86.2	65.7	151.9
2002	(s)	43.9	0.4	(s)	7.1	7.5	2.8	0.1	(s)	30.6	84.9	68.1	153.0
2003	(s)	42.2	0.5	(s)	6.8	7.3	3.0	0.1	(s)	30.2	82.8	66.6	149.5
2004	(s)	R 38.5	0.6	(s)	5.7	6.3	3.0	0.1	(s)	29.9	77.8	66.1	143.9
2005	(s)	38.4	0.5	(s)	6.2	6.7	R 3.6	0.1	(s)	31.8	R 80.6	69.5	R 150.1
2006	(s)	36.4	0.6	(s)	R 5.0	R 5.6	R 3.3	0.1	(s)	31.7	R 77.2	68.6	R 145.7
2007	(s)	39.3	0.3	(s)	6.0	6.3	3.6	0.2	(s)	33.3	82.7	71.8	154.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	89	22	140	65	316	84	43	649	0	--	--	1,269	--	--	--	
1965	26	26	112	87	449	95	84	827	0	--	--	2,025	--	--	--	
1970	16	47	197	73	686	110	241	1,307	0	--	--	3,505	--	--	--	
1975	6	43	174	71	555	120	159	1,079	0	--	--	3,660	--	--	--	
1980	15	43	181	21	248	149	23	622	0	--	--	4,068	--	--	--	
1985	9	39	831	12	176	158	0	1,177	0	--	--	5,714	--	--	--	
1990	3	36	287	23	173	155	20	658	0	--	--	6,451	--	--	--	
1995	8	40	162	4	207	21	1	395	0	--	--	7,494	--	--	--	
1996	1	41	230	4	278	21	0	533	0	--	--	7,563	--	--	--	
1997	105	34	165	3	223	21	9	421	0	--	--	8,014	--	--	--	
1998	0	29	222	3	295	21	7	548	0	--	--	8,069	--	--	--	
1999	0	28	219	1	302	21	3	546	0	--	--	7,997	--	--	--	
2000	0	29	198	1	308	279	8	794	0	--	--	8,727	--	--	--	
2001	5	28	243	3	287	209	21	763	0	--	--	8,757	--	--	--	
2002	6	28	92	2	348	126	0	569	0	--	--	9,142	--	--	--	
2003	5	28	205	3	331	96	14	650	0	--	--	8,583	--	--	--	
2004	3	30	182	7	278	203	49	718	0	--	--	8,501	--	--	--	
2005	3	27	206	4	300	26	23	559	0	--	--	8,848	--	--	--	
2006	5	28	189	3	R 246	110	41	R 589	0	--	--	9,006	--	--	--	
2007	4	30	189	1	294	115	0	600	0	--	--	9,396	--	--	--	
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	R 38.7	4.8	0.1	0.6	0.8	0.0	6.4	0.0	0.2	0.0	19.5	64.1	44.9	109.0	
1990	0.1	R 35.9	1.7	0.1	0.6	0.8	0.1	3.4	0.0	0.4	(s)	22.0	61.1	50.9	111.9	
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)	R 41.1	1.3	(s)	1.0	0.1	0.0	2.5	0.0	0.5	0.2	25.8	70.0	58.7	128.7	
1997	1.8	R 33.8	1.0	(s)	0.8	0.1	0.1	2.0	0.0	0.6	0.2	27.3	65.6	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	62.4	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	120.5	
2000	0.0	29.0	1.2	(s)	1.1	1.5	0.1	3.8	0.0	0.6	0.2	29.8	63.4	67.7	131.1	
2001	0.1	28.3	1.4	(s)	1.0	1.1	0.1	3.7	0.0	0.6	0.3	29.9	62.8	66.6	129.4	
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	69.5	132.4	
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	64.6	126.4	
2004	0.1	29.7	1.1	(s)	1.0	1.1	0.3	3.5	0.0	0.7	0.5	29.0	63.4	64.2	127.6	
2005	0.1	27.7	1.2	(s)	1.1	0.1	0.1	2.6	0.0	R 0.7	0.5	30.2	R 61.8	66.0	127.8	
2006	0.1	R 28.5	1.1	(s)	0.9	0.6	0.3	R 2.8	0.0	R 0.7	0.6	30.7	R 63.4	66.4	R 129.8	
2007	0.1	30.6	1.1	(s)	1.1	0.6	0.0	2.8	0.0	0.7	0.6	32.1	66.9	69.2	136.0	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	408	37	2,405	441	2,146	18	1,214	6,224	(s)	--	--	889	--	--
1965	349	48	1,956	314	1,790	32	1,086	5,177	(s)	--	--	1,182	--	--
1970	240	56	3,271	823	1,319	139	1,530	7,082	(s)	--	--	2,145	--	--
1975	308	74	3,234	1,811	1,644	137	1,208	8,035	0	--	--	3,200	--	--
1980	269	52	3,411	2,675	1,471	29	920	8,506	0	--	--	4,155	--	--
1985	261	33	4,457	1,359	1,392	62	608	7,877	0	--	--	3,794	--	--
1990	235	26	4,810	1,700	950	236	1,761	9,457	0	--	--	4,618	--	--
1995	339	45	4,748	1,617	759	120	1,009	8,253	0	--	--	5,802	--	--
1996	286	36	4,604	1,957	773	167	1,850	9,351	0	--	--	6,193	--	--
1997	296	44	4,696	1,571	810	101	1,530	8,708	0	--	--	6,580	--	--
1998	384	53	5,025	1,308	1,047	98	1,478	8,956	0	--	--	6,916	--	--
1999	405	46	4,198	1,636	686	69	1,936	8,524	0	--	--	6,883	--	--
2000	407	47	4,545	1,753	634	115	1,005	8,052	0	--	--	7,276	--	--
2001	518	40	5,170	1,668	953	106	1,159	9,056	0	--	--	7,328	--	--
2002	388	41	5,014	2,579	1,031	124	1,101	9,849	0	--	--	7,563	--	--
2003	385	38	5,146	2,077	1,086	127	1,648	10,084	0	--	--	8,421	--	--
2004	371	39	5,523	2,133	1,304	180	1,646	10,786	0	--	--	8,618	--	--
2005	393	41	5,222	1,745	1,250	103	1,536	9,856	0	--	--	8,819	--	--
2006	420	R 54	5,168	R 2,089	1,279	35	1,358	R 9,927	0	--	--	8,977	--	--
2007	426	59	6,113	1,537	719	47	1,195	9,611	0	--	--	9,104	--	--
Trillion Btu														
1960	9.0	38.3	14.0	1.8	11.3	0.1	7.7	34.9	(s)	0.4	0.0	3.0	85.5	7.5
1965	7.6	47.7	11.4	1.3	9.4	0.2	6.9	29.1	(s)	0.5	0.0	4.0	88.9	9.6
1970	4.9	56.9	19.1	3.1	6.9	0.9	9.9	39.8	(s)	0.5	0.0	7.3	109.5	17.7
1975	5.9	73.5	18.8	6.7	8.6	0.9	7.7	42.8	0.0	1.5	0.0	10.9	134.7	26.3
1980	5.2	50.9	19.9	9.8	7.7	0.2	5.9	43.6	0.0	(s)	0.0	14.2	113.8	34.2
1985	4.9	R 32.6	26.0	4.9	7.3	0.4	3.9	42.5	0.0	(s)	0.0	12.9	92.3	29.8
1990	4.5	R 25.4	28.0	6.2	5.0	1.5	11.3	51.9	0.0	0.0	0.0	15.8	97.1	36.4
1995	6.6	43.9	27.7	5.9	4.0	0.8	6.6	44.9	0.0	(s)	0.0	19.8	115.1	45.0
1996	5.4	R 36.4	26.8	7.1	4.0	1.1	12.2	51.2	0.0	3.5	0.0	21.1	117.5	48.1
1997	5.7	R 44.4	27.4	5.7	4.2	0.6	10.1	48.0	0.0	2.7	0.0	22.4	123.2	50.9
1998	7.3	53.2	29.3	4.7	5.5	0.6	9.7	49.8	0.0	2.7	0.0	23.6	136.6	53.5
1999	7.7	45.7	24.5	5.9	3.6	0.4	12.8	47.2	0.0	2.7	0.0	23.5	126.8	53.7
2000	8.4	R 47.1	26.5	6.3	3.3	0.7	6.6	43.4	0.0	2.1	0.0	24.8	125.7	56.5
2001	10.1	R 40.9	30.1	6.0	5.0	0.7	7.4	49.1	0.0	4.2	0.0	25.0	129.3	55.7
2002	8.0	40.8	29.2	9.3	5.4	0.8	7.0	51.6	0.0	4.7	0.0	25.8	130.9	57.5
2003	7.8	38.4	30.0	7.5	5.7	0.8	10.6	54.6	0.0	4.6	0.0	28.7	134.1	63.4
2004	7.5	39.0	32.2	7.7	6.8	1.1	10.5	58.4	0.0	4.5	0.0	29.4	R 138.8	65.1
2005	7.8	41.6	30.4	6.3	6.5	0.6	9.8	53.7	0.0	4.8	0.0	30.1	138.1	65.8
2006	8.2	R 54.3	30.1	R 7.5	6.7	0.2	8.7	R 53.2	0.0	R 4.8	0.0	30.6	R 151.1	66.2
2007	8.1	59.9	35.6	5.5	3.8	0.3	7.6	52.8	0.0	5.3	0.0	31.1	157.1	67.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	7	6	371	1,402	1,202	103	328	12,768	258	16,432	0	0	--	--	--
1965	1	9	410	1,439	1,371	99	295	13,861	109	17,583	0	0	--	--	--
1970	(s)	13	199	3,658	1,783	217	319	17,096	225	23,497	0	0	--	--	--
1975	(s)	10	141	4,618	1,679	231	299	18,871	138	25,976	0	0	--	--	--
1980	0	7	213	5,112	1,588	171	348	17,480	0	24,911	0	0	--	--	--
1985	0	6	96	6,709	1,357	57	317	16,187	0	24,722	416	0	--	--	--
1990	0	4	83	7,524	1,501	61	356	17,346	0	26,871	667	0	--	--	--
1995	0	3	77	9,540	1,001	23	340	18,521	0	29,501	621	0	--	--	--
1996	0	5	75	11,649	1,007	21	330	18,679	0	31,763	402	0	--	--	--
1997	0	4	90	11,825	1,075	71	348	18,994	0	32,404	458	0	--	--	--
1998	0	3	63	13,252	R 1,081	23	365	19,237	0	R 34,021	477	0	--	--	--
1999	0	3	71	13,195	1,564	14	368	19,781	0	34,994	569	0	--	--	--
2000	0	3	64	9,983	1,231	26	363	19,543	0	31,210	757	0	--	--	--
2001	0	3	86	8,651	1,113	31	333	19,231	0	29,445	623	0	--	--	--
2002	0	3	93	8,719	1,527	41	329	19,689	0	30,397	787	0	--	--	--
2003	0	5	81	9,415	1,205	41	304	19,492	0	30,538	857	0	--	--	--
2004	0	4	56	10,589	918	53	308	19,333	0	31,257	799	0	--	--	--
2005	0	4	82	10,739	934	23	306	18,872	0	30,957	R 409	0	--	--	--
2006	0	R 5	80	11,036	1,060	34	298	18,774	0	31,283	R 400	0	--	--	--
2007	0	5	79	10,834	968	38	308	19,501	0	31,729	741	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	1.5	0.0	141.1	0.0	141.1
1990	0.0	3.5	0.4	43.8	8.3	0.2	2.2	91.1	0.0	146.0	2.4	0.0	151.9	0.0	151.9
1995	0.0	3.4	0.4	55.6	5.7	0.1	2.1	96.6	0.0	160.4	2.2	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	1.4	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	1.6	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	1.7	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	2.0	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	2.7	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	2.2	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	2.8	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	3.0	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	2.8	0.0	174.1	0.0	174.1
2005	0.0	4.5	0.4	62.6	5.3	0.1	1.9	98.5	0.0	168.7	R 1.4	0.0	173.2	0.0	173.2
2006	0.0	R 4.6	0.4	64.3	6.0	0.1	1.8	98.0	0.0	170.6	R 1.4	0.0	R 175.2	0.0	R 175.2
2007	0.0	5.5	0.4	63.1	5.5	0.1	1.9	101.8	0.0	172.8	2.6	0.0	178.3	0.0	178.3

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Nebraska

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	12,886	8	19	44	0	63	8,802	871	--	0	0	97	-4	--
2006	12,881	8	2	40	0	41	9,003	893	--	0	0	261	-1	--
2007	12,267	11	23	54	0	76	11,042	347	--	0	0	217	9	--
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	R 3.6	(s)	0.2	0.0	0.2	79.5	11.9	0.0	0.0	0.0	0.0	0.0	232.5
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	216.4	4.4	(s)	0.4	0.0	0.4	91.2	11.6	0.1	0.0	0.0	(s)	0.0	324.1
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
2005	220.8	8.0	0.1	0.3	0.0	0.4	91.8	8.7	0.5	0.0	0.0	1.0	(s)	331.2
2006	219.2	7.8	(s)	0.2	0.0	0.2	93.9	8.9	0.5	0.0	0.0	2.6	(s)	333.1
2007	208.7	11.1	0.1	0.3	0.0	0.5	115.8	3.4	0.6	0.0	0.0	2.1	(s)	342.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Nevada

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	151	12	2,409	2,462	773	3,621	246	623	10,134	0	1,967	--	--	--	--	--
1965	309	28	2,775	2,999	720	5,504	137	828	12,963	0	1,595	--	--	--	--	--
1970	680	53	2,834	4,584	839	7,374	143	927	16,700	0	1,646	--	--	--	--	--
1975	4,521	61	2,565	5,859	493	9,633	1,339	1,182	21,070	0	1,690	--	--	--	--	--
1980	4,215	58	3,966	7,223	880	11,224	2,439	982	26,715	0	2,372	--	--	--	--	--
1985	5,539	39	5,289	5,715	1,043	11,627	165	1,136	24,975	0	4,344	--	--	--	--	--
1990	7,442	65	6,815	6,114	1,430	14,942	454	1,324	31,079	0	1,735	--	--	--	--	--
1995	7,340	109	8,774	7,374	815	18,017	1,109	1,749	37,837	0	1,942	--	--	--	--	--
1996	7,604	122	11,031	7,843	970	18,962	276	1,760	40,842	0	2,164	--	--	--	--	--
1997	7,447	132	9,987	7,559	852	19,952	230	759	39,339	0	2,587	--	--	--	--	--
1998	8,216	149	9,207	6,721	911	22,070	145	1,690	40,744	0	3,166	--	--	--	--	--
1999	8,067	155	9,426	8,354	1,378	21,583	64	1,124	41,930	0	2,828	--	--	--	--	--
2000	8,865	189	9,750	9,163	1,313	22,063	80	1,080	43,448	0	2,429	--	--	--	--	--
2001	8,399	177	9,646	8,414	1,529	22,877	2,090	1,333	45,888	0	2,514	--	--	--	--	--
2002	8,071	177	9,672	8,154	1,111	23,582	19	1,276	43,814	0	2,268	--	--	--	--	--
2003	8,095	186	8,960	7,651	790	24,863	8	2,086	44,357	0	1,757	--	--	--	--	--
2004	8,715	215	11,388	7,915	614	26,050	149	2,164	48,280	0	1,615	--	--	--	--	--
2005	8,826	227	12,452	8,157	931	27,137	6	2,486	51,169	0	1,702	--	--	--	--	--
2006	3,696	250	13,862	8,551	911	28,237	13	2,434	54,009	0	2,058	--	--	--	--	--
2007	3,650	254	13,431	9,207	915	28,414	8	1,645	53,621	0	2,003	--	--	--	--	--
Trillion Btu																
1960	4.0	12.9	14.0	13.2	3.1	19.0	1.5	3.6	54.5	0.0	21.2	0.9	0.0	-2.3	0.0	91.2
1965	7.9	29.4	16.2	16.3	2.9	28.9	0.9	4.9	70.0	0.0	16.7	0.9	0.0	5.5	0.0	130.3
1970	17.3	56.9	16.5	25.3	3.2	38.7	0.9	5.8	90.4	0.0	17.3	1.1	0.0	7.2	0.0	190.1
1975	101.3	65.4	14.9	32.7	1.8	50.6	8.4	7.4	115.9	0.0	17.6	1.2	0.0	-63.1	0.0	238.2
1980	93.2	62.0	23.1	40.4	3.2	59.0	15.3	6.1	147.1	0.0	24.6	2.8	0.0	-38.2	(s)	291.6
1985	126.2	41.6	30.8	31.7	3.8	61.1	1.0	7.3	135.6	0.0	45.4	4.6	0.0	-50.5	0.1	303.0
1990	165.3	66.9	39.7	34.0	5.2	78.5	2.9	8.5	168.8	0.0	18.0	2.9	16.9	-39.0	0.3	400.1
1995	162.5	112.5	51.1	41.8	3.0	94.0	7.0	11.4	208.2	0.0	20.0	3.2	33.6	-42.6	0.0	497.3
1996	169.5	126.9	64.3	44.5	3.5	98.9	1.7	11.4	224.2	0.0	22.4	3.6	33.7	-42.8	0.0	537.4
1997	166.7	135.5	58.2	42.9	3.1	104.0	1.4	4.8	214.3	0.0	26.4	4.5	34.5	-30.5	0.0	551.4
1998	184.2	154.7	53.6	38.1	3.3	115.0	0.9	10.9	221.9	0.0	32.3	4.0	33.5	-51.5	0.0	579.1
1999	181.6	160.0	54.9	47.4	5.0	112.5	0.4	7.2	227.3	0.0	28.9	4.2	31.3	-33.1	0.0	600.1
2000	199.3	194.1	56.8	52.0	4.7	114.9	0.5	6.9	235.8	0.0	24.8	4.5	30.4	-61.7	0.0	627.3
2001	188.6	181.3	56.2	47.7	5.5	119.2	13.1	8.5	250.3	0.0	26.0	3.3	27.0	-49.3	0.0	627.1
2002	164.8	183.3	56.3	46.2	4.0	122.8	0.1	8.1	237.7	0.0	23.1	3.1	25.5	2.1	0.3	639.9
2003	182.6	189.9	52.2	43.4	2.9	129.5	(s)	13.6	241.5	0.0	18.0	3.3	24.2	7.7	0.8	652.5
2004	193.6	219.5	66.3	44.9	2.2	135.9	0.9	14.1	264.3	0.0	16.2	3.4	29.1	-31.8	0.6	695.0
2005	197.8	236.9	72.5	46.2	3.4	141.6	(s)	16.1	279.9	0.0	17.0	6.7	28.7	-37.5	0.8	730.3
2006	84.2	259.1	80.7	48.5	3.3	147.3	0.1	15.8	295.7	0.0	20.4	6.2	30.5	72.7	0.3	769.2
2007	82.9	263.6	78.2	52.2	3.3	148.3	0.1	10.5	292.6	0.0	19.8	6.7	29.2	81.5	1.0	777.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nevada

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	18	2	219	0	275	493	46	--	--	719	--	--	--
1965	39	4	286	0	519	805	43	--	--	1,268	--	--	--
1970	37	7	328	0	621	949	52	--	--	1,990	--	--	--
1975	3	11	265	0	316	581	61	--	--	2,803	--	--	--
1980	1	13	187	0	427	614	135	--	--	3,697	--	--	--
1985	(s)	13	276	47	650	974	224	--	--	4,126	--	--	--
1990	1	17	213	8	817	1,039	128	--	--	5,540	--	--	--
1995	(s)	21	176	6	509	691	141	--	--	6,655	--	--	--
1996	(s)	23	198	6	549	754	146	--	--	7,526	--	--	--
1997	(s)	25	260	5	584	849	182	--	--	7,801	--	--	--
1998	(s)	30	273	10	615	897	161	--	--	7,975	--	--	--
1999	(s)	29	208	8	894	1,110	170	--	--	8,386	--	--	--
2000	0	30	212	8	544	764	183	--	--	9,406	--	--	--
2001	(s)	33	218	7	519	744	109	--	--	9,607	--	--	--
2002	(s)	32	208	7	756	970	111	--	--	9,702	--	--	--
2003	(s)	33	165	11	416	592	116	--	--	10,340	--	--	--
2004	(s)	37	171	18	372	560	119	--	--	10,673	--	--	--
2005	(s)	36	204	18	644	866	R 263	--	--	11,080	--	--	--
2006	(s)	38	157	16	R 622	R 795	R 239	--	--	11,978	--	--	--
2007	(s)	38	147	17	622	785	264	--	--	12,390	--	--	--

  

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	0.1	0.1	18.9	43.6	43.7	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	120.5
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	65.4	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	73.0	145.3
2002	(s)	34.1	1.2	(s)	2.7	4.0	2.2	0.2	0.6	33.1	74.3	73.8	148.0
2003	(s)	33.5	1.0	0.1	1.5	2.5	2.3	0.2	0.6	35.3	74.5	77.9	152.3
2004	(s)	36.7	1.0	0.1	1.3	2.4	2.4	0.2	0.7	36.4	78.8	80.6	159.4
2005	(s)	38.4	1.2	0.1	2.3	3.6	R 5.3	0.2	0.8	37.8	R 86.1	82.7	R 168.8
2006	(s)	40.0	0.9	0.1	R 2.2	R 3.2	R 4.8	0.2	1.0	40.9	R 90.2	88.4	R 178.6
2007	(s)	39.9	0.9	0.1	2.2	3.2	5.3	0.2	1.2	42.3	92.1	91.2	183.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nevada

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet							Thousand Barrels							
1960	12	1	107	0	48	29	86	271	0	--	--	655	--	--	--	
1965	29	2	140	1	92	44	38	316	0	--	--	1,235	--	--	--	
1970	29	10	161	10	110	49	29	358	0	--	--	2,069	--	--	--	
1975	6	15	130	12	56	69	34	301	0	--	--	2,876	--	--	--	
1980	3	10	353	0	75	61	7	496	0	--	--	1,775	--	--	--	
1985	2	12	315	5	115	82	25	542	0	--	--	3,408	--	--	--	
1990	2	15	311	4	144	84	2	545	0	--	--	4,550	--	--	--	
1995	1	19	832	1	90	13	0	935	0	--	--	5,509	--	--	--	
1996	1	20	987	2	97	13	0	1,098	0	--	--	5,973	--	--	--	
1997	1	22	282	1	103	13	1	399	0	--	--	6,383	--	--	--	
1998	1	23	309	2	108	13	4	436	0	--	--	6,544	--	--	--	
1999	(s)	23	364	3	158	13	7	544	0	--	--	7,007	--	--	--	
2000	0	26	401	2	96	13	8	521	0	--	--	7,147	--	--	--	
2001	1	23	336	2	92	16	0	445	0	--	--	7,321	--	--	--	
2002	1	23	357	1	133	18	0	509	0	--	--	8,130	--	--	--	
2003	1	24	272	2	73	16	0	363	0	--	--	8,168	--	--	--	
2004	1	27	372	2	66	16	0	455	0	--	--	8,275	--	--	--	
2005	1	27	494	3	114	16	0	626	0	--	--	8,516	--	--	--	
2006	2	28	521	6	R 110	17	0	R 653	0	--	--	8,975	--	--	--	
2007	(s)	28	306	6	110	17	5	443	0	--	--	9,352	--	--	--	
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	0.0	0.3	0.4	15.5	34.6	35.9	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	46.3	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	49.3	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	50.6	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	55.7	107.4	
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	61.8	117.4	
2003	(s)	24.6	1.6	(s)	0.3	0.1	0.0	1.9	0.0	0.4	0.6	27.9	55.4	61.5	116.9	
2004	(s)	27.0	2.2	(s)	0.2	0.1	0.0	2.5	0.0	0.4	0.6	28.2	58.8	62.5	121.2	
2005	(s)	28.0	2.9	(s)	0.4	0.1	0.0	3.4	0.0	R 0.8	0.7	29.1	R 62.0	63.6	R 125.5	
2006	(s)	29.6	3.0	(s)	0.4	0.1	0.0	R 3.5	0.0	R 0.8	0.7	30.6	R 65.3	66.2	R 131.5	
2007	(s)	29.6	1.8	(s)	0.4	0.1	(s)	2.3	0.0	0.8	0.6	31.9	65.3	68.8	134.2	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



**Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nevada**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	119	3	575	445	120	118	268	1,527	(s)	--	--	793	--	--	--
1965	61	8	740	101	131	40	406	1,419	(s)	--	--	1,059	--	--	--
1970	70	10	840	99	166	34	648	1,788	(s)	--	--	1,635	--	--	--
1975	77	10	705	107	115	44	881	1,852	0	--	--	1,964	--	--	--
1980	147	7	651	374	111	1	692	1,830	0	--	--	4,936	--	--	--
1985	110	6	1,497	247	131	88	904	2,867	0	--	--	3,808	--	--	--
1990	169	8	2,906	446	170	8	1,116	4,646	0	--	--	6,263	--	--	--
1995	255	7	3,452	197	201	1,082	1,597	6,529	0	--	--	8,496	--	--	--
1996	179	7	3,959	302	206	129	1,580	6,176	0	--	--	9,075	--	--	--
1997	185	8	4,058	147	299	206	593	5,303	0	--	--	10,034	--	--	--
1998	254	10	3,233	180	434	77	1,526	5,451	0	--	--	10,518	--	--	--
1999	304	12	2,740	326	134	19	948	4,166	0	--	--	10,861	--	--	--
2000	231	11	2,824	672	111	0	901	4,508	0	--	--	11,239	--	--	--
2001	208	11	2,530	775	456	0	1,156	4,916	0	--	--	11,239	--	--	--
2002	185	11	2,211	220	473	6	1,105	4,015	0	--	--	11,373	--	--	--
2003	225	11	1,610	244	503	1	1,926	4,284	0	--	--	11,624	--	--	--
2004	212	12	2,780	133	568	(s)	1,987	5,468	0	--	--	12,364	--	--	--
2005	203	14	3,171	84	614	(s)	2,254	6,124	0	--	--	12,897	--	--	--
2006	206	14	3,373	R 114	619	2	2,203	R 6,312	0	--	--	13,625	--	--	--
2007	204	13	3,576	119	313	0	1,411	5,418	0	--	--	13,893	--	--	--
Trillion Btu															
1960	3.2	3.4	3.3	1.8	0.6	0.7	1.8	8.3	(s)	0.0	0.0	2.7	17.6	6.7	24.2
1965	1.6	8.4	4.3	0.4	0.7	0.3	2.7	8.3	(s)	0.0	0.0	3.6	21.9	8.6	30.5
1970	1.7	11.2	4.9	0.4	0.9	0.2	4.3	10.6	(s)	0.0	0.0	5.6	29.1	13.5	42.6
1975	1.8	10.7	4.1	0.4	0.6	0.3	5.8	11.2	0.0	0.0	0.0	6.7	30.4	16.1	46.5
1980	3.4	7.7	3.8	1.4	0.6	(s)	4.5	10.3	0.0	0.0	0.0	16.8	38.3	40.6	78.9
1985	2.6	6.6	8.7	0.9	0.7	0.6	6.0	16.8	0.0	0.0	0.0	13.0	39.0	29.9	68.9
1990	3.9	7.7	16.9	1.6	0.9	(s)	7.4	26.9	0.0	0.0	0.2	21.4	60.1	49.4	109.5
1995	5.8	7.3	20.1	0.7	1.1	6.8	10.5	39.2	0.0	0.0	0.4	29.0	81.6	65.8	147.4
1996	4.0	7.7	23.1	1.1	1.1	0.8	10.4	36.4	0.0	0.2	0.3	31.0	79.7	70.4	150.1
1997	4.3	8.6	23.6	0.5	1.6	1.3	3.8	30.9	0.0	0.2	0.3	34.2	78.5	77.6	156.1
1998	5.9	10.5	18.8	0.7	2.3	0.5	10.0	32.3	0.0	0.2	0.2	35.9	85.0	81.4	166.4
1999	7.0	12.4	16.0	1.2	0.7	0.1	6.2	24.1	0.0	0.2	0.4	37.1	81.2	84.8	165.9
2000	5.4	11.7	16.4	2.4	0.6	0.0	5.9	25.3	0.0	0.2	0.4	38.3	81.4	87.2	168.6
2001	4.9	11.7	14.7	2.8	2.4	0.0	7.6	27.5	0.0	0.8	0.4	38.3	83.6	85.5	169.1
2002	4.3	11.8	12.9	0.8	2.5	(s)	7.2	23.4	0.0	0.5	0.4	38.8	79.2	86.5	165.7
2003	5.2	10.9	9.4	0.9	2.6	(s)	12.7	25.6	0.0	0.5	0.3	39.7	82.2	87.5	169.7
2004	4.9	11.8	16.2	0.5	3.0	(s)	13.1	32.8	0.0	0.6	0.3	42.2	92.5	93.3	185.9
2005	4.6	14.5	18.5	0.3	3.2	(s)	14.9	36.9	0.0	0.6	0.4	44.0	100.9	96.2	197.2
2006	4.7	14.3	19.6	R 0.4	3.2	(s)	14.5	R 37.8	0.0	0.6	0.4	46.5	R 104.3	100.5	R 204.8
2007	4.7	13.9	20.8	0.4	1.6	0.0	9.3	32.2	0.0	0.6	0.4	47.4	99.1	102.3	201.4

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.  
<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
kWh = Kilowatthours. -- = Not applicable.  
Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.  
Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.  
Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."  
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

**Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Nevada**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	2	0	281	1,501	2,462	5	73	3,472	0	7,795	0	0	--	--	--
1965	(s)	0	335	1,599	2,999	9	86	5,329	7	10,364	0	0	--	--	--
1970	(s)	0	186	1,492	4,584	9	83	7,158	1	13,512	0	0	--	--	--
1975	(s)	0	197	1,407	5,859	13	94	9,449	5	17,023	0	0	--	--	--
1980	0	(s)	206	2,754	7,223	3	83	11,052	0	21,322	0	0	--	--	--
1985	0	(s)	105	3,146	5,715	31	76	11,414	0	20,487	2	0	--	--	--
1990	0	1	111	3,294	6,114	22	85	14,688	0	24,314	114	0	--	--	--
1995	0	1	63	4,287	7,374	19	81	17,803	0	29,628	300	0	--	--	--
1996	0	1	93	5,852	7,843	22	79	18,743	0	32,632	0	0	--	--	--
1997	0	1	76	5,339	R 7,559	19	83	19,640	0	R 32,717	0	0	--	--	--
1998	0	1	65	5,354	R 6,721	7	87	21,623	0	R 33,858	345	0	--	--	--
1999	0	1	78	6,079	8,354	(s)	88	21,437	0	36,036	632	0	--	--	--
2000	0	1	81	6,266	9,163	1	87	21,938	0	37,537	685	0	--	--	--
2001	0	1	88	6,528	8,414	144	80	22,406	0	37,659	731	0	--	--	--
2002	0	1	84	6,860	8,154	2	79	23,091	0	38,270	863	0	--	--	--
2003	0	2	74	6,885	7,651	57	73	24,344	0	39,085	1,009	0	--	--	--
2004	0	3	83	8,044	7,915	44	74	25,466	0	41,626	1,034	0	--	--	--
2005	0	3	138	8,545	8,157	89	73	26,507	0	43,509	R 1,028	8	--	--	--
2006	0	3	138	9,785	8,551	65	71	27,601	0	46,213	R 995	8	--	--	--
2007	0	3	137	9,381	9,207	65	74	28,084	(s)	46,949	1,215	8	--	--	--
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	(s)	0.0	111.2	0.0	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	R 42.9	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	R 182.9	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	2.2	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	2.9	0.4	46.9	44.9	0.2	0.4	132.8	0.0	225.6	3.7	0.0	228.5	0.0	228.5
2005	0.0	2.8	0.7	49.8	46.2	0.3	0.4	138.3	0.0	235.8	R 3.6	(s)	238.7	0.1	238.7
2006	0.0	3.4	0.7	57.0	48.5	0.2	0.4	144.0	0.0	250.9	R 3.5	(s)	254.3	0.1	R 254.3
2007	0.0	3.6	0.7	54.6	52.2	0.2	0.4	146.6	(s)	254.8	4.3	(s)	258.4	0.1	258.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Nevada

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	761	0	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	R 221	--
2004	8,502	137	148	22	0	170	0	1,615	--	1,298	0	0	188	--
2005	8,622	148	5	38	0	43	0	1,702	--	1,263	0	0	R 245	--
2006	3,488	167	11	26	0	37	0	2,058	--	1,344	0	0	91	--
2007	3,447	171	3	22	0	25	0	2,003	--	1,253	44	0	300	--
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	0.0	16.1	0.0	0.0	(s)	223.8
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	R 0.8	R 337.3
2004	188.7	R 141.2	0.9	0.1	0.0	1.1	0.0	16.2	0.0	27.3	0.0	0.0	0.6	375.0
2005	193.2	153.1	(s)	0.2	0.0	0.3	0.0	17.0	0.0	26.5	0.0	0.0	R 0.8	R 391.0
2006	79.5	171.8	0.1	0.1	0.0	0.2	0.0	20.4	0.0	28.2	0.0	0.0	0.3	300.5
2007	78.2	176.6	(s)	0.1	0.0	0.1	0.0	19.8	0.0	26.3	0.4	0.0	1.0	302.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	216	3	4,590	1,151	532	4,940	2,195	1,449	14,856	0	1,373	--	--	--	--	--
1965	407	4	5,912	1,097	657	5,773	2,416	1,341	17,195	0	1,053	--	--	--	--	--
1970	992	7	7,681	1,053	829	8,122	5,520	1,597	24,802	0	1,239	--	--	--	--	--
1975	982	8	7,194	916	1,436	9,373	4,611	1,177	24,707	0	1,251	--	--	--	--	--
1980	1,093	9	5,820	777	1,280	9,382	5,692	1,150	24,103	0	1,027	--	--	--	--	--
1985	1,481	11	5,754	521	1,586	10,340	3,442	2,009	23,652	0	1,131	--	--	--	--	--
1990	1,186	14	7,236	647	2,122	11,778	5,235	1,716	28,733	4,081	1,881	--	--	--	--	--
1995	1,355	20	7,534	333	2,285	13,495	3,295	989	27,932	8,379	1,370	--	--	--	--	--
1996	1,377	19	7,808	360	2,466	13,939	2,891	3,580	31,045	9,845	1,919	--	--	--	--	--
1997	1,705	21	7,802	408	2,183	14,666	3,115	3,708	R 31,882	7,979	1,622	--	--	--	--	--
1998	1,469	19	8,335	R 610	2,447	15,086	3,339	3,686	33,503	8,387	1,597	--	--	--	--	--
1999	1,344	20	8,835	820	2,407	15,659	3,347	3,432	34,498	8,676	1,411	--	--	--	--	--
2000	1,677	25	9,403	977	2,773	15,952	1,425	3,508	34,037	7,922	1,427	--	--	--	--	--
2001	1,537	23	9,340	880	2,449	16,102	1,496	845	31,112	8,693	991	--	--	--	--	--
2002	1,531	25	10,257	839	2,344	16,737	1,713	901	32,791	9,295	1,141	--	--	--	--	--
2003	1,597	54	10,100	942	3,136	16,893	3,993	1,532	36,597	9,276	1,331	--	--	--	--	--
2004	1,662	61	10,914	904	2,875	17,074	4,341	1,608	37,717	10,178	1,316	--	--	--	--	--
2005	1,727	70	9,785	452	2,891	16,908	3,466	1,878	35,381	9,456	1,799	--	--	--	--	--
2006	1,638	63	8,837	162	3,015	17,326	1,474	1,308	32,122	9,398	1,529	--	--	--	--	--
2007	1,628	62	8,226	152	3,308	17,708	1,388	1,254	32,037	10,764	1,265	--	--	--	--	--
Trillion Btu																
1960	5.4	3.0	26.7	6.2	2.1	25.9	13.8	8.7	83.5	0.0	14.8	10.9	0.0	-5.2	0.0	112.3
1965	11.2	4.1	34.4	5.9	2.6	30.3	15.2	8.0	96.5	0.0	11.0	11.0	0.0	-2.4	0.0	131.4
1970	27.1	6.8	44.7	5.7	3.1	42.7	34.7	9.6	140.5	0.0	13.0	12.3	0.0	-12.5	0.0	187.2
1975	26.2	7.7	41.9	4.9	5.3	49.2	29.0	7.1	137.5	0.0	13.0	12.8	0.0	4.8	0.0	202.1
1980	29.3	R 9.7	33.9	4.2	4.7	49.3	35.8	6.8	134.6	0.0	10.7	21.7	0.0	4.3	-0.8	209.5
1985	39.7	R 10.9	33.5	2.8	5.7	54.3	21.6	12.2	130.2	0.0	11.8	22.0	0.0	16.9	2.5	234.0
1990	31.5	R 14.5	42.2	3.6	7.7	61.9	32.9	10.9	159.1	43.2	19.6	27.2	(s)	-30.7	-0.1	264.3
1995	35.6	R 20.1	43.9	1.9	8.3	70.4	20.7	5.9	151.1	88.0	14.1	25.3	(s)	-67.0	4.3	271.6
1996	36.1	R 19.4	45.5	2.0	8.9	72.7	18.2	20.2	167.5	103.4	19.8	27.7	(s)	-82.9	4.4	295.5
1997	44.5	R 21.2	45.4	2.3	7.9	76.5	19.6	20.7	172.4	83.7	16.6	25.7	(s)	-72.7	5.7	297.2
1998	38.6	R 19.3	48.6	3.5	8.8	78.6	21.0	20.5	181.0	88.0	16.3	24.3	(s)	-72.7	5.9	300.7
1999	35.4	R 20.5	51.5	4.6	8.7	81.6	21.0	19.0	186.4	90.7	14.4	24.5	(s)	-66.1	6.5	312.4
2000	44.0	R 26.4	54.8	5.5	10.0	83.1	9.0	19.4	181.8	82.6	14.6	24.1	(s)	-51.6	5.2	327.2
2001	40.1	24.8	54.4	5.0	8.9	83.9	9.4	5.0	166.5	90.8	10.2	R 19.9	(s)	-48.4	2.5	R 306.6
2002	39.8	26.4	59.7	4.8	8.5	87.2	10.8	5.5	176.4	97.0	11.6	17.3	(s)	-55.8	1.0	R 313.8
2003	41.6	54.1	58.8	5.3	11.4	88.0	25.1	9.5	198.2	96.7	13.6	R 16.3	(s)	-94.6	0.4	R 326.5
2004	43.4	R 64.5	63.6	5.1	10.4	89.0	27.3	9.9	205.4	106.1	13.2	R 21.7	0.1	-115.7	1.4	R 340.1
2005	44.2	R 73.0	57.0	2.6	10.5	88.2	21.8	11.6	191.7	98.7	18.0	R 21.6	0.1	-114.4	1.6	R 334.4
2006	44.8	R 64.8	51.5	0.9	10.9	90.4	9.3	8.0	171.0	98.1	15.2	R 16.3	0.1	-99.7	1.5	R 312.0
2007	44.9	64.6	47.9	0.9	11.9	92.4	8.7	7.8	169.6	112.9	12.5	20.5	0.1	-112.9	2.1	314.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	12	2	3,622	803	412	4,837	186	--	--	619	--	--	--
1965	7	3	4,724	710	460	5,894	156	--	--	868	--	--	--
1970	4	4	6,039	705	474	7,218	136	--	--	1,476	--	--	--
1975	1	4	5,709	406	692	6,807	159	--	--	2,148	--	--	--
1980	1	4	3,519	322	588	4,430	372	--	--	2,478	--	--	--
1985	2	5	3,619	855	856	5,329	268	--	--	2,851	--	--	--
1990	2	6	4,034	233	1,449	5,717	184	--	--	3,444	--	--	--
1995	1	7	4,448	331	1,662	6,441	201	--	--	3,364	--	--	--
1996	1	7	4,643	393	1,834	6,870	209	--	--	3,429	--	--	--
1997	1	7	4,635	476	1,607	6,718	152	--	--	3,389	--	--	--
1998	(s)	6	4,319	620	1,803	6,742	135	--	--	3,401	--	--	--
1999	(s)	7	4,530	377	1,880	6,788	142	--	--	3,640	--	--	--
2000	(s)	7	4,577	393	1,799	6,768	153	--	--	3,656	--	--	--
2001	(s)	7	4,523	353	1,769	6,645	121	--	--	3,789	--	--	--
2002	(s)	7	4,164	262	1,773	6,199	123	--	--	4,003	--	--	--
2003	(s)	8	4,962	415	2,456	7,833	129	--	--	4,252	--	--	--
2004	(s)	7	5,336	523	2,254	8,113	132	--	--	4,282	--	--	--
2005	(s)	8	4,795	561	2,102	7,457	R 95	--	--	4,495	--	--	--
2006	(s)	7	4,237	434	R 2,028	R 6,700	R 86	--	--	4,401	--	--	--
2007	(s)	7	4,068	297	2,474	6,839	95	--	--	4,493	--	--	--
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)	R 4.4	20.5	1.8	2.2	24.5	7.4	0.0	0.0	8.5	44.5	20.4	64.8
1985	(s)	R 4.8	21.1	4.8	3.1	29.0	5.4	0.0	0.0	9.7	48.7	22.4	71.1
1990	0.1	R 6.0	23.5	1.3	5.3	30.1	3.7	0.0	(s)	11.8	51.5	27.2	78.7
1995	(s)	R 6.6	25.9	1.9	6.0	33.8	4.0	0.0	(s)	11.5	55.9	26.1	82.0
1996	(s)	7.1	27.0	2.2	6.6	35.9	4.2	0.0	(s)	11.7	58.9	26.6	85.5
1997	(s)	7.0	27.0	2.7	5.8	35.5	3.0	0.0	(s)	11.6	57.1	26.2	83.3
1998	(s)	6.3	25.2	3.5	6.5	35.2	2.7	0.0	(s)	11.6	55.8	26.3	82.2
1999	(s)	R 6.7	26.4	2.1	6.8	35.3	2.8	(s)	(s)	12.4	57.3	28.4	85.7
2000	(s)	R 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	57.3	28.8	86.2
2002	(s)	R 7.4	24.3	1.5	6.4	32.1	2.5	(s)	(s)	13.7	55.6	30.4	86.1
2003	(s)	7.5	28.9	2.4	8.9	40.2	2.6	(s)	(s)	14.5	64.8	32.0	96.8
2004	(s)	7.6	31.1	3.0	8.2	42.2	2.6	(s)	(s)	14.6	67.1	32.3	99.4
2005	(s)	R 8.0	27.9	3.2	7.6	38.7	R 1.9	(s)	(s)	15.3	R 64.0	33.5	R 97.5
2006	(s)	6.9	24.7	2.5	R 7.3	R 34.5	R 1.7	(s)	0.1	15.0	R 58.1	32.5	R 90.6
2007	(s)	7.5	23.7	1.7	8.9	34.3	1.9	(s)	0.1	15.3	59.1	33.1	92.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>g,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	8	1	376	30	73	37	18	534	0	--	--	371	--	--	--
1965	6	1	491	26	81	43	26	667	0	--	--	468	--	--	--
1970	3	2	628	26	84	46	71	854	0	--	--	699	--	--	--
1975	3	3	593	15	122	52	56	839	0	--	--	883	--	--	--
1980	2	4	1,044	9	104	116	372	1,645	0	--	--	1,110	--	--	--
1985	6	5	615	41	151	126	87	1,020	0	--	--	1,582	--	--	--
1990	10	5	1,415	25	256	74	648	2,417	0	--	--	2,117	--	--	--
1995	7	7	1,129	44	293	11	436	1,912	0	--	--	3,357	--	--	--
1996	7	7	1,320	42	324	11	447	2,144	0	--	--	3,373	--	--	--
1997	5	7	1,325	58	284	11	474	2,151	0	--	--	3,407	--	--	--
1998	4	7	1,235	57	318	11	277	1,898	0	--	--	3,478	--	--	--
1999	3	7	1,435	42	332	11	126	1,945	0	--	--	3,732	--	--	--
2000	4	8	1,903	47	317	14	125	2,407	0	--	--	3,905	--	--	--
2001	4	7	1,746	53	312	20	82	2,213	0	--	--	4,044	--	--	--
2002	4	9	1,547	35	313	11	123	2,029	0	--	--	4,159	--	--	--
2003	2	10	1,949	43	433	11	153	2,590	0	--	--	4,318	--	--	--
2004	2	9	1,835	46	398	12	810	3,101	0	--	--	4,363	--	--	--
2005	4	10	1,538	62	371	17	1,251	3,238	0	--	--	4,576	--	--	--
2006	4	8	1,134	46	R 358	129	409	R 2,076	0	--	--	4,563	--	--	--
2007	3	9	1,112	39	437	47	442	2,077	0	--	--	4,570	--	--	--
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	R 4.2	6.1	0.1	0.4	0.6	2.3	9.5	0.0	0.2	0.0	3.8	17.3	9.1	26.5
1985	0.1	R 5.1	3.6	0.2	0.5	0.7	0.5	5.6	0.0	0.1	0.0	5.4	16.1	12.4	28.5
1990	0.2	5.1	8.2	0.1	0.9	0.4	4.1	13.8	0.0	0.4	0.0	7.2	26.7	16.7	43.4
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	55.4
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	31.4	26.2	57.6
1997	0.1	R 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	58.2
1998	0.1	R 6.9	7.2	0.3	1.2	0.1	1.7	10.5	0.0	0.4	0.0	11.9	29.7	26.9	56.6
1999	0.1	R 7.3	8.4	0.2	1.2	0.1	0.8	10.6	0.0	0.5	0.0	12.7	31.1	29.1	60.3
2000	0.1	R 8.8	11.1	0.3	1.1	0.1	0.8	13.4	0.0	0.5	0.0	13.3	36.0	30.3	66.3
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	30.7	65.1
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	31.6	66.8
2003	(s)	9.2	11.4	0.2	1.6	0.1	1.0	14.2	0.0	0.5	0.0	14.7	38.6	32.5	71.1
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	32.9	75.4
2005	0.1	10.0	9.0	0.4	1.3	0.1	7.9	18.6	0.0	R 0.3	0.0	15.6	R 44.6	34.1	R 78.8
2006	0.1	8.7	6.6	0.3	1.3	0.7	2.6	11.4	0.0	R 0.3	0.0	15.6	R 36.0	33.7	R 69.7
2007	0.1	9.5	6.5	0.2	1.6	0.2	2.8	11.3	0.0	0.3	0.0	15.6	36.7	33.6	70.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	100	1	280	47	66	727	524	1,644	239	--	--	596	--	--
1965	36	1	421	114	53	1,046	498	2,132	170	--	--	902	--	--
1970	9	1	511	267	38	2,842	774	4,432	184	--	--	1,452	--	--
1975	6	1	460	617	31	2,266	675	4,048	178	--	--	1,839	--	--
1980	10	1	558	514	27	923	719	2,741	155	--	--	2,406	--	--
1985	40	1	428	556	61	1,024	1,034	3,104	155	--	--	2,974	--	--
1990	28	3	517	402	55	522	1,375	2,871	175	--	--	3,418	--	--
1995	1	5	433	312	109	1,092	534	2,479	169	--	--	2,286	--	--
1996	0	5	393	294	108	957	3,070	4,821	206	--	--	2,344	--	--
1997	0	6	311	282	116	829	3,091	4,629	197	--	--	2,372	--	--
1998	0	6	374	323	74	715	2,926	4,413	199	--	--	2,425	--	--
1999	0	6	469	194	151	592	2,922	4,328	200	--	--	2,516	--	--
2000	0	9	580	656	161	546	2,980	4,924	183	--	--	2,597	--	--
2001	0	9	635	368	298	619	318	2,238	93	--	--	2,483	--	--
2002	0	8	619	216	318	493	498	2,145	53	--	--	2,222	--	--
2003	0	8	724	240	344	384	978	2,670	162	--	--	2,403	--	--
2004	0	7	775	215	364	433	921	2,708	6	--	--	2,328	--	--
2005	0	7	783	409	349	144	1,134	2,819	8	--	--	2,174	--	--
2006	0	6	613	R 618	360	642	730	R 2,963	5	--	--	2,131	--	--
2007	0	6	490	390	188	408	819	2,296	4	--	--	2,173	--	--
Trillion Btu														
1960	2.5	0.7	1.6	0.2	0.3	4.6	3.4	10.2	2.6	7.1	0.0	2.0	25.0	5.0
1965	0.9	0.7	2.5	0.5	0.3	6.6	3.2	13.0	1.8	7.8	0.0	3.1	27.2	7.3
1970	0.2	0.8	3.0	1.0	0.2	17.9	4.9	26.9	1.9	9.5	0.0	5.0	44.4	12.0
1975	0.1	1.1	2.7	2.3	0.2	14.2	4.3	23.7	1.9	9.6	0.0	6.3	42.6	15.1
1980	0.2	R 1.0	3.2	1.9	0.1	5.8	4.3	15.4	1.6	14.1	0.0	8.2	40.5	19.8
1985	1.0	0.9	2.5	2.0	0.3	6.4	6.7	17.9	1.6	16.5	0.0	10.1	48.1	23.4
1990	0.7	3.3	3.0	1.5	0.3	3.3	8.9	17.0	1.8	7.8	0.0	11.7	42.3	27.0
1995	(s)	R 4.7	2.5	1.1	0.6	6.9	3.4	14.4	1.7	7.0	0.0	7.8	35.7	17.7
1996	0.0	5.0	2.3	1.1	0.6	6.0	17.3	27.2	2.1	9.0	0.0	8.0	51.2	18.2
1997	0.0	5.9	1.8	1.0	0.6	5.2	17.2	25.9	2.0	7.9	0.0	8.1	49.8	18.3
1998	0.0	5.9	2.2	1.2	0.4	4.5	16.2	24.4	2.0	6.5	0.0	8.3	47.1	18.8
1999	0.0	R 6.0	2.7	0.7	0.8	3.7	16.1	24.0	2.0	6.5	0.0	8.6	47.1	19.6
2000	0.0	9.0	3.4	2.4	0.8	3.4	16.4	26.4	1.9	5.8	0.0	8.9	52.0	20.2
2001	0.0	9.2	3.7	1.3	1.6	3.9	2.0	12.5	1.0	R 3.5	0.0	8.5	R 34.6	18.9
2002	0.0	R 8.6	3.6	0.8	1.7	3.1	3.2	12.3	0.5	1.5	0.0	7.6	30.5	16.9
2003	0.0	7.5	4.2	0.9	1.8	2.4	6.4	15.7	1.7	R 1.4	0.0	8.2	R 34.4	18.1
2004	0.0	7.9	4.5	0.8	1.9	2.7	6.0	16.0	0.1	R 6.6	0.0	7.9	38.5	17.6
2005	0.0	7.0	4.6	1.5	1.8	0.9	7.4	16.2	0.1	R 6.8	0.0	7.4	R 37.5	16.2
2006	0.0	6.1	3.6	R 2.2	1.9	4.0	4.8	R 16.5	0.1	R 1.6	0.0	7.3	R 31.5	15.7
2007	0.0	6.4	2.9	1.4	1.0	2.6	5.4	13.2	(s)	1.6	0.0	7.4	28.6	16.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	2	0	18	209	1,151	(s)	74	4,837	49	6,338	0	0	--	--	--
1965	(s)	0	46	178	1,097	1	60	5,677	1	7,061	0	0	--	--	--
1970	(s)	0	38	319	1,053	5	55	8,038	69	9,577	0	0	--	--	--
1975	(s)	0	33	418	903	5	48	9,290	9	10,706	0	0	--	--	--
1980	0	(s)	40	687	771	74	60	9,240	49	10,921	0	0	--	--	--
1985	0	(s)	24	1,061	521	24	55	10,152	0	11,837	0	0	--	--	--
1990	0	(s)	21	1,232	647	15	61	11,649	82	13,706	0	0	--	--	--
1995	0	(s)	22	1,473	333	18	59	13,376	0	15,280	0	0	--	--	--
1996	0	(s)	20	1,424	360	15	57	13,820	5	15,700	0	0	--	--	--
1997	0	(s)	23	1,494	408	10	60	14,540	3	R 16,538	0	0	--	--	--
1998	0	(s)	20	2,376	R 610	2	63	15,001	6	R 18,078	0	0	--	--	--
1999	0	(s)	28	2,365	820	(s)	64	15,496	1	18,773	0	0	--	--	--
2000	0	(s)	24	2,313	977	0	63	15,777	0	19,154	0	0	--	--	--
2001	0	(s)	64	2,399	880	0	57	15,783	0	19,184	0	0	--	--	--
2002	0	(s)	50	3,870	839	41	57	16,408	0	21,265	0	0	--	--	--
2003	0	(s)	44	2,399	942	7	52	16,537	0	19,982	0	0	--	--	--
2004	0	(s)	65	2,797	904	8	53	16,698	0	20,525	0	0	--	--	--
2005	0	(s)	69	2,534	452	10	53	16,542	0	19,660	R 334	0	--	--	--
2006	0	(s)	46	2,597	162	11	52	16,836	0	19,703	R 808	0	--	--	--
2007	0	(s)	46	2,471	152	8	53	17,473	0	20,203	1,019	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	0.0	0.0	62.9	0.0	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
2005	0.0	(s)	0.3	14.8	2.6	(s)	0.3	86.3	0.0	104.3	R 1.2	0.0	104.4	0.0	104.4
2006	0.0	(s)	0.2	15.1	0.9	(s)	0.3	87.8	0.0	104.5	R 2.9	0.0	104.5	0.0	104.5
2007	0.0	(s)	0.2	14.4	0.9	(s)	0.3	91.2	0.0	107.0	3.6	0.0	107.1	0.0	107.1

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, New Hampshire

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	1,723	46	2,072	135	0	2,206	9,456	1,791	--	0	0	0	491	--
2006	1,634	41	424	256	0	680	9,398	1,524	--	0	0	0	477	--
2007	1,625	39	538	84	0	622	10,764	1,261	--	0	0	0	617	--
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	15.3	0.0	0.0	0.0	0.1	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	13.6	0.0	0.0	0.0	2.6	162.1
2002	39.7	1.1	6.9	0.3	0.0	7.2	97.0	11.1	12.9	0.0	0.0	0.0	1.1	170.2
2003	41.6	29.9	21.7	0.4	0.0	22.1	96.7	12.0	11.9	0.0	0.0	0.0	0.5	214.6
2004	43.4	39.4	19.5	1.0	0.0	20.5	106.1	13.1	12.0	0.0	0.0	0.0	1.4	235.9
2005	44.1	<sup>R</sup> 48.0	13.0	0.8	0.0	13.8	98.7	17.9	12.6	0.0	0.0	0.0	1.7	236.6
2006	44.7	43.1	2.7	1.5	0.0	4.2	98.1	15.1	12.6	0.0	0.0	0.0	1.6	219.4
2007	44.8	41.2	3.4	0.5	0.0	3.9	112.9	12.5	16.7	0.0	0.0	0.0	2.1	234.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	6,424	139	46,051	2,125	3,213	48,706	42,854	22,984	165,934	0	45	--	--	--	--	--
1965	9,034	210	53,611	5,280	4,268	55,149	42,900	30,873	192,082	0	-31	--	--	--	--	--
1970	4,946	323	63,391	6,705	6,748	66,231	80,770	34,514	258,360	3,454	-403	--	--	--	--	--
1975	2,397	244	59,630	6,267	7,328	77,617	49,463	33,336	233,642	3,146	-272	--	--	--	--	--
1980	2,634	340	52,854	8,781	7,383	72,740	53,617	38,418	233,792	7,627	-282	--	--	--	--	--
1985	3,943	379	43,747	43,910	7,184	75,405	23,986	31,372	225,604	17,770	-244	--	--	--	--	--
1990	3,029	446	38,999	46,377	4,295	78,343	15,194	38,778	221,986	23,770	31	--	--	--	--	--
1995	3,015	697	34,080	50,059	4,062	82,325	12,526	41,905	224,956	16,806	11	--	--	--	--	--
1996	3,323	701	35,370	43,002	3,813	86,044	9,709	34,587	212,526	11,028	19	--	--	--	--	--
1997	3,841	717	35,271	R 38,754	4,268	88,850	9,165	39,706	R 216,015	13,908	18	--	--	--	--	--
1998	3,299	680	34,192	R 37,103	3,717	91,734	8,669	37,095	R 212,511	27,132	21	--	--	--	--	--
1999	3,405	716	36,449	36,343	7,569	91,783	8,393	40,957	221,494	28,971	17	--	--	--	--	--
2000	4,395	605	37,034	36,781	6,801	94,729	14,032	37,235	226,613	28,578	14	--	--	--	--	--
2001	4,315	565	38,612	33,952	7,632	94,145	12,642	45,189	232,172	30,469	18	--	--	--	--	--
2002	4,079	599	35,937	28,933	7,526	96,329	15,862	44,915	229,503	30,866	12	--	--	--	--	--
2003	4,191	613	38,408	25,901	3,539	98,327	14,100	42,664	222,939	29,709	39	--	--	--	--	--
2004	4,440	621	40,318	25,038	3,045	103,782	14,054	43,597	229,833	27,082	38	--	--	--	--	--
2005	5,004	R 602	39,814	31,834	2,420	103,150	18,780	43,885	239,882	31,392	31	--	--	--	--	--
2006	4,642	R 547	36,651	33,726	1,979	103,580	16,882	41,278	234,096	32,568	35	--	--	--	--	--
2007	4,671	619	39,647	36,534	2,758	106,074	19,780	42,193	246,986	32,010	21	--	--	--	--	--
Trillion Btu																
1960	168.8	144.1	268.2	11.5	12.9	255.9	269.4	138.4	956.3	0.0	0.5	20.0	0.0	12.9	0.0	1,302.6
1965	236.6	219.2	312.3	29.4	17.1	289.7	269.7	181.5	1,099.7	0.0	-0.3	24.0	0.0	18.1	0.0	1,597.3
1970	123.3	331.2	369.3	37.5	25.5	347.9	507.8	201.8	1,489.8	37.9	-4.2	30.1	0.0	19.9	0.0	2,028.0
1975	60.5	251.7	347.3	35.1	27.2	407.7	311.0	195.2	1,323.6	34.6	-2.8	33.8	0.0	237.8	0.0	1,939.1
1980	68.7	R 351.0	307.9	49.3	27.1	382.1	337.1	222.0	1,325.5	83.2	-2.9	51.3	0.0	252.7	-9.9	2,119.6
1985	103.3	R 389.1	254.8	248.6	25.9	396.1	150.8	181.9	1,258.1	188.8	-2.6	52.2	0.0	231.3	-13.8	2,206.4
1990	80.8	R 458.1	227.2	262.6	15.6	411.5	95.5	222.1	1,234.5	251.5	0.3	25.4	0.4	291.9	-10.2	2,332.6
1995	79.9	R 720.7	198.5	283.8	14.7	429.3	78.8	242.7	1,247.9	176.6	0.1	42.5	0.6	296.3	-7.5	2,557.0
1996	86.6	R 725.7	206.0	243.8	13.8	448.8	61.0	203.2	1,176.7	115.8	0.2	40.4	0.6	388.5	-7.0	2,527.5
1997	99.9	R 742.0	205.5	R 219.7	15.4	463.2	57.6	235.3	R 1,196.7	146.0	0.2	38.5	0.6	323.9	-6.7	R 2,541.1
1998	86.2	R 705.5	199.2	R 210.4	13.4	478.1	54.5	219.3	R 1,174.9	284.6	0.2	37.9	0.7	220.3	-9.4	R 2,500.9
1999	89.0	R 743.6	212.3	206.1	27.4	478.3	52.8	244.0	1,220.7	302.7	0.2	39.2	0.7	224.3	-6.0	2,614.3
2000	114.7	R 626.5	215.7	208.5	24.5	493.5	88.2	220.6	1,251.1	298.0	0.1	39.6	0.7	196.3	-8.6	2,518.5
2001	112.2	R 585.8	224.9	192.5	27.6	490.5	79.5	266.3	1,281.3	318.3	0.2	28.1	0.7	215.2	-12.8	2,529.0
2002	104.8	R 622.5	209.3	164.1	27.2	501.7	99.7	265.5	1,267.4	322.2	0.1	27.5	1.0	208.1	-3.7	2,550.1
2003	106.9	R 639.2	223.7	146.9	12.8	512.0	88.6	248.5	1,232.6	309.6	0.4	25.0	1.3	259.7	-0.5	2,574.1
2004	112.7	R 645.0	234.8	142.0	11.0	541.2	88.4	252.5	1,270.0	282.4	0.4	25.1	1.5	R 288.0	-0.6	R 2,624.6
2005	125.3	R 626.5	231.9	180.5	8.8	538.2	118.1	254.8	1,332.3	327.6	0.3	R 23.5	1.8	287.2	-0.5	R 2,724.0
2006	116.1	R 567.5	213.5	191.2	7.1	540.5	106.1	240.8	1,299.2	339.8	0.4	R 23.3	2.2	252.8	-0.2	R 2,601.0
2007	111.8	640.7	230.9	207.2	9.9	553.6	124.4	247.4	1,373.3	335.7	0.2	22.2	2.6	257.5	-0.4	2,743.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	266	75	25,587	1,200	737	27,524	353	--	--	5,080	--	--	--
1965	159	114	29,038	969	672	30,679	338	--	--	7,410	--	--	--
1970	84	140	32,933	769	834	34,536	503	--	--	12,131	--	--	--
1975	24	129	30,655	431	964	32,050	550	--	--	14,495	--	--	--
1980	12	136	23,976	262	777	25,015	1,609	--	--	16,329	--	--	--
1985	24	151	20,180	907	918	22,005	1,502	--	--	17,177	--	--	--
1990	3	172	13,661	295	899	14,855	809	--	--	20,498	--	--	--
1995	1	194	12,030	236	1,548	13,814	726	--	--	22,470	--	--	--
1996	1	223	12,169	284	1,685	14,137	754	--	--	22,632	--	--	--
1997	1	217	11,361	292	1,394	13,046	427	--	--	22,286	--	--	--
1998	1	197	9,127	308	1,755	11,191	380	--	--	23,191	--	--	--
1999	1	209	9,771	270	1,876	11,916	400	--	--	24,551	--	--	--
2000	1	220	10,228	299	1,973	12,500	430	--	--	24,547	--	--	--
2001	(s)	215	9,469	410	1,993	11,872	395	--	--	25,491	--	--	--
2002	(s)	210	9,050	143	1,583	10,775	401	--	--	27,171	--	--	--
2003	1	244	10,302	138	2,094	12,534	422	--	--	27,367	--	--	--
2004	1	232	9,909	155	1,690	11,754	433	--	--	28,020	--	--	--
2005	(s)	231	8,801	184	1,414	10,399	R 327	--	--	29,973	--	--	--
2006	(s)	197	7,079	116	R 1,159	R 8,354	R 298	--	--	28,622	--	--	--
2007	(s)	228	7,527	72	1,617	9,217	328	--	--	29,752	--	--	--
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	R 140.9	139.7	1.5	2.9	144.0	32.2	0.0	0.0	55.7	369.1	134.3	503.4
1985	0.6	R 154.3	117.5	5.1	3.3	126.0	30.0	0.0	0.0	58.6	364.0	135.0	498.9
1990	0.1	R 175.8	79.6	1.7	3.3	84.5	16.2	0.1	0.4	69.9	343.0	161.7	504.8
1995	(s)	R 201.2	70.1	1.3	5.6	77.0	14.5	0.1	0.5	76.7	367.9	174.1	542.0
1996	(s)	R 230.9	70.9	1.6	6.1	78.6	15.1	0.1	0.5	77.2	400.2	175.6	575.8
1997	(s)	R 224.5	66.2	1.7	5.0	72.9	8.5	0.1	0.5	76.0	380.6	172.3	552.9
1998	(s)	R 204.0	53.2	1.7	6.3	61.3	7.6	0.1	0.6	79.1	349.9	179.4	529.3
1999	(s)	R 217.8	56.9	1.5	6.8	65.2	8.0	0.1	0.6	83.8	373.7	191.6	565.3
2000	(s)	R 227.8	59.6	1.7	7.1	68.4	8.6	0.1	0.6	83.8	386.1	190.5	576.6
2001	(s)	R 223.3	55.2	2.3	7.2	64.7	7.9	0.1	0.6	87.0	378.6	193.8	572.4
2002	(s)	R 218.9	52.7	0.8	5.7	59.2	8.0	0.1	0.9	92.7	378.6	206.7	585.2
2003	(s)	R 254.7	60.0	0.8	7.6	68.4	8.4	0.2	1.1	93.4	426.1	206.0	632.1
2004	(s)	241.6	57.7	0.9	6.1	64.7	8.7	0.2	1.4	95.6	R 411.9	211.5	R 623.5
2005	(s)	R 240.6	51.3	1.0	5.1	57.4	R 6.5	0.2	1.6	102.3	R 408.5	223.7	R 632.2
2006	(s)	R 204.6	41.2	0.7	R 4.2	46.1	R 6.0	0.2	1.9	97.7	R 356.3	211.2	R 567.5
2007	(s)	236.1	43.8	0.4	5.8	50.1	6.6	0.3	2.1	101.5	396.5	219.0	615.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	185	10	8,640	466	130	308	7,117	16,661	0	--	--	4,391	--	--	--
1965	120	20	9,805	377	119	420	7,473	18,194	0	--	--	6,945	--	--	--
1970	66	56	11,121	299	147	613	11,415	23,595	0	--	--	10,799	--	--	--
1975	56	53	10,351	168	170	634	6,484	17,807	0	--	--	13,849	--	--	--
1980	44	60	9,167	39	137	297	10,950	20,590	0	--	--	16,878	--	--	--
1985	84	83	6,296	77	162	660	3,128	10,323	0	--	--	20,903	--	--	--
1990	10	116	8,217	178	159	754	1,460	10,768	0	--	--	27,201	--	--	--
1995	6	139	3,467	566	273	78	1,238	5,622	0	--	--	30,170	--	--	--
1996	7	150	4,944	243	297	77	1,281	6,843	0	--	--	30,520	--	--	--
1997	5	169	3,406	750	246	79	794	5,274	0	--	--	30,127	--	--	--
1998	4	147	3,061	1,084	310	76	489	5,021	0	--	--	31,489	--	--	--
1999	4	164	4,121	1,244	331	75	591	6,362	0	--	--	32,897	--	--	--
2000	4	159	3,340	1,189	348	74	479	5,430	0	--	--	33,474	--	--	--
2001	4	131	3,394	1,248	352	77	385	5,455	0	--	--	34,743	--	--	--
2002	4	146	2,414	452	279	73	279	3,497	0	--	--	35,727	--	--	--
2003	3	160	3,052	247	370	74	442	4,184	0	--	--	36,616	--	--	--
2004	5	169	2,680	276	298	72	347	3,673	0	--	--	38,074	--	--	--
2005	3	170	3,498	351	250	71	281	4,451	0	--	--	39,762	--	--	--
2006	2	153	2,092	140	R 205	70	217	R 2,723	0	--	--	39,437	--	--	--
2007	2	169	3,349	108	285	76	233	4,051	0	--	--	40,876	--	--	--
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	R 62.5	53.4	0.2	0.5	1.6	68.8	124.5	0.0	0.8	0.0	57.6	244.6	138.8	383.4
1985	2.0	R 85.3	36.7	0.4	0.6	3.5	19.7	60.8	0.0	0.7	0.0	71.3	217.1	164.3	381.3
1990	0.3	118.4	47.9	1.0	0.6	4.0	9.2	62.6	0.0	1.8	0.0	92.8	273.2	214.6	487.8
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	280.0	233.8	513.8
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	300.7	236.8	537.5
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	308.0	232.9	540.9
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	287.5	243.7	531.1
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	319.0	256.7	575.7
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	308.6	259.8	568.4
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	284.5	264.2	548.6
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	294.8	271.7	566.5
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	316.9	275.7	592.6
2004	0.1	175.4	15.6	1.6	1.1	0.4	2.2	20.8	0.0	1.5	0.0	129.9	327.6	287.4	R 615.0
2005	0.1	176.9	20.4	2.0	0.9	0.4	1.8	25.4	0.0	R 1.0	0.0	135.7	339.0	296.7	R 635.7
2006	(s)	158.2	12.2	0.8	R 0.7	0.4	1.4	R 15.4	0.0	R 1.0	0.0	134.6	309.2	291.0	R 600.2
2007	0.1	174.7	19.5	0.6	1.0	0.4	1.5	23.0	0.0	1.0	0.0	139.5	338.2	300.9	639.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,368	28	6,719	2,340	612	18,822	19,486	47,980	10	--	--	8,021	--	--	--
1965	1,921	52	8,423	3,438	532	17,049	27,755	57,196	4	--	--	11,519	--	--	--
1970	740	80	9,560	5,665	401	22,609	32,713	70,948	4	--	--	15,215	--	--	--
1975	67	52	7,963	6,096	233	14,809	32,040	61,142	4	--	--	14,562	--	--	--
1980	33	63	7,339	6,429	147	17,694	37,321	68,931	3	--	--	16,345	--	--	--
1985	359	81	2,835	5,994	462	4,851	29,555	43,697	3	--	--	15,657	--	--	--
1990	276	90	3,453	3,163	460	3,622	37,456	48,154	0	--	--	15,041	--	--	--
1995	13	209	1,994	2,172	602	1,901	40,262	46,931	0	--	--	13,989	--	--	--
1996	7	196	1,927	1,773	597	1,660	33,271	39,228	0	--	--	13,603	--	--	--
1997	10	193	1,789	2,523	628	1,356	37,817	44,113	0	--	--	13,369	--	--	--
1998	10	199	2,002	1,599	509	855	34,824	39,789	0	--	--	13,339	--	--	--
1999	8	197	2,076	5,352	242	633	38,583	46,887	0	--	--	13,121	--	--	--
2000	8	88	1,795	4,457	259	590	34,914	42,016	0	--	--	11,812	--	--	--
2001	6	86	2,434	5,250	962	600	42,789	52,035	0	--	--	12,707	--	--	--
2002	5	80	2,149	5,479	992	292	43,432	52,344	0	--	--	11,476	--	--	--
2003	7	77	2,088	940	1,074	506	41,441	46,050	0	--	--	12,215	--	--	--
2004	6	77	3,135	984	1,211	539	42,423	48,291	1	--	--	11,210	--	--	--
2005	6	75	1,958	670	1,054	430	42,614	46,724	2	--	--	11,862	--	--	--
2006	5	66	2,231	R 546	1,096	469	40,322	R 44,664	1	--	--	11,331	--	--	--
2007	0	63	1,977	770	1,175	512	41,243	45,677	0	--	--	11,013	--	--	--

  

Trillion Btu															
1960	61.2	28.7	39.1	9.4	3.2	118.3	119.0	289.1	0.1	12.8	0.0	27.4	419.3	67.7	487.0
1965	49.0	54.6	49.1	13.8	2.8	107.2	164.3	337.1	(s)	17.1	0.0	39.3	497.2	93.9	591.1
1970	18.6	81.9	55.7	21.4	2.1	142.1	191.5	412.8	(s)	19.9	0.0	51.9	585.2	125.7	710.8
1975	1.6	54.0	46.4	22.6	1.2	93.1	187.7	351.1	(s)	22.6	0.0	49.7	478.9	119.5	598.4
1980	0.8	R 64.9	42.7	23.6	0.8	111.2	215.6	394.0	(s)	18.3	0.0	55.8	532.0	134.4	666.4
1985	8.8	R 83.0	16.5	21.6	2.4	30.5	171.4	242.5	(s)	21.5	0.0	53.4	406.3	123.0	529.3
1990	7.0	R 92.6	20.1	11.5	2.4	22.8	214.3	271.1	0.0	3.1	0.0	51.3	423.0	118.7	541.7
1995	0.3	R 216.2	11.6	7.9	3.1	12.0	233.2	267.8	0.0	4.5	0.0	47.7	534.3	108.4	642.6
1996	0.2	R 202.8	11.2	6.4	3.1	10.4	195.6	226.7	0.0	6.4	0.0	46.4	480.6	105.5	586.2
1997	0.3	R 199.7	10.4	9.1	3.3	8.5	224.4	255.7	0.0	6.7	0.0	45.6	506.2	103.3	609.5
1998	0.2	R 206.3	11.7	5.8	2.7	5.4	206.2	231.7	0.0	5.6	0.0	45.5	486.5	103.2	589.7
1999	0.2	R 205.1	12.1	19.4	1.3	4.0	230.3	266.9	0.0	5.9	0.0	44.8	521.2	102.4	623.6
2000	0.2	R 91.6	10.5	16.1	1.4	3.7	207.2	238.8	0.0	5.6	0.0	40.3	375.1	91.7	466.8
2001	0.1	R 89.4	14.2	19.0	5.0	3.8	252.5	294.4	0.0	3.7	0.0	43.4	429.0	96.6	525.6
2002	0.1	R 84.0	12.5	19.8	5.2	1.8	256.9	296.2	0.0	2.6	0.0	39.2	421.5	87.3	508.8
2003	0.2	R 80.9	12.2	3.4	5.6	3.2	241.4	265.8	0.0	2.3	0.0	41.7	390.8	92.0	482.8
2004	0.2	R 80.1	18.3	3.6	6.3	3.4	245.7	277.2	(s)	2.8	0.0	38.2	R 398.4	84.6	483.1
2005	0.1	R 78.0	11.4	2.4	5.5	2.7	247.5	269.5	(s)	2.8	0.0	40.5	390.8	88.5	479.3
2006	0.1	R 68.1	13.0	R 2.0	5.7	2.9	235.2	R 258.8	(s)	2.8	0.0	38.7	R 368.5	83.6	R 452.1
2007	0.0	65.3	11.5	2.8	6.1	3.2	241.8	265.5	0.0	2.7	0.0	37.6	371.0	81.1	452.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	41	1	1,147	4,748	2,125	6	685	47,786	5,754	62,252	0	4	--	--	--
1965	6	(s)	1,153	5,964	5,280	40	619	54,198	6,431	73,684	0	4	--	--	--
1970	1	1	160	8,558	6,705	102	574	65,217	9,081	90,396	0	39	--	--	--
1975	(s)	(s)	92	8,907	5,777	98	605	76,750	4,246	96,475	0	43	--	--	--
1980	0	(s)	83	10,243	8,088	40	713	72,296	12,053	103,516	0	33	--	--	--
1985	0	2	184	13,766	43,910	111	649	74,283	11,010	143,911	0	95	--	--	--
1990	0	3	119	12,982	46,377	75	730	77,129	7,273	144,684	0	117	--	--	--
1995	0	3	145	15,309	50,059	69	696	81,644	8,049	155,972	289	125	--	--	--
1996	0	3	114	15,705	43,002	58	676	85,370	6,009	150,933	244	135	--	--	--
1997	0	3	133	18,239	R 38,754	106	714	88,143	6,663	R 152,752	277	132	--	--	--
1998	0	3	132	19,482	R 37,103	53	747	91,149	6,658	R 155,324	218	143	--	--	--
1999	0	4	106	19,768	36,343	10	755	91,466	6,478	154,925	187	134	--	--	--
2000	0	3	90	20,536	36,781	22	744	94,396	12,226	164,795	221	144	--	--	--
2001	0	4	61	21,971	33,952	37	681	93,107	10,397	160,206	294	237	--	--	--
2002	0	2	214	22,039	28,933	185	673	95,265	14,440	161,750	25	228	--	--	--
2003	0	2	215	22,189	25,901	135	622	97,179	11,941	158,183	26	184	--	--	--
2004	0	2	113	23,903	25,038	74	631	102,499	12,328	164,585	142	290	--	--	--
2005	0	2	109	25,130	31,834	87	627	102,025	17,195	177,007	R 2,748	299	--	--	--
2006	0	1	88	25,123	33,726	70	611	102,414	15,991	178,023	R 7,386	291	--	--	--
2007	0	2	139	26,568	36,534	85	631	104,822	18,804	187,584	9,217	293	--	--	--
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	0.0	0.3	796.1	0.7	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	R 219.7	0.4	4.3	459.5	41.9	R 832.7	1.0	0.5	R 836.8	1.0	R 837.8
1998	0.0	3.0	0.7	113.5	R 210.4	0.2	4.5	475.1	41.9	R 846.2	0.8	0.5	R 849.7	1.1	R 850.8
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	1.0	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
2005	0.0	1.6	0.5	146.4	180.5	0.3	3.8	532.4	108.1	972.0	R 9.7	1.0	974.6	2.2	976.8
2006	0.0	R 1.2	0.4	146.3	191.2	0.3	3.7	534.4	100.5	976.9	R 26.1	1.0	R 979.1	2.1	981.3
2007	0.0	1.8	0.7	154.8	207.2	0.3	3.8	547.1	118.2	1,032.0	32.6	1.0	1,034.9	2.2	1,037.0

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, New Jersey

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--	0	0	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)	--
2005	4,995	125	874	428	0	1,302	31,392	29	--	0	0	0	0	--
2006	4,635	131	205	127	0	331	32,568	34	--	0	0	16	0	--
2007	4,669	157	230	226	0	456	32,010	21	--	0	0	20	0	--
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	R 82.2	81.2	16.3	0.0	97.5	83.2	-3.0	0.0	0.0	0.0	0.0	0.0	324.3
1985	92.0	R 64.2	31.4	3.9	0.0	35.3	188.8	-2.6	0.0	0.0	0.0	0.0	0.0	375.4
1990	73.5	R 68.5	17.8	4.0	0.0	21.8	251.5	0.3	4.3	0.0	0.0	0.0	0.0	418.5
1995	79.4	R 156.9	8.4	7.4	0.0	15.9	176.6	0.1	21.4	0.0	0.0	0.0	0.0	448.7
1996	86.2	R 132.6	4.8	3.6	0.0	8.4	115.8	0.2	16.8	0.0	0.0	0.0	0.0	358.8
1997	99.5	R 139.5	2.2	2.8	0.0	5.0	146.0	0.2	21.7	0.0	0.0	0.0	0.0	410.5
1998	85.9	R 140.1	4.2	3.0	0.0	7.2	284.6	0.2	23.5	0.0	0.0	0.0	0.0	539.7
1999	88.7	R 145.9	4.3	4.1	0.0	8.5	302.7	0.2	23.9	0.0	0.0	0.0	0.0	568.8
2000	114.4	R 139.6	4.6	6.6	0.0	11.2	298.0	0.1	24.0	0.0	0.0	0.0	0.0	585.6
2001	112.0	R 132.5	7.9	7.8	0.0	15.8	318.3	0.2	15.1	0.0	0.0	0.0	0.0	590.9
2002	104.6	R 165.4	5.4	1.7	0.0	7.0	322.2	0.1	15.5	0.0	0.0	0.0	0.0	613.8
2003	106.6	R 134.7	7.6	4.5	0.0	12.1	309.6	0.4	12.7	0.0	0.0	0.0	0.0	576.1
2004	112.4	R 145.9	5.3	4.0	0.0	9.3	282.4	0.4	12.2	0.0	0.0	0.0	(s)	R 562.5
2005	125.1	R 129.4	5.5	2.5	0.0	8.0	327.6	0.3	13.1	0.0	0.0	0.0	0.0	603.4
2006	115.9	R 135.3	1.3	0.7	0.0	2.0	339.8	0.3	13.5	0.0	0.0	0.2	0.0	607.0
2007	111.7	162.8	1.4	1.3	0.0	2.8	335.7	0.2	11.9	0.0	0.0	0.2	0.0	625.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.

<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.

<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>g</sup> Solar thermal and photovoltaic energy.

<sup>h</sup> Electricity traded with Canada and Mexico.

<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, New Mexico

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	174	200	3,067	2,186	3,014	9,555	191	2,313	20,325	0	69	--	--	--	--	--
1965	2,450	202	3,895	2,530	3,334	10,806	699	2,863	24,127	0	43	--	--	--	--	--
1970	5,529	270	5,410	3,110	4,413	13,146	220	3,301	29,601	0	66	--	--	--	--	--
1975	7,425	240	6,717	2,667	3,865	16,493	3,046	4,166	36,955	0	63	--	--	--	--	--
1980	11,458	222	7,967	2,673	4,710	16,913	1,033	4,639	37,937	0	94	--	--	--	--	--
1985	14,589	151	7,381	2,873	3,002	17,905	825	3,075	35,061	0	128	--	--	--	--	--
1990	15,111	239	7,973	2,912	7,943	18,647	148	3,507	41,129	0	205	--	--	--	--	--
1995	15,221	215	5,067	2,222	8,191	21,014	179	4,256	40,928	0	264	--	--	--	--	--
1996	15,297	227	10,049	1,615	2,015	20,247	195	6,570	40,691	0	211	--	--	--	--	--
1997	15,886	257	10,797	<sup>R</sup> 1,752	2,667	21,505	158	6,404	43,283	0	259	--	--	--	--	--
1998	15,963	246	11,377	<sup>R</sup> 2,198	2,801	21,918	136	6,895	<sup>R</sup> 45,324	0	236	--	--	--	--	--
1999	16,303	236	11,605	2,723	4,115	22,189	141	6,789	47,562	0	243	--	--	--	--	--
2000	16,585	266	11,937	3,017	2,856	21,247	136	6,562	45,755	0	221	--	--	--	--	--
2001	16,031	266	12,419	3,065	4,411	21,655	96	3,676	45,322	0	237	--	--	--	--	--
2002	15,275	235	12,396	2,510	3,587	22,357	131	4,775	45,756	0	265	--	--	--	--	--
2003	16,625	221	13,009	2,438	2,842	22,669	157	4,956	46,071	0	171	--	--	--	--	--
2004	16,745	224	14,151	2,274	2,769	23,249	105	5,294	47,841	0	139	--	--	--	--	--
2005	17,116	221	14,371	2,283	2,842	23,014	87	5,102	47,697	0	165	--	--	--	--	--
2006	17,044	224	15,772	2,353	<sup>R</sup> 3,155	23,340	138	5,476	<sup>R</sup> 50,235	0	198	--	--	--	--	--
2007	16,038	234	15,643	1,943	7,307	22,935	158	5,769	53,756	0	268	--	--	--	--	--
Trillion Btu																
1960	4.1	207.3	17.9	11.7	12.1	50.2	1.2	14.2	107.2	0.0	0.7	6.6	0.0	3.1	0.0	329.0
1965	44.3	224.3	22.7	13.7	13.4	56.8	4.4	17.7	128.6	0.0	0.4	5.6	0.0	-49.4	0.0	353.8
1970	99.4	292.5	31.5	17.0	16.7	69.1	1.4	20.2	155.8	0.0	0.7	4.9	0.0	-94.5	0.0	458.8
1975	132.5	255.6	39.1	14.6	14.4	86.6	19.1	25.8	199.7	0.0	0.7	5.3	0.0	-134.1	0.0	459.7
1980	202.9	231.3	46.4	14.6	17.3	88.8	6.5	28.0	201.6	0.0	1.0	5.2	0.0	-160.9	0.0	481.1
1985	268.4	162.3	43.0	15.7	10.8	94.1	5.2	19.5	188.2	0.0	1.3	7.9	0.0	-163.0	0.5	465.6
1990	275.7	251.5	46.4	16.0	28.8	98.0	0.9	21.8	212.0	0.0	2.1	3.9	0.7	-147.5	1.3	599.6
1995	275.2	219.5	29.5	12.6	29.7	109.6	1.1	26.5	209.0	0.0	2.7	4.0	0.8	-125.9	0.0	585.3
1996	279.1	233.6	58.5	9.2	7.3	105.6	1.2	38.8	220.6	0.0	2.2	4.0	0.8	-123.2	0.0	617.0
1997	288.5	261.9	62.9	9.9	9.6	112.1	1.0	37.5	233.0	0.0	2.6	4.5	0.7	-134.6	0.0	656.7
1998	290.4	241.4	66.3	12.5	10.1	114.2	0.9	41.0	245.0	0.0	2.4	4.0	0.7	-134.1	0.0	649.9
1999	298.1	231.3	67.6	15.4	14.9	115.6	0.9	40.2	254.6	0.0	2.5	4.3	1.2	-139.8	0.0	652.1
2000	305.5	259.0	69.5	17.1	10.3	110.7	0.9	38.7	247.2	0.0	2.3	4.5	1.1	-142.6	(s)	677.0
2001	297.1	259.6	72.3	17.4	15.9	112.8	0.6	22.2	241.3	0.0	2.5	3.0	1.1	-140.1	0.0	664.4
2002	284.1	237.4	72.2	14.2	13.0	116.4	0.8	29.5	246.2	0.0	2.7	2.9	1.1	-111.3	0.1	663.2
2003	305.6	223.2	75.8	13.8	10.3	118.0	1.0	30.6	249.5	0.0	1.7	2.8	2.8	<sup>R</sup> -134.1	0.1	651.7
2004	309.4	230.3	82.4	12.9	10.0	121.2	0.7	32.6	259.8	0.0	1.4	2.9	6.0	-128.3	0.2	681.7
2005	317.9	227.1	83.7	12.9	10.3	120.1	0.5	31.4	258.9	0.0	1.6	<sup>R</sup> 5.4	8.9	<sup>R</sup> -142.9	-0.1	<sup>R</sup> 676.9
2006	316.2	<sup>R</sup> 229.0	91.9	13.3	11.4	121.8	0.9	33.7	<sup>R</sup> 273.0	0.0	2.0	<sup>R</sup> 5.1	13.4	-153.8	-0.1	<sup>R</sup> 684.8
2007	296.1	240.3	91.1	11.0	26.2	119.7	1.0	35.8	284.8	0.0	2.6	5.7	14.7	-133.5	-0.1	710.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Mexico

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	25	20	3	17	1,441	1,461	287	--	--	872	--	--	--
1965	6	24	2	14	1,518	1,534	234	--	--	988	--	--	--
1970	(s)	31	3	29	2,004	2,036	202	--	--	1,475	--	--	--
1975	0	28	5	27	1,270	1,301	210	--	--	1,957	--	--	--
1980	9	29	11	132	1,209	1,352	196	--	--	2,453	--	--	--
1985	2	22	15	41	2,091	2,147	315	--	--	3,098	--	--	--
1990	1	28	8	4	1,705	1,718	157	--	--	3,566	--	--	--
1995	1	29	3	6	860	869	155	--	--	4,124	--	--	--
1996	1	34	3	7	853	862	161	--	--	4,328	--	--	--
1997	1	37	3	5	1,085	1,093	182	--	--	4,502	--	--	--
1998	1	36	2	6	1,593	1,600	161	--	--	4,642	--	--	--
1999	1	36	20	23	2,045	2,088	170	--	--	4,649	--	--	--
2000	1	36	6	6	2,040	2,052	183	--	--	4,937	--	--	--
2001	1	35	5	5	3,446	3,455	100	--	--	4,999	--	--	--
2002	1	33	7	3	2,744	2,754	101	--	--	5,238	--	--	--
2003	1	32	3	4	2,086	2,092	107	--	--	5,418	--	--	--
2004	(s)	34	4	5	1,941	1,950	110	--	--	5,635	--	--	--
2005	(s)	33	4	5	1,996	2,004	R 216	--	--	5,865	--	--	--
2006	(s)	30	3	4	R 2,200	R 2,207	R 197	--	--	6,009	--	--	--
2007	(s)	33	4	3	1,807	1,814	217	--	--	6,387	--	--	--
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	24.3	73.0
1990	(s)	29.7	(s)	(s)	6.2	6.3	3.1	(s)	0.6	12.2	51.9	28.1	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)	33.8	(s)	(s)	12.5	12.5	2.0	(s)	0.4	17.1	65.8	38.0	103.8
2002	(s)	33.9	(s)	(s)	9.9	10.0	2.0	(s)	0.4	17.9	64.1	39.8	104.0
2003	(s)	32.0	(s)	(s)	7.6	7.6	2.1	(s)	0.3	18.5	60.6	40.8	101.4
2004	(s)	35.4	(s)	(s)	7.0	7.1	2.2	(s)	0.3	19.2	64.2	42.5	106.7
2005	(s)	34.4	(s)	(s)	7.2	7.3	R 4.3	(s)	0.2	20.0	R 66.2	43.8	R 110.0
2006	(s)	31.3	(s)	(s)	R 7.9	R 8.0	R 3.9	(s)	0.2	20.5	R 64.0	44.3	R 108.3
2007	(s)	34.3	(s)	(s)	6.5	6.5	4.3	(s)	0.2	21.8	67.2	47.0	114.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

<sup>e</sup> 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 an explanation of estimation methodology.

<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

**Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Mexico**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>g,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	17	9	107	4	254	46	0	412	0	--	--	963	--	--	--
1965	5	13	65	4	268	54	0	391	0	--	--	1,485	--	--	--
1970	(s)	33	114	8	354	70	0	545	0	--	--	2,216	--	--	--
1975	0	23	179	7	224	91	0	501	0	--	--	2,743	--	--	--
1980	35	25	133	659	213	108	0	1,113	0	--	--	3,380	--	--	--
1985	6	17	320	61	369	113	4	866	0	--	--	4,664	--	--	--
1990	4	24	426	15	301	127	0	868	0	--	--	5,842	--	--	--
1995	7	24	242	4	152	18	0	416	0	--	--	6,641	--	--	--
1996	7	26	176	1	150	18	(s)	345	0	--	--	6,924	--	--	--
1997	7	27	169	3	192	18	0	381	0	--	--	6,839	--	--	--
1998	8	27	138	3	281	18	0	440	0	--	--	7,346	--	--	--
1999	5	27	316	6	361	18	0	701	0	--	--	7,435	--	--	--
2000	5	27	266	8	360	19	0	652	0	--	--	8,371	--	--	--
2001	4	27	350	16	608	39	0	1,013	0	--	--	8,455	--	--	--
2002	4	25	329	8	484	337	0	1,159	0	--	--	8,653	--	--	--
2003	3	24	389	6	368	551	0	1,314	0	--	--	8,063	--	--	--
2004	4	25	403	3	343	77	0	826	0	--	--	8,239	--	--	--
2005	4	24	628	3	352	23	0	1,007	0	--	--	8,411	--	--	--
2006	4	23	301	3	R 388	20	0	R 712	0	--	--	8,604	--	--	--
2007	3	25	189	2	319	21	0	530	0	--	--	8,932	--	--	--
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	0.0	0.3	(s)	19.9	49.8	46.1	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	56.8	111.2
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	26.4	2.0	0.1	2.2	0.2	0.0	4.5	0.0	0.4	0.1	28.8	60.3	64.3	124.6
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	65.8	127.1
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	60.7	119.3
2004	0.1	26.3	2.3	(s)	1.2	0.4	0.0	4.0	0.0	0.4	0.1	28.1	58.9	62.2	121.1
2005	0.1	25.0	3.7	(s)	1.3	0.1	0.0	5.1	0.0	R 0.7	0.1	28.7	R 59.6	62.8	R 122.4
2006	0.1	24.1	1.8	(s)	1.4	0.1	0.0	3.3	0.0	R 0.6	0.1	29.4	R 57.5	63.5	R 121.0
2007	0.1	25.5	1.1	(s)	1.1	0.1	0.0	2.4	0.0	0.7	0.1	30.5	59.1	65.8	124.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Mexico

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	105	120	1,028	1,194	295	59	1,931	4,508	0	--	--	1,548	--	--	--
1965	22	97	1,206	1,345	241	621	2,442	5,855	0	--	--	1,299	--	--	--
1970	11	121	2,127	1,813	192	123	2,987	7,242	0	--	--	1,911	--	--	--
1975	0	95	2,299	2,160	145	1,342	3,854	9,800	0	--	--	1,960	--	--	--
1980	8	74	2,196	3,260	84	858	3,468	9,866	0	--	--	2,945	--	--	--
1985	83	58	2,595	447	361	781	2,684	6,868	0	--	--	4,111	--	--	--
1990	41	85	1,486	5,819	330	115	3,183	10,934	0	--	--	4,413	--	--	--
1995	76	74	1,907	7,085	653	179	3,985	13,809	0	--	--	5,651	--	--	--
1996	74	105	2,024	926	658	194	6,260	10,063	0	--	--	5,921	--	--	--
1997	76	90	2,080	1,316	693	158	6,080	10,327	0	--	--	6,187	--	--	--
1998	72	85	1,896	927	497	136	6,601	10,056	0	--	--	6,186	--	--	--
1999	73	82	2,175	1,692	342	141	6,464	10,814	0	--	--	5,957	--	--	--
2000	76	111	2,271	438	346	136	6,252	9,442	0	--	--	5,492	--	--	--
2001	71	110	2,180	320	630	86	3,372	6,588	0	--	--	5,272	--	--	--
2002	73	97	2,078	340	622	131	4,489	7,659	0	--	--	5,316	--	--	--
2003	79	98	2,322	338	666	157	4,696	8,179	0	--	--	5,849	--	--	--
2004	80	106	2,280	405	755	105	5,007	8,552	0	--	--	5,972	--	--	--
2005	78	102	1,923	420	729	87	4,847	8,006	0	--	--	6,363	--	--	--
2006	79	97	2,216	R 496	750	138	5,238	R 8,838	0	--	--	6,822	--	--	--
2007	76	101	2,326	5,141	512	158	5,529	13,666	0	--	--	6,948	--	--	--
Trillion Btu															
1960	2.4	124.5	6.0	4.8	1.6	0.4	12.1	24.8	0.0	0.8	0.0	5.3	157.7	13.1	170.7
1965	0.5	107.1	7.0	5.4	1.3	3.9	15.4	33.0	0.0	0.9	0.0	4.4	145.9	10.6	156.5
1970	0.2	131.2	12.4	6.8	1.0	0.8	18.4	39.4	0.0	0.7	0.0	6.5	178.1	15.8	193.9
1975	0.0	102.6	13.4	8.0	0.8	8.4	24.0	54.6	0.0	1.1	0.0	6.7	164.9	16.1	181.0
1980	0.2	77.6	12.8	12.0	0.4	5.4	21.4	52.0	0.0	1.2	0.0	10.0	141.0	24.2	165.3
1985	1.8	63.5	15.1	1.6	1.9	4.9	17.2	40.8	0.0	1.4	0.0	14.0	121.5	32.3	153.8
1990	0.9	90.0	8.7	21.1	1.7	0.7	20.0	52.2	0.0	0.3	0.1	15.1	158.5	34.8	193.3
1995	1.7	75.1	11.1	25.7	3.4	1.1	25.0	66.3	0.0	0.3	0.1	19.3	162.7	43.8	206.5
1996	1.6	108.2	11.8	3.3	3.4	1.2	37.0	56.8	0.0	0.2	0.1	20.2	187.1	45.9	233.1
1997	1.7	92.4	12.1	4.8	3.6	1.0	35.6	57.1	0.0	0.2	0.1	21.1	172.6	47.8	220.4
1998	1.6	82.9	11.0	3.3	2.6	0.9	39.3	57.2	0.0	0.2	0.1	21.1	163.1	47.9	210.9
1999	1.6	79.9	12.7	6.1	1.8	0.9	38.3	59.8	0.0	0.2	0.6	20.3	162.4	46.5	208.8
2000	1.9	107.1	13.2	1.6	1.8	0.9	36.9	54.4	0.0	0.2	0.6	18.7	182.9	42.6	225.6
2001	1.8	106.8	12.7	1.2	3.3	0.5	20.4	38.1	0.0	0.4	0.7	18.0	165.7	40.1	205.8
2002	1.8	98.1	12.1	1.2	3.2	0.8	27.9	45.3	0.0	0.3	0.7	18.1	164.3	40.4	204.8
2003	2.0	99.5	13.5	1.2	3.5	1.0	29.1	48.3	0.0	0.3	0.5	20.0	170.6	44.0	214.6
2004	2.0	108.9	13.3	1.5	3.9	0.7	30.9	50.3	0.0	0.3	0.5	20.4	182.4	45.1	227.5
2005	1.9	105.7	11.2	1.5	3.8	0.5	29.9	46.9	0.0	0.3	0.6	21.7	177.2	47.5	224.6
2006	1.9	R 99.4	12.9	R 1.8	3.9	0.9	32.3	R 51.8	0.0	0.3	0.6	23.3	R 177.4	50.3	R 227.7
2007	1.9	104.2	13.5	18.5	2.7	1.0	34.4	70.0	0.0	0.4	0.6	23.7	200.8	51.2	251.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, New Mexico

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	2	17	201	1,919	2,186	124	159	9,213	25	13,826	0	0	--	--	--
1965	(s)	25	239	2,618	2,530	203	165	10,511	36	16,301	0	0	--	--	--
1970	(s)	30	111	3,158	3,110	243	166	12,884	11	19,684	0	0	--	--	--
1975	0	29	81	4,200	2,667	211	197	16,257	0	23,615	0	0	--	--	--
1980	0	38	167	5,411	2,673	29	213	16,721	0	25,214	0	0	--	--	--
1985	0	26	95	4,406	2,873	95	194	17,431	0	25,094	138	0	--	--	--
1990	0	76	86	6,016	2,912	118	218	18,190	0	27,539	361	0	--	--	--
1995	0	57	53	2,871	2,222	94	208	20,342	0	25,790	456	0	--	--	--
1996	0	27	101	7,804	1,615	85	202	19,570	0	29,377	384	0	--	--	--
1997	0	62	102	8,504	R 1,752	75	214	20,794	0	R 31,440	386	0	--	--	--
1998	0	53	61	9,296	R 2,198	1	224	21,403	0	R 33,182	655	0	--	--	--
1999	0	49	70	9,022	2,723	17	226	21,828	0	33,887	551	0	--	--	--
2000	0	46	73	9,327	3,017	18	223	20,883	0	33,541	627	0	--	--	--
2001	0	46	79	9,824	3,065	37	204	20,986	0	34,195	206	0	--	--	--
2002	0	42	74	9,928	2,510	19	202	21,398	0	34,129	175	0	--	--	--
2003	0	29	64	10,207	2,438	51	186	21,451	0	34,398	140	0	--	--	--
2004	0	27	89	11,411	2,274	81	189	22,416	0	36,459	155	0	--	--	--
2005	0	20	60	11,752	2,283	74	188	22,262	0	36,617	R 291	0	--	--	--
2006	0	18	49	13,179	2,353	71	183	22,570	0	38,405	R 282	0	--	--	--
2007	0	14	46	13,043	1,943	39	189	22,403	0	37,664	368	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	0.5	0.0	163.6	0.0	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	230.4	0.0	230.4
1995	0.0	58.0	0.3	16.7	12.6	0.3	1.3	106.1	0.0	137.3	1.6	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	2.3	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	1.9	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	2.2	0.0	226.5	0.0	226.5
2001	0.0	44.5	0.4	57.2	17.4	0.1	1.2	109.3	0.0	185.7	0.7	0.0	230.2	0.0	230.2
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	29.8	0.3	59.5	13.8	0.2	1.1	111.7	0.0	186.6	0.5	0.0	216.4	0.0	216.4
2004	0.0	28.2	0.4	66.5	12.9	0.3	1.1	116.9	0.0	198.1	0.5	0.0	226.3	0.0	226.3
2005	0.0	20.6	0.3	68.5	12.9	0.3	1.1	116.2	0.0	199.3	R 1.0	0.0	219.9	0.0	219.9
2006	0.0	18.3	0.2	76.8	13.3	0.3	1.1	117.8	0.0	209.5	R 1.0	0.0	R 227.7	0.0	R 227.7
2007	0.0	14.1	0.2	76.0	11.0	0.1	1.1	116.9	0.0	205.4	1.3	0.0	219.6	0.0	219.6

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, New Mexico

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	R 23	--
2004	16,661	31	0	53	0	53	0	139	--	0	0	513	57	--
2005	17,034	41	0	64	0	64	0	165	--	0	0	795	R -15	--
2006	16,961	56	0	73	0	73	0	198	--	0	0	1,255	-34	--
2007	15,959	61	0	82	0	82	0	268	--	0	0	1,393	-25	--
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	0.2	0.0	0.0	0.0	0.0	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	295.2	48.1	0.1	0.4	0.0	0.4	0.0	2.5	0.2	0.0	0.0	0.0	0.0	346.4
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	R 345.6
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
2005	315.9	41.4	0.0	0.4	0.0	0.4	0.0	1.6	(s)	0.0	0.0	7.9	R -0.1	R 367.3
2006	314.2	55.9	0.0	0.4	0.0	0.4	0.0	2.0	0.2	0.0	0.0	12.5	-0.1	385.1
2007	294.1	62.1	0.0	0.5	0.0	0.5	0.0	2.6	0.3	0.0	0.0	13.8	-0.1	373.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	26,418	419	82,380	9,411	2,849	95,706	77,563	29,628	297,538	0	12,087	--	--	--	--	--
1965	28,736	545	104,033	23,620	3,174	109,226	104,296	23,028	367,377	727	19,576	--	--	--	--	--
1970	23,936	711	111,107	38,338	4,506	130,737	152,252	23,414	460,354	4,273	25,051	--	--	--	--	--
1975	12,678	577	105,118	38,634	5,188	133,461	144,721	22,486	449,609	13,111	28,323	--	--	--	--	--
1980	12,503	737	72,559	35,936	5,631	127,422	115,488	21,530	378,566	19,276	26,474	--	--	--	--	--
1985	11,944	763	67,766	3,856	4,923	136,330	66,334	21,513	300,723	24,092	27,189	--	--	--	--	--
1990	13,597	869	73,802	5,447	5,606	139,180	77,242	19,869	321,146	23,623	28,188	--	--	--	--	--
1995	11,785	1,260	70,349	7,697	6,332	132,627	30,126	20,202	267,333	26,336	25,993	--	--	--	--	--
1996	12,074	1,200	71,914	11,532	7,073	130,979	36,628	32,058	290,185	35,226	28,951	--	--	--	--	--
1997	12,522	1,324	71,033	R 12,138	6,686	130,923	29,992	33,549	R 284,321	29,570	30,618	--	--	--	--	--
1998	12,952	1,233	64,516	R 14,800	7,306	131,469	35,732	36,235	R 290,058	31,314	29,316	--	--	--	--	--
1999	12,187	1,274	71,969	9,122	7,316	133,621	35,353	36,672	294,053	37,019	24,752	--	--	--	--	--
2000	12,612	1,245	79,039	9,516	9,850	132,831	42,349	35,068	308,653	31,508	24,910	--	--	--	--	--
2001	11,783	1,172	82,878	14,655	7,111	133,724	37,090	22,188	297,644	40,395	23,084	--	--	--	--	--
2002	10,908	1,200	76,684	15,428	7,613	136,664	31,110	20,130	287,629	39,617	25,048	--	--	--	--	--
2003	11,314	1,102	88,919	17,268	7,771	138,010	46,578	20,486	319,031	40,679	24,269	--	--	--	--	--
2004	11,335	1,098	95,300	19,300	8,639	137,391	51,469	25,046	337,145	40,640	23,990	--	--	--	--	--
2005	10,739	1,080	86,630	20,016	8,261	137,355	52,150	26,619	331,031	42,443	25,783	--	--	--	--	--
2006	10,911	1,097	75,871	20,341	7,152	140,020	25,526	23,711	292,622	42,224	27,345	--	--	--	--	--
2007	11,022	1,190	78,850	19,977	7,345	139,140	28,975	21,065	295,352	42,453	25,253	--	--	--	--	--
Trillion Btu																
1960	691.7	434.1	479.9	52.6	11.4	502.7	487.6	166.2	1,700.6	0.0	130.1	59.3	0.0	-38.5	12.4	2,989.6
1965	755.2	558.7	606.0	133.2	12.7	573.8	655.7	136.1	2,117.5	8.6	204.6	58.1	0.0	-31.5	1.7	3,672.9
1970	598.9	725.8	647.2	216.7	17.0	686.8	957.2	138.5	2,663.4	46.9	262.9	62.6	0.0	-43.6	3.2	4,320.2
1975	312.5	585.5	612.3	218.5	19.3	701.1	909.9	133.6	2,594.6	144.4	294.7	60.2	0.0	-51.5	5.6	3,946.0
1980	313.7	R 755.9	422.7	203.3	20.7	669.3	726.1	126.6	2,168.7	210.3	275.0	129.7	0.0	24.8	21.1	3,899.1
1985	301.4	R 784.7	394.7	21.4	17.7	716.1	417.0	128.6	1,695.6	255.9	284.0	131.5	0.0	22.4	57.1	3,532.7
1990	349.8	R 895.4	429.9	30.4	20.3	731.1	485.6	118.1	1,815.5	250.0	293.2	97.4	0.3	47.4	2.0	3,750.9
1995	305.3	R 1,295.4	409.8	43.6	22.9	691.7	189.4	120.7	1,478.2	276.7	268.0	122.6	0.6	89.5	28.8	3,865.1
1996	311.8	R 1,230.8	418.9	65.4	25.6	683.2	230.3	183.0	1,606.4	370.0	299.4	139.2	0.7	75.6	22.8	4,056.5
1997	325.2	R 1,358.1	413.8	68.8	24.2	682.5	188.6	191.8	1,569.6	310.3	312.7	177.7	0.8	43.2	4.4	4,102.0
1998	337.4	R 1,267.1	375.8	R 83.9	26.4	685.2	224.6	208.0	1,604.0	328.5	298.9	159.0	0.8	28.4	2.1	R 4,026.4
1999	318.0	R 1,308.7	419.2	51.7	26.5	696.3	222.3	210.1	1,626.1	386.8	253.1	167.1	0.9	52.3	2.9	4,115.8
2000	330.8	R 1,279.7	460.4	54.0	35.5	692.0	266.2	199.8	1,707.9	328.6	254.1	176.1	1.0	140.8	28.7	4,247.7
2001	307.0	R 1,205.9	482.8	83.1	25.7	696.7	233.2	132.1	1,653.5	422.0	238.5	111.1	1.1	94.8	25.5	4,059.5
2002	280.6	1,191.2	446.7	87.5	27.5	711.7	195.6	119.6	1,588.6	413.6	254.8	107.4	1.8	163.9	37.4	4,039.2
2003	286.2	1,145.7	518.0	97.9	28.2	718.6	292.8	121.7	1,777.2	423.9	248.5	110.2	1.5	149.9	18.7	4,161.8
2004	276.5	1,120.0	555.1	109.4	31.3	716.5	323.6	150.1	1,886.0	423.8	240.4	116.2	2.4	165.4	17.7	4,248.4
2005	256.9	1,108.3	504.6	113.5	29.9	716.7	327.9	159.1	1,851.7	442.9	257.8	R 105.2	2.6	112.7	24.9	R 4,163.0
2006	254.5	R 1,123.5	442.0	115.3	25.8	730.6	160.5	142.4	1,616.6	440.6	271.2	R 100.8	8.4	74.1	34.1	R 3,923.7
2007	257.5	1,218.9	459.3	113.3	26.4	726.2	182.2	126.1	1,633.4	445.2	249.6	105.0	10.4	105.8	38.5	4,064.3

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> Liquefied petroleum gases.  
<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."  
<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.  
<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.  
<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.  
<sup>i</sup> 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.  
<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.  
kWh = Kilowatthours. -- = Not applicable.  
Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.  
Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.  
Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."  
Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	1,158	225	44,927	4,174	2,130	51,232	1,295	--	--	12,496	--	--	--
1965	735	288	57,623	4,161	2,254	64,037	1,070	--	--	17,027	--	--	--
1970	373	347	60,128	5,581	2,782	68,491	1,096	--	--	25,492	--	--	--
1975	128	327	55,966	3,746	3,078	62,790	1,103	--	--	28,710	--	--	--
1980	75	334	37,690	1,723	2,511	41,923	3,960	--	--	30,583	--	--	--
1985	95	320	34,608	3,219	3,227	41,054	3,655	--	--	32,757	--	--	--
1990	55	338	31,520	1,765	4,079	37,364	1,902	--	--	38,574	--	--	--
1995	29	375	28,624	1,240	4,516	34,381	2,618	--	--	39,887	--	--	--
1996	34	403	30,240	1,450	4,937	36,627	2,719	--	--	40,285	--	--	--
1997	28	376	29,367	1,744	4,379	35,490	4,202	--	--	40,059	--	--	--
1998	16	340	26,637	1,866	4,323	32,827	3,734	--	--	40,563	--	--	--
1999	22	371	28,347	2,327	4,691	35,365	3,931	--	--	42,919	--	--	--
2000	11	400	35,229	2,344	6,211	43,785	4,225	--	--	43,018	--	--	--
2001	13	376	36,502	2,390	4,698	43,591	2,755	--	--	44,236	--	--	--
2002	5	370	32,893	1,642	5,441	39,977	2,796	--	--	46,457	--	--	--
2003	11	410	33,847	1,639	5,390	40,876	2,943	--	--	47,116	--	--	--
2004	16	393	34,262	2,065	5,961	42,288	3,017	--	--	47,379	--	--	--
2005	13	406	35,054	2,203	4,903	42,160	R 2,518	--	--	50,533	--	--	--
2006	R 13	356	26,797	1,803	R 4,504	R 33,105	R 2,292	--	--	48,427	--	--	--
2007	12	397	30,101	1,318	5,140	36,559	2,527	--	--	50,241	--	--	--
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	R 341.5	219.5	9.8	9.2	238.5	79.2	0.0	0.0	104.3	763.8	251.5	1,015.4
1985	2.3	R 328.8	201.6	18.3	11.6	231.5	73.1	0.0	0.0	111.8	746.6	257.4	1,004.0
1990	1.4	R 347.9	183.6	10.0	14.8	208.4	38.0	(s)	0.3	131.6	727.5	304.4	1,031.8
1995	0.7	R 386.7	166.7	7.0	16.4	190.1	52.4	0.1	0.4	136.1	766.0	309.1	1,075.1
1996	0.8	R 414.1	176.1	8.2	17.8	202.2	54.4	0.1	0.5	137.5	809.2	312.6	1,121.7
1997	0.7	R 385.8	171.1	9.9	15.8	196.8	84.0	0.1	0.5	136.7	804.3	309.7	1,114.0
1998	0.4	R 349.5	155.2	10.6	15.6	181.4	74.7	0.1	0.6	138.4	744.8	313.9	1,058.7
1999	0.6	R 381.3	165.1	13.2	17.0	195.3	78.6	0.1	0.6	146.4	802.6	335.0	1,137.6
2000	0.3	R 413.1	205.2	13.3	22.4	240.9	84.5	0.1	0.6	146.8	886.0	333.9	1,219.8
2001	0.3	R 388.8	212.6	13.6	17.0	243.2	55.1	0.1	0.6	150.9	838.6	336.3	1,174.9
2002	0.1	362.9	191.6	9.3	19.7	220.6	55.9	0.1	0.6	158.5	798.7	353.3	1,152.0
2003	0.3	428.0	197.2	9.3	19.6	226.0	58.9	0.1	0.6	160.8	874.6	354.7	1,229.3
2004	0.4	R 400.4	199.6	11.7	21.6	232.9	60.3	0.1	0.7	161.7	856.5	357.7	1,214.2
2005	0.3	R 417.5	204.2	12.5	17.7	234.4	R 50.4	0.1	0.9	172.4	R 876.0	377.1	R 1,253.1
2006	0.3	365.9	156.1	10.2	R 16.2	R 182.6	R 45.8	0.1	1.2	165.2	R 761.2	357.3	R 1,118.5
2007	0.3	406.8	175.3	7.5	18.5	201.3	50.5	0.2	1.4	171.4	831.9	369.9	1,201.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	805	63	15,225	468	376	636	28,208	44,913	0	--	--	17,546	--	--	--
1965	555	87	19,527	467	398	828	37,514	58,733	0	--	--	23,528	--	--	--
1970	293	139	20,376	626	491	1,052	43,318	65,863	0	--	--	32,790	--	--	--
1975	300	128	18,965	420	543	1,162	28,482	49,573	0	--	--	37,827	--	--	--
1980	283	162	14,492	169	443	1,035	25,431	41,569	0	--	--	40,471	--	--	--
1985	339	165	13,215	862	569	1,911	16,677	33,235	0	--	--	48,816	--	--	--
1990	218	195	15,415	269	720	1,201	17,400	35,004	7	--	--	56,025	--	--	--
1995	191	231	15,711	714	797	208	13,555	30,985	4	--	--	62,509	--	--	--
1996	249	253	15,531	751	871	200	12,791	30,145	7	--	--	62,663	--	--	--
1997	226	321	14,337	801	773	195	10,105	26,210	5	--	--	64,033	--	--	--
1998	131	335	11,914	981	763	212	6,765	20,636	4	--	--	65,834	--	--	--
1999	158	360	13,946	682	828	200	7,439	23,095	3	--	--	67,969	--	--	--
2000	90	366	15,128	948	1,096	202	9,429	26,803	4	--	--	70,417	--	--	--
2001	102	347	16,865	874	829	218	7,193	25,979	0	--	--	71,850	--	--	--
2002	40	362	15,032	493	960	855	8,678	26,018	(s)	--	--	73,198	--	--	--
2003	73	339	19,198	665	951	293	10,784	31,892	(s)	--	--	72,495	--	--	--
2004	145	359	19,907	745	1,052	197	11,441	33,341	5	--	--	74,378	--	--	--
2005	147	276	18,086	759	865	235	10,066	30,012	3	--	--	76,822	--	--	--
2006	R 127	260	15,602	354	R 795	284	7,941	R 24,976	5	--	--	76,029	--	--	--
2007	109	290	14,606	244	907	263	8,723	24,744	4	--	--	74,326	--	--	--
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	2.0	0.0	138.1	563.7	332.8	896.6
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	544.8	383.6	928.4
1990	5.4	200.7	89.8	1.5	2.6	6.3	109.4	209.6	0.1	4.4	(s)	191.2	611.3	442.0	1,053.3
1995	4.8	238.5	91.5	4.1	2.9	1.1	85.2	184.8	(s)	10.6	0.1	213.3	651.9	484.4	1,136.2
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	670.2	486.2	1,156.4
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	726.8	495.0	1,221.8
1998	3.3	345.3	69.4	5.6	2.8	1.1	42.5	121.4	(s)	15.9	0.2	224.6	710.5	509.4	1,219.9
1999	4.0	370.4	81.2	3.9	3.0	1.0	46.8	135.9	(s)	16.8	0.2	231.9	759.2	530.5	1,289.7
2000	2.3	377.7	88.1	5.4	4.0	1.1	59.3	157.8	(s)	18.1	0.2	240.3	796.1	546.5	1,342.6
2001	2.5	358.9	98.2	5.0	3.0	1.1	45.2	152.6	0.0	12.2	0.3	245.2	771.2	546.3	1,317.6
2002	1.0	355.6	87.6	2.8	3.5	4.5	54.6	152.8	(s)	12.4	0.3	249.8	771.9	556.7	1,328.6
2003	1.8	354.6	111.8	3.8	3.5	1.5	67.8	188.4	(s)	12.8	0.4	247.4	805.3	545.8	1,351.1
2004	3.6	366.1	116.0	4.2	3.8	1.0	71.9	196.9	(s)	12.6	0.4	253.8	833.6	561.5	1,395.1
2005	3.7	283.4	105.4	4.3	3.1	1.2	63.3	177.3	(s)	R 10.6	0.5	262.1	737.6	573.3	R 1,311.0
2006	3.2	266.9	90.9	2.0	2.9	1.5	49.9	147.2	0.1	R 10.1	0.5	259.4	687.3	560.9	R 1,248.2
2007	2.7	296.9	85.1	1.4	3.3	1.4	54.8	145.9	(s)	10.5	0.6	253.6	710.3	547.2	1,257.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.

<sup>d</sup> Includes small amounts of petroleum coke not shown separately.

<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

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

<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	11,947	72	12,930	325	3,369	22,444	9,888	48,956	341	--	--	14,428	--	--	--
1965	13,811	93	16,909	485	3,708	29,213	14,852	65,167	275	--	--	23,101	--	--	--
1970	12,125	116	16,810	1,125	3,281	33,696	15,763	70,676	269	--	--	27,152	--	--	--
1975	6,125	105	15,761	1,442	1,351	23,039	17,096	58,689	188	--	--	27,247	--	--	--
1980	5,699	114	9,339	2,598	1,535	14,815	18,254	46,541	233	--	--	32,110	--	--	--
1985	3,723	101	5,378	980	1,224	5,553	16,243	29,378	233	--	--	28,659	--	--	--
1990	3,199	102	4,073	657	1,145	4,684	16,667	27,227	129	--	--	31,929	--	--	--
1995	2,791	215	3,071	881	1,126	1,990	17,131	24,199	94	--	--	25,317	--	--	--
1996	2,799	216	3,053	1,142	1,114	2,456	28,759	36,524	115	--	--	25,947	--	--	--
1997	2,804	207	2,922	1,445	1,173	1,965	29,870	37,375	115	--	--	25,285	--	--	--
1998	2,878	173	3,016	1,687	1,030	1,868	31,814	39,416	109	--	--	25,218	--	--	--
1999	2,742	102	3,441	1,772	899	1,623	31,808	39,543	101	--	--	25,835	--	--	--
2000	2,747	97	3,285	2,308	931	2,005	30,323	38,852	87	--	--	25,838	--	--	--
2001	2,411	85	2,981	1,559	1,741	1,544	17,619	25,444	70	--	--	25,450	--	--	--
2002	1,708	93	2,889	1,145	1,984	1,362	16,585	23,966	67	--	--	25,148	--	--	--
2003	1,583	84	2,960	1,379	2,112	1,584	17,040	25,075	80	--	--	21,745	--	--	--
2004	1,472	79	3,481	1,561	2,145	1,483	20,554	29,223	78	--	--	20,675	--	--	--
2005	1,510	81	3,371	2,417	2,214	1,337	20,190	29,528	59	--	--	19,947	--	--	--
2006	1,354	78	3,463	R 1,754	2,426	1,301	19,756	R 28,700	87	--	--	14,976	--	--	--
2007	1,288	80	3,625	1,243	2,164	1,461	17,879	26,371	58	--	--	20,213	--	--	--

  

Trillion Btu															
1960	311.9	74.2	75.3	1.3	17.7	141.1	62.3	297.7	3.7	32.9	0.0	49.2	769.6	121.8	891.4
1965	360.1	95.3	98.5	1.9	19.5	183.7	90.8	394.4	2.9	36.3	0.0	78.8	967.8	188.2	1,156.0
1970	308.4	118.0	97.9	4.3	17.2	211.8	94.8	426.0	2.8	40.3	0.0	92.6	988.2	224.2	1,212.4
1975	155.5	106.2	91.8	5.4	7.1	144.8	102.8	351.9	2.0	37.7	0.0	93.0	746.3	223.6	969.9
1980	146.5	R 116.4	54.4	9.5	8.1	93.1	107.8	272.9	2.4	48.4	0.0	109.6	695.7	264.1	959.8
1985	94.8	R 103.6	31.3	3.5	6.4	34.9	98.5	174.7	2.4	56.7	0.0	97.8	529.8	225.2	755.0
1990	82.6	R 105.1	23.7	2.4	6.0	29.5	99.5	161.1	1.3	26.6	0.0	108.9	485.7	251.9	737.6
1995	72.4	R 221.2	17.9	3.2	5.9	12.5	103.0	142.4	1.0	20.9	0.0	86.4	544.1	196.2	740.2
1996	72.5	R 221.4	17.8	4.1	5.8	15.4	164.0	207.1	1.2	32.6	0.0	88.5	623.1	201.3	824.4
1997	72.7	R 212.1	17.0	5.2	6.1	12.4	170.6	211.3	1.2	34.5	0.0	86.3	618.0	195.5	813.4
1998	75.1	R 177.8	17.6	6.1	5.4	11.7	182.6	223.4	1.1	28.9	0.0	86.0	592.3	195.1	787.4
1999	71.6	R 105.2	20.0	6.4	4.7	10.2	181.9	223.3	1.0	30.4	0.0	88.2	519.6	201.6	721.2
2000	73.5	100.2	19.1	8.3	4.8	12.6	172.4	217.3	0.9	32.1	0.0	88.2	512.1	200.5	712.6
2001	63.1	R 87.9	17.4	5.6	9.1	9.7	105.9	147.7	0.7	17.7	0.0	86.8	403.9	193.5	597.4
2002	45.2	91.4	16.8	4.1	10.3	8.6	99.1	139.0	0.7	14.0	0.0	85.8	376.1	191.3	567.3
2003	41.9	87.3	17.2	5.0	11.0	10.0	101.8	145.0	0.8	13.9	0.0	74.2	363.0	163.7	526.8
2004	38.9	R 80.4	20.3	5.6	11.2	9.3	124.2	170.6	0.8	17.2	0.0	70.5	378.5	156.1	534.6
2005	39.9	83.7	19.6	8.8	11.6	8.4	121.7	170.0	0.6	16.9	0.0	68.1	379.2	148.9	528.1
2006	35.3	R 80.5	20.2	R 6.3	12.7	8.2	119.3	R 166.6	0.9	17.1	0.0	51.1	R 351.5	110.5	R 462.0
2007	33.9	82.2	21.1	4.5	11.3	9.2	107.6	153.6	0.6	16.5	0.0	69.0	355.8	148.8	504.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	205	2	13,729	8,758	9,411	18	1,368	91,701	17,060	142,046	0	2,045	--	--	--
1965	45	3	2,427	8,800	23,620	38	1,122	104,690	16,158	156,856	0	2,144	--	--	--
1970	19	3	249	10,653	38,338	107	1,196	126,403	18,450	195,396	0	2,366	--	--	--
1975	1	3	274	10,488	37,252	125	950	130,948	8,862	188,899	0	2,057	--	--	--
1980	0	4	320	10,309	35,916	79	1,064	124,853	11,344	183,885	0	2,146	--	--	--
1985	0	4	221	13,744	3,856	147	968	133,195	884	153,015	0	2,442	--	--	--
1990	0	5	78	21,700	5,447	150	1,089	136,834	1,358	166,656	0	2,795	--	--	--
1995	0	8	76	21,316	7,697	138	1,039	131,294	2,318	163,878	648	2,757	--	--	--
1996	0	8	66	21,822	11,532	123	1,009	129,665	6,441	170,658	546	2,632	--	--	--
1997	0	8	68	22,839	R 12,138	90	1,066	129,555	5,109	R 170,865	526	2,567	--	--	--
1998	0	8	238	21,558	R 14,800	533	1,116	130,227	4,024	R 172,495	391	2,580	--	--	--
1999	0	9	84	24,028	9,122	25	1,127	132,521	6,237	173,145	338	2,654	--	--	--
2000	0	8	75	23,044	9,516	234	1,110	131,698	8,126	173,804	374	2,753	--	--	--
2001	0	6	249	23,520	14,655	25	1,017	131,764	3,207	174,437	106	2,646	--	--	--
2002	0	9	175	23,641	15,428	66	1,005	133,825	3,826	177,966	93	2,637	--	--	--
2003	0	8	18	30,504	17,268	51	929	135,605	4,583	188,959	540	2,689	--	--	--
2004	0	9	226	35,910	19,300	66	942	135,049	5,823	197,315	6,904	2,650	--	--	--
2005	0	13	275	28,545	20,016	75	937	134,906	5,684	190,437	R 2,280	2,846	--	--	--
2006	0	14	25	29,388	20,341	99	913	137,309	6,530	194,606	R 5,939	2,806	--	--	--
2007	0	16	185	29,146	19,977	56	942	136,714	7,063	194,083	7,482	3,397	--	--	--
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	17.6	1,027.3
1985	0.0	3.6	1.1	80.1	21.4	0.5	5.9	699.7	5.6	814.2	0.0	8.3	826.1	19.2	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	1.9	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	R 83.9	1.9	6.8	678.7	25.3	R 923.4	1.4	8.8	R 940.4	20.0	R 960.4
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	20.1	969.6
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	20.1	991.3
2003	0.0	8.7	0.1	177.7	97.9	0.2	5.6	706.1	28.8	1,016.4	1.9	9.2	1,034.3	20.2	1,054.6
2004	0.0	8.9	1.1	209.2	109.4	0.2	5.7	704.3	36.6	1,066.6	24.4	9.0	1,084.5	20.0	1,104.5
2005	0.0	13.1	1.4	166.3	113.5	0.3	5.7	703.9	35.7	1,026.8	R 8.1	9.7	1,049.6	21.2	1,070.9
2006	0.0	R 14.6	0.1	171.2	115.3	0.4	5.5	716.5	41.1	1,050.1	R 21.0	9.6	R 1,074.3	20.7	R 1,095.0
2007	0.0	16.1	0.9	169.8	113.3	0.2	5.7	713.5	44.4	1,047.8	26.5	11.6	1,075.5	25.0	1,100.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, New York

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	<sup>R</sup> 5,489	--
2004	9,702	259	32,722	1,740	514	34,977	40,640	23,907	--	0	0	116	5,194	--
2005	9,069	304	35,064	1,574	2,256	38,894	42,443	25,720	--	0	0	103	<sup>R</sup> 7,313	--
2006	9,417	388	9,754	622	860	11,236	42,224	27,252	--	0	0	655	9,986	--
2007	9,613	408	11,728	1,372	496	13,596	42,453	25,191	--	0	0	833	11,288	--
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	<sup>R</sup> 128.9	401.7	4.4	0.0	406.1	210.3	272.6	0.1	0.0	0.0	0.0	24.5	1,200.6
1985	196.2	<sup>R</sup> 178.7	271.7	4.8	0.0	276.5	255.9	281.6	(s)	0.0	0.0	0.0	59.0	1,247.5
1990	260.4	<sup>R</sup> 236.8	338.2	6.4	0.0	344.6	250.0	291.8	28.4	0.0	0.0	0.0	2.4	1,414.3
1995	227.4	<sup>R</sup> 440.4	77.1	9.5	0.0	86.6	276.7	267.0	38.7	0.0	0.0	0.0	30.4	1,366.6
1996	232.3	<sup>R</sup> 326.9	93.9	7.4	0.1	101.5	370.0	298.1	41.2	0.0	0.0	0.0	24.1	1,393.7
1997	246.2	<sup>R</sup> 422.9	80.6	9.1	0.0	89.7	310.3	311.5	41.4	0.0	0.0	0.0	5.3	1,426.9
1998	258.6	<sup>R</sup> 386.3	145.1	8.1	1.3	154.5	328.5	297.8	39.6	0.0	0.0	0.0	2.8	1,467.8
1999	241.8	<sup>R</sup> 443.0	126.1	12.9	3.9	142.8	386.8	252.0	<sup>R</sup> 41.4	0.0	0.0	0.0	3.3	1,511.0
2000	254.8	<sup>R</sup> 380.1	143.3	13.7	1.6	158.6	328.6	253.2	41.4	0.0	0.0	0.1	29.6	1,446.0
2001	241.1	<sup>R</sup> 364.1	158.1	17.5	0.2	175.9	422.0	237.8	26.1	0.0	0.0	0.2	26.5	1,493.4
2002	234.3	372.5	108.4	13.0	1.4	122.8	413.6	254.1	25.0	0.0	0.0	0.8	37.4	1,460.6
2003	242.1	267.1	186.3	14.0	1.2	201.5	423.9	247.7	24.7	0.0	0.0	0.4	18.7	1,426.1
2004	233.6	<sup>R</sup> 264.2	205.7	10.1	3.1	219.0	423.8	239.6	26.0	0.0	0.0	1.2	17.7	<sup>R</sup> 1,424.9
2005	213.0	310.6	220.4	9.2	13.6	243.2	442.9	257.2	27.3	0.0	0.0	1.0	<sup>R</sup> 25.0	1,520.1
2006	215.8	395.5	61.3	3.6	5.2	70.1	440.6	270.3	27.8	0.0	0.0	6.5	34.1	1,460.7
2007	220.6	416.9	73.7	8.0	3.0	84.7	445.2	249.0	27.5	0.0	0.0	8.2	38.5	1,490.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	8,947	45	13,445	3,401	2,635	35,875	4,603	16,310	76,268	0	4,998	--	--	--	--	--
1965	12,707	76	17,182	3,649	4,188	43,144	4,723	17,801	90,687	0	5,385	--	--	--	--	--
1970	20,417	151	22,612	4,702	5,489	56,348	6,778	17,651	113,580	0	4,374	--	--	--	--	--
1975	20,055	115	21,259	3,809	6,445	66,935	7,779	11,858	118,083	1,405	7,055	--	--	--	--	--
1980	25,466	153	24,116	5,209	7,979	66,222	9,058	10,880	123,465	5,775	5,486	--	--	--	--	--
1985	22,052	134	26,290	6,668	7,546	70,856	6,233	11,990	129,582	19,303	4,094	--	--	--	--	--
1990	22,590	162	26,189	5,567	8,892	77,525	5,857	12,192	136,222	25,905	6,819	--	--	--	--	--
1995	26,434	205	31,396	4,947	12,137	86,421	6,263	14,846	156,010	35,910	5,521	--	--	--	--	--
1996	29,813	214	32,589	9,127	13,917	88,147	6,832	19,067	169,679	33,718	5,952	--	--	--	--	--
1997	30,859	216	32,724	R 7,156	15,789	90,933	5,999	20,060	R 172,661	32,453	5,626	--	--	--	--	--
1998	30,319	214	33,296	R 6,761	13,100	94,177	4,884	21,393	R 173,611	38,778	5,738	--	--	--	--	--
1999	29,738	217	31,371	6,802	11,858	97,421	4,364	20,642	172,458	37,524	3,684	--	--	--	--	--
2000	31,371	234	36,210	7,277	14,101	97,833	4,969	20,406	180,797	39,127	3,138	--	--	--	--	--
2001	30,481	207	36,595	6,051	13,847	98,717	3,623	18,167	177,000	37,775	2,596	--	--	--	--	--
2002	31,208	235	34,084	4,825	12,562	100,642	3,972	16,687	172,771	39,627	3,492	--	--	--	--	--
2003	31,124	219	34,755	5,246	11,945	102,618	4,904	16,898	176,365	40,907	7,201	--	--	--	--	--
2004	31,723	225	36,644	5,397	12,122	105,414	5,910	18,442	183,929	40,091	5,435	--	--	--	--	--
2005	32,860	230	36,441	7,366	13,192	105,796	5,568	17,387	185,750	39,982	5,397	--	--	--	--	--
2006	31,797	223	35,689	5,323	13,062	106,440	4,223	16,248	180,985	39,963	3,839	--	--	--	--	--
2007	33,599	237	35,483	7,161	12,074	107,871	3,756	15,786	182,132	40,045	2,984	--	--	--	--	--
Trillion Btu																
1960	231.3	47.0	78.3	18.2	10.6	188.4	28.9	94.9	419.4	0.0	53.8	73.7	0.0	1.7	0.0	827.0
1965	325.9	78.2	100.1	19.7	16.8	226.6	29.7	103.4	496.3	0.0	56.3	67.3	0.0	-21.8	0.0	1,002.2
1970	491.4	154.9	131.7	25.7	20.7	296.0	42.6	103.8	620.6	0.0	45.9	65.9	0.0	-33.5	0.0	1,345.2
1975	476.5	116.9	123.8	20.8	23.9	351.6	48.9	70.3	639.5	15.5	73.4	66.4	0.0	74.8	0.0	1,463.0
1980	624.7	R 155.2	140.5	28.7	29.3	347.9	56.9	64.6	667.9	63.0	57.0	78.9	0.0	31.5	(s)	1,678.1
1985	550.5	R 138.4	153.1	37.0	27.2	372.2	39.2	71.2	700.0	205.0	42.8	94.0	0.0	74.0	0.8	1,805.4
1990	568.3	166.7	152.6	30.8	32.2	407.2	36.8	72.8	732.5	274.1	70.9	97.5	0.3	174.8	0.0	2,085.2
1995	662.9	212.0	182.9	28.0	44.0	450.7	39.4	89.7	834.7	377.3	56.9	111.5	0.3	139.9	0.0	2,395.5
1996	744.3	222.1	189.8	51.7	50.3	459.8	43.0	109.3	903.9	354.1	61.5	109.5	0.3	118.7	0.0	2,514.5
1997	765.9	223.4	190.6	40.6	57.1	474.0	37.7	115.2	915.2	340.6	57.5	107.0	0.3	112.1	0.0	2,522.1
1998	754.3	222.7	193.9	38.3	47.3	490.9	30.7	123.2	924.4	406.8	58.5	100.8	0.3	91.2	0.0	R 2,559.1
1999	742.4	R 224.8	182.7	38.6	42.9	507.7	27.4	118.7	918.0	392.1	37.7	102.1	0.3	154.7	(s)	2,572.0
2000	786.1	240.7	210.9	41.3	50.9	509.7	31.2	117.6	961.6	408.1	32.0	104.2	0.3	145.7	(s)	2,678.7
2001	756.3	215.6	213.2	34.3	50.0	514.3	22.8	106.7	941.3	394.7	26.8	100.2	0.3	161.5	(s)	2,596.8
2002	770.9	244.8	198.5	27.4	45.4	524.1	25.0	97.9	918.3	413.7	35.5	89.4	0.4	144.7	(s)	2,617.6
2003	771.6	227.8	202.4	29.7	43.3	534.3	30.8	99.0	939.7	426.3	73.7	108.2	0.4	82.8	(s)	2,630.7
2004	782.7	232.7	213.5	30.6	43.9	549.7	37.2	108.4	983.2	418.0	54.5	84.9	0.4	R 144.1	0.0	2,700.5
2005	811.9	238.4	212.3	41.8	47.8	552.0	35.0	102.3	991.1	417.2	54.0	R 88.2	0.5	122.8	0.0	R 2,724.2
2006	777.9	230.8	207.9	30.2	47.1	555.4	26.5	96.0	963.2	417.0	38.1	R 99.1	0.7	134.3	0.0	R 2,661.0
2007	827.8	245.2	206.7	40.6	43.4	563.0	23.6	93.5	970.8	420.0	29.5	83.5	0.8	122.5	0.0	2,700.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	587	9	5,887	10,429	1,615	17,931	2,196	--	--	5,796	--	--	--
1965	309	15	6,654	10,547	2,563	19,765	1,527	--	--	8,601	--	--	--
1970	244	27	8,663	10,045	3,003	21,711	1,024	--	--	14,660	--	--	--
1975	111	27	7,261	4,901	2,245	14,408	1,047	--	--	18,999	--	--	--
1980	36	34	7,044	2,747	2,846	12,637	1,154	--	--	24,377	--	--	--
1985	43	29	5,449	3,994	3,194	12,636	1,428	--	--	26,852	--	--	--
1990	31	35	4,225	1,408	4,277	9,910	585	--	--	33,144	--	--	--
1995	29	49	4,023	2,098	5,850	11,970	885	--	--	39,506	--	--	--
1996	25	59	4,257	2,546	6,696	13,499	919	--	--	41,592	--	--	--
1997	21	53	3,426	2,603	6,664	12,694	725	--	--	40,611	--	--	--
1998	22	51	2,993	2,988	6,358	12,339	645	--	--	42,890	--	--	--
1999	18	53	2,968	1,985	6,430	11,383	679	--	--	43,648	--	--	--
2000	12	64	3,238	1,979	6,956	12,172	729	--	--	46,537	--	--	--
2001	14	57	3,118	2,022	7,158	12,297	484	--	--	46,201	--	--	--
2002	16	59	2,808	1,223	6,670	10,700	492	--	--	49,854	--	--	--
2003	17	65	2,967	1,786	7,415	12,168	517	--	--	49,349	--	--	--
2004	35	63	2,868	1,892	7,781	12,541	530	--	--	51,717	--	--	--
2005	12	64	2,228	1,755	6,529	10,512	<sup>R</sup> 658	--	--	54,073	--	--	--
2006	<sup>R</sup> 10	57	2,030	1,194	<sup>R</sup> 5,811	<sup>R</sup> 9,036	<sup>R</sup> 599	--	--	52,851	--	--	--
2007	4	58	1,972	849	5,725	8,546	660	--	--	56,095	--	--	--
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	409.0
1985	1.1	29.6	31.7	22.6	11.5	65.9	28.6	0.0	0.0	91.6	216.8	211.0	427.8
1990	0.8	36.1	24.6	8.0	15.5	48.1	11.7	0.1	0.2	113.1	210.1	261.5	471.6
1995	0.7	51.0	23.4	11.9	21.2	56.5	17.7	0.2	0.2	134.8	261.1	306.1	567.2
1996	0.6	60.9	24.8	14.4	24.2	63.4	18.4	0.2	0.2	141.9	285.6	322.7	608.3
1997	0.5	54.8	20.0	14.8	24.1	58.8	14.5	0.2	0.2	138.6	267.6	313.9	581.5
1998	0.6	52.9	17.4	16.9	23.0	57.4	12.9	0.2	0.2	146.3	270.4	331.9	602.3
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	610.5
2000	0.3	65.9	18.9	11.2	25.1	55.2	14.6	0.2	0.1	158.8	295.1	361.2	656.2
2001	0.4	59.2	18.2	11.5	25.9	55.5	9.7	0.2	0.1	157.6	282.7	351.3	634.0
2002	0.4	61.5	16.4	6.9	24.1	47.4	9.8	0.2	0.1	170.1	289.6	379.2	668.8
2003	0.4	68.3	17.3	10.1	26.9	54.3	10.3	0.3	0.1	168.4	302.2	371.5	673.8
2004	0.9	65.2	16.7	10.7	28.2	55.6	10.6	0.3	0.1	176.5	309.1	390.4	699.6
2005	0.3	66.5	13.0	10.0	23.6	46.6	<sup>R</sup> 13.2	0.4	0.1	184.5	<sup>R</sup> 311.6	403.5	<sup>R</sup> 715.1
2006	<sup>R</sup> 0.3	58.7	11.8	6.8	<sup>R</sup> 20.9	<sup>R</sup> 39.5	<sup>R</sup> 12.0	0.5	0.2	180.3	<sup>R</sup> 291.5	389.9	<sup>R</sup> 681.4
2007	0.1	60.5	11.5	4.8	20.6	36.9	13.2	0.6	0.2	191.4	302.9	413.0	715.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	408	4	1,156	248	285	206	122	2,018	0	--	--	2,667	--	--	--	
1965	233	7	1,307	251	452	278	120	2,409	0	--	--	5,360	--	--	--	
1970	192	22	1,701	239	530	355	179	3,004	0	--	--	9,697	--	--	--	
1975	259	22	1,426	117	396	414	233	2,586	0	--	--	11,679	--	--	--	
1980	135	26	1,673	118	502	790	491	3,574	0	--	--	14,258	--	--	--	
1985	152	25	2,958	245	564	633	322	4,721	0	--	--	19,163	--	--	--	
1990	125	31	2,302	78	755	782	223	4,140	24	--	--	25,516	--	--	--	
1995	195	37	2,345	147	1,032	61	185	3,770	15	--	--	31,104	--	--	--	
1996	181	40	2,824	178	1,182	312	220	4,716	13	--	--	32,563	--	--	--	
1997	171	38	2,861	205	1,176	176	169	4,587	16	--	--	33,344	--	--	--	
1998	178	36	2,584	261	1,122	347	114	4,427	13	--	--	35,720	--	--	--	
1999	132	38	2,162	185	1,135	311	100	3,892	10	--	--	37,202	--	--	--	
2000	101	43	2,679	234	1,227	330	113	4,583	10	--	--	39,067	--	--	--	
2001	114	39	3,096	192	1,263	263	128	4,941	2	--	--	39,895	--	--	--	
2002	116	40	1,992	95	1,177	275	74	3,613	8	--	--	41,451	--	--	--	
2003	113	44	2,125	269	1,308	1,163	208	5,075	6	--	--	41,672	--	--	--	
2004	317	45	1,680	168	1,373	1,461	276	4,958	17	--	--	42,864	--	--	--	
2005	137	48	1,669	162	1,152	1,939	229	5,151	18	--	--	44,161	--	--	--	
2006	R 106	R 46	1,471	100	R 1,026	1,604	161	R 4,362	12	--	--	44,585	--	--	--	
2007	37	45	1,502	71	1,010	1,153	30	3,766	7	--	--	46,807	--	--	--	
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	0.3	1.3	0.0	87.1	146.1	201.3	347.4	
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	241.0	412.9	
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	441.8	
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	276.4	466.3	
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	290.3	482.5	
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	303.2	509.9	
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	303.3	510.1	
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	315.3	521.7	
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	313.8	532.9	
2004	7.9	47.1	9.8	1.0	5.0	7.6	1.7	25.1	0.2	1.8	0.0	146.3	228.2	323.6	551.8	
2005	3.5	49.7	9.7	0.9	4.2	10.1	1.4	26.4	0.2	R 2.1	0.0	150.7	232.5	329.6	R 562.0	
2006	2.7	R 48.1	8.6	0.6	R 3.7	8.4	1.0	R 22.2	0.1	R 1.9	0.0	152.1	227.2	329.0	R 556.1	
2007	0.9	47.1	8.7	0.4	3.6	6.0	0.2	19.0	0.1	2.1	0.0	159.7	228.9	344.6	573.5	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,421	26	3,155	730	1,089	3,967	4,396	13,336	48	--	--	8,773	--	--
1965	2,563	47	4,710	1,156	1,315	4,005	5,710	16,896	37	--	--	10,707	--	--
1970	2,267	75	4,514	1,891	1,004	5,809	6,692	19,911	10	--	--	16,099	--	--
1975	1,479	62	4,271	3,695	782	7,045	6,123	21,915	5	--	--	20,875	--	--
1980	1,375	86	4,131	4,581	514	8,468	7,165	24,859	3	--	--	25,254	--	--
1985	2,247	75	3,613	3,606	832	5,814	7,000	20,864	3	--	--	26,272	--	--
1990	2,989	86	3,467	3,700	807	5,121	9,843	22,938	3	--	--	31,265	--	--
1995	2,437	107	4,640	5,115	977	5,779	11,842	28,352	1,636	--	--	34,063	--	--
1996	2,336	104	4,372	5,908	1,003	6,280	15,593	33,155	1,741	--	--	34,142	--	--
1997	2,158	112	4,019	7,827	1,041	5,554	16,451	34,891	1,697	--	--	35,095	--	--
1998	1,883	106	4,822	5,409	923	4,622	17,242	33,018	1,663	--	--	34,986	--	--
1999	1,751	107	3,935	4,221	657	4,132	17,613	30,558	1,174	--	--	34,165	--	--
2000	1,762	107	4,207	5,820	804	4,729	17,391	32,950	936	--	--	34,252	--	--
2001	1,704	89	4,676	5,368	2,019	3,391	15,195	30,648	733	--	--	32,931	--	--
2002	1,597	98	3,411	4,581	1,957	3,099	14,678	27,727	1,062	--	--	31,381	--	--
2003	1,590	88	3,433	3,094	1,666	3,914	14,147	26,255	866	--	--	30,314	--	--
2004	1,448	90	3,483	2,830	1,966	5,233	15,712	29,225	688	--	--	31,075	--	--
2005	1,408	87	4,272	4,264	1,831	4,918	14,783	30,067	722	--	--	30,101	--	--
2006	1,225	87	3,914	R 5,052	1,941	3,869	14,303	R 29,078	494	--	--	29,263	--	--
2007	1,145	88	3,923	4,440	1,385	3,136	14,208	27,092	2	--	--	28,978	--	--
Trillion Btu														
1960	61.6	27.0	18.4	2.9	5.7	24.9	27.6	79.5	0.5	29.0	0.0	29.9	74.0	301.6
1965	64.6	48.3	27.4	4.6	6.9	25.2	35.1	99.2	0.4	36.2	0.0	36.5	87.2	372.5
1970	53.9	76.9	26.3	7.1	5.3	36.5	41.5	116.8	0.1	45.0	0.0	54.9	133.0	480.5
1975	34.7	63.2	24.9	13.7	4.1	44.3	37.8	124.8	0.1	45.1	0.0	71.2	171.3	510.4
1980	33.6	86.6	24.1	16.8	2.7	53.2	43.4	140.2	(s)	55.3	0.0	86.2	207.7	609.6
1985	55.9	R 77.4	21.0	13.0	4.4	36.6	42.8	117.8	(s)	64.8	0.0	89.6	206.5	611.9
1990	74.5	88.9	20.2	13.4	4.2	32.2	59.4	129.4	(s)	82.8	0.0	106.7	246.7	729.1
1995	61.6	110.3	27.0	18.5	5.1	36.3	72.5	159.5	16.9	84.9	0.0	116.2	263.9	813.2
1996	58.7	107.9	25.5	21.3	5.2	39.5	89.5	181.0	18.0	82.7	0.0	116.5	264.9	829.7
1997	54.1	115.6	23.4	28.3	5.4	34.9	94.6	186.6	17.3	83.8	0.0	119.7	271.3	848.4
1998	47.2	110.9	28.1	19.5	4.8	29.1	99.5	181.0	17.0	78.9	0.0	119.4	270.7	825.0
1999	43.9	111.1	22.9	15.3	3.4	26.0	101.4	169.0	12.0	79.6	0.0	116.6	266.6	798.8
2000	46.7	109.8	24.5	21.0	4.2	29.7	100.3	179.7	9.5	80.6	0.0	116.9	265.8	809.0
2001	45.6	92.6	27.2	19.4	10.5	21.3	89.7	168.2	7.6	82.3	0.0	112.4	250.4	759.1
2002	42.2	102.7	19.9	16.5	10.2	19.5	86.4	152.5	10.8	71.4	0.0	107.1	238.7	725.3
2003	42.1	92.4	20.0	11.2	8.7	24.6	83.3	147.8	8.9	89.9	0.0	103.4	228.2	712.7
2004	38.1	93.5	20.3	10.2	10.3	32.9	92.8	166.5	6.9	65.9	0.0	106.0	234.6	R 711.6
2005	36.9	90.4	24.9	15.4	9.6	30.9	87.3	168.1	7.2	65.7	0.0	102.7	224.6	695.7
2006	32.2	R 90.5	22.8	R 18.2	10.1	24.3	84.9	R 160.3	4.9	76.7	0.0	99.8	R 464.4	R 680.3
2007	30.0	91.7	22.8	15.9	7.2	19.7	84.4	150.1	(s)	59.7	0.0	98.9	213.3	643.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	42	2	692	3,187	3,401	5	545	34,580	494	42,905	0	0	--	--	--
1965	8	4	714	4,458	3,649	17	578	41,551	581	51,548	0	0	--	--	--
1970	4	6	151	6,301	4,702	65	523	54,989	345	67,077	0	0	--	--	--
1975	(s)	4	219	8,207	3,809	108	498	65,739	263	78,844	0	0	--	--	--
1980	0	6	215	10,707	5,209	50	635	64,918	99	81,834	0	0	--	--	--
1985	0	5	174	13,827	6,668	183	578	69,392	97	90,917	223	0	--	--	--
1990	0	6	213	15,804	5,567	160	650	75,937	513	98,844	0	0	--	--	--
1995	0	6	139	19,855	4,947	141	620	85,383	299	111,384	28	0	--	--	--
1996	0	7	148	20,539	9,127	131	602	86,832	328	117,707	778	0	--	--	--
1997	0	7	159	21,909	R 7,156	122	636	89,716	277	R 119,973	787	0	--	--	--
1998	0	7	138	22,240	R 6,761	211	665	92,908	148	R 123,071	962	0	--	--	--
1999	0	7	187	21,635	6,802	72	672	96,454	132	125,953	828	0	--	--	--
2000	0	7	140	24,918	7,277	98	662	96,699	128	129,923	934	0	--	--	--
2001	0	7	151	24,827	6,051	58	607	96,436	104	128,234	1,272	0	--	--	--
2002	0	6	91	25,061	4,825	134	600	98,410	798	129,919	1,567	0	--	--	--
2003	0	6	141	25,071	5,246	128	554	99,788	782	131,710	2,045	0	--	--	--
2004	0	5	108	27,964	5,397	138	562	101,987	401	136,557	2,180	0	--	--	--
2005	0	4	128	27,724	7,366	1,247	559	102,026	421	139,472	R 598	(s)	--	--	--
2006	0	5	107	27,801	5,323	1,173	544	102,895	193	138,036	R 856	(s)	--	--	--
2007	0	5	96	27,561	7,161	900	562	105,333	590	142,202	1,270	(s)	--	--	--
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	0.8	0.0	493.4	0.0	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	3.4	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	2.9	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	4.5	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	5.5	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	7.2	0.0	711.3	0.0	711.3
2004	0.0	5.2	0.5	162.9	30.6	0.5	3.4	531.9	2.5	732.3	7.7	0.0	737.6	0.0	737.6
2005	0.0	4.5	0.6	161.5	41.8	4.5	3.4	532.4	2.6	746.8	R 2.1	(s)	751.3	(s)	751.3
2006	0.0	4.9	0.5	161.9	30.2	4.2	3.3	536.9	1.2	738.3	R 3.0	(s)	743.2	(s)	743.2
2007	0.0	5.2	0.5	160.5	40.6	3.2	3.4	549.7	3.7	761.7	4.5	(s)	766.9	(s)	766.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, North Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--
2005	31,303	27	0	548	0	548	39,982	4,656	--	0	0	0	0	--
2006	30,456	28	0	473	0	473	39,963	3,333	--	0	0	0	0	--
2007	32,412	40	0	525	0	525	40,045	2,975	--	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	6.5	0.0	0.0	0.0	0.0	1,149.7
2002	725.5	32.2	0.0	4.7	0.0	4.7	413.7	24.6	6.3	0.0	0.0	0.0	0.0	1,207.0
2003	726.2	14.4	0.0	6.7	0.0	6.7	426.3	64.8	6.2	0.0	0.0	0.0	0.0	1,244.7
2004	735.8	21.6	0.0	3.8	0.0	3.8	418.0	47.4	6.6	0.0	0.0	0.0	0.0	1,233.3
2005	771.2	27.4	0.0	3.2	0.0	3.2	417.2	46.6	7.2	0.0	0.0	0.0	0.0	1,272.8
2006	742.8	28.7	0.0	2.8	0.0	2.8	417.0	33.1	8.4	0.0	0.0	0.0	0.0	1,232.8
2007	796.7	40.7	0.0	3.1	0.0	3.1	420.0	29.4	8.5	0.0	0.0	0.0	0.0	1,298.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	2,100	26	3,773	2,103	1,212	7,719	687	3,089	18,583	0	1,060	--	--	--	--	--
1965	1,719	32	5,170	2,069	1,154	8,212	868	2,054	19,526	0	2,497	--	--	--	--	--
1970	4,186	33	4,975	2,074	1,719	8,766	728	2,879	21,141	0	2,815	--	--	--	--	--
1975	5,100	37	4,446	1,855	1,580	10,044	1,089	2,463	21,477	0	3,345	--	--	--	--	--
1980	12,346	23	8,139	1,702	1,302	9,167	716	2,057	23,083	0	2,513	--	--	--	--	--
1985	22,958	28	7,637	1,682	549	8,822	505	2,051	21,246	0	2,173	--	--	--	--	--
1990	28,114	32	7,219	1,178	1,426	8,151	326	2,168	20,468	0	1,711	--	--	--	--	--
1995	30,237	45	8,005	333	1,754	8,650	164	2,141	21,047	0	2,457	--	--	--	--	--
1996	30,511	49	8,334	246	2,226	8,683	135	2,391	22,015	0	3,151	--	--	--	--	--
1997	29,360	56	8,034	189	2,534	8,628	187	2,698	22,270	0	3,320	--	--	--	--	--
1998	31,060	50	7,181	211	1,976	8,681	44	2,751	20,844	0	2,296	--	--	--	--	--
1999	31,276	56	7,548	405	2,675	8,711	61	3,451	22,850	0	2,609	--	--	--	--	--
2000	31,902	57	7,805	413	3,354	8,512	78	2,375	22,538	0	2,123	--	--	--	--	--
2001	31,524	61	8,869	751	5,426	8,478	69	2,838	26,430	0	1,332	--	--	--	--	--
2002	31,984	67	8,202	528	3,406	8,554	101	2,538	23,330	0	1,593	--	--	--	--	--
2003	31,970	61	8,298	558	2,775	8,675	143	2,172	22,621	0	1,724	--	--	--	--	--
2004	30,079	60	9,405	1,093	3,311	8,603	63	2,490	24,965	0	1,546	--	--	--	--	--
2005	32,044	53	9,798	646	3,370	8,716	256	2,908	25,694	0	1,342	--	--	--	--	--
2006	31,073	53	9,966	735	2,766	8,455	105	3,353	25,380	0	1,521	--	--	--	--	--
2007	31,302	60	11,934	710	3,023	8,648	94	2,039	26,448	0	1,305	--	--	--	--	--
Trillion Btu																
1960	30.5	27.4	22.0	11.3	4.9	40.5	4.3	18.9	101.9	0.0	11.4	0.5	0.0	-12.0	0.0	159.6
1965	24.7	32.4	30.1	11.1	4.6	43.1	5.5	12.7	107.1	0.0	26.1	0.3	0.0	-21.1	(s)	169.6
1970	57.5	33.7	29.0	11.2	6.5	46.0	4.6	18.0	115.3	0.0	29.5	0.4	0.0	-46.3	1.0	191.1
1975	67.9	36.9	25.9	10.0	5.9	52.8	6.8	15.4	116.8	0.0	34.8	0.5	0.0	-54.4	4.0	206.5
1980	163.3	R 24.0	47.4	9.2	4.8	48.2	4.5	12.8	126.8	0.0	26.1	2.4	0.0	-129.8	9.5	222.5
1985	302.0	R 29.8	44.5	9.1	2.0	46.3	3.2	13.1	118.2	0.0	22.7	3.1	(s)	-181.2	5.0	299.6
1990	374.5	R 33.5	42.1	6.4	5.2	42.8	2.1	13.5	112.0	0.0	17.8	1.9	0.1	-225.2	-5.1	309.5
1995	399.8	R 47.7	46.6	1.9	6.4	45.1	1.0	13.3	114.3	0.0	25.3	2.6	0.1	-239.0	-3.5	347.3
1996	404.0	R 51.6	48.5	1.4	8.0	45.3	0.9	14.9	119.0	0.0	32.6	2.4	0.2	-255.3	-2.9	351.5
1997	386.0	R 59.3	46.8	1.1	9.2	45.0	1.2	17.0	120.2	0.0	33.9	2.3	0.2	-240.9	-5.2	355.7
1998	409.2	R 51.4	41.8	1.2	7.1	45.2	0.3	17.4	113.1	0.0	23.4	2.2	0.2	-250.2	-6.4	343.0
1999	411.3	R 59.0	44.0	2.3	9.7	45.4	0.4	22.0	123.8	0.0	26.7	2.4	0.2	-245.7	-6.1	371.5
2000	424.6	R 58.5	45.5	2.3	12.1	44.3	0.5	15.0	119.7	0.0	21.7	2.6	0.2	-246.3	-2.9	378.1
2001	420.0	R 62.6	51.7	4.3	19.6	44.2	0.4	17.8	137.9	0.0	13.8	R 3.5	0.3	-232.4	-3.3	R 402.4
2002	422.8	R 64.9	47.8	3.0	12.3	44.5	0.6	15.9	124.2	0.0	16.2	2.6	0.3	-232.9	-4.6	R 393.5
2003	420.8	R 59.1	48.3	3.2	10.1	45.2	0.9	13.4	121.0	0.0	17.7	R 2.7	1.0	-226.2	-6.6	R 389.5
2004	398.4	R 60.3	54.8	6.2	12.0	44.9	0.4	15.5	133.8	0.0	15.5	R 3.3	2.6	R -212.4	-4.4	R 397.0
2005	431.1	R 55.0	57.1	3.7	12.2	45.5	1.6	18.3	138.3	0.0	13.4	R 4.2	2.7	-238.0	0.5	R 407.1
2006	414.8	R 55.7	58.1	4.2	10.0	44.1	0.7	21.2	138.2	0.0	15.1	R 4.0	4.2	-218.1	-3.1	R 410.8
2007	420.1	63.0	69.5	4.0	10.9	45.1	0.6	12.6	142.7	0.0	12.9	3.8	6.7	-220.4	-0.8	428.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	328	4	874	860	787	2,521	23	--	--	728	--	--	--
1965	177	7	1,269	40	758	2,067	16	--	--	911	--	--	--
1970	80	8	1,103	190	1,283	2,576	19	--	--	1,399	--	--	--
1975	46	10	776	21	1,181	1,978	22	--	--	1,901	--	--	--
1980	30	10	1,173	5	511	1,689	119	--	--	2,456	--	--	--
1985	43	10	1,162	14	169	1,345	153	--	--	3,012	--	--	--
1990	27	9	981	5	653	1,639	84	--	--	2,954	--	--	--
1995	14	11	717	4	775	1,495	73	--	--	3,384	--	--	--
1996	18	13	818	5	945	1,768	76	--	--	3,602	--	--	--
1997	15	11	602	5	1,519	2,127	59	--	--	3,437	--	--	--
1998	13	10	532	6	1,088	1,626	52	--	--	3,272	--	--	--
1999	15	11	485	17	1,439	1,941	55	--	--	3,307	--	--	--
2000	15	11	564	3	1,756	2,322	59	--	--	3,390	--	--	--
2001	15	11	492	4	2,006	2,502	55	--	--	3,480	--	--	--
2002	17	12	424	2	1,800	2,226	56	--	--	3,664	--	--	--
2003	22	12	502	3	1,727	2,232	59	--	--	3,707	--	--	--
2004	25	11	582	5	1,693	2,280	61	--	--	3,663	--	--	--
2005	21	11	460	7	1,843	2,310	72	--	--	3,796	--	--	--
2006	R 9	10	462	3	R 1,459	R 1,923	R 65	--	--	3,853	--	--	--
2007	24	11	470	2	1,507	1,979	72	--	--	4,067	--	--	--
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	30.0	20.2	50.2
1985	0.6	R 11.0	6.8	0.1	0.6	7.5	3.1	0.0	0.0	10.3	30.4	23.7	54.1
1990	0.4	R 9.5	5.7	(s)	2.4	8.1	1.7	0.1	(s)	10.1	27.7	23.3	51.0
1995	0.2	R 11.8	4.2	(s)	2.8	7.0	1.5	0.1	(s)	11.5	29.8	26.2	56.0
1996	0.3	R 13.2	4.8	(s)	3.4	8.2	1.5	0.1	(s)	12.3	33.3	27.9	61.3
1997	0.2	R 11.9	3.5	(s)	5.5	9.0	1.2	0.1	(s)	11.7	32.7	26.6	59.3
1998	0.2	R 10.5	3.1	(s)	3.9	7.1	1.0	0.1	(s)	11.2	28.6	25.3	53.9
1999	0.2	R 11.0	2.8	0.1	5.2	8.1	1.1	0.1	(s)	11.3	30.3	25.8	56.2
2000	0.2	R 11.3	3.3	(s)	6.3	9.6	1.2	0.1	(s)	11.6	32.5	26.3	58.8
2001	0.2	R 10.9	2.9	(s)	7.3	10.1	1.1	0.1	(s)	11.9	32.9	26.5	59.4
2002	0.3	R 11.4	2.5	(s)	6.5	9.0	1.1	0.1	(s)	12.5	33.0	27.9	60.9
2003	0.4	R 11.5	2.9	(s)	6.3	9.2	1.2	0.2	(s)	12.6	33.5	27.9	61.4
2004	0.4	R 11.2	3.4	(s)	6.1	9.5	1.2	0.2	(s)	12.5	33.7	27.7	61.3
2005	0.4	R 11.1	2.7	(s)	6.7	9.4	R 1.4	0.2	(s)	13.0	R 33.7	28.3	R 62.0
2006	R 0.2	R 10.1	2.7	(s)	R 5.3	R 8.0	R 1.3	0.3	(s)	13.1	31.3	28.4	59.7
2007	0.4	11.2	2.7	(s)	5.4	8.2	1.4	0.3	(s)	13.9	33.9	29.9	63.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	228	3	198	0	139	32	73	442	0	--	--	304	--	--	--
1965	133	5	288	0	134	179	209	809	0	--	--	443	--	--	--
1970	63	8	250	0	226	151	104	731	0	--	--	696	--	--	--
1975	107	12	176	0	208	95	493	972	0	--	--	805	--	--	--
1980	113	11	642	0	90	73	400	1,206	0	--	--	1,145	--	--	--
1985	154	10	502	(s)	30	69	64	665	0	--	--	2,026	--	--	--
1990	108	10	175	(s)	115	70	22	383	0	--	--	2,300	--	--	--
1995	96	12	148	1	137	10	19	315	0	--	--	2,728	--	--	--
1996	129	12	208	2	167	10	6	393	0	--	--	2,877	--	--	--
1997	125	11	257	1	268	10	9	545	0	--	--	2,769	--	--	--
1998	105	10	269	1	192	21	16	499	0	--	--	2,761	--	--	--
1999	113	10	234	1	254	22	15	525	0	--	--	2,793	--	--	--
2000	119	11	232	1	310	10	12	565	0	--	--	2,992	--	--	--
2001	119	10	262	2	354	10	36	664	0	--	--	3,577	--	--	--
2002	128	12	142	1	318	10	94	565	0	--	--	3,920	--	--	--
2003	147	11	178	1	305	19	100	603	0	--	--	3,800	--	--	--
2004	226	10	180	2	299	10	18	509	0	--	--	3,843	--	--	--
2005	239	10	141	3	325	10	46	525	0	--	--	3,994	--	--	--
2006	R 94	9	149	3	R 257	20	10	R 440	0	--	--	4,127	--	--	--
2007	216	10	160	1	266	17	26	470	0	--	--	4,215	--	--	--
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	R 11.6	3.7	0.0	0.3	0.4	2.5	7.0	0.0	0.1	0.0	3.9	23.9	9.4	33.3
1985	2.0	R 10.7	2.9	(s)	0.1	0.4	0.4	3.8	0.0	0.1	0.0	6.9	21.6	15.9	37.6
1990	1.5	R 10.6	1.0	(s)	0.4	0.4	0.1	1.9	0.0	0.2	(s)	7.8	19.7	18.1	37.8
1995	1.5	R 12.2	0.9	(s)	0.5	0.1	0.1	1.5	0.0	0.2	0.1	9.3	22.4	21.1	43.6
1996	1.9	R 12.8	1.2	(s)	0.6	0.1	(s)	1.9	0.0	0.2	0.1	9.8	24.5	22.3	46.9
1997	1.9	R 11.4	1.5	(s)	1.0	0.1	0.1	2.6	0.0	0.2	0.1	9.4	24.2	21.4	45.6
1998	1.5	R 10.5	1.6	(s)	0.7	0.1	0.1	2.5	0.0	0.2	0.1	9.4	22.7	21.4	44.1
1999	1.6	R 10.5	1.4	(s)	0.9	0.1	0.1	2.5	0.0	0.2	0.1	9.5	22.9	21.8	44.7
2000	1.7	R 11.4	1.3	(s)	1.1	0.1	0.1	2.6	0.0	0.2	0.1	10.2	24.7	23.2	47.9
2001	1.9	R 10.8	1.5	(s)	1.3	0.1	0.2	3.1	0.0	0.2	0.1	12.2	26.9	27.2	54.1
2002	2.1	R 11.3	0.8	(s)	1.1	0.1	0.6	2.6	0.0	0.2	0.1	13.4	28.3	29.8	58.1
2003	2.4	R 10.6	1.0	(s)	1.1	0.1	0.6	2.9	0.0	0.2	0.2	13.0	27.8	28.6	56.4
2004	3.8	R 10.5	1.0	(s)	1.1	0.1	0.1	2.3	0.0	0.2	0.2	13.1	28.9	29.0	57.9
2005	4.3	R 10.3	0.8	(s)	1.2	0.1	0.3	2.4	0.0	0.2	0.2	13.6	29.4	29.8	59.2
2006	1.7	R 9.8	0.9	(s)	0.9	0.1	0.1	2.0	0.0	0.2	0.3	14.1	26.4	30.4	R 56.8
2007	3.4	10.8	0.9	(s)	1.0	0.1	0.2	2.1	0.0	0.2	0.3	14.4	29.8	31.0	60.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	521	20	2,104	257	2,927	530	2,005	7,823	0	--	--	121	--	--
1965	444	21	2,696	240	2,533	632	1,702	7,804	0	--	--	241	--	--
1970	523	16	2,174	206	2,315	558	2,456	7,710	0	--	--	720	--	--
1975	570	14	1,613	189	2,193	577	2,219	6,792	0	--	--	1,007	--	--
1980	585	2	2,460	690	1,540	315	1,836	6,842	0	--	--	1,576	--	--
1985	5,407	7	2,890	340	1,080	440	1,896	6,646	0	--	--	1,988	--	--
1990	6,400	11	3,016	644	799	304	1,979	6,742	0	--	--	1,760	--	--
1995	7,447	18	3,027	830	685	145	1,923	6,610	0	--	--	1,771	--	--
1996	6,724	20	2,912	1,093	575	129	2,190	6,899	0	--	--	1,835	--	--
1997	6,465	29	2,613	734	450	178	2,508	6,482	0	--	--	2,076	--	--
1998	6,664	29	2,563	691	562	27	2,542	6,386	0	--	--	2,187	--	--
1999	6,608	26	2,362	972	434	46	3,233	7,048	0	--	--	3,013	--	--
2000	6,719	24	2,756	1,283	443	66	2,179	6,726	0	--	--	3,031	--	--
2001	6,595	26	3,420	3,057	527	33	2,600	9,637	0	--	--	2,753	--	--
2002	6,592	29	2,839	1,279	550	4	2,334	7,005	0	--	--	2,636	--	--
2003	6,628	24	2,796	721	573	43	1,965	6,098	0	--	--	2,954	--	--
2004	5,913	24	3,532	1,286	717	45	2,285	7,865	0	--	--	3,010	--	--
2005	6,467	19	3,747	1,180	626	210	2,699	8,462	0	--	--	3,050	--	--
2006	6,671	21	3,787	1,031	676	95	3,173	8,762	0	--	--	3,266	--	--
2007	6,424	25	3,871	1,230	577	68	1,865	7,611	0	--	--	3,624	--	--
Trillion Btu														
1960	7.7	20.3	12.3	1.0	15.4	3.3	12.7	44.7	0.0	0.0	0.0	0.4	73.2	74.2
1965	6.5	20.9	15.7	1.0	13.3	4.0	10.7	44.7	0.0	0.0	0.0	0.8	72.9	74.8
1970	7.2	16.3	12.7	0.8	12.2	3.5	15.6	44.7	0.0	0.0	0.0	2.5	70.8	76.7
1975	7.4	14.0	9.4	0.7	11.5	3.6	14.0	39.2	0.0	0.0	0.0	3.4	64.1	72.3
1980	7.7	2.1	14.3	2.5	8.1	2.0	11.5	38.4	0.0	0.0	0.0	5.4	53.6	66.5
1985	71.2	R 7.3	16.8	1.2	5.7	2.8	12.2	38.7	0.0	0.0	0.0	6.8	123.6	139.2
1990	86.3	R 11.7	17.6	2.3	4.2	1.9	12.4	38.4	0.0	0.1	0.0	6.0	141.5	155.4
1995	99.4	R 18.7	17.6	3.0	3.6	0.9	12.1	37.2	0.0	0.9	0.0	6.0	161.0	174.8
1996	90.0	R 20.5	17.0	3.9	3.0	0.8	13.7	38.5	0.0	0.7	0.0	6.3	154.5	168.7
1997	85.9	R 30.6	15.2	2.7	2.3	1.1	15.9	37.2	0.0	0.9	0.0	7.1	159.0	175.0
1998	88.9	R 30.0	14.9	2.5	2.9	0.2	16.2	36.7	0.0	1.0	0.0	7.5	161.3	178.2
1999	88.2	R 27.4	13.8	3.5	2.3	0.3	20.8	40.6	0.0	1.1	0.0	10.3	165.0	188.5
2000	95.6	R 24.7	16.1	4.6	2.3	0.4	13.8	37.2	0.0	1.2	0.0	10.3	167.1	190.6
2001	93.5	R 26.9	19.9	11.0	2.7	0.2	16.5	50.4	0.0	R 2.2	0.0	9.4	R 180.0	R 200.9
2002	92.2	R 28.2	16.5	4.6	2.9	(s)	14.7	38.8	0.0	1.3	0.0	9.0	R 167.2	R 187.2
2003	94.8	R 23.2	16.3	2.6	3.0	0.3	12.2	34.4	0.0	R 1.3	0.0	10.1	R 161.8	R 184.0
2004	84.8	R 24.4	20.6	4.7	3.7	0.3	14.4	43.6	0.0	R 1.9	0.0	10.3	R 162.9	185.6
2005	92.3	R 19.8	21.8	4.3	3.3	1.3	17.1	47.7	0.0	R 2.5	0.0	10.4	R 170.9	193.6
2006	95.3	R 22.2	22.1	R 3.7	3.5	0.6	20.2	R 50.1	0.0	R 2.5	0.0	11.1	R 178.9	R 203.0
2007	91.8	26.4	22.5	4.4	3.0	0.4	11.5	42.0	0.0	2.1	0.0	12.4	172.2	198.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	9	(s)	66	592	2,103	29	158	4,760	69	7,778	0	0	--	--	--
1965	1	(s)	165	916	2,069	22	147	5,499	25	8,843	0	0	--	--	--
1970	1	(s)	95	1,441	2,074	3	138	6,300	41	10,092	0	0	--	--	--
1975	(s)	(s)	85	1,880	1,855	2	137	7,756	0	11,715	0	0	--	--	--
1980	0	(s)	64	3,795	1,702	12	151	7,553	0	13,278	0	0	--	--	--
1985	0	1	4	3,009	1,682	11	138	7,673	0	12,517	60	0	--	--	--
1990	0	2	28	2,990	1,178	14	155	7,282	0	11,647	76	0	--	--	--
1995	0	5	65	4,014	333	13	148	7,955	0	12,528	151	0	--	--	--
1996	0	5	50	4,241	246	21	144	8,098	0	12,800	113	0	--	--	--
1997	0	5	33	4,409	189	12	152	8,168	0	12,963	112	0	--	--	--
1998	0	(s)	43	3,728	211	4	159	8,098	0	12,243	108	0	--	--	--
1999	0	10	39	4,386	405	9	160	8,255	0	13,255	117	0	--	--	--
2000	0	11	34	4,158	413	5	158	8,060	0	12,829	141	0	--	--	--
2001	0	14	86	4,632	751	8	145	7,941	0	13,562	168	0	--	--	--
2002	0	14	58	4,733	528	10	143	7,993	0	13,465	213	0	--	--	--
2003	0	14	70	4,727	558	23	132	8,083	0	13,592	254	0	--	--	--
2004	0	14	64	5,037	1,093	33	134	7,875	0	14,237	222	0	--	--	--
2005	0	13	66	5,380	646	23	133	8,080	0	14,327	R 491	0	--	--	--
2006	0	13	43	5,489	735	19	130	7,759	0	14,176	R 470	0	--	--	--
2007	0	14	37	7,338	710	19	134	8,054	0	16,291	583	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	0.2	0.0	68.8	0.0	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	0.5	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	0.9	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	0.8	0.0	92.1	0.0	92.1
2005	0.0	13.8	0.3	31.3	3.7	0.1	0.8	42.2	0.0	78.4	R 1.7	0.0	92.2	0.0	92.2
2006	0.0	13.6	0.2	32.0	4.2	0.1	0.8	40.5	0.0	77.7	R 1.7	0.0	91.3	0.0	91.3
2007	0.0	14.6	0.2	42.7	4.0	0.1	0.8	42.0	0.0	89.9	2.1	0.0	104.5	0.0	104.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, North Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours		Wood and Waste <sup>e,f</sup>	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	--	0	0	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	--
2005	25,317	(s)	0	70	0	70	0	1,342	--	0	0	220	1,694	--
2006	24,298	(s)	0	78	0	78	0	1,521	--	0	0	369	756	--
2007	24,639	(s)	0	96	0	96	0	1,305	--	0	0	621	1,332	--
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	0.0	0.0	0.0	0.0	0.1	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
2005	334.1	(s)	0.0	0.4	0.0	0.4	0.0	13.4	0.0	0.0	0.0	2.2	5.8	355.9
2006	317.6	(s)	0.0	0.5	0.0	0.5	0.0	15.1	0.0	0.0	0.0	3.7	2.6	339.4
2007	324.5	(s)	0.0	0.6	0.0	0.6	0.0	12.9	0.0	0.0	0.0	6.1	4.5	348.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Ohio

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	51,250	700	23,919	1,808	3,680	78,170	11,605	24,677	143,859	0	20	--	--	--	--	--
1965	54,022	880	27,663	3,075	5,441	86,271	10,963	33,792	167,205	22	11	--	--	--	--	--
1970	66,863	1,053	34,458	5,857	8,712	106,296	6,445	36,273	198,040	0	7	--	--	--	--	--
1975	70,764	957	42,168	6,039	9,910	118,808	10,399	34,230	221,554	0	7	--	--	--	--	--
1980	64,914	897	48,833	7,219	44,263	113,232	6,918	37,425	257,892	2,119	6	--	--	--	--	--
1985	57,979	733	36,629	7,204	27,919	108,763	2,322	27,522	210,359	1,943	175	--	--	--	--	--
1990	59,205	747	37,580	10,602	10,994	110,487	1,656	35,393	206,713	10,664	181	--	--	--	--	--
1995	56,580	890	40,203	11,236	14,273	116,222	1,422	34,246	217,603	16,768	232	--	--	--	--	--
1996	59,835	933	44,036	11,960	16,019	115,361	1,684	40,148	229,208	13,919	397	--	--	--	--	--
1997	58,821	898	47,075	R 12,610	11,105	118,336	1,246	43,317	R 233,688	15,331	507	--	--	--	--	--
1998	60,514	811	45,775	R 13,838	8,687	119,932	916	42,774	R 231,922	16,476	406	--	--	--	--	--
1999	57,600	842	47,989	16,457	12,929	120,902	1,221	45,931	245,429	16,422	423	--	--	--	--	--
2000	60,246	891	48,814	18,655	11,961	121,297	1,510	40,044	242,282	16,781	583	--	--	--	--	--
2001	58,424	804	49,465	18,579	9,779	121,450	1,034	39,915	240,222	15,464	511	--	--	--	--	--
2002	59,610	831	50,706	17,489	13,392	123,465	966	38,351	244,369	10,865	488	--	--	--	--	--
2003	61,064	848	50,801	17,685	20,632	124,282	571	37,700	251,671	8,475	511	--	--	--	--	--
2004	59,023	826	55,757	18,635	10,965	124,517	750	40,119	250,743	15,950	730	--	--	--	--	--
2005	63,826	826	53,578	18,615	13,308	124,698	1,424	35,869	247,492	14,803	516	--	--	--	--	--
2006	R 62,837	742	55,293	18,486	12,137	124,364	1,375	37,110	248,765	16,847	632	--	--	--	--	--
2007	63,791	806	57,859	18,145	9,022	124,107	909	38,491	248,533	15,764	410	--	--	--	--	--
Trillion Btu																
1960	1,269.2	724.8	139.3	9.8	14.8	410.6	73.0	149.9	797.4	0.0	0.2	36.8	0.0	167.0	0.0	2,995.5
1965	1,324.4	909.4	161.1	17.0	21.8	453.2	68.9	201.1	923.2	0.3	0.1	38.6	0.0	178.9	0.0	3,374.9
1970	1,571.4	1,077.2	200.7	32.8	32.9	558.4	40.5	217.2	1,082.5	0.0	0.1	44.1	0.0	168.8	0.0	3,944.1
1975	1,619.0	978.9	245.6	33.9	36.8	624.1	65.4	206.4	1,212.2	0.0	0.1	46.2	0.0	137.5	0.0	3,993.9
1980	1,528.1	R 911.3	284.5	40.6	162.6	594.8	43.5	221.2	1,347.2	23.1	0.1	107.3	0.0	153.1	-70.3	3,999.9
1985	1,389.5	R 765.4	213.4	40.6	100.6	571.3	14.6	164.9	1,105.4	20.6	1.8	121.9	0.0	267.5	-20.9	3,651.2
1990	1,425.3	R 776.6	218.9	59.9	39.9	580.4	10.4	212.8	1,122.2	112.8	1.9	66.1	0.4	325.7	8.1	3,839.1
1995	1,379.8	R 923.9	234.2	63.7	51.7	606.1	8.9	205.6	1,170.2	176.2	2.4	65.3	0.6	372.9	-0.9	4,090.3
1996	1,447.1	R 968.6	256.5	67.8	57.9	601.7	10.6	240.9	1,235.4	146.2	4.1	74.2	0.6	324.7	-1.9	4,199.1
1997	1,407.2	R 938.2	274.2	71.5	40.2	616.9	7.8	261.8	1,272.3	160.9	5.2	68.3	0.7	334.3	-1.5	R 4,185.7
1998	1,450.2	R 843.9	266.6	R 78.5	31.4	625.1	5.8	257.2	1,264.5	172.8	4.1	62.3	0.8	291.6	-1.2	R 4,089.0
1999	1,382.2	R 873.2	279.5	93.3	46.8	630.0	7.7	276.2	1,333.5	171.6	4.3	69.4	0.9	402.5	-1.2	4,236.3
2000	1,428.5	R 928.4	284.3	105.8	43.1	632.0	9.5	241.3	1,316.0	175.0	5.9	72.8	0.9	336.3	-1.5	4,262.3
2001	1,362.8	R 838.0	288.1	105.3	35.3	632.8	6.5	241.6	1,309.6	161.6	5.3	44.9	0.9	289.7	-1.2	4,011.7
2002	1,396.9	R 852.6	295.4	99.2	48.4	643.0	6.1	231.3	1,323.3	113.4	5.0	32.2	1.0	241.9	-0.1	3,966.2
2003	1,443.5	R 872.1	295.9	100.3	74.9	647.1	3.6	226.9	1,348.7	88.3	5.2	41.5	1.4	202.6	-1.1	4,002.2
2004	1,391.3	R 846.4	324.8	105.7	39.7	649.4	4.7	241.6	1,365.8	166.3	7.3	42.5	1.5	193.6	-0.7	R 4,014.0
2005	1,481.0	R 862.3	312.1	105.5	48.2	650.7	9.0	216.0	1,341.4	154.5	5.2	R 49.4	1.9	165.2	-1.8	R 4,059.0
2006	1,446.0	R 771.3	322.1	104.8	43.8	648.9	8.6	223.8	1,352.0	175.8	6.3	R 48.1	2.1	94.6	1.7	R 3,897.9
2007	1,461.7	836.3	337.0	102.9	32.4	647.7	5.7	231.3	1,357.0	165.3	4.1	51.3	2.4	170.5	0.4	4,048.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Ohio

Year			Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	2,013	362	7,270	1,837	1,750	10,857	990	--	--	10,786	--	--	--
1965	1,285	412	7,795	3,626	2,293	13,715	805	--	--	14,504	--	--	--
1970	906	460	9,320	2,979	3,892	16,191	925	--	--	22,266	--	--	--
1975	340	428	10,776	2,060	4,876	17,713	963	--	--	27,890	--	--	--
1980	117	394	7,430	1,016	2,556	11,003	2,421	--	--	33,459	--	--	--
1985	189	328	4,645	941	3,339	8,925	2,516	--	--	33,945	--	--	--
1990	131	308	4,740	625	4,205	9,570	1,560	--	--	37,889	--	--	--
1995	53	358	3,998	748	4,979	9,725	838	--	--	44,010	--	--	--
1996	79	375	3,777	818	6,683	11,278	871	--	--	44,573	--	--	--
1997	36	355	3,325	774	6,467	10,567	567	--	--	43,635	--	--	--
1998	43	297	2,893	774	5,593	9,261	504	--	--	44,516	--	--	--
1999	26	318	3,432	1,295	7,483	12,210	530	--	--	46,629	--	--	--
2000	24	344	2,999	419	6,468	9,887	570	--	--	46,488	--	--	--
2001	25	309	2,764	442	4,311	7,517	758	--	--	47,346	--	--	--
2002	43	321	3,175	329	5,263	8,767	770	--	--	50,864	--	--	--
2003	26	343	3,242	369	6,291	9,902	810	--	--	49,621	--	--	--
2004	46	321	3,348	485	5,071	8,903	831	--	--	50,300	--	--	--
2005	27	323	2,860	442	5,052	8,354	R 1,140	--	--	53,904	--	--	--
2006	R 10	272	2,197	364	R 4,514	R 7,075	R 1,038	--	--	51,375	--	--	--
2007	13	300	2,514	243	5,096	7,854	1,144	--	--	54,376	--	--	--
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	R 400.1	43.3	5.8	9.4	58.4	48.4	0.0	0.0	114.2	592.5	275.2	867.7
1985	4.5	R 342.0	27.1	5.3	12.0	44.4	50.3	0.0	0.0	115.8	545.5	266.7	812.2
1990	3.2	R 320.7	27.6	3.5	15.2	46.4	31.2	0.3	(s)	129.3	530.7	299.0	829.7
1995	1.3	R 371.4	23.3	4.2	18.0	45.6	16.8	0.4	(s)	150.2	585.3	341.0	926.3
1996	1.9	R 389.1	22.0	4.6	24.1	50.8	17.4	0.5	(s)	152.1	611.0	345.8	956.8
1997	0.9	R 370.5	19.4	4.4	23.4	47.1	11.3	0.5	0.1	148.9	578.7	337.3	916.0
1998	1.1	R 308.5	16.9	4.4	20.2	41.5	10.1	0.5	0.1	151.9	513.1	344.5	857.6
1999	0.6	R 330.1	20.0	7.3	27.1	54.4	10.6	0.6	0.1	159.1	555.0	363.9	918.9
2000	0.6	R 358.5	17.5	2.4	23.3	43.2	11.4	0.6	0.1	158.6	572.3	360.8	933.1
2001	0.6	R 321.6	16.1	2.5	15.6	34.2	15.2	0.6	0.1	161.5	533.3	360.0	893.3
2002	1.0	329.7	18.5	1.9	19.0	39.4	15.4	0.7	0.1	173.5	559.8	386.9	946.7
2003	0.6	R 352.6	18.9	2.1	22.8	43.8	16.2	0.9	0.1	169.3	583.1	373.6	956.7
2004	1.0	R 328.8	19.5	2.7	18.3	40.6	16.6	0.9	0.2	171.6	559.5	379.7	R 939.3
2005	0.6	R 337.1	16.7	2.5	18.3	37.5	R 22.8	1.1	0.2	183.9	R 582.9	402.3	R 985.2
2006	0.2	R 282.9	12.8	2.1	R 16.3	R 31.1	R 20.8	1.2	0.2	175.3	R 511.7	379.1	R 890.7
2007	0.3	310.7	14.6	1.4	18.3	34.3	22.9	1.5	0.2	185.5	555.3	400.3	955.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Wood and wood-derived fuels.

<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

<sup>e</sup> 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 an explanation of estimation methodology.

<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Ohio

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Million Kilowatthours					
1960	1,399	108	1,443	95	309	541	2,118	4,507	0	--	--	7,594	--	--	--
1965	969	127	1,548	188	405	572	1,997	4,710	0	--	--	10,384	--	--	--
1970	712	183	1,850	155	687	401	824	3,917	0	--	--	17,073	--	--	--
1975	792	169	2,139	107	861	956	1,457	5,520	0	--	--	20,047	--	--	--
1980	439	166	2,591	130	451	2,058	380	5,610	0	--	--	23,323	--	--	--
1985	670	143	2,114	440	589	604	83	3,830	0	--	--	29,176	--	--	--
1990	523	144	1,920	189	742	1,059	22	3,932	0	--	--	34,850	--	--	--
1995	356	175	1,709	89	879	438	5	3,119	0	--	--	40,093	--	--	--
1996	577	190	1,335	155	1,179	365	2	3,036	0	--	--	40,570	--	--	--
1997	293	184	1,402	127	1,141	1,956	2	4,628	0	--	--	40,935	--	--	--
1998	348	157	1,124	218	987	744	1	3,074	0	--	--	42,232	--	--	--
1999	191	168	1,810	129	1,321	175	0	3,435	0	--	--	43,297	--	--	--
2000	192	178	1,740	132	1,141	525	0	3,539	0	--	--	44,635	--	--	--
2001	205	173	1,886	147	761	213	1	3,007	0	--	--	43,310	--	--	--
2002	314	163	2,256	93	929	403	4	3,685	0	--	--	44,029	--	--	--
2003	176	180	1,753	203	1,110	212	2	3,281	0	--	--	44,737	--	--	--
2004	410	170	1,932	258	895	189	101	3,374	0	--	--	45,313	--	--	--
2005	307	167	1,270	224	892	275	108	2,769	0	--	--	46,870	--	--	--
2006	<sup>R</sup> 100	147	1,534	161	<sup>R</sup> 797	454	28	<sup>R</sup> 2,974	0	--	--	46,141	--	--	--
2007	117	159	1,765	84	899	458	1	3,207	0	--	--	48,129	--	--	--
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	277.3	191.8	469.1
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	281.9	229.3	511.2
1990	12.6	149.2	11.2	1.1	2.7	5.6	0.1	20.6	0.0	3.6	0.0	118.9	305.0	275.0	580.0
1995	8.7	181.8	10.0	0.5	3.2	2.3	(s)	16.0	0.0	2.5	0.1	136.8	345.7	310.7	656.3
1996	13.7	197.2	7.8	0.9	4.3	1.9	(s)	14.8	0.0	2.5	0.1	138.4	366.4	314.8	681.2
1997	7.0	192.1	8.2	0.7	4.1	10.2	(s)	23.2	0.0	2.6	0.2	139.7	364.5	316.4	680.9
1998	8.8	162.9	6.5	1.2	3.6	3.9	(s)	15.2	0.0	2.2	0.2	144.1	333.2	326.8	660.0
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	345.3	337.9	683.2
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	362.4	346.4	708.8
2001	4.9	179.9	11.0	0.8	2.7	1.1	(s)	15.7	0.0	2.9	0.2	147.8	351.2	329.3	680.5
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	334.9	683.1
2003	4.3	184.6	10.2	1.2	4.0	1.1	(s)	16.5	0.0	3.5	0.4	152.6	361.7	336.8	698.5
2004	8.8	174.5	11.3	1.5	3.2	1.0	0.6	17.6	0.0	3.5	0.4	154.6	359.2	342.1	701.3
2005	7.4	174.1	7.4	1.3	3.2	1.4	0.7	14.0	0.0	<sup>R</sup> 3.7	0.5	159.9	359.5	349.8	<sup>R</sup> 709.3
2006	2.4	152.7	8.9	0.9	2.9	2.4	0.2	15.3	0.0	<sup>R</sup> 3.4	0.5	157.4	331.6	340.4	<sup>R</sup> 672.0
2007	2.8	165.4	10.3	0.5	3.2	2.4	(s)	16.4	0.0	4.3	0.5	164.2	353.5	354.3	707.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Ohio

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	25,835	218	7,112	1,585	3,354	9,082	19,969	41,102	12	--	--	39,246	--	--	--
1965	26,758	327	8,479	2,649	2,598	8,228	26,590	48,544	1	--	--	41,757	--	--	--
1970	29,875	376	11,429	3,999	1,926	4,166	31,186	52,706	0	--	--	45,827	--	--	--
1975	22,307	345	11,150	3,993	1,519	7,038	29,950	53,651	0	--	--	55,597	--	--	--
1980	15,821	321	12,591	41,031	1,154	5,678	34,381	94,834	0	--	--	55,283	--	--	--
1985	10,420	253	6,944	23,612	1,074	2,098	24,514	58,242	0	--	--	61,109	--	--	--
1990	9,703	284	5,973	5,689	973	1,493	32,881	47,010	0	--	--	69,682	--	--	--
1995	6,386	332	5,861	8,159	1,200	1,362	31,782	48,364	0	--	--	74,473	--	--	--
1996	5,636	345	5,609	7,922	1,203	1,600	37,479	53,813	0	--	--	73,394	--	--	--
1997	5,599	336	5,721	3,219	1,231	1,185	40,610	51,966	0	--	--	73,888	--	--	--
1998	5,510	332	5,369	1,998	1,311	846	39,922	49,447	0	--	--	72,998	--	--	--
1999	5,156	327	5,271	3,936	1,126	1,193	42,754	54,279	0	--	--	74,293	--	--	--
2000	4,296	340	4,868	4,206	707	1,485	37,788	49,054	0	--	--	74,019	--	--	--
2001	4,360	297	5,471	4,507	1,874	952	37,817	50,620	0	--	--	65,099	--	--	--
2002	3,336	307	5,451	7,021	1,976	852	36,442	51,741	0	--	--	58,472	--	--	--
2003	3,637	291	6,201	12,964	2,098	553	35,754	57,570	0	--	--	57,828	--	--	--
2004	3,573	303	6,576	4,776	2,408	648	36,104	50,512	0	--	--	58,558	--	--	--
2005	3,885	295	6,017	7,096	2,349	1,315	31,994	48,772	0	--	--	59,354	--	--	--
2006	4,123	287	5,941	6,564	2,440	1,346	33,196	49,487	0	--	--	55,869	--	--	--
2007	4,210	296	5,883	2,829	1,932	905	35,074	46,623	0	--	--	59,219	--	--	--
Trillion Btu															
1960	664.3	226.1	41.4	6.4	17.6	57.1	123.6	246.1	0.1	16.5	0.0	133.9	1,287.1	331.2	1,618.2
1965	681.5	338.3	49.4	10.6	13.6	51.7	161.1	286.5	(s)	22.1	0.0	142.5	1,470.8	340.2	1,811.0
1970	738.5	384.8	66.6	15.1	10.1	26.2	188.3	306.3	0.0	25.2	0.0	156.4	1,611.1	378.5	1,989.6
1975	556.5	352.8	64.9	14.8	8.0	44.2	181.8	313.8	0.0	26.6	0.0	189.7	1,439.3	456.2	1,895.5
1980	404.7	R 326.0	73.3	150.7	6.1	35.7	203.6	469.5	0.0	57.7	0.0	188.6	1,421.1	454.7	1,875.8
1985	265.7	R 264.4	40.4	85.1	5.6	13.2	147.5	291.9	0.0	67.6	0.0	208.5	1,089.3	480.2	1,569.5
1990	248.2	R 294.9	34.8	20.6	5.1	9.4	198.1	268.0	0.0	27.6	0.0	237.8	1,076.3	549.8	1,626.1
1995	162.9	R 344.5	34.1	29.6	6.3	8.6	191.2	269.7	0.0	45.5	0.0	254.1	1,076.4	577.1	1,653.4
1996	142.2	R 358.1	32.7	28.6	6.3	10.1	225.4	303.1	0.0	53.4	0.0	250.4	1,106.5	569.5	1,676.0
1997	141.2	R 351.2	33.3	11.6	6.4	7.5	246.1	304.9	0.0	53.6	0.0	252.1	1,102.5	571.2	1,673.7
1998	139.8	R 345.6	31.3	7.2	6.8	5.3	240.6	291.3	0.0	49.3	0.0	249.1	1,074.6	564.8	1,639.4
1999	131.1	R 339.1	30.7	14.2	5.9	7.5	257.7	316.0	0.0	55.9	0.0	253.5	1,095.1	579.8	1,674.9
2000	110.8	R 354.5	28.4	15.2	3.7	9.3	228.1	284.6	0.0	57.9	0.0	252.6	1,059.8	574.5	1,634.2
2001	114.0	R 309.1	31.9	16.3	9.8	6.0	229.2	293.1	0.0	25.8	0.0	222.1	963.7	495.0	1,458.7
2002	86.6	R 314.9	31.8	25.4	10.3	5.4	220.0	292.8	0.0	12.2	0.0	199.5	906.0	444.7	1,350.7
2003	94.8	R 299.6	36.1	47.0	10.9	3.5	215.4	313.0	0.0	20.5	0.0	197.3	924.8	435.4	1,360.2
2004	93.7	R 310.5	38.3	17.3	12.6	4.1	217.8	290.0	0.0	21.3	0.0	199.8	915.0	442.1	1,357.1
2005	100.1	R 308.0	35.1	25.7	12.3	8.3	192.9	274.2	0.0	21.8	0.0	202.5	906.3	443.0	1,349.2
2006	106.2	R 298.6	34.6	R 23.7	12.7	8.5	200.7	R 280.2	0.0	R 22.9	0.0	190.6	R 898.3	412.2	R 1,310.6
2007	108.7	307.0	34.3	10.2	10.1	5.7	211.1	271.3	0.0	23.0	0.0	202.1	911.9	436.0	1,347.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Ohio

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	444	9	1,395	7,987	1,808	36	1,381	74,274	310	87,192	0	91	--	--	--
1965	87	11	2,125	9,722	3,075	94	1,263	83,101	633	100,013	0	57	--	--	--
1970	48	12	712	11,068	5,857	133	1,241	103,970	758	123,739	0	54	--	--	--
1975	4	9	491	15,647	5,926	180	1,622	116,333	592	140,790	0	45	--	--	--
1980	0	11	473	24,578	7,219	225	1,425	110,021	255	144,198	0	46	--	--	--
1985	0	8	330	22,418	7,204	379	1,297	107,086	0	138,713	1,280	46	--	--	--
1990	0	10	239	24,495	10,602	358	1,459	108,455	5	145,613	2,485	44	--	--	--
1995	0	18	235	27,993	11,236	256	1,392	114,584	56	155,753	5,074	49	--	--	--
1996	0	20	345	32,731	11,960	234	1,351	113,793	82	160,497	2,002	50	--	--	--
1997	0	20	379	36,052	R 12,610	277	1,427	115,149	59	R 165,953	3,576	50	--	--	--
1998	0	18	365	35,753	R 13,838	109	1,494	117,877	58	R 169,494	5,312	47	--	--	--
1999	0	18	244	36,490	16,457	190	1,510	119,601	7	174,499	5,478	52	--	--	--
2000	0	19	218	38,414	18,655	145	1,487	120,065	12	178,997	5,593	53	--	--	--
2001	0	16	147	38,560	18,579	201	1,363	119,363	68	178,280	4,881	43	--	--	--
2002	0	17	141	39,154	17,489	179	1,347	121,086	102	179,498	4,774	43	--	--	--
2003	0	16	129	38,736	17,685	267	1,245	121,972	16	180,049	4,413	45	--	--	--
2004	0	13	118	43,160	18,635	223	1,261	121,921	1	185,319	4,342	49	--	--	--
2005	0	14	109	42,707	18,615	268	1,255	122,074	0	185,028	R 5,320	48	--	--	--
2006	0	13	331	45,037	18,486	262	1,222	121,470	1	186,808	R 5,801	44	--	--	--
2007	0	14	327	47,104	18,145	198	1,262	121,717	3	188,757	7,271	48	--	--	--
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	4.5	0.2	757.9	0.4	758.3
1990	0.0	10.5	1.2	142.7	59.9	1.3	8.9	569.7	(s)	783.7	8.8	0.2	803.1	0.3	803.4
1995	0.0	18.5	1.2	163.1	63.7	0.9	8.4	597.6	0.4	835.2	18.0	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	7.1	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	12.7	0.2	R 914.7	0.4	R 915.1
1998	0.0	18.7	1.8	208.3	R 78.5	0.4	9.1	614.4	0.4	R 912.8	18.8	0.2	R 931.6	0.4	R 932.0
1999	0.0	18.5	1.2	212.6	93.3	0.7	9.2	623.2	(s)	940.2	19.4	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	19.8	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	17.3	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	16.9	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	15.6	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	15.4	0.2	1,015.9	0.4	1,016.3
2005	0.0	14.4	0.6	248.8	105.5	1.0	7.6	637.0	0.0	1,000.4	R 18.8	0.2	1,015.0	0.4	1,015.4
2006	0.0	R 13.1	1.7	262.3	104.8	0.9	7.4	633.8	(s)	1,011.0	R 20.5	0.1	R 1,024.3	0.3	R 1,024.6
2007	0.0	14.7	1.7	274.4	102.9	0.7	7.7	635.2	(s)	1,022.5	25.7	0.2	1,037.4	0.4	1,037.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Ohio

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	59,607	28	0	723	1,846	2,569	14,803	516	--	0	0	13	-348	--
2006	58,604	23	0	584	1,836	2,420	16,847	632	--	0	0	14	619	--
2007	59,452	37	0	591	1,500	2,092	15,764	410	--	0	0	15	306	--
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	R 4.7	3.8	9.6	0.0	13.4	23.1	0.1	(s)	0.0	0.0	0.0	0.0	1,151.5
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	R 8.2	0.1	3.7	0.0	3.8	172.8	4.1	0.7	0.0	0.0	0.0	0.0	1,490.0
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	1,440.0
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	1,509.4
2001	1,243.3	10.7	0.1	4.6	0.0	4.7	161.6	5.3	1.0	0.0	0.0	0.0	0.0	1,426.5
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	R 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
2005	1,373.0	R 28.8	0.0	4.2	11.1	15.3	154.5	5.2	1.1	0.0	0.0	0.1	-1.2	1,576.7
2006	1,337.2	23.9	0.0	3.4	11.1	14.5	175.8	6.3	1.1	0.0	0.0	0.1	2.1	1,560.9
2007	1,349.9	38.5	0.0	3.4	9.0	12.5	165.3	4.1	1.0	0.0	0.0	0.1	1.0	1,572.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Oklahoma

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	77	308	2,618	2,920	6,433	22,708	1,454	11,670	47,803	0	705	--	--	--	--	--
1965	30	468	2,877	3,453	7,654	25,815	851	14,629	55,278	0	825	--	--	--	--	--
1970	7	597	5,584	4,378	9,618	32,521	807	15,760	68,667	0	1,406	--	--	--	--	--
1975	23	669	9,449	3,916	9,342	38,469	641	16,767	78,585	0	2,945	--	--	--	--	--
1980	6,046	722	12,125	4,900	8,987	39,633	732	16,188	82,565	0	1,315	--	--	--	--	--
1985	13,602	587	18,723	5,870	8,035	42,170	219	10,322	85,338	0	3,980	--	--	--	--	--
1990	15,514	612	15,473	7,832	3,289	38,998	623	12,554	78,768	0	2,731	--	--	--	--	--
1995	20,742	575	16,672	5,359	3,625	42,382	442	11,974	80,453	0	2,780	--	--	--	--	--
1996	21,141	574	19,948	4,707	4,076	43,763	392	13,126	86,011	0	2,158	--	--	--	--	--
1997	22,178	567	20,917	R 5,259	4,693	42,670	269	11,996	R 85,804	0	2,921	--	--	--	--	--
1998	20,711	576	21,640	R 5,348	3,821	43,349	102	12,440	R 86,701	0	3,509	--	--	--	--	--
1999	20,288	538	22,151	6,576	9,198	43,571	111	11,925	93,533	0	3,175	--	--	--	--	--
2000	21,422	539	28,249	6,812	5,862	42,325	237	11,895	95,380	0	2,277	--	--	--	--	--
2001	21,224	491	35,302	7,041	5,306	43,027	343	15,368	106,386	0	2,345	--	--	--	--	--
2002	22,090	508	30,752	6,434	7,343	42,224	461	14,401	101,616	0	1,988	--	--	--	--	--
2003	22,283	540	29,738	6,240	5,472	43,361	513	14,272	99,596	0	1,798	--	--	--	--	--
2004	21,008	539	22,757	6,898	7,348	45,338	623	15,251	98,215	0	2,977	--	--	--	--	--
2005	22,680	583	28,020	5,964	10,840	45,150	224	15,371	105,569	0	2,630	--	--	--	--	--
2006	21,923	R 624	31,954	5,661	14,870	43,675	246	15,271	R 111,677	0	624	--	--	--	--	--
2007	21,293	658	33,776	5,295	3,656	45,385	320	16,162	104,594	0	3,066	--	--	--	--	--
Trillion Btu																
1960	1.8	319.3	15.3	15.7	25.8	119.3	9.1	70.7	255.9	0.0	7.6	10.2	0.0	-12.6	0.0	582.1
1965	0.7	480.1	16.8	18.7	30.7	135.6	5.4	89.1	296.2	0.0	8.6	7.6	0.0	-17.0	0.0	776.2
1970	0.2	616.3	32.5	24.0	36.3	170.8	5.1	96.7	365.5	0.0	14.8	7.0	0.0	-64.0	0.0	939.6
1975	0.5	678.9	55.0	21.5	34.7	202.1	4.0	103.8	421.2	0.0	30.6	12.0	0.0	-73.2	0.0	1,070.1
1980	106.3	738.9	70.6	26.9	33.0	208.2	4.6	99.8	443.2	0.0	13.7	11.2	0.0	-97.8	0.0	1,215.5
1985	237.2	603.9	109.1	32.5	29.0	221.5	1.4	65.3	458.7	0.0	41.6	15.4	0.0	-57.0	0.2	1,299.8
1990	278.8	628.2	90.1	43.8	11.9	204.9	3.9	77.4	432.0	0.0	28.4	21.4	0.1	1.7	0.0	1,390.7
1995	369.9	586.4	97.1	30.3	13.1	221.0	2.8	73.7	438.0	0.0	28.7	24.5	0.1	-70.4	0.0	1,377.2
1996	373.1	588.0	116.2	26.7	14.7	228.3	2.5	79.7	468.1	0.0	22.3	29.3	0.1	-44.2	0.0	1,436.5
1997	392.4	573.5	121.8	29.8	17.0	222.4	1.7	72.1	464.9	0.0	29.8	25.3	0.1	-46.5	0.0	1,439.5
1998	370.1	584.0	126.1	30.3	13.8	225.9	0.6	75.7	472.4	0.0	35.8	24.7	0.1	-42.2	0.0	1,444.8
1999	360.6	550.8	129.0	37.3	33.3	227.0	0.7	72.0	499.3	0.0	32.5	22.8	0.1	-34.1	0.0	1,431.9
2000	381.1	546.7	164.6	38.6	21.1	220.5	1.5	72.0	518.4	0.0	23.2	24.2	0.1	-17.7	0.0	1,476.0
2001	376.1	505.2	205.6	39.9	19.2	224.2	2.2	94.6	585.6	0.0	24.2	24.1	0.1	-19.5	0.0	1,495.9
2002	391.4	523.0	179.1	36.5	26.5	219.9	2.9	88.5	553.4	0.0	20.2	20.6	0.1	-51.6	0.0	1,457.1
2003	393.8	558.5	173.2	35.4	19.9	225.8	3.2	87.1	544.6	0.0	18.4	23.2	0.6	-50.3	0.0	1,488.7
2004	372.1	556.3	132.6	39.1	26.6	236.4	3.9	93.5	532.2	0.0	29.8	26.5	5.8	-40.4	(s)	1,482.3
2005	397.4	605.3	163.2	33.8	39.2	235.6	1.4	94.1	567.4	0.0	26.3	26.8	8.5	-82.3	(s)	1,549.3
2006	384.4	R 666.9	186.1	32.1	53.6	227.9	1.5	93.1	594.3	0.0	6.2	27.7	17.0	-87.4	0.0	R 1,609.1
2007	373.2	690.6	196.7	30.0	13.1	236.9	2.0	99.2	578.0	0.0	30.3	26.2	18.3	-108.2	0.0	1,608.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oklahoma

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	30	60	2	18	3,938	3,959	460	--	--	2,372	--	--	--
1965	10	65	2	78	4,642	4,722	331	--	--	4,086	--	--	--
1970	3	77	3	52	5,802	5,856	308	--	--	7,293	--	--	--
1975	1	80	12	24	5,628	5,663	341	--	--	9,222	--	--	--
1980	6	77	15	21	1,759	1,795	142	--	--	12,309	--	--	--
1985	1	76	86	30	2,027	2,143	279	--	--	14,400	--	--	--
1990	(s)	66	(s)	10	1,274	1,284	222	--	--	17,077	--	--	--
1995	1	69	11	4	1,214	1,229	317	--	--	16,319	--	--	--
1996	(s)	77	23	20	1,630	1,673	329	--	--	17,303	--	--	--
1997	32	72	4	14	1,533	1,550	157	--	--	17,376	--	--	--
1998	(s)	67	1	13	1,619	1,632	140	--	--	19,511	--	--	--
1999	(s)	62	2	9	2,292	2,303	147	--	--	18,301	--	--	--
2000	0	67	2	59	2,607	2,668	158	--	--	19,640	--	--	--
2001	(s)	65	3	7	2,482	2,491	143	--	--	19,796	--	--	--
2002	(s)	67	2	15	3,031	3,048	145	--	--	19,927	--	--	--
2003	(s)	66	1	14	2,436	2,451	153	--	--	20,162	--	--	--
2004	0	59	1	17	2,018	2,035	157	--	--	19,699	--	--	--
2005	(s)	59	1	6	1,908	1,915	<sup>R</sup> 171	--	--	21,309	--	--	--
2006	(s)	53	1	9	<sup>R</sup> 1,992	<sup>R</sup> 2,002	<sup>R</sup> 155	--	--	21,690	--	--	--
2007	(s)	60	30	8	2,407	2,445	171	--	--	21,361	--	--	--
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	101.2	229.6
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	(s)	0.1	58.3	134.5	134.7	269.2
1995	(s)	69.7	0.1	(s)	4.4	4.5	6.3	(s)	0.1	55.7	136.3	126.4	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	134.3	275.2
1998	(s)	67.0	(s)	0.1	5.8	5.9	2.8	(s)	0.1	66.6	142.3	151.0	293.3
1999	(s)	62.9	(s)	0.1	8.3	8.3	2.9	(s)	0.1	62.4	136.7	142.8	279.5
2000	0.0	67.4	(s)	0.3	9.4	9.8	3.2	(s)	0.1	67.0	147.4	152.4	299.8
2001	(s)	66.3	(s)	(s)	9.0	9.0	2.9	(s)	0.1	67.5	145.8	150.5	296.3
2002	(s)	69.3	(s)	0.1	11.0	11.0	2.9	(s)	(s)	68.0	151.3	151.6	302.8
2003	(s)	68.1	(s)	0.1	8.8	8.9	3.1	(s)	(s)	68.8	148.9	151.8	300.7
2004	0.0	61.5	(s)	0.1	7.3	7.4	3.1	(s)	(s)	67.2	139.3	148.7	288.0
2005	(s)	62.1	(s)	(s)	6.9	6.9	3.4	(s)	(s)	72.7	145.2	159.0	304.2
2006	(s)	57.9	(s)	(s)	<sup>R</sup> 7.2	<sup>R</sup> 7.2	3.1	(s)	(s)	74.0	<sup>R</sup> 142.3	160.0	<sup>R</sup> 302.3
2007	(s)	63.7	0.2	(s)	8.6	8.9	3.4	(s)	(s)	72.9	148.9	157.3	306.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oklahoma

Year			Petroleum						Hydro- electric Power <sup>e,f</sup>	Biomass			Retail Electricity Sales		Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
	Coal	Natural Gas <sup>a</sup>	Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>	Geothermal <sup>f</sup>	Million Kilowatthours	Net Energy <sup>f,h</sup>			
1960	21	29	72	83	695	177	395	1,422	0	--	--	1,904	--	--	--	
1965	8	27	68	353	819	204	233	1,677	0	--	--	2,945	--	--	--	
1970	3	44	95	233	1,024	229	190	1,771	0	--	--	4,415	--	--	--	
1975	2	42	406	106	993	264	196	1,965	0	--	--	6,810	--	--	--	
1980	24	47	315	15	310	301	30	972	0	--	--	9,005	--	--	--	
1985	2	41	732	20	358	338	0	1,447	0	--	--	11,706	--	--	--	
1990	(s)	37	626	13	225	374	80	1,317	0	--	--	13,663	--	--	--	
1995	10	40	270	5	214	38	(s)	527	0	--	--	13,359	--	--	--	
1996	1	46	383	5	288	38	0	713	0	--	--	13,828	--	--	--	
1997	259	45	566	16	270	37	0	890	0	--	--	14,275	--	--	--	
1998	1	44	619	21	286	37	0	963	0	--	--	15,211	--	--	--	
1999	2	40	362	12	404	37	0	816	0	--	--	15,164	--	--	--	
2000	0	43	242	32	460	38	0	772	0	--	--	15,989	--	--	--	
2001	1	41	673	8	438	39	0	1,157	0	--	--	16,515	--	--	--	
2002	1	40	350	5	535	76	10	976	0	--	--	16,661	--	--	--	
2003	1	37	95	5	430	78	0	607	0	--	--	16,958	--	--	--	
2004	0	37	293	7	356	129	1	786	0	--	--	17,020	--	--	--	
2005	1	39	252	9	337	139	0	736	0	--	--	17,477	--	--	--	
2006	3	R 35	292	9	R 352	123	0	R 775	0	--	--	18,197	--	--	--	
2007	(s)	41	473	8	425	218	0	1,124	0	--	--	18,634	--	--	--	
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	181.1	
1990	(s)	38.0	3.6	0.1	0.8	2.0	0.5	7.0	0.0	0.5	0.0	46.6	92.1	107.8	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	219.1	
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	118.3	214.8	
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)	41.6	3.9	(s)	1.6	0.2	0.0	5.7	0.0	0.5	0.0	56.3	104.2	125.6	229.8	
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	126.7	230.0	
2003	(s)	38.8	0.6	(s)	1.6	0.4	0.0	2.5	0.0	0.5	0.0	57.9	99.8	127.7	227.5	
2004	0.0	38.4	1.7	(s)	1.3	0.7	(s)	3.7	0.0	0.5	0.0	58.1	100.7	128.5	229.2	
2005	(s)	41.1	1.5	0.1	1.2	0.7	0.0	3.5	0.0	0.5	0.0	59.6	104.8	130.4	235.2	
2006	0.1	R 39.0	1.7	(s)	1.3	0.6	0.0	3.7	0.0	0.5	0.0	62.1	105.3	134.3	R 239.6	
2007	(s)	43.5	2.8	(s)	1.5	1.1	0.0	5.5	0.0	0.5	0.0	63.6	113.1	137.2	250.3	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oklahoma

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	25	128	1,193	1,511	1,383	1,017	10,522	15,626	0	--	--	2,561	--	--	--
1965	11	236	1,203	1,704	812	346	12,926	16,990	0	--	--	3,563	--	--	--
1970	0	218	2,084	2,277	515	477	14,571	19,924	0	--	--	4,888	--	--	--
1975	20	223	4,166	2,248	437	374	15,792	23,018	0	--	--	7,233	--	--	--
1980	264	246	3,705	6,683	359	702	15,047	26,495	0	--	--	9,795	--	--	--
1985	852	245	7,215	5,517	977	211	9,347	23,267	0	--	--	10,576	--	--	--
1990	557	307	3,592	1,693	834	484	11,589	18,192	0	--	--	11,764	--	--	--
1995	1,455	275	2,873	2,138	1,183	329	11,051	17,574	0	--	--	11,714	--	--	--
1996	738	274	3,388	2,117	1,216	259	12,246	19,226	0	--	--	12,160	--	--	--
1997	736	288	3,462	2,832	1,248	259	11,108	18,909	0	--	--	12,802	--	--	--
1998	698	260	3,329	1,846	1,319	100	11,459	18,053	0	--	--	13,175	--	--	--
1999	719	236	2,921	6,454	686	111	10,980	21,152	0	--	--	13,271	--	--	--
2000	714	231	3,341	2,751	671	237	10,884	17,884	0	--	--	13,935	--	--	--
2001	724	188	3,769	2,320	1,268	342	14,530	22,228	0	--	--	13,356	--	--	--
2002	724	182	3,459	3,728	1,398	449	13,526	22,561	0	--	--	12,898	--	--	--
2003	702	209	3,657	2,538	1,442	478	13,469	21,584	0	--	--	13,308	--	--	--
2004	714	211	3,645	4,923	1,691	611	14,406	25,276	0	--	--	14,223	--	--	--
2005	727	210	3,449	8,532	1,590	221	14,608	28,400	0	--	--	14,920	--	--	--
2006	732	R 226	3,797	R 12,462	1,683	246	14,326	R 32,514	0	--	--	15,018	--	--	--
2007	745	242	4,112	777	1,269	130	15,406	21,694	0	--	--	15,198	--	--	--

  

Trillion Btu															
1960	0.6	132.5	7.0	6.1	7.3	6.4	64.4	91.0	0.0	0.8	0.0	8.7	233.8	21.6	255.4
1965	0.3	242.2	7.0	6.8	4.3	2.2	79.7	99.9	0.0	0.9	0.0	12.2	355.4	29.0	384.4
1970	0.0	225.3	12.1	8.6	2.7	3.0	90.0	116.5	0.0	0.7	0.0	16.7	359.1	40.4	399.5
1975	0.5	221.7	24.3	8.4	2.3	2.4	98.3	135.6	0.0	5.1	0.0	24.7	387.4	59.3	446.8
1980	5.6	246.4	21.6	24.6	1.9	4.4	93.2	145.7	0.0	8.3	0.0	33.4	439.4	80.6	519.9
1985	18.3	249.3	42.0	19.9	5.1	1.3	59.6	128.0	0.0	9.7	0.0	36.1	441.3	83.1	524.4
1990	12.7	313.1	20.9	6.1	4.4	3.0	71.7	106.2	0.0	16.5	0.0	40.1	488.6	92.8	581.4
1995	33.0	278.9	16.7	7.7	6.2	2.1	68.2	100.9	0.0	17.3	0.0	40.0	470.2	90.8	560.9
1996	16.4	280.2	19.7	7.6	6.3	1.6	74.5	109.9	0.0	21.8	0.0	41.5	469.8	94.4	564.2
1997	15.4	289.9	20.2	10.2	6.5	1.6	66.8	105.4	0.0	21.6	0.0	43.7	475.9	99.0	574.8
1998	16.3	261.4	19.4	6.7	6.9	0.6	69.9	103.4	0.0	21.5	0.0	45.0	447.5	101.9	549.4
1999	16.8	240.6	17.0	23.3	3.6	0.7	66.4	111.0	0.0	19.4	0.0	45.3	433.0	103.6	536.6
2000	14.2	233.1	19.5	9.9	3.5	1.5	66.1	100.4	0.0	20.5	0.0	47.5	415.7	108.1	523.9
2001	14.5	193.1	22.0	8.4	6.6	2.1	89.6	128.7	0.0	20.7	0.0	45.6	402.5	101.6	504.1
2002	14.6	187.7	20.1	13.5	7.3	2.8	83.3	127.0	0.0	17.2	0.0	44.0	390.5	98.1	488.6
2003	14.3	216.5	21.3	9.2	7.5	3.0	82.3	123.4	0.0	19.6	0.0	45.4	419.2	100.2	519.4
2004	15.1	217.9	21.2	17.8	8.8	3.8	88.6	140.3	0.0	22.8	0.0	48.5	444.7	107.4	552.1
2005	15.4	219.5	20.1	30.9	8.3	1.4	89.6	150.2	0.0	22.8	0.0	50.9	458.8	111.3	570.2
2006	15.0	R 248.3	22.1	R 44.9	8.8	1.5	87.6	R 165.0	0.0	R 24.1	0.0	51.2	R 503.6	110.8	R 614.4
2007	15.4	258.0	24.0	2.8	6.6	0.8	94.7	128.9	0.0	22.3	0.0	51.9	476.4	111.9	588.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oklahoma

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	(s)	9	562	1,325	2,920	290	485	21,148	8	26,737	0	0	--	--	--
1965	(s)	13	745	1,582	3,453	489	527	24,799	244	31,839	0	0	--	--	--
1970	0	23	448	3,351	4,378	516	457	31,776	75	41,000	0	0	--	--	--
1975	(s)	24	309	4,809	3,916	474	537	37,768	42	47,854	0	0	--	--	--
1980	0	23	328	8,030	4,900	235	777	38,974	0	53,244	0	0	--	--	--
1985	0	25	217	10,611	5,870	133	707	40,855	0	58,394	46	0	--	--	--
1990	0	26	146	11,227	7,832	97	796	37,790	0	57,888	0	0	--	--	--
1995	0	31	154	13,501	5,359	59	759	41,161	0	60,994	0	0	--	--	--
1996	0	34	117	16,070	4,707	41	737	42,509	0	64,181	0	0	--	--	--
1997	0	26	80	16,865	R 5,259	58	778	41,385	0	R 64,425	0	0	--	--	--
1998	0	25	133	17,673	R 5,348	72	815	41,993	2	R 66,035	0	0	--	--	--
1999	0	24	102	18,842	6,576	48	823	42,847	0	69,239	0	0	--	--	--
2000	0	22	108	24,586	6,812	44	811	41,617	0	73,978	0	0	--	--	--
2001	0	24	80	30,601	7,041	66	743	41,721	0	80,252	0	0	--	--	--
2002	0	24	121	26,923	6,434	49	734	40,750	0	75,011	0	0	--	--	--
2003	0	31	106	25,832	6,240	68	679	41,841	0	74,766	0	0	--	--	--
2004	0	31	133	18,787	6,898	51	688	43,518	0	70,075	0	0	--	--	--
2005	0	32	64	24,296	5,964	63	684	43,421	0	74,492	R 999	0	--	--	--
2006	0	32	262	27,818	5,661	64	667	41,869	0	76,339	R 995	0	--	--	--
2007	0	29	51	29,102	5,295	49	688	43,898	0	79,083	1,965	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	0.2	0.0	340.8	0.0	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	465.6	0.0	465.6
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
2005	0.0	R 33.1	0.3	141.5	33.8	0.2	4.1	226.6	0.0	406.6	R 3.5	0.0	R 439.7	0.0	R 439.7
2006	0.0	R 34.6	1.3	162.0	32.1	0.2	4.0	218.5	0.0	418.2	R 3.5	0.0	R 452.8	0.0	R 452.8
2007	0.0	30.5	0.3	169.5	30.0	0.2	4.2	229.1	0.0	433.3	7.0	0.0	463.8	0.0	463.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Oklahoma

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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)	--
2005	21,952	242	3	23	0	25	0	2,630	--	0	0	848	(s)	--
2006	21,188	279	(s)	46	0	46	0	624	--	0	0	1,712	0	--
2007	20,547	287	190	59	0	249	0	3,066	--	0	0	1,849	0	--
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	179.2	(s)	1.5	0.0	1.5	0.0	24.2	0.0	0.0	0.0	0.0	0.0	566.6
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
2005	382.0	249.5	(s)	0.1	0.0	0.1	0.0	26.3	0.0	0.0	0.0	8.5	(s)	666.4
2006	369.3	287.0	(s)	0.3	0.0	0.3	0.0	6.2	0.0	0.0	0.0	17.0	0.0	679.8
2007	357.8	294.9	1.2	0.3	0.0	1.5	0.0	30.3	0.0	0.0	0.0	18.3	0.0	702.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.

<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.

<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.

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

<sup>g</sup> Solar thermal and photovoltaic energy.

<sup>h</sup> Electricity traded with Canada and Mexico.

<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	381	31	10,966	384	1,164	16,361	5,562	3,430	37,866	0	12,466	--	--	--	--	--
1965	305	56	13,085	812	961	19,838	5,115	4,521	44,332	0	16,508	--	--	--	--	--
1970	140	95	12,904	2,086	1,251	24,958	6,632	5,071	52,903	0	29,912	--	--	--	--	--
1975	130	110	13,267	2,079	726	28,904	4,321	5,688	54,984	2	34,562	--	--	--	--	--
1980	715	79	16,764	2,465	1,354	30,511	4,511	4,649	60,254	5,395	30,222	--	--	--	--	--
1985	591	83	15,027	2,142	1,527	29,047	4,961	4,544	57,248	6,911	40,780	--	--	--	--	--
1990	934	109	15,902	3,319	1,384	31,728	4,430	5,582	62,345	6,074	41,240	--	--	--	--	--
1995	1,125	146	16,530	5,114	1,535	34,021	3,589	4,743	65,532	0	40,764	--	--	--	--	--
1996	1,134	181	16,074	5,235	1,627	35,161	3,249	4,568	65,913	0	44,906	--	--	--	--	--
1997	918	185	16,641	R 5,723	898	33,594	3,449	4,565	R 64,870	0	46,704	--	--	--	--	--
1998	2,074	229	16,005	R 5,866	773	36,360	3,871	6,916	R 69,790	0	39,902	--	--	--	--	--
1999	2,154	235	17,426	6,437	1,179	36,512	2,581	7,292	71,426	0	45,639	--	--	--	--	--
2000	2,241	225	18,519	6,277	1,320	35,989	1,468	5,646	69,219	0	38,116	--	--	--	--	--
2001	2,490	230	17,413	5,217	1,009	36,157	1,360	3,859	65,016	0	28,645	--	--	--	--	--
2002	2,205	202	17,762	R 5,175	1,307	36,898	1,758	4,740	R 67,640	0	34,413	--	--	--	--	--
2003	2,598	213	15,547	R 5,589	1,335	36,527	1,942	4,666	R 65,607	0	33,250	--	--	--	--	--
2004	2,141	235	17,792	R 5,097	1,022	36,818	2,069	5,007	R 67,805	0	33,081	--	--	--	--	--
2005	2,112	233	17,853	5,402	1,278	37,488	2,186	5,062	69,268	0	30,948	--	--	--	--	--
2006	1,539	223	18,586	5,764	R 1,092	37,956	2,069	5,050	R 70,518	0	37,850	--	--	--	--	--
2007	2,667	252	18,847	5,630	1,066	37,810	2,539	4,088	69,980	0	33,587	--	--	--	--	--
Trillion Btu																
1960	8.9	31.9	63.9	2.1	4.7	85.9	35.0	21.1	212.7	0.0	134.1	56.4	0.0	26.8	0.0	470.8
1965	7.1	60.0	76.2	4.5	3.9	104.2	32.2	28.0	249.0	0.0	172.6	57.8	0.0	46.1	0.0	592.6
1970	3.0	99.6	75.2	11.8	4.7	131.1	41.7	31.3	295.7	0.0	313.9	57.4	0.0	-15.4	0.0	754.3
1975	2.7	114.2	77.3	11.7	2.7	151.8	27.2	35.9	306.6	(s)	359.7	57.7	0.0	27.5	(s)	868.3
1980	12.1	82.3	97.7	13.9	5.0	160.3	28.4	29.1	334.3	58.8	314.0	87.2	0.0	57.3	0.0	946.0
1985	10.0	85.5	87.5	12.1	5.5	152.6	31.2	28.9	317.8	73.4	426.0	103.6	0.0	-118.4	17.4	915.4
1990	15.7	111.7	92.6	18.8	5.0	166.7	27.9	35.3	346.2	64.3	429.0	57.7	0.7	-39.7	2.9	988.5
1995	20.2	152.1	96.3	29.0	5.6	177.4	22.6	29.9	360.7	0.0	420.4	45.9	0.9	42.9	2.8	1,045.8
1996	20.3	188.2	93.6	29.7	5.9	183.4	20.4	28.9	361.9	0.0	464.3	52.1	1.0	15.0	9.5	1,112.3
1997	16.4	193.8	96.9	32.4	3.2	175.1	21.7	29.1	358.5	0.0	477.0	52.6	1.1	15.7	2.6	1,117.5
1998	36.1	239.3	93.2	R 33.3	2.8	189.5	24.3	43.9	R 387.1	0.0	406.9	46.1	1.3	17.3	2.0	R 1,136.2
1999	38.6	247.0	101.5	36.5	4.3	190.3	16.2	45.8	394.6	0.0	466.7	41.1	2.2	-29.8	1.1	1,161.5
2000	38.7	231.0	107.9	35.6	4.8	187.5	9.2	35.7	380.6	0.0	388.8	46.0	2.1	56.2	0.5	1,143.9
2001	43.4	235.6	101.4	29.6	3.6	188.4	8.6	24.0	355.6	0.0	296.0	51.5	2.5	73.9	0.5	1,059.0
2002	37.8	208.2	103.5	R 29.3	4.7	192.2	11.1	30.0	R 370.8	0.0	350.1	45.2	5.4	41.9	5.0	R 1,064.4
2003	44.9	219.1	90.6	R 31.7	4.8	190.2	12.2	29.7	R 359.2	0.0	340.5	R 41.7	6.2	R 23.0	0.9	R 1,035.7
2004	36.5	243.2	103.6	R 28.9	3.7	192.0	13.0	31.9	R 373.2	0.0	331.5	45.5	7.9	R 27.5	8.3	R 1,073.6
2005	35.6	240.7	104.0	30.6	4.6	195.6	13.7	32.3	380.9	0.0	309.5	R 43.0	9.2	R 55.3	0.3	R 1,074.5
2006	26.4	229.5	108.3	32.7	R 3.9	198.1	13.0	32.2	R 388.2	0.0	375.4	R 45.4	11.4	25.8	(s)	R 1,102.0
2007	45.3	258.2	109.8	31.9	3.8	197.3	16.0	25.9	384.7	0.0	332.0	47.1	14.8	21.8	4.2	1,108.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	94	7	2,865	1	507	3,373	922	--	--	5,263	--	--	--
1965	73	11	3,382	5	785	4,172	661	--	--	7,169	--	--	--
1970	18	20	3,101	65	867	4,033	460	--	--	9,850	--	--	--
1975	4	29	2,390	48	362	2,800	489	--	--	12,096	--	--	--
1980	4	18	2,019	37	574	2,630	310	--	--	13,545	--	--	--
1985	1	21	2,308	41	517	2,866	530	--	--	14,526	--	--	--
1990	(s)	23	1,592	13	380	1,985	391	--	--	15,380	--	--	--
1995	(s)	28	1,276	26	488	1,790	495	--	--	16,315	--	--	--
1996	0	33	1,206	40	463	1,709	514	--	--	17,285	--	--	--
1997	(s)	33	1,072	34	393	1,499	438	--	--	17,185	--	--	--
1998	0	34	956	66	484	1,505	389	--	--	17,529	--	--	--
1999	(s)	39	1,089	81	544	1,714	410	--	--	18,058	--	--	--
2000	0	39	983	186	624	1,793	441	--	--	18,212	--	--	--
2001	0	38	1,053	173	694	1,920	703	--	--	17,503	--	--	--
2002	0	39	971	110	821	1,902	714	--	--	17,554	--	--	--
2003	0	37	874	76	927	1,877	751	--	--	17,736	--	--	--
2004	0	39	760	93	394	1,247	770	--	--	18,001	--	--	--
2005	0	40	623	76	802	1,501	R 388	--	--	18,339	--	--	--
2006	0	41	649	51	R 659	R 1,360	R 353	--	--	18,978	--	--	--
2007	0	43	558	8	637	1,203	389	--	--	19,374	--	--	--
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	197.2
1985	(s)	22.1	13.4	0.2	1.9	15.5	10.6	0.0	0.0	49.6	97.8	114.1	212.0
1990	(s)	23.9	9.3	0.1	1.4	10.7	7.8	0.1	0.3	52.5	95.3	121.3	216.7
1995	(s)	29.3	7.4	0.1	1.8	9.3	9.9	0.1	0.5	55.7	104.9	126.4	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	132.8	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	135.6	247.8
1999	(s)	40.9	6.3	0.5	2.0	8.8	8.2	0.2	0.7	61.6	120.4	140.9	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	141.3	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	133.1	256.8
2002	0.0	40.2	5.7	0.6	3.0	9.2	14.3	0.3	0.7	59.9	124.6	133.5	258.1
2003	0.0	38.7	5.1	0.4	3.4	8.9	15.0	0.3	0.8	60.5	124.1	133.5	257.6
2004	0.0	40.2	4.4	0.5	1.4	6.4	15.4	0.3	0.8	61.4	124.5	135.9	260.4
2005	0.0	41.6	3.6	0.4	2.9	7.0	R 7.8	0.3	0.9	62.6	R 120.0	136.9	R 256.9
2006	0.0	42.5	3.8	0.3	R 2.4	R 6.4	R 7.1	0.3	1.1	64.8	R 122.1	140.0	R 262.1
2007	0.0	43.7	3.2	(s)	2.3	5.6	7.8	0.3	1.4	66.1	124.9	142.6	267.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	66	3	1,485	(s)	89	139	991	2,704	0	--	--	3,083	--	--	--	
1965	55	6	1,752	4	139	206	1,046	3,147	0	--	--	4,557	--	--	--	
1970	14	11	1,607	46	153	249	1,326	3,382	0	--	--	6,674	--	--	--	
1975	10	16	1,238	34	64	218	962	2,517	0	--	--	8,804	--	--	--	
1980	13	15	1,792	37	101	291	876	3,098	0	--	--	10,456	--	--	--	
1985	2	19	1,345	26	91	231	191	1,884	0	--	--	10,340	--	--	--	
1990	2	20	1,192	8	67	272	283	1,823	0	--	--	12,091	--	--	--	
1995	1	22	1,061	14	86	33	87	1,281	0	--	--	13,558	--	--	--	
1996	0	26	911	38	82	33	83	1,145	0	--	--	14,085	--	--	--	
1997	1	25	951	22	69	30	48	1,121	0	--	--	14,477	--	--	--	
1998	0	26	994	63	85	30	72	1,244	0	--	--	14,724	--	--	--	
1999	(s)	29	834	31	96	30	48	1,038	0	--	--	15,347	--	--	--	
2000	0	29	994	28	110	29	61	1,223	0	--	--	15,730	--	--	--	
2001	0	28	1,204	73	122	31	50	1,480	0	--	--	15,263	--	--	--	
2002	0	28	1,027	46	145	31	64	1,313	0	--	--	15,370	--	--	--	
2003	0	26	514	23	164	31	53	784	0	--	--	15,483	--	--	--	
2004	0	26	592	45	70	31	55	792	0	--	--	15,667	--	--	--	
2005	0	28	516	61	142	32	49	799	0	--	--	15,380	--	--	--	
2006	0	28	477	42	R 116	64	40	R 738	0	--	--	16,083	--	--	--	
2007	0	29	471	13	112	32	32	661	0	--	--	16,187	--	--	--	
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	0.0	2.0	0.2	41.3	74.9	95.4	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	183.6	
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	113.9	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	116.1	208.1	
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	116.9	208.3	
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	87.2	116.6	203.8	
2004	0.0	27.4	3.5	0.3	0.3	0.2	0.3	4.5	0.0	2.6	0.5	53.5	88.4	118.3	R 206.7	
2005	0.0	28.8	3.0	0.3	0.5	0.2	0.3	4.3	0.0	R 1.2	0.6	52.5	R 87.5	114.8	R 202.2	
2006	0.0	28.8	2.8	0.2	0.4	0.3	0.2	R 4.0	0.0	R 1.1	0.5	54.9	R 89.4	118.7	R 208.0	
2007	0.0	29.6	2.7	0.1	0.4	0.2	0.2	3.6	0.0	1.4	0.5	55.2	90.3	119.2	209.4	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	217	20	3,723	558	1,080	3,411	2,473	11,244	77	--	--	5,247	--	--	--
1965	175	39	4,287	33	808	3,398	3,831	12,358	61	--	--	7,167	--	--	--
1970	109	58	3,413	212	722	4,217	4,168	12,733	77	--	--	9,123	--	--	--
1975	116	57	2,827	287	560	2,922	4,945	11,541	40	--	--	12,402	--	--	--
1980	213	39	3,992	614	417	2,528	3,785	11,337	28	--	--	13,847	--	--	--
1985	170	38	2,475	728	482	1,679	3,854	9,219	28	--	--	11,081	--	--	--
1990	82	49	2,537	755	425	447	4,897	9,060	0	--	--	15,498	--	--	--
1995	147	69	3,556	850	513	325	4,043	9,287	0	--	--	15,839	--	--	--
1996	90	88	2,553	983	565	134	3,796	8,032	0	--	--	17,029	--	--	--
1997	95	90	2,813	370	584	166	3,802	7,735	0	--	--	16,880	--	--	--
1998	37	103	2,633	203	692	139	6,082	9,749	0	--	--	14,640	--	--	--
1999	0	108	2,719	516	396	144	6,458	10,233	0	--	--	14,106	--	--	--
2000	0	76	3,602	523	403	138	4,740	9,407	0	--	--	16,353	--	--	--
2001	0	70	3,020	172	807	134	2,881	7,013	0	--	--	13,084	--	--	--
2002	50	71	2,949	318	861	474	3,929	8,530	0	--	--	12,296	--	--	--
2003	65	68	1,944	159	879	366	3,970	7,318	0	--	--	11,961	--	--	--
2004	64	72	2,217	477	1,041	302	4,274	8,311	0	--	--	11,954	--	--	--
2005	9	70	1,844	163	968	266	4,314	7,556	0	--	--	12,684	--	--	--
2006	90	70	1,859	R 173	1,018	468	4,299	R 7,817	0	--	--	12,991	--	--	--
2007	90	69	1,675	213	868	328	3,396	6,481	0	--	--	13,117	--	--	--
Trillion Btu															
1960	4.9	20.9	21.7	2.2	5.7	21.4	16.0	67.0	0.8	37.3	0.0	17.9	148.9	44.3	193.2
1965	3.9	41.5	25.0	0.1	4.2	21.4	24.1	74.8	0.6	44.1	0.0	24.5	189.5	58.4	247.9
1970	2.3	60.3	19.9	0.8	3.8	26.5	26.2	77.1	0.8	47.6	0.0	31.1	219.2	75.3	294.6
1975	2.4	59.6	16.5	1.1	2.9	18.4	31.6	70.4	0.4	47.8	0.0	42.3	222.9	101.8	324.7
1980	3.8	41.0	23.3	2.3	2.2	15.9	24.2	67.8	0.3	79.2	0.0	47.2	239.2	113.9	353.1
1985	3.0	39.0	14.4	2.6	2.5	10.6	24.9	55.0	0.3	92.7	0.0	37.8	227.9	87.1	315.0
1990	1.4	50.1	14.8	2.7	2.2	2.8	31.2	53.8	0.0	40.8	0.1	52.9	199.0	122.3	321.3
1995	2.8	72.0	20.7	3.1	2.7	2.0	25.8	54.3	0.0	27.5	0.1	54.0	210.7	122.7	333.5
1996	1.9	91.6	14.9	3.6	2.9	0.8	24.4	46.7	0.0	33.7	0.1	58.1	232.1	132.1	364.2
1997	1.9	95.0	16.4	1.3	3.0	1.0	24.6	46.4	0.0	35.7	0.1	57.6	236.8	130.5	367.2
1998	0.8	107.9	15.3	0.7	3.6	0.9	39.1	59.6	0.0	30.1	0.1	50.0	248.4	113.3	361.7
1999	0.0	114.5	15.8	1.9	2.1	0.9	41.0	61.6	0.0	26.3	0.1	48.1	250.7	110.1	360.8
2000	0.0	78.7	21.0	1.9	2.1	0.9	30.4	56.3	0.0	29.6	0.1	55.8	220.5	126.9	347.4
2001	0.0	71.9	17.6	0.6	4.2	0.8	18.4	41.7	0.0	29.5	0.2	44.6	187.9	99.5	287.4
2002	1.1	73.0	17.2	1.1	4.5	3.0	25.3	51.1	0.0	24.1	0.2	42.0	191.5	93.5	285.0
2003	1.5	70.0	11.3	0.6	4.6	2.3	25.7	44.4	0.0	18.2	0.1	40.8	175.1	90.1	265.1
2004	1.4	74.9	12.9	1.7	5.4	1.9	27.7	49.6	0.0	26.2	0.2	40.8	193.0	90.2	283.3
2005	0.2	72.7	10.7	0.6	5.1	1.7	28.0	46.0	0.0	26.9	0.2	43.3	189.3	94.7	284.0
2006	2.2	72.5	10.8	R 0.6	5.3	2.9	27.9	R 47.6	0.0	R 29.8	0.2	44.3	R 196.6	95.8	R 292.5
2007	2.2	70.2	9.8	0.8	4.5	2.1	21.9	39.0	0.0	31.2	0.2	44.8	187.6	96.6	284.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	4	(s)	655	2,893	384	10	301	15,142	1,157	20,542	0	0	--	--	--
1965	1	1	277	3,664	812	4	404	18,824	670	24,654	0	0	--	--	--
1970	(s)	6	305	4,782	2,086	18	487	23,987	1,070	32,736	0	0	--	--	--
1975	(s)	8	171	6,783	2,079	13	490	28,125	438	38,098	0	0	--	--	--
1980	0	6	260	8,851	2,465	65	530	29,803	1,107	43,080	0	0	--	--	--
1985	0	5	141	8,895	2,142	191	482	28,335	3,091	43,277	(s)	0	--	--	--
1990	0	9	121	10,526	3,319	183	542	31,030	3,700	49,421	0	9	--	--	--
1995	0	7	143	10,625	5,114	110	518	33,476	3,178	53,163	0	14	--	--	--
1996	0	8	191	11,394	5,235	99	502	34,562	3,033	55,017	0	11	--	--	--
1997	0	13	176	11,781	R 5,723	66	531	32,980	3,235	R 54,491	0	11	--	--	--
1998	0	13	150	11,363	R 5,866	1	555	35,638	3,660	R 57,234	346	14	--	--	--
1999	0	10	160	12,769	6,437	23	561	36,085	2,389	58,426	296	33	--	--	--
2000	0	12	139	12,835	6,277	63	553	35,557	1,268	56,692	331	35	--	--	--
2001	0	11	226	11,954	5,217	21	507	35,320	1,176	54,421	427	34	--	--	--
2002	0	9	155	12,801	R 5,175	23	501	36,006	1,220	R 55,881	814	36	--	--	--
2003	0	7	136	12,114	R 5,589	85	463	35,617	1,524	R 55,528	619	49	--	--	--
2004	0	10	127	14,183	R 5,097	82	469	35,747	1,712	R 57,416	650	54	--	--	--
2005	0	7	144	14,777	5,402	172	466	36,488	1,871	59,319	R 1,103	55	--	--	--
2006	0	8	204	15,590	5,764	144	454	36,873	1,562	60,592	R 1,236	61	--	--	--
2007	0	10	202	16,134	5,630	104	469	36,910	2,179	61,627	1,571	62	--	--	--
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	(s)	0.0	241.2	0.0	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	R 33.3	(s)	3.4	185.7	23.0	312.3	1.2	(s)	326.4	0.1	R 326.6
1999	0.0	10.9	0.8	74.4	36.5	0.1	3.4	188.0	15.0	318.2	1.0	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	R 29.3	0.1	3.0	187.5	7.7	R 303.0	2.9	0.1	R 312.6	0.3	R 312.9
2003	0.0	7.4	0.7	70.6	R 31.7	0.3	2.8	185.5	9.6	R 301.1	2.2	0.2	R 308.7	0.4	R 309.1
2004	0.0	10.2	0.6	82.6	R 28.9	0.3	2.8	186.4	10.8	R 312.5	2.3	0.2	R 322.9	0.4	R 323.3
2005	0.0	7.8	0.7	86.1	30.6	0.6	2.8	190.4	11.8	323.0	R 3.9	0.2	331.0	0.4	331.4
2006	0.0	8.7	1.0	90.8	32.7	0.5	2.8	192.4	9.8	330.0	R 4.4	0.2	R 338.9	0.5	339.4
2007	0.0	9.9	1.0	94.0	31.9	0.4	2.8	192.6	13.7	336.5	5.6	0.2	346.6	0.5	347.0

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Oregon

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	<sup>R</sup> 278	--
2004	2,077	89	0	40	0	40	0	33,081	--	0	0	619	2,445	--
2005	2,103	88	0	93	0	93	0	30,948	--	0	0	734	<sup>R</sup> 76	--
2006	1,449	75	0	11	0	11	0	37,850	--	0	0	931	-14	--
2007	2,577	102	0	9	0	9	0	33,587	--	0	0	1,247	1,234	--
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	7.2	0.0	0.0	(s)	2.9	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	5.5	0.0	0.0	0.9	0.5	431.5
2002	36.6	56.8	0.0	0.1	0.0	0.1	0.0	350.1	4.3	0.0	0.0	3.8	5.0	456.7
2003	43.4	76.0	0.0	0.6	0.0	0.6	0.0	340.5	5.9	0.0	0.0	4.5	<sup>R</sup> 0.9	<sup>R</sup> 471.8
2004	35.1	90.5	0.0	0.2	0.0	0.2	0.0	331.5	1.3	0.0	0.0	6.2	8.3	473.2
2005	35.4	89.8	0.0	0.5	0.0	0.5	0.0	309.5	7.1	0.0	0.0	7.3	<sup>R</sup> 0.3	<sup>R</sup> 449.9
2006	24.2	77.0	0.0	0.1	0.0	0.1	0.0	375.4	7.4	0.0	0.0	9.2	(s)	493.4
2007	43.1	104.9	0.0	0.1	0.0	0.1	0.0	332.0	6.7	0.0	0.0	12.3	4.2	503.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	60,646	522	46,257	1,036	2,334	80,104	42,958	24,318	197,008	230	1,826	--	--	--	--	--
1965	68,911	629	54,459	3,406	3,030	85,723	43,238	29,834	219,689	313	1,329	--	--	--	--	--
1970	68,574	772	63,489	9,083	4,754	101,718	60,436	29,819	269,299	465	1,366	--	--	--	--	--
1975	67,043	654	68,017	8,548	6,077	108,765	41,631	28,823	261,861	15,869	1,576	--	--	--	--	--
1980	65,911	776	68,602	10,148	7,255	107,925	35,099	32,116	261,145	12,091	734	--	--	--	--	--
1985	56,702	626	57,887	10,126	7,577	101,979	17,799	29,357	224,724	26,232	972	--	--	--	--	--
1990	61,019	656	59,661	12,042	6,313	107,467	18,762	35,029	239,276	57,787	2,869	--	--	--	--	--
1995	62,969	736	61,656	12,313	5,509	112,282	13,715	36,569	242,044	66,462	2,030	--	--	--	--	--
1996	65,691	746	61,297	11,831	6,080	113,639	12,959	34,062	239,866	68,672	3,012	--	--	--	--	--
1997	66,667	706	59,438	R 14,819	5,283	114,779	11,495	37,105	R 242,920	67,655	2,249	--	--	--	--	--
1998	62,342	644	57,603	R 16,731	5,452	116,867	13,933	37,798	R 248,384	61,149	2,381	--	--	--	--	--
1999	59,822	689	62,519	15,943	5,677	117,420	11,872	34,806	248,237	71,127	1,947	--	--	--	--	--
2000	63,516	703	68,564	19,009	7,115	118,034	12,071	34,887	259,680	73,771	2,290	--	--	--	--	--
2001	60,161	635	69,446	18,877	6,573	120,458	9,721	39,343	264,418	73,731	1,650	--	--	--	--	--
2002	60,583	676	69,282	17,006	6,974	122,851	7,834	36,266	260,212	76,089	2,211	--	--	--	--	--
2003	61,992	690	66,350	17,473	11,231	122,575	11,456	38,206	267,291	74,361	3,346	--	--	--	--	--
2004	62,797	696	71,869	16,381	11,037	124,468	11,859	40,364	275,978	77,459	3,155	--	--	--	--	--
2005	65,044	692	71,764	16,826	12,209	123,808	14,200	40,434	279,240	76,289	2,232	--	--	--	--	--
2006	66,223	660	71,248	16,465	13,033	122,702	7,131	38,854	269,432	75,298	2,844	--	--	--	--	--
2007	65,645	752	70,216	15,503	13,307	123,970	6,623	36,853	266,473	77,376	2,236	--	--	--	--	--
Trillion Btu																
1960	1,530.5	540.1	269.4	5.7	9.4	420.8	270.1	145.9	1,121.3	2.7	19.6	46.5	0.0	-7.0	0.0	3,253.7
1965	1,751.3	652.9	317.2	19.2	12.2	450.3	271.8	178.3	1,249.0	3.7	13.9	47.4	0.0	17.0	0.0	3,735.1
1970	1,699.0	797.9	369.8	51.4	18.0	534.3	380.0	179.5	1,532.9	5.1	14.3	53.2	0.0	8.8	0.0	4,111.2
1975	1,646.7	670.1	396.2	48.4	22.6	571.3	261.7	173.3	1,473.5	174.8	16.4	57.5	0.0	-119.0	0.0	3,919.9
1980	1,636.1	R 792.8	399.6	57.4	26.7	566.9	220.7	190.7	1,462.0	131.9	7.6	129.2	0.0	-131.7	-3.2	4,024.6
1985	1,409.1	R 646.9	337.2	57.3	27.3	535.7	111.9	176.3	1,245.6	278.6	10.1	138.1	0.0	-267.4	-0.2	3,460.9
1990	1,469.7	R 680.7	347.5	68.2	22.9	564.5	118.0	211.5	1,332.6	611.5	29.8	61.4	0.7	-482.3	-0.2	3,703.8
1995	1,484.1	R 761.5	359.1	69.8	20.0	585.6	86.2	220.5	1,341.2	698.3	20.9	91.5	0.8	-487.4	(s)	3,910.9
1996	1,543.7	R 771.2	357.1	67.1	22.0	592.7	81.5	204.8	1,325.1	721.3	31.1	99.0	0.9	-552.4	0.4	3,940.4
1997	1,569.6	R 730.8	346.2	84.0	19.1	598.3	72.3	222.8	1,342.7	710.0	23.0	90.8	0.9	-542.4	0.2	R 3,925.7
1998	1,466.0	667.2	335.5	R 94.9	19.7	609.1	87.6	227.5	R 1,374.4	641.5	24.3	85.3	1.0	-488.6	-0.6	R 3,770.5
1999	1,415.0	R 713.6	364.2	90.4	20.5	611.9	74.6	207.3	1,368.9	743.3	19.9	88.7	1.0	-549.0	-0.2	3,801.2
2000	1,508.1	R 727.5	399.4	107.8	25.7	615.0	75.9	209.7	1,433.4	769.4	23.4	89.5	1.1	-605.9	-0.3	3,946.1
2001	1,392.2	R 669.1	404.5	107.0	23.8	627.6	61.1	236.8	1,460.8	770.3	17.0	77.6	1.1	-491.8	-0.1	3,896.2
2002	1,457.3	R 710.7	403.6	96.4	25.2	639.8	49.3	217.5	1,431.8	794.3	22.5	72.5	1.6	-559.6	-0.4	3,930.7
2003	1,462.0	R 725.9	386.5	99.1	40.8	638.2	72.0	229.8	1,466.4	774.9	34.3	73.8	2.3	R -561.6	-0.4	3,977.5
2004	1,474.3	R 732.4	418.6	92.9	39.9	649.1	74.6	243.0	1,518.1	807.7	31.6	74.4	4.4	-601.7	-0.7	4,040.4
2005	1,490.8	R 719.3	418.0	95.4	44.2	646.0	89.3	243.8	1,536.8	796.1	22.3	R 71.6	4.4	-596.2	-1.1	R 4,043.9
2006	1,501.1	685.5	415.0	93.4	47.0	640.3	44.8	234.5	1,475.0	785.7	28.2	R 71.7	5.3	-623.9	-0.5	R 3,928.1
2007	1,490.7	781.7	409.0	87.9	47.8	647.0	41.6	222.3	1,455.6	811.5	22.1	74.0	6.7	-636.2	0.1	4,006.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	5,236	232	25,101	2,763	1,125	28,989	1,307	--	--	11,094	--	--	--
1965	3,185	256	28,391	2,753	1,349	32,493	1,060	--	--	14,807	--	--	--
1970	2,028	297	31,242	3,368	1,890	36,500	1,024	--	--	23,007	--	--	--
1975	561	273	31,587	2,023	2,109	35,719	1,039	--	--	27,678	--	--	--
1980	329	288	27,838	2,362	1,589	31,789	2,666	--	--	31,767	--	--	--
1985	280	245	24,185	2,853	2,299	29,337	2,478	--	--	32,686	--	--	--
1990	262	240	20,207	1,377	2,533	24,117	1,300	--	--	38,164	--	--	--
1995	154	262	20,307	2,064	3,089	25,460	1,172	--	--	42,802	--	--	--
1996	119	279	20,704	2,411	3,362	26,477	1,217	--	--	43,645	--	--	--
1997	137	262	19,169	2,541	3,311	25,021	691	--	--	42,785	--	--	--
1998	93	218	16,232	2,906	3,486	22,624	614	--	--	42,923	--	--	--
1999	83	241	19,175	2,518	3,733	25,426	646	--	--	44,126	--	--	--
2000	82	263	20,910	2,790	4,489	28,190	695	--	--	45,008	--	--	--
2001	86	239	20,863	2,884	3,480	27,226	625	--	--	46,030	--	--	--
2002	70	239	20,503	1,985	4,015	26,503	634	--	--	48,730	--	--	--
2003	91	265	22,251	1,597	5,017	28,864	667	--	--	49,651	--	--	--
2004	68	248	22,427	1,941	4,992	29,359	684	--	--	50,663	--	--	--
2005	50	245	19,896	1,822	4,559	26,277	R 515	--	--	53,661	--	--	--
2006	R 56	206	16,902	1,420	R 4,659	R 22,981	R 469	--	--	51,790	--	--	--
2007	66	231	17,139	945	5,308	23,392	517	--	--	54,587	--	--	--
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	R 294.7	162.2	13.4	5.8	181.4	53.3	0.0	0.0	108.4	644.2	261.3	905.4
1985	6.6	R 253.2	140.9	16.2	8.3	165.3	49.6	0.0	0.0	111.5	586.2	256.9	843.1
1990	6.6	R 249.5	117.7	7.8	9.2	134.7	26.0	0.2	0.5	130.2	547.5	301.1	848.6
1995	3.8	R 271.4	118.3	11.7	11.2	141.2	23.4	0.2	0.5	146.0	586.6	331.6	918.2
1996	2.9	R 288.1	120.6	13.7	12.1	146.4	24.3	0.2	0.5	148.9	611.4	338.6	950.0
1997	3.4	271.7	111.7	14.4	12.0	138.0	13.8	0.3	0.5	146.0	573.7	330.7	904.4
1998	2.3	225.8	94.6	16.5	12.6	123.6	12.3	0.3	0.5	146.5	511.3	332.1	843.4
1999	2.1	R 250.2	111.7	14.3	13.5	139.5	12.9	0.3	0.5	150.6	556.0	344.4	900.3
2000	2.2	R 272.0	121.8	15.8	16.2	153.8	13.9	0.3	0.5	153.6	596.1	349.3	945.4
2001	2.2	251.9	121.5	16.4	12.6	150.5	12.5	0.3	0.4	157.1	574.8	350.0	924.8
2002	1.8	252.0	119.4	11.3	14.5	145.2	12.7	0.3	0.4	166.3	578.7	370.6	949.3
2003	2.3	279.0	129.6	9.1	18.2	156.9	13.3	0.4	0.4	169.4	621.7	373.8	995.6
2004	1.7	261.1	130.6	11.0	18.1	159.7	13.7	0.5	0.5	172.9	610.0	382.5	992.5
2005	1.3	255.0	115.9	10.3	16.5	142.7	R 10.3	0.6	0.5	183.1	R 593.4	400.5	R 993.9
2006	R 1.4	214.0	98.5	8.0	R 16.8	R 123.3	R 9.4	0.6	0.6	176.7	R 526.0	382.1	R 908.2
2007	1.6	240.8	99.8	5.4	19.1	124.3	10.3	0.8	0.8	186.3	564.7	401.9	966.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	3,639	56	4,363	241	198	2,084	5,514	12,401	0	--	--	7,125	--	--	--	
1965	2,403	68	4,935	240	238	2,585	5,899	13,897	0	--	--	9,417	--	--	--	
1970	1,594	99	5,431	294	334	2,455	5,254	13,767	0	--	--	13,435	--	--	--	
1975	1,308	99	5,491	177	372	1,310	3,630	10,980	0	--	--	18,608	--	--	--	
1980	1,239	118	5,858	193	280	313	1,521	8,165	0	--	--	21,746	--	--	--	
1985	993	115	5,508	359	406	448	1,414	8,134	0	--	--	24,580	--	--	--	
1990	1,046	126	6,640	150	447	701	794	8,732	0	--	--	30,198	--	--	--	
1995	1,034	144	6,334	528	545	88	1,221	8,716	0	--	--	35,542	--	--	--	
1996	875	155	6,152	556	593	87	1,304	8,692	0	--	--	36,373	--	--	--	
1997	1,108	144	4,807	323	584	284	1,029	7,027	0	--	--	36,853	--	--	--	
1998	749	131	4,597	284	615	929	598	7,023	0	--	--	38,088	--	--	--	
1999	607	143	4,751	344	659	188	540	6,481	0	--	--	38,306	--	--	--	
2000	660	145	5,495	407	792	146	634	7,475	0	--	--	42,988	--	--	--	
2001	698	136	5,994	501	614	127	500	7,737	0	--	--	41,446	--	--	--	
2002	516	136	7,454	388	708	158	376	9,084	0	--	--	43,598	--	--	--	
2003	609	149	6,269	394	885	158	564	8,269	0	--	--	43,218	--	--	--	
2004	612	143	6,216	409	881	111	609	8,225	0	--	--	44,355	--	--	--	
2005	573	145	6,124	460	805	90	626	8,105	0	--	--	45,782	--	--	--	
2006	<sup>R</sup> 568	130	5,703	420	<sup>R</sup> 822	91	287	<sup>R</sup> 7,322	0	--	--	45,624	--	--	--	
2007	590	146	4,920	186	937	91	389	6,523	0	--	--	47,531	--	--	--	
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	272.2	178.8	451.1	
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	467.8	
1990	26.3	130.6	38.7	0.9	1.6	3.7	5.0	49.8	0.0	2.8	(s)	103.0	312.6	238.3	550.8	
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	275.4	628.4	
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	362.7	282.2	644.9	
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	284.9	633.2	
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	294.7	624.6	
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	337.0	299.0	636.0	
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	333.6	696.3	
2001	17.6	143.9	34.9	2.8	2.2	0.7	3.1	43.8	0.0	4.4	0.2	141.4	351.3	315.1	666.5	
2002	13.0	143.5	43.4	2.2	2.6	0.8	2.4	51.4	0.0	4.5	0.3	148.8	361.4	331.6	693.0	
2003	15.3	157.4	36.5	2.2	3.2	0.8	3.5	46.3	0.0	4.7	0.3	147.5	371.5	325.4	696.8	
2004	15.4	150.3	36.2	2.3	3.2	0.6	3.8	46.1	0.0	4.4	0.4	151.3	367.9	334.9	<sup>R</sup> 702.8	
2005	14.4	150.8	35.7	2.6	2.9	0.5	3.9	45.6	0.0	<sup>R</sup> 3.8	0.5	156.2	371.3	341.7	<sup>R</sup> 713.0	
2006	<sup>R</sup> 14.3	135.5	33.2	2.4	3.0	0.5	1.8	<sup>R</sup> 40.8	0.0	<sup>R</sup> 3.6	0.5	155.7	350.3	336.6	<sup>R</sup> 687.0	
2007	14.8	151.8	28.7	1.1	3.4	0.5	2.4	36.0	0.0	3.7	0.5	162.2	369.0	349.9	718.9	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	33,140	213	8,645	992	1,456	29,692	17,976	58,762	16	--	--	20,693	--	--
1965	40,010	285	11,641	1,383	1,480	29,434	23,797	67,734	15	--	--	29,075	--	--
1970	35,753	340	10,196	2,396	1,181	27,132	24,169	65,074	12	--	--	38,993	--	--
1975	28,510	263	11,033	3,439	1,098	21,941	25,104	62,614	1	--	--	41,256	--	--
1980	21,877	337	11,128	5,238	586	11,555	27,597	56,104	1	--	--	46,045	--	--
1985	13,716	231	6,434	4,624	1,276	2,624	23,961	38,919	1	--	--	42,520	--	--
1990	14,546	241	7,489	3,177	1,180	5,734	31,009	48,589	0	--	--	45,992	--	--
1995	14,885	252	4,392	1,687	934	2,888	31,259	41,161	0	--	--	47,528	--	--
1996	15,155	246	4,462	1,977	855	3,292	28,366	38,952	0	--	--	47,208	--	--
1997	14,825	240	4,179	1,272	887	2,227	31,502	40,067	0	--	--	48,063	--	--
1998	10,691	232	4,066	1,224	872	2,219	31,779	40,160	0	--	--	48,815	--	--
1999	10,160	236	5,034	1,188	741	1,903	29,629	38,495	0	--	--	46,059	--	--
2000	10,508	235	5,576	1,766	703	1,994	30,140	40,180	0	--	--	45,449	--	--
2001	10,079	203	5,997	2,391	1,363	1,600	34,558	45,910	0	--	--	47,383	--	--
2002	10,137	212	5,254	2,153	1,432	1,316	31,920	42,075	0	--	--	47,090	--	--
2003	10,366	200	4,739	5,176	1,510	2,111	34,130	47,666	0	--	--	46,773	--	--
2004	10,418	200	5,446	5,010	1,823	1,918	35,708	49,904	0	--	--	47,659	--	--
2005	9,957	190	5,681	6,649	1,841	1,915	36,362	52,448	0	--	--	47,950	--	--
2006	R 9,663	195	7,293	R 7,372	2,112	1,709	35,493	R 53,979	0	--	--	47,920	--	--
2007	9,277	196	7,847	6,933	1,542	1,300	34,463	52,084	0	--	--	48,579	--	--
Trillion Btu														
1960	873.1	220.0	50.4	4.0	7.6	186.7	110.7	359.3	0.2	19.8	0.0	70.6	1,543.0	1,717.7
1965	1,053.3	296.1	67.8	5.5	7.8	185.0	144.8	411.0	0.2	25.8	0.0	99.2	1,885.5	2,122.4
1970	932.1	351.2	59.4	9.1	6.2	170.6	147.3	392.6	0.1	32.3	0.0	133.0	1,841.4	2,163.4
1975	743.1	269.8	64.3	12.8	5.8	137.9	152.1	372.8	(s)	36.3	0.0	140.8	1,562.8	1,901.3
1980	573.1	R 344.0	64.8	19.2	3.1	72.6	164.6	324.4	(s)	74.6	0.0	157.1	1,471.7	1,850.4
1985	359.2	238.7	37.5	16.7	6.7	16.5	145.1	222.4	(s)	87.4	0.0	145.1	1,052.7	1,386.8
1990	382.1	R 250.9	43.6	11.5	6.2	36.0	187.9	285.3	0.0	23.7	0.0	156.9	1,098.9	1,461.7
1995	392.2	261.4	25.6	6.1	4.9	18.2	189.5	244.2	0.0	33.2	0.0	162.2	1,093.2	1,461.4
1996	398.4	R 254.6	26.0	7.1	4.5	20.7	171.6	229.9	0.0	38.4	0.0	161.1	1,082.2	1,448.5
1997	390.0	248.3	24.3	4.6	4.6	14.0	190.1	237.6	0.0	41.8	0.0	164.0	1,081.7	1,453.2
1998	284.2	240.5	23.7	4.4	4.5	14.0	192.5	239.1	0.0	36.3	0.0	166.6	966.6	1,344.3
1999	269.6	244.2	29.3	4.3	3.9	12.0	177.3	226.7	0.0	38.5	0.0	157.2	936.2	1,295.7
2000	277.9	R 243.6	32.5	6.4	3.7	12.5	182.3	237.4	0.0	38.0	0.0	155.1	951.8	1,304.5
2001	266.0	R 214.6	34.9	8.6	7.1	10.1	209.2	269.9	0.0	35.6	0.0	161.7	947.7	1,308.0
2002	267.7	223.9	30.6	7.8	7.5	8.3	192.3	246.4	0.0	30.2	0.0	160.7	928.8	1,287.0
2003	274.0	R 210.8	27.6	18.8	7.9	13.3	206.0	273.5	0.0	31.1	0.0	159.6	949.0	1,301.1
2004	273.4	210.8	31.7	18.1	9.5	12.1	215.8	287.2	0.0	32.3	0.0	162.6	966.2	1,326.0
2005	250.3	197.5	33.1	24.1	9.6	12.0	220.2	299.0	0.0	32.6	0.0	163.6	942.9	1,300.7
2006	242.3	202.7	42.5	R 26.6	11.0	10.7	215.1	R 305.9	0.0	R 33.3	0.0	163.5	R 947.7	R 1,301.3
2007	232.6	204.2	45.7	24.9	8.0	8.2	208.3	295.2	0.0	33.5	0.0	165.8	931.2	1,288.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	569	15	1,994	7,662	1,036	20	1,343	76,565	5,005	93,625	0	306	--	--	--
1965	130	19	1,922	8,900	3,406	60	1,121	81,658	4,554	101,622	0	232	--	--	--
1970	57	27	662	12,662	9,083	134	1,327	98,082	5,548	127,497	0	184	--	--	--
1975	5	18	426	16,566	8,469	157	1,094	106,357	5,788	138,857	0	194	--	--	--
1980	0	29	337	21,539	10,148	147	1,312	107,026	4,796	145,306	0	186	--	--	--
1985	0	33	208	20,337	10,126	249	1,194	100,255	2,139	134,508	0	365	--	--	--
1990	0	34	145	23,187	12,042	157	1,344	105,586	5,584	148,044	0	396	--	--	--
1995	0	38	125	29,224	12,313	188	1,282	111,261	4,769	159,162	1,714	379	--	--	--
1996	0	41	121	28,464	11,831	148	1,244	112,697	3,326	157,831	1,287	397	--	--	--
1997	0	39	107	30,227	R 14,819	117	1,314	113,608	4,579	R 164,771	1,422	376	--	--	--
1998	0	33	126	31,153	R 16,731	127	1,376	115,066	5,481	R 170,060	325	381	--	--	--
1999	0	37	205	32,235	15,943	97	1,390	116,491	5,003	171,364	281	392	--	--	--
2000	0	39	154	33,989	19,009	68	1,369	117,185	4,699	176,473	317	401	--	--	--
2001	0	33	122	35,425	18,877	88	1,255	118,968	2,446	177,180	405	412	--	--	--
2002	0	38	121	34,831	17,006	98	1,240	121,261	2,878	177,435	135	403	--	--	--
2003	0	34	95	31,746	17,473	153	1,146	120,907	2,959	174,479	161	727	--	--	--
2004	0	30	95	36,709	16,381	155	1,161	122,535	4,003	181,037	2,115	823	--	--	--
2005	0	31	100	38,790	16,826	197	1,155	121,878	4,600	183,546	R 1,346	880	--	--	--
2006	0	28	218	40,699	16,465	179	1,125	120,499	4,186	183,371	R 2,961	816	--	--	--
2007	0	35	97	39,473	15,503	130	1,162	122,337	3,419	182,120	3,993	876	--	--	--
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	0.0	1.2	760.4	2.9	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	R 890.1	5.0	1.3	931.9	2.9	934.8
1998	0.0	34.0	0.6	181.5	R 94.9	0.5	8.3	599.7	34.5	R 920.0	1.2	1.3	955.2	2.9	R 958.2
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	1.4	1.4	993.8	3.1	996.9
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	1,001.4
2003	0.0	35.9	0.5	184.9	99.1	0.6	7.0	629.6	18.6	940.1	0.6	2.5	978.5	5.5	984.0
2004	0.0	31.2	0.5	213.8	92.9	0.6	7.0	639.0	25.2	979.0	7.5	2.8	1,012.9	6.2	1,019.2
2005	0.0	32.3	0.5	225.9	95.4	0.7	7.0	636.0	28.9	994.5	R 4.8	3.0	1,029.8	6.6	1,036.3
2006	0.0	R 28.8	1.1	237.1	93.4	0.6	6.8	628.8	26.3	994.1	R 10.5	2.8	R 1,025.7	6.0	R 1,031.7
2007	0.0	36.6	0.5	229.9	87.9	0.5	7.0	638.5	21.5	985.8	14.1	3.0	1,025.4	6.4	1,031.8

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Pennsylvania

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	R -85	--
2004	51,698	76	5,331	1,072	1,051	7,453	77,459	3,155	--	0	0	306	-177	--
2005	54,464	81	7,058	1,273	534	8,865	76,289	2,232	--	0	0	284	-286	--
2006	55,936	101	949	651	179	1,779	75,298	2,844	--	0	0	361	-95	--
2007	55,712	144	1,516	838	0	2,353	77,376	2,236	--	0	0	470	62	--
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	8.8	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	25.1	0.0	0.0	0.1	0.0	1,981.9
2002	1,174.9	51.7	20.5	7.2	3.7	31.4	794.3	22.5	25.1	0.0	0.0	0.6	-0.3	2,100.1
2003	1,170.4	42.8	36.6	7.8	5.1	49.5	774.9	34.3	24.6	0.0	0.0	1.1	-0.3	2,097.4
2004	1,183.9	R 79.0	33.5	6.2	6.3	46.1	807.7	31.6	24.0	0.0	0.0	3.1	-0.6	2,174.7
2005	1,224.9	83.5	44.4	7.4	3.2	55.0	796.1	22.3	25.0	0.0	0.0	2.8	-1.0	2,208.7
2006	1,243.1	104.4	6.0	3.8	1.1	10.8	785.7	28.2	25.5	0.0	0.0	3.6	-0.3	2,200.9
2007	1,241.6	148.3	9.5	4.9	0.0	14.4	811.5	22.1	26.4	0.0	0.0	4.6	0.2	2,269.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	598	12	8,106	38	207	5,975	9,827	2,016	26,170	0	9	--	--	--	--	--
1965	419	16	6,879	49	223	6,492	6,276	2,126	22,045	0	2	--	--	--	--	--
1970	10	25	8,631	137	375	8,009	9,727	1,954	28,833	0	3	--	--	--	--	--
1975	7	23	8,003	271	498	8,972	4,389	1,990	24,122	0	3	--	--	--	--	--
1980	7	28	5,032	348	293	8,416	2,525	2,065	18,680	0	1	--	--	--	--	--
1985	9	30	4,940	498	501	8,665	2,232	3,387	20,223	0	0	--	--	--	--	--
1990	5	39	5,285	776	501	8,765	1,424	1,923	18,674	0	10	--	--	--	--	--
1995	3	101	5,839	500	461	8,927	936	1,220	17,882	0	9	--	--	--	--	--
1996	3	120	6,008	540	536	9,006	984	573	17,647	0	10	--	--	--	--	--
1997	3	118	6,705	828	422	9,195	904	546	18,599	0	8	--	--	--	--	--
1998	2	131	5,578	R 920	481	9,391	683	596	R 17,649	0	9	--	--	--	--	--
1999	2	118	5,465	1,057	506	9,593	641	614	17,876	0	6	--	--	--	--	--
2000	2	88	5,459	1,283	447	9,468	681	478	17,815	0	5	--	--	--	--	--
2001	2	96	5,750	1,304	431	9,617	633	547	18,283	0	3	--	--	--	--	--
2002	3	88	5,678	1,286	560	9,452	610	448	18,034	0	4	--	--	--	--	--
2003	4	78	6,390	1,056	473	9,474	683	543	18,620	0	6	--	--	--	--	--
2004	3	73	6,515	1,035	360	9,108	671	393	18,082	0	5	--	--	--	--	--
2005	3	81	6,177	825	433	9,216	727	569	17,947	0	7	--	--	--	--	--
2006	2	77	5,329	593	416	9,854	478	526	17,195	0	6	--	--	--	--	--
2007	1	88	5,780	335	417	9,730	411	191	16,863	0	4	--	--	--	--	--
Trillion Btu																
1960	16.8	12.3	47.2	0.2	0.8	31.4	61.8	12.2	153.7	0.0	0.1	2.9	0.0	1.5	0.0	187.1
1965	11.5	17.0	40.1	0.3	0.9	34.1	39.5	13.0	127.8	0.0	(s)	3.5	0.0	14.0	0.0	173.8
1970	0.2	25.6	50.3	0.8	1.4	42.1	61.2	11.9	167.6	0.0	(s)	5.2	0.0	24.3	0.0	223.0
1975	0.1	23.5	46.6	1.5	1.8	47.1	27.6	12.4	137.1	0.0	(s)	4.0	0.0	41.8	0.0	206.6
1980	0.2	R 28.2	29.3	2.0	1.1	44.2	15.9	12.5	104.9	0.0	(s)	7.3	0.0	47.6	-0.3	187.9
1985	0.2	R 30.9	28.8	2.8	1.8	45.5	14.0	22.1	115.0	0.0	0.0	5.1	0.0	52.6	1.3	205.1
1990	0.1	R 40.5	30.8	4.4	1.8	46.0	9.0	12.5	104.5	0.0	0.1	4.4	(s)	59.8	0.1	209.4
1995	0.1	103.5	34.0	2.8	1.7	46.6	5.9	7.9	98.9	0.0	0.1	4.9	(s)	31.5	4.3	243.3
1996	0.1	R 127.2	35.0	3.1	1.9	47.0	6.2	3.6	96.7	0.0	0.1	5.4	(s)	3.4	4.5	237.4
1997	0.1	120.5	39.1	4.7	1.5	47.9	5.7	3.4	102.3	0.0	0.1	4.2	(s)	5.0	5.8	238.0
1998	0.1	134.0	32.5	5.2	1.7	48.9	4.3	3.7	96.4	0.0	0.1	4.1	(s)	7.6	6.0	248.3
1999	(s)	120.7	31.8	6.0	1.8	50.0	4.0	3.8	97.5	0.0	0.1	4.4	(s)	16.2	6.6	245.5
2000	0.1	91.8	31.8	7.3	1.6	49.3	4.3	2.9	97.2	0.0	(s)	4.5	(s)	24.6	5.4	223.6
2001	0.1	98.6	33.5	7.4	1.6	50.1	4.0	3.3	99.9	0.0	(s)	3.8	(s)	16.9	2.6	221.9
2002	0.1	90.5	33.1	7.3	2.0	49.2	3.8	2.7	98.2	0.0	(s)	3.6	(s)	25.8	1.1	219.4
2003	0.1	80.5	37.2	6.0	1.7	49.3	4.3	3.4	102.0	0.0	0.1	3.7	(s)	40.6	0.4	227.3
2004	0.1	74.6	38.0	5.9	1.3	47.5	4.2	2.4	99.3	0.0	0.1	3.8	(s)	47.3	1.0	226.1
2005	0.1	83.7	36.0	4.7	1.6	48.1	4.6	3.6	98.5	0.0	0.1	R 1.8	(s)	41.3	1.2	R 226.5
2006	R (s)	79.8	31.0	3.4	1.5	51.4	3.0	3.3	93.6	0.0	0.1	R 3.4	(s)	37.3	1.1	R 215.4
2007	(s)	90.8	33.7	1.9	1.5	50.8	2.6	1.1	91.5	0.0	(s)	3.7	(s)	30.0	1.4	217.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	12	7	5,507	770	149	6,426	52	--	--	620	--	--	--
1965	7	9	4,828	534	134	5,496	46	--	--	871	--	--	--
1970	4	12	5,835	335	158	6,328	58	--	--	1,390	--	--	--
1975	1	13	5,395	87	148	5,629	64	--	--	1,684	--	--	--
1980	1	14	3,297	54	115	3,466	355	--	--	1,840	--	--	--
1985	1	15	3,818	131	279	4,227	248	--	--	1,971	--	--	--
1990	1	18	3,035	38	277	3,349	152	--	--	2,376	--	--	--
1995	(s)	17	3,466	27	283	3,775	164	--	--	2,472	--	--	--
1996	(s)	19	3,479	30	354	3,864	171	--	--	2,481	--	--	--
1997	(s)	18	3,607	34	318	3,960	122	--	--	2,486	--	--	--
1998	(s)	16	3,265	41	372	3,678	108	--	--	2,522	--	--	--
1999	(s)	17	3,161	49	261	3,471	114	--	--	2,667	--	--	--
2000	(s)	19	3,262	65	278	3,604	123	--	--	2,664	--	--	--
2001	(s)	18	3,562	69	243	3,874	96	--	--	2,699	--	--	--
2002	(s)	18	3,355	34	298	3,687	98	--	--	2,829	--	--	--
2003	1	20	3,705	46	306	4,058	103	--	--	2,998	--	--	--
2004	(s)	19	3,892	50	236	4,178	105	--	--	3,000	--	--	--
2005	(s)	19	3,733	59	244	4,036	R 73	--	--	3,171	--	--	--
2006	(s)	17	2,870	40	R 216	R 3,125	R 66	--	--	3,008	--	--	--
2007	(s)	18	2,963	16	253	3,232	73	--	--	3,132	--	--	--
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)	R 14.3	19.2	0.3	0.4	19.9	7.1	0.0	0.0	6.3	47.4	15.1	62.6
1985	(s)	R 15.5	22.2	0.7	1.0	24.0	5.0	0.0	0.0	6.7	51.1	15.5	66.6
1990	(s)	18.2	17.7	0.2	1.0	18.9	3.0	0.0	(s)	8.1	48.3	18.7	67.0
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	19.2	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	20.5	72.2
2002	(s)	18.4	19.5	0.2	1.1	20.8	2.0	(s)	(s)	9.7	50.9	21.5	72.4
2003	(s)	20.8	21.6	0.3	1.1	23.0	2.1	(s)	(s)	10.2	56.1	22.6	78.7
2004	(s)	20.1	22.7	0.3	0.9	23.8	2.1	(s)	(s)	10.2	56.3	22.7	78.9
2005	(s)	20.1	21.7	0.3	0.9	23.0	R 1.5	(s)	(s)	10.8	R 55.4	23.7	R 79.1
2006	(s)	17.8	16.7	0.2	0.8	17.7	R 1.3	(s)	(s)	10.3	R 47.2	22.2	R 69.4
2007	(s)	18.4	17.3	0.1	0.9	18.3	1.5	(s)	(s)	10.7	48.9	23.1	71.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	8	2	1,381	17	26	26	1,237	2,688	0	--	--	376	--	--	--	
1965	6	3	1,211	12	24	32	634	1,913	0	--	--	546	--	--	--	
1970	3	5	1,464	7	28	36	971	2,506	0	--	--	1,285	--	--	--	
1975	3	4	1,353	2	26	41	602	2,024	0	--	--	1,576	--	--	--	
1980	2	7	617	0	20	49	180	866	0	--	--	1,892	--	--	--	
1985	4	8	493	4	49	32	552	1,130	0	--	--	2,159	--	--	--	
1990	4	8	799	2	49	39	597	1,486	0	--	--	2,688	--	--	--	
1995	3	12	741	30	50	10	499	1,330	0	--	--	2,790	--	--	--	
1996	3	12	808	2	63	10	667	1,550	0	--	--	2,773	--	--	--	
1997	3	12	742	55	56	11	608	1,473	0	--	--	2,872	--	--	--	
1998	2	11	620	67	66	10	388	1,150	0	--	--	2,908	--	--	--	
1999	1	12	509	40	46	10	371	976	0	--	--	3,324	--	--	--	
2000	2	13	629	19	49	10	419	1,125	0	--	--	3,243	--	--	--	
2001	2	13	630	98	43	43	429	1,243	0	--	--	3,308	--	--	--	
2002	3	11	662	55	53	59	360	1,189	0	--	--	3,401	--	--	--	
2003	3	11	980	5	54	59	373	1,471	0	--	--	3,490	--	--	--	
2004	3	11	859	7	42	12	395	1,315	0	--	--	3,542	--	--	--	
2005	3	11	686	9	43	12	437	1,187	0	--	--	3,628	--	--	--	
2006	2	10	609	10	R 38	10	256	924	0	--	--	3,599	--	--	--	
2007	1	11	688	1	45	10	234	977	0	--	--	3,710	--	--	--	
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	R 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	34.1	
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	0.0	0.3	0.0	9.2	26.7	21.2	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	25.9	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	25.2	57.3	
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	25.9	56.9	
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	26.3	59.0	
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	26.7	58.6	
2005	0.1	11.6	4.0	0.1	0.2	0.1	2.7	7.0	0.0	R 0.2	0.0	12.4	R 31.3	27.1	R 58.4	
2006	(s)	10.5	3.5	0.1	0.1	0.1	1.6	5.4	0.0	R 0.2	0.0	12.3	R 28.4	26.6	R 55.0	
2007	(s)	11.7	4.0	(s)	0.2	0.1	1.5	5.7	0.0	0.2	0.0	12.7	30.3	27.3	57.6	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	4	3	367	31	6	4,051	1,107	5,561	1	--	--	916	--	--	--
1965	4	4	431	61	5	2,135	1,449	4,082	(s)	--	--	1,274	--	--	--
1970	2	6	672	162	3	3,246	1,388	5,470	0	--	--	1,253	--	--	--
1975	2	6	440	297	3	1,916	1,559	4,215	0	--	--	1,191	--	--	--
1980	4	5	415	149	2	654	1,672	2,892	0	--	--	1,399	--	--	--
1985	4	5	275	150	26	973	3,158	4,584	0	--	--	1,300	--	--	--
1990	(s)	4	279	156	35	453	1,770	2,692	0	--	--	1,354	--	--	--
1995	0	35	280	119	54	372	1,072	1,898	0	--	--	1,374	--	--	--
1996	0	26	294	112	47	315	437	1,204	0	--	--	1,351	--	--	--
1997	0	24	342	38	51	295	375	1,102	0	--	--	1,386	--	--	--
1998	0	42	249	43	45	294	405	1,035	0	--	--	1,458	--	--	--
1999	0	35	235	197	24	266	440	1,161	0	--	--	1,158	--	--	--
2000	0	8	165	118	33	257	308	881	0	--	--	1,394	--	--	--
2001	0	6	120	144	82	204	299	849	0	--	--	1,386	--	--	--
2002	0	4	151	207	104	249	286	998	0	--	--	1,331	--	--	--
2003	0	4	236	104	104	310	423	1,177	0	--	--	1,309	--	--	--
2004	0	6	251	75	104	276	263	968	0	--	--	1,345	--	--	--
2005	0	6	204	140	105	291	427	1,167	0	--	--	1,250	--	--	--
2006	0	7	216	R 157	115	217	394	R 1,099	0	--	--	1,191	--	--	--
2007	0	7	164	117	154	175	90	700	0	--	--	1,171	--	--	--
Trillion Btu															
1960	0.1	3.0	2.1	0.1	(s)	25.5	7.1	34.8	(s)	1.8	0.0	3.1	42.8	7.7	50.5
1965	0.1	4.4	2.5	0.2	(s)	13.4	9.1	25.3	(s)	2.6	0.0	4.3	36.8	10.4	47.2
1970	(s)	5.9	3.9	0.6	(s)	20.4	8.8	33.7	0.0	4.0	0.0	4.3	47.9	10.3	58.3
1975	0.1	R 5.9	2.6	1.1	(s)	12.0	10.1	25.9	0.0	2.7	0.0	4.1	38.6	9.8	48.4
1980	0.1	R 5.2	2.4	0.5	(s)	4.1	10.4	17.5	0.0	0.0	0.0	4.8	27.5	11.5	39.0
1985	0.1	4.8	1.6	0.5	0.1	6.1	20.8	29.2	0.0	0.0	0.0	4.4	38.5	10.2	48.7
1990	(s)	4.5	1.6	0.6	0.2	2.8	11.6	16.8	0.0	0.0	0.0	4.6	25.9	10.7	36.6
1995	0.0	36.0	1.6	0.4	0.3	2.3	7.1	11.7	0.0	0.2	0.0	4.7	52.6	10.6	63.3
1996	0.0	R 28.4	1.7	0.4	0.2	2.0	2.8	7.2	0.0	0.3	0.0	4.6	40.4	10.5	50.9
1997	0.0	R 25.4	2.0	0.1	0.3	1.9	2.4	6.7	0.0	0.3	0.0	4.7	37.0	10.7	47.7
1998	0.0	43.4	1.4	0.2	0.2	1.8	2.6	6.3	0.0	0.2	0.0	5.0	54.9	11.3	66.2
1999	0.0	35.6	1.4	0.7	0.1	1.7	2.8	6.7	0.0	0.3	0.0	4.0	46.4	9.0	55.5
2000	0.0	8.4	1.0	0.4	0.2	1.6	2.0	5.1	0.0	0.2	0.0	4.8	18.5	10.8	29.3
2001	0.0	6.3	0.7	0.5	0.4	1.3	1.9	4.8	0.0	0.2	0.0	4.7	16.1	10.5	26.6
2002	0.0	4.7	0.9	0.7	0.5	1.6	1.8	5.5	0.0	0.1	0.0	4.5	14.8	10.1	25.0
2003	0.0	4.6	1.4	0.4	0.5	2.0	2.7	7.0	0.0	0.1	0.0	4.5	16.1	9.9	25.9
2004	0.0	5.7	1.5	0.3	0.5	1.7	1.7	5.7	0.0	0.1	0.0	4.6	16.1	10.2	26.2
2005	0.0	6.2	1.2	0.5	0.5	1.8	2.8	6.8	0.0	0.1	0.0	4.3	17.4	9.3	26.7
2006	0.0	6.8	1.3	0.6	0.6	1.4	2.5	6.3	0.0	0.1	0.0	4.1	17.2	8.8	26.0
2007	0.0	7.0	1.0	0.4	0.8	1.1	0.5	3.8	0.0	0.1	0.0	4.0	14.9	8.6	23.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	(s)	(s)	19	838	38	1	103	5,943	3,826	10,768	0	0	--	--	--
1965	(s)	(s)	63	393	49	4	69	6,455	2,637	9,669	0	0	--	--	--
1970	(s)	(s)	148	604	137	28	77	7,970	2,519	11,482	0	0	--	--	--
1975	(s)	(s)	285	788	271	27	57	8,929	329	10,685	0	0	--	--	--
1980	0	(s)	269	675	348	9	70	8,365	58	9,794	0	0	--	--	--
1985	0	(s)	30	334	498	22	64	8,606	0	9,554	0	0	--	--	--
1990	0	(s)	42	1,154	776	19	72	8,692	34	10,789	0	0	--	--	--
1995	0	1	22	1,328	500	8	68	8,864	2	10,792	0	0	--	--	--
1996	0	1	37	1,290	540	7	66	8,950	2	10,892	0	0	--	--	--
1997	0	1	11	1,941	828	9	70	9,133	1	11,993	0	0	--	--	--
1998	0	(s)	9	1,397	R 920	1	73	9,337	1	R 11,738	0	0	--	--	--
1999	0	(s)	11	1,517	1,057	3	74	9,559	3	12,224	0	0	--	--	--
2000	0	(s)	13	1,364	1,283	2	73	9,425	5	12,165	0	0	--	--	--
2001	0	(s)	14	1,395	1,304	1	67	9,491	0	12,273	0	0	--	--	--
2002	0	(s)	7	1,477	1,286	2	66	9,289	0	12,127	10	0	--	--	--
2003	0	(s)	7	1,440	1,056	9	61	9,312	0	11,884	11	0	--	--	--
2004	0	(s)	12	1,491	1,035	7	62	8,993	0	11,599	196	0	--	--	--
2005	0	1	12	1,527	825	6	62	9,100	0	11,531	R 295	0	--	--	--
2006	0	1	22	1,609	593	5	60	9,729	4	12,022	R 790	0	--	--	--
2007	0	1	22	1,930	335	3	62	9,565	2	11,919	1,016	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	0.0	0.0	50.7	0.0	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
2005	0.0	0.9	0.1	8.9	4.7	(s)	0.4	47.5	0.0	61.5	R 1.0	0.0	62.4	0.0	62.4
2006	0.0	1.0	0.1	9.4	3.4	(s)	0.4	50.8	(s)	64.0	R 2.8	0.0	65.0	0.0	65.0
2007	0.0	1.0	0.1	11.2	1.9	(s)	0.4	49.9	(s)	63.6	3.6	0.0	64.6	0.0	64.6

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Rhode Island

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	0	44	0	27	0	27	0	7	--	0	0	0	347	--
2006	0	43	0	25	0	25	0	6	--	0	0	0	320	--
2007	0	51	0	35	0	35	0	4	--	0	0	0	415	--
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	1.0	0.0	0.0	0.0	0.1	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	R 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	R 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
2005	0.0	44.8	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	1.2	46.3
2006	0.0	43.8	0.0	0.1	0.0	0.1	0.0	0.1	1.8	0.0	0.0	0.0	1.1	46.9
2007	0.0	52.7	0.0	0.2	0.0	0.2	0.0	(s)	1.9	0.0	0.0	0.0	1.4	56.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	3,719	59	5,234	3,131	1,376	18,094	4,732	7,095	39,661	0	3,611	--	--	--	--	--
1965	4,760	87	4,849	2,958	2,097	21,430	3,916	6,094	41,344	75	3,517	--	--	--	--	--
1970	5,817	160	9,423	3,170	2,927	28,756	5,335	5,724	55,335	7	2,293	--	--	--	--	--
1975	5,842	123	8,376	2,692	3,204	35,429	7,666	5,048	62,415	19,458	4,413	--	--	--	--	--
1980	9,929	142	10,660	3,062	3,178	35,517	7,205	7,462	67,083	17,404	3,025	--	--	--	--	--
1985	10,479	97	12,256	3,184	3,161	37,719	2,921	7,035	66,274	31,826	1,835	--	--	--	--	--
1990	11,447	130	14,866	2,939	2,914	43,264	2,416	8,274	74,674	42,881	3,298	--	--	--	--	--
1995	12,279	152	14,501	1,027	3,826	46,973	2,649	10,648	79,624	49,173	3,457	--	--	--	--	--
1996	13,852	150	15,174	1,292	3,666	47,427	2,984	5,959	76,502	43,571	3,041	--	--	--	--	--
1997	14,109	154	15,815	1,328	6,150	49,468	2,590	6,939	82,291	44,916	2,958	--	--	--	--	--
1998	14,649	159	18,227	R 1,438	4,601	51,216	2,212	7,163	R 84,856	48,759	3,569	--	--	--	--	--
1999	15,764	163	18,271	1,536	3,858	52,774	1,757	7,360	85,555	50,814	1,687	--	--	--	--	--
2000	16,946	160	18,879	1,861	5,038	53,040	2,324	7,354	88,496	50,888	1,533	--	--	--	--	--
2001	16,421	142	19,389	1,851	3,563	53,822	2,178	14,278	95,080	49,870	1,225	--	--	--	--	--
2002	16,263	185	19,240	1,548	3,362	55,222	2,079	13,466	94,917	53,326	1,390	--	--	--	--	--
2003	16,697	147	18,968	1,459	3,152	55,935	3,816	14,044	97,373	50,418	3,665	--	--	--	--	--
2004	17,351	164	22,074	1,656	3,117	61,691	5,540	18,193	112,271	51,201	2,447	--	--	--	--	--
2005	17,296	172	21,547	1,609	3,607	59,302	5,039	16,951	108,054	53,138	2,938	--	--	--	--	--
2006	17,288	175	21,812	1,805	3,243	61,779	3,589	16,980	109,208	50,797	1,807	--	--	--	--	--
2007	17,791	174	21,880	1,881	2,858	61,328	3,226	14,985	106,157	53,200	1,556	--	--	--	--	--
Trillion Btu																
1960	96.4	60.6	30.5	16.8	5.5	95.0	29.7	41.9	219.5	0.0	38.8	43.1	0.0	31.1	0.0	489.5
1965	121.5	90.5	28.2	15.8	8.4	112.6	24.6	36.1	225.8	0.9	36.8	40.6	0.0	39.7	0.0	555.7
1970	140.1	164.3	54.9	17.1	11.1	151.1	33.5	34.5	302.2	0.1	24.1	41.0	0.0	75.8	0.0	747.6
1975	140.2	125.9	48.8	14.5	11.9	186.1	48.2	31.0	340.5	214.3	45.9	41.9	0.0	-64.0	0.0	844.6
1980	245.8	R 146.9	62.1	16.6	11.7	186.6	45.3	43.5	365.8	189.8	31.4	39.8	0.0	-6.0	-0.1	1,013.4
1985	262.7	R 100.2	71.4	17.2	11.4	198.1	18.4	41.0	357.5	338.1	19.2	47.4	0.0	-35.1	-0.1	1,089.8
1990	289.2	134.1	86.6	16.0	10.6	227.3	15.2	48.7	404.3	453.8	34.3	71.7	0.1	-98.0	0.5	1,290.1
1995	314.5	156.0	84.5	5.8	13.9	245.0	16.7	61.9	427.7	516.7	35.7	88.9	0.1	-93.3	-0.1	1,446.2
1996	352.6	R 154.1	88.4	7.3	13.2	247.4	18.8	36.6	411.7	457.6	31.4	100.2	0.1	-44.6	-0.2	1,463.0
1997	361.4	158.7	92.1	7.5	22.2	257.9	16.3	43.3	439.4	471.3	30.2	101.6	0.1	-54.3	(s)	1,508.5
1998	373.4	164.9	106.2	R 8.2	16.6	266.9	13.9	43.9	455.7	511.5	36.4	93.4	0.1	-77.5	(s)	1,557.9
1999	402.2	168.0	106.4	8.7	13.9	275.0	11.0	44.9	460.0	531.0	17.3	79.7	0.2	-91.3	(s)	1,567.0
2000	432.2	R 165.1	110.0	10.6	18.2	276.3	14.6	45.5	475.1	530.7	15.6	76.8	0.2	-81.2	-0.1	1,614.5
2001	414.5	147.2	112.9	10.5	12.9	280.4	13.7	83.1	513.5	521.0	12.7	57.7	0.2	-84.9	(s)	1,581.9
2002	404.5	184.8	112.1	8.8	12.1	287.6	13.1	78.1	511.7	556.7	14.1	66.3	0.2	-107.5	(s)	1,630.8
2003	419.7	146.6	110.5	8.3	11.4	291.3	24.0	81.6	527.0	525.4	37.5	66.4	0.2	-105.0	(s)	1,617.9
2004	433.9	163.8	128.6	9.4	11.3	321.7	34.8	106.5	612.3	533.9	24.5	72.7	0.3	-112.4	(s)	R 1,728.9
2005	431.1	R 178.6	125.5	9.1	13.1	309.4	31.7	99.5	588.3	554.5	29.4	R 77.6	0.3	-151.0	-0.1	R 1,708.6
2006	432.2	181.4	127.1	10.2	11.7	322.4	22.6	100.1	594.0	530.0	17.9	R 81.6	0.3	-129.0	-0.1	R 1,708.5
2007	444.0	180.3	127.5	10.7	10.3	320.1	20.3	87.8	576.5	558.0	15.4	80.6	0.4	-162.8	(s)	1,692.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	197	7	1,595	3,475	926	5,996	1,269	--	--	3,272	--	--	--
1965	130	12	1,178	2,606	1,419	5,203	852	--	--	4,371	--	--	--
1970	138	19	2,400	2,011	1,778	6,188	489	--	--	7,347	--	--	--
1975	72	18	1,695	858	1,750	4,304	492	--	--	9,837	--	--	--
1980	41	19	1,580	1,200	1,510	4,290	587	--	--	12,580	--	--	--
1985	14	16	1,287	1,211	1,859	4,357	729	--	--	14,661	--	--	--
1990	1	18	1,199	550	1,682	3,431	296	--	--	18,258	--	--	--
1995	2	25	692	470	2,106	3,268	446	--	--	21,392	--	--	--
1996	2	29	712	561	1,951	3,225	463	--	--	22,514	--	--	--
1997	(s)	26	535	610	1,988	3,133	363	--	--	21,611	--	--	--
1998	3	25	475	680	1,683	2,838	323	--	--	23,558	--	--	--
1999	28	26	503	553	1,980	3,035	340	--	--	23,699	--	--	--
2000	0	29	482	514	2,277	3,273	365	--	--	25,270	--	--	--
2001	0	27	419	498	1,501	2,418	240	--	--	24,875	--	--	--
2002	(s)	28	386	291	1,922	2,599	243	--	--	26,787	--	--	--
2003	0	29	432	377	1,932	2,741	256	--	--	26,422	--	--	--
2004	0	29	288	544	2,107	2,939	263	--	--	27,910	--	--	--
2005	0	29	241	476	2,041	2,758	R 322	--	--	28,676	--	--	--
2006	R 8	25	211	362	R 1,747	R 2,320	R 293	--	--	28,539	--	--	--
2007	(s)	24	172	192	1,711	2,075	323	--	--	29,569	--	--	--
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	218.1
1990	(s)	18.9	7.0	3.1	6.1	16.2	5.9	0.1	(s)	62.3	103.4	144.1	247.5
1995	0.1	25.8	4.0	2.7	7.6	14.3	8.9	0.1	(s)	73.0	122.2	165.8	288.0
1996	0.1	30.3	4.1	3.2	7.1	14.4	9.3	0.1	(s)	76.8	130.9	174.7	305.6
1997	(s)	26.5	3.1	3.5	7.2	13.8	7.3	0.1	(s)	73.7	121.5	167.1	288.5
1998	0.1	26.3	2.8	3.9	6.1	12.7	6.5	0.1	(s)	80.4	126.0	182.3	308.3
1999	0.7	26.4	2.9	3.1	7.2	13.2	6.8	0.1	(s)	80.9	128.2	185.0	313.1
2000	0.0	29.9	2.8	2.9	8.2	13.9	7.3	0.1	(s)	86.2	137.5	196.1	333.6
2001	0.0	28.5	2.4	2.8	5.4	10.7	4.8	0.2	(s)	84.9	129.1	189.1	318.2
2002	(s)	27.4	2.3	1.6	6.9	10.8	4.9	0.2	(s)	91.4	134.7	203.7	338.5
2003	0.0	29.1	2.5	2.1	7.0	11.7	5.1	0.2	(s)	90.2	136.2	198.9	335.2
2004	0.0	29.1	1.7	3.1	7.6	12.4	5.3	0.2	(s)	95.2	142.2	210.7	352.9
2005	0.0	R 29.7	1.4	2.7	7.4	11.5	R 6.4	0.3	(s)	97.8	R 145.7	214.0	R 359.7
2006	0.2	25.8	1.2	2.1	R 6.3	R 9.6	R 5.9	0.3	(s)	97.4	R 139.1	210.6	R 349.7
2007	(s)	25.4	1.0	1.1	6.1	8.2	6.5	0.4	(s)	100.9	141.3	217.7	359.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	137	5	474	93	163	275	176	1,182	0	--	--	1,957	--	--	--
1965	98	7	350	70	250	301	121	1,092	0	--	--	2,531	--	--	--
1970	108	14	714	54	314	204	80	1,366	0	--	--	4,237	--	--	--
1975	169	17	504	23	309	225	160	1,221	0	--	--	7,121	--	--	--
1980	156	23	481	25	266	240	35	1,047	0	--	--	8,705	--	--	--
1985	51	15	939	48	328	230	80	1,625	0	--	--	9,778	--	--	--
1990	5	15	721	12	297	256	17	1,303	2	--	--	12,693	--	--	--
1995	15	19	1,002	26	372	32	38	1,470	3	--	--	14,863	--	--	--
1996	17	20	964	23	344	32	37	1,400	3	--	--	15,388	--	--	--
1997	1	20	1,049	16	351	31	10	1,458	2	--	--	15,645	--	--	--
1998	20	20	1,502	47	297	58	6	1,911	3	--	--	17,290	--	--	--
1999	209	21	1,043	30	349	34	10	1,466	1	--	--	17,488	--	--	--
2000	0	22	759	54	402	35	50	1,300	1	--	--	18,434	--	--	--
2001	0	21	769	40	265	36	113	1,223	1	--	--	18,430	--	--	--
2002	(s)	21	669	24	339	38	19	1,089	(s)	--	--	19,107	--	--	--
2003	0	22	586	22	341	37	18	1,004	1	--	--	19,336	--	--	--
2004	0	22	553	26	372	33	47	1,031	2	--	--	20,113	--	--	--
2005	0	22	621	27	360	34	77	1,120	3	--	--	20,498	--	--	--
2006	R 80	21	694	27	R 308	35	17	R 1,081	2	--	--	20,923	--	--	--
2007	(s)	21	692	18	302	35	14	1,062	1	--	--	21,746	--	--	--
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	76.8	136.1
1990	0.1	15.8	4.2	0.1	1.1	1.3	0.1	6.8	(s)	2.8	0.0	43.3	68.9	100.1	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	84.8	119.4	204.2
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	120.9	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	227.7
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	238.8
2001	0.0	21.5	4.5	0.2	1.0	0.2	0.7	6.6	(s)	2.1	0.0	62.9	93.1	140.1	233.2
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	145.3	237.8
2003	0.0	22.3	3.4	0.1	1.2	0.2	0.1	5.1	(s)	2.2	0.0	66.0	95.5	145.6	241.1
2004	0.0	22.1	3.2	0.1	1.3	0.2	0.3	5.2	(s)	2.1	0.0	68.6	98.0	151.8	R 249.9
2005	0.0	22.9	3.6	0.2	1.3	0.2	0.5	5.7	(s)	R 2.3	0.0	69.9	100.9	153.0	R 253.9
2006	R 1.9	21.4	4.0	0.2	1.1	0.2	0.1	5.6	(s)	R 2.2	0.0	71.4	102.5	154.4	R 256.9
2007	(s)	21.5	4.0	0.1	1.1	0.2	0.1	5.5	(s)	2.2	0.0	74.2	103.4	160.1	263.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	1,758	23	1,959	273	614	3,392	3,022	9,261	97	--	--	6,234	--	--	--
1965	1,835	47	1,748	415	517	2,438	2,822	7,941	79	--	--	7,450	--	--	--
1970	1,861	79	2,655	775	332	1,608	3,195	8,564	37	--	--	10,110	--	--	--
1975	1,200	70	2,040	1,066	209	2,687	3,812	9,813	48	--	--	12,766	--	--	--
1980	1,805	92	1,875	1,368	96	4,245	5,827	13,412	49	--	--	15,979	--	--	--
1985	2,525	63	1,897	834	702	2,233	5,402	11,068	49	--	--	21,829	--	--	--
1990	2,310	87	2,317	849	703	1,888	7,344	13,101	0	--	--	24,701	--	--	--
1995	2,188	98	1,904	1,272	426	2,111	9,774	15,486	0	--	--	28,819	--	--	--
1996	2,000	95	2,124	1,326	452	2,245	5,068	11,216	0	--	--	29,185	--	--	--
1997	2,012	103	1,937	3,748	478	1,974	5,987	14,125	0	--	--	31,278	--	--	--
1998	1,962	102	2,030	2,571	388	1,589	6,107	12,685	0	--	--	31,606	--	--	--
1999	1,861	103	2,190	1,502	346	1,120	6,400	11,559	0	--	--	32,117	--	--	--
2000	1,912	97	2,242	2,304	333	1,734	6,438	13,051	0	--	--	33,308	--	--	--
2001	2,038	80	2,458	1,759	812	1,700	13,420	20,150	0	--	--	31,528	--	--	--
2002	1,923	96	2,333	1,070	870	1,477	12,817	18,567	0	--	--	31,926	--	--	--
2003	1,983	79	2,320	819	921	3,167	13,245	20,472	0	--	--	31,296	--	--	--
2004	1,794	78	2,612	564	1,061	3,433	16,505	24,174	0	--	--	31,886	--	--	--
2005	1,504	74	3,071	1,096	1,033	3,328	15,678	24,205	0	--	--	32,080	--	--	--
2006	1,439	77	2,533	R 1,068	1,086	1,828	16,234	R 22,748	0	--	--	31,416	--	--	--
2007	1,267	75	2,286	756	713	1,603	14,436	19,794	0	--	--	30,632	--	--	--
Trillion Btu															
1960	44.7	23.3	11.4	1.1	3.2	21.3	18.8	55.9	1.0	17.3	0.0	21.3	163.4	52.6	216.0
1965	46.2	48.7	10.2	1.7	2.7	15.3	17.7	47.6	0.8	23.2	0.0	25.4	192.0	60.7	252.7
1970	44.2	80.9	15.5	2.9	1.7	10.1	20.2	50.5	0.4	31.0	0.0	34.5	241.5	83.5	325.0
1975	28.2	72.0	11.9	4.0	1.1	16.9	24.0	57.8	0.5	31.9	0.0	43.6	233.8	104.7	338.6
1980	44.0	R 95.1	10.9	5.0	0.5	26.7	34.3	77.4	0.5	27.7	0.0	54.5	299.2	131.4	430.7
1985	62.8	R 64.8	11.1	3.0	3.7	14.0	31.7	63.5	0.5	32.5	0.0	74.5	298.5	171.5	470.0
1990	58.0	89.3	13.5	3.1	3.7	11.9	43.3	75.5	0.0	63.0	0.0	84.3	370.0	194.9	564.9
1995	55.1	101.0	11.1	4.6	2.2	13.3	57.0	88.1	0.0	76.5	0.0	98.3	419.0	223.3	642.3
1996	50.1	R 98.4	12.4	4.8	2.4	14.1	31.5	65.2	0.0	87.4	0.0	99.6	400.5	226.4	626.9
1997	50.5	106.1	11.3	13.6	2.5	12.4	37.9	77.6	0.0	90.9	0.0	106.7	431.9	241.8	673.6
1998	49.1	105.8	11.8	9.3	2.0	10.0	37.8	71.0	0.0	83.5	0.0	107.8	417.2	244.6	661.8
1999	46.6	105.6	12.8	5.4	1.8	7.0	39.4	66.4	0.0	69.4	0.0	109.6	397.6	250.7	648.3
2000	50.2	R 100.1	13.1	8.3	1.7	10.9	40.2	74.3	0.0	66.1	0.0	113.6	404.2	258.5	662.7
2001	53.1	82.7	14.3	6.4	4.2	10.7	78.2	113.8	0.0	50.9	0.0	107.6	408.1	239.7	647.8
2002	50.6	95.6	13.6	3.9	4.5	9.3	74.3	105.6	0.0	60.4	0.0	108.9	421.2	242.8	664.0
2003	51.9	78.6	13.5	3.0	4.8	19.9	77.0	118.2	0.0	58.9	0.0	106.8	414.4	235.6	650.1
2004	46.6	77.8	15.2	2.0	5.5	21.6	96.6	141.0	0.0	62.3	0.0	108.8	436.4	240.7	R 677.2
2005	38.8	76.9	17.9	4.0	5.4	20.9	92.1	140.2	0.0	61.9	0.0	109.5	427.3	239.4	666.7
2006	37.0	R 79.8	14.8	R 3.8	5.7	11.5	95.8	R 131.6	0.0	66.6	0.0	107.2	R 422.2	231.8	R 654.0
2007	32.8	78.1	13.3	2.7	3.7	10.1	84.7	114.5	0.0	65.4	0.0	104.5	395.4	225.5	620.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	30	1	215	1,196	3,131	13	289	17,205	1,139	23,188	0	0	--	--	--
1965	6	2	354	1,556	2,958	12	243	20,612	1,313	27,048	0	0	--	--	--
1970	3	3	228	2,899	3,170	60	237	28,220	1,605	36,420	0	0	--	--	--
1975	(s)	3	142	4,019	2,692	79	213	34,995	419	42,560	0	0	--	--	--
1980	0	3	149	6,156	3,062	33	261	35,181	844	45,686	0	0	--	--	--
1985	0	2	136	7,949	3,184	140	237	36,787	606	49,039	1	0	--	--	--
1990	0	3	101	10,512	2,939	87	267	42,305	502	56,713	144	0	--	--	--
1995	0	3	123	10,703	1,027	77	255	46,515	432	59,133	0	0	--	--	--
1996	0	3	59	11,107	1,292	44	247	46,944	662	60,356	0	0	--	--	--
1997	0	3	64	11,894	1,328	62	261	48,959	550	63,118	0	0	--	--	--
1998	0	3	55	13,609	R 1,438	50	273	50,770	418	R 66,613	0	0	--	--	--
1999	0	4	100	13,978	1,536	26	276	52,393	377	68,687	0	0	--	--	--
2000	0	3	76	14,791	1,861	55	272	52,672	373	70,100	0	0	--	--	--
2001	0	3	72	15,344	1,851	37	249	52,973	279	70,806	0	0	--	--	--
2002	0	3	87	15,520	1,548	31	246	54,314	516	72,262	0	0	--	--	--
2003	0	3	93	15,181	1,459	60	228	54,976	594	72,590	0	0	--	--	--
2004	0	3	83	18,270	1,656	74	231	60,597	1,993	82,904	0	0	--	--	--
2005	0	2	97	17,283	1,609	110	230	58,235	1,562	79,125	R 347	0	--	--	--
2006	0	2	109	18,151	1,805	120	224	60,658	1,715	82,783	R 511	0	--	--	--
2007	0	3	108	18,412	1,881	88	231	60,580	1,563	82,863	768	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	(s)	0.0	265.5	0.0	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	R 8.2	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	449.0	0.0	449.0
2005	0.0	2.5	0.5	100.7	9.1	0.4	1.4	303.9	9.8	425.8	R 1.2	0.0	428.3	0.0	428.3
2006	0.0	2.4	0.6	105.7	10.2	0.4	1.4	316.5	10.8	445.6	R 1.8	0.0	448.0	0.0	448.0
2007	0.0	2.7	0.5	107.2	10.7	0.3	1.4	316.2	9.8	446.2	2.7	0.0	448.9	0.0	448.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, South Carolina

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	15,793	45	72	332	443	846	53,138	2,936	--	0	0	0	0	--
2006	15,761	50	29	223	24	276	50,797	1,805	--	0	0	0	0	--
2007	16,524	51	45	318	0	364	53,200	1,555	--	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	794.0
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	32.3	0.4	2.0	4.8	7.3	533.9	24.5	3.0	0.0	0.0	0.0	0.0	988.3
2005	392.3	46.6	0.5	1.9	2.7	5.0	554.5	29.4	6.9	0.0	0.0	0.0	0.0	1,034.6
2006	393.0	R 52.2	0.2	1.3	0.1	1.6	530.0	17.9	6.9	0.0	0.0	0.0	0.0	1,001.6
2007	411.1	52.7	0.3	1.9	0.0	2.1	558.0	15.4	6.4	0.0	0.0	0.0	0.0	1,045.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	374	25	2,941	1,145	1,370	8,561	102	1,999	16,118	0	1,156	--	--	--	--	--
1965	310	27	3,766	1,111	1,541	8,955	71	1,437	16,881	0	3,872	--	--	--	--	--
1970	338	36	4,375	1,173	2,712	9,903	328	1,175	19,666	0	6,579	--	--	--	--	--
1975	1,888	33	3,841	1,056	2,930	10,636	218	1,104	19,784	0	7,927	--	--	--	--	--
1980	2,827	24	4,801	1,311	2,530	9,688	122	909	19,362	0	5,818	--	--	--	--	--
1985	2,703	25	5,154	1,019	1,241	9,279	36	1,114	17,843	0	5,333	--	--	--	--	--
1990	2,571	25	5,939	1,097	3,691	8,986	60	1,054	20,828	0	3,934	--	--	--	--	--
1995	2,537	34	6,255	1,463	2,294	10,007	14	1,050	21,082	0	6,010	--	--	--	--	--
1996	1,852	37	6,537	1,014	2,908	10,148	40	1,361	22,008	0	7,978	--	--	--	--	--
1997	2,442	36	6,129	697	2,627	10,165	64	1,582	R 21,264	0	9,012	--	--	--	--	--
1998	2,316	33	5,874	R 819	2,151	10,440	101	1,512	R 20,897	0	5,758	--	--	--	--	--
1999	2,649	36	6,080	770	1,988	10,337	88	2,123	21,385	0	6,677	--	--	--	--	--
2000	2,815	38	6,036	1,024	2,597	10,304	133	1,964	22,057	0	5,716	--	--	--	--	--
2001	2,599	37	6,317	967	2,071	10,204	106	1,282	20,948	0	3,432	--	--	--	--	--
2002	2,358	42	6,792	919	3,022	10,599	104	1,239	22,674	0	4,354	--	--	--	--	--
2003	2,543	44	6,084	769	2,618	10,307	46	1,525	21,349	0	4,276	--	--	--	--	--
2004	2,574	42	6,555	776	2,441	10,389	93	1,364	21,618	0	3,598	--	--	--	--	--
2005	2,158	43	6,850	996	2,202	10,273	62	2,007	22,390	0	3,075	--	--	--	--	--
2006	2,340	41	6,844	945	2,171	10,217	29	1,869	22,075	0	3,397	--	--	--	--	--
2007	1,963	54	7,791	880	2,409	10,330	35	1,249	22,693	0	2,917	--	--	--	--	--
Trillion Btu																
1960	6.7	25.4	17.1	6.1	5.5	45.0	0.6	12.0	86.4	0.0	12.4	1.5	0.0	-3.4	0.0	129.1
1965	5.7	26.9	21.9	6.0	6.2	47.0	0.4	8.7	90.3	0.0	40.5	1.1	0.0	-24.1	0.0	140.3
1970	5.7	36.5	25.5	6.3	10.2	52.0	2.1	7.5	103.7	0.0	69.0	1.1	0.0	-47.3	0.0	168.7
1975	24.3	32.5	22.4	5.7	10.9	55.9	1.4	7.1	103.3	0.0	82.5	1.5	0.0	-62.3	0.0	181.8
1980	36.6	24.0	28.0	7.1	9.3	50.9	0.8	5.8	101.8	0.0	60.4	3.3	0.0	-35.4	(s)	190.7
1985	34.5	25.5	30.0	5.5	4.5	48.7	0.2	7.1	96.1	0.0	55.7	4.1	0.0	-21.3	0.3	194.9
1990	34.9	R 25.5	34.6	5.9	13.4	47.2	0.4	6.7	108.2	0.0	40.9	2.2	0.2	-0.7	0.5	211.6
1995	37.4	R 34.8	36.4	7.9	8.3	52.2	0.1	6.8	111.7	0.0	62.0	2.1	0.2	-11.0	(s)	237.3
1996	33.5	R 37.4	38.1	5.7	10.5	52.9	0.3	8.8	116.3	0.0	82.5	2.2	0.3	-23.6	-0.1	248.5
1997	42.9	36.8	35.7	4.0	9.5	53.0	0.4	10.3	R 112.9	0.0	92.0	1.9	0.3	-42.9	0.2	244.1
1998	41.0	33.4	34.2	4.6	7.8	54.4	0.6	9.9	R 111.6	0.0	58.7	1.6	0.4	-7.8	-0.1	238.7
1999	46.3	36.0	35.4	4.4	7.2	53.9	0.6	13.9	115.3	0.0	68.3	1.7	0.4	-20.8	0.8	247.9
2000	50.6	38.1	35.2	5.8	9.4	53.7	0.8	12.8	117.7	0.0	58.3	1.8	0.4	-8.3	(s)	258.7
2001	44.4	37.0	36.8	5.5	7.5	53.2	0.7	8.3	111.9	0.0	35.5	1.8	0.5	16.5	(s)	247.6
2002	40.0	42.4	39.6	5.2	10.9	55.2	0.7	8.1	119.6	0.0	44.3	1.7	0.6	18.0	(s)	266.5
2003	43.0	R 44.8	35.4	4.4	9.5	53.7	0.3	10.0	113.2	0.0	43.8	1.8	1.1	15.8	-0.1	263.4
2004	43.6	42.5	38.2	4.4	8.8	54.2	0.6	8.9	115.1	0.0	36.1	1.8	2.3	21.9	(s)	263.2
2005	37.0	R 42.9	39.9	5.6	8.0	53.6	0.4	13.2	120.7	0.0	30.7	R 2.1	2.4	38.1	(s)	R 273.9
2006	39.6	40.9	39.9	5.4	7.8	53.3	0.2	12.2	118.8	0.0	33.7	R 1.9	2.3	34.9	0.0	R 272.1
2007	33.2	54.1	45.4	5.0	8.6	53.9	0.2	8.1	121.3	0.0	28.8	2.1	2.4	50.2	(s)	292.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	72	8	567	903	1,067	2,537	61	--	--	847	--	--	--
1965	39	10	677	524	1,198	2,398	42	--	--	1,183	--	--	--
1970	18	14	763	14	2,010	2,787	33	--	--	1,586	--	--	--
1975	7	12	574	3	1,994	2,571	35	--	--	2,068	--	--	--
1980	4	11	762	10	1,165	1,937	127	--	--	2,623	--	--	--
1985	4	11	772	35	703	1,510	160	--	--	2,769	--	--	--
1990	1	10	936	4	1,731	2,671	89	--	--	2,866	--	--	--
1995	1	13	501	4	1,384	1,889	78	--	--	3,268	--	--	--
1996	(s)	14	623	5	1,857	2,485	81	--	--	3,426	--	--	--
1997	(s)	13	463	6	1,798	2,266	64	--	--	3,376	--	--	--
1998	0	12	382	5	1,450	1,837	57	--	--	3,303	--	--	--
1999	(s)	12	336	4	1,396	1,736	60	--	--	3,302	--	--	--
2000	(s)	13	351	4	1,664	2,018	65	--	--	3,423	--	--	--
2001	1	12	366	4	1,376	1,746	62	--	--	3,580	--	--	--
2002	(s)	13	267	3	1,598	1,868	63	--	--	3,733	--	--	--
2003	(s)	13	305	2	1,631	1,938	67	--	--	3,740	--	--	--
2004	(s)	12	246	3	1,226	1,475	68	--	--	3,696	--	--	--
2005	(s)	12	229	3	1,203	1,435	R 82	--	--	3,973	--	--	--
2006	(s)	12	219	2	R 1,139	R 1,361	R 74	--	--	4,051	--	--	--
2007	(s)	12	177	2	1,328	1,506	82	--	--	4,261	--	--	--
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	52.4
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	(s)	(s)	9.8	33.7	22.6	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)	R 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)	R 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	27.2	60.2
2002	(s)	13.2	1.6	(s)	5.8	7.3	1.3	0.1	(s)	12.7	34.6	28.4	63.0
2003	(s)	13.5	1.8	(s)	5.9	7.7	1.3	0.1	(s)	12.8	35.4	28.2	63.5
2004	(s)	12.5	1.4	(s)	4.4	5.9	1.4	0.1	(s)	12.6	R 32.5	27.9	60.4
2005	(s)	12.3	1.3	(s)	4.4	5.7	R 1.6	0.1	(s)	13.6	R 33.3	29.6	R 63.0
2006	(s)	11.5	1.3	(s)	R 4.1	R 5.4	R 1.5	0.2	(s)	13.8	32.4	29.9	62.3
2007	(s)	12.4	1.0	(s)	4.8	5.8	1.6	0.2	(s)	14.5	34.6	31.4	66.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	50	7	226	0	188	37	16	466	0	--	--	409	--	--	--
1965	29	9	269	0	211	46	8	534	0	--	--	645	--	--	--
1970	14	11	303	0	355	50	16	724	0	--	--	937	--	--	--
1975	17	11	228	0	352	58	20	658	0	--	--	995	--	--	--
1980	13	9	365	0	206	65	19	655	0	--	--	1,139	--	--	--
1985	13	10	288	1	124	98	19	530	0	--	--	1,863	--	--	--
1990	2	9	242	(s)	305	78	24	650	0	--	--	1,811	--	--	--
1995	6	11	301	1	244	11	2	559	0	--	--	2,424	--	--	--
1996	1	12	251	1	328	11	0	590	0	--	--	2,525	--	--	--
1997	1	10	263	1	317	11	8	600	0	--	--	2,555	--	--	--
1998	0	9	237	(s)	256	11	5	510	0	--	--	2,653	--	--	--
1999	1	10	202	1	246	11	8	468	0	--	--	2,671	--	--	--
2000	1	10	195	1	294	11	69	570	0	--	--	2,857	--	--	--
2001	8	10	251	1	243	30	5	530	0	--	--	3,380	--	--	--
2002	1	10	180	2	282	28	(s)	492	0	--	--	3,600	--	--	--
2003	1	10	127	2	288	12	0	428	0	--	--	3,713	--	--	--
2004	1	10	194	2	216	12	13	436	0	--	--	3,627	--	--	--
2005	1	10	204	3	212	12	(s)	431	0	--	--	3,998	--	--	--
2006	1	10	158	1	R 201	12	1	R 374	0	--	--	4,054	--	--	--
2007	1	10	225	(s)	234	12	12	484	0	--	--	4,181	--	--	--
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	0.0	0.2	0.1	6.2	18.3	14.3	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)	R 11.8	1.5	(s)	1.2	0.1	0.0	2.7	0.0	0.2	0.2	8.6	23.5	19.6	43.1
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	42.3
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	20.8	42.3
2000	(s)	R 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	25.7	50.2
2002	(s)	10.5	1.0	(s)	1.0	0.1	(s)	2.2	0.0	0.2	0.4	12.3	25.6	27.4	53.0
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	28.0	53.8
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	27.4	52.8
2005	(s)	9.9	1.2	(s)	0.8	0.1	(s)	2.0	0.0	R 0.3	0.6	13.6	R 26.5	29.8	56.3
2006	(s)	9.6	0.9	(s)	0.7	0.1	(s)	1.7	0.0	0.2	0.7	13.8	26.0	29.9	55.9
2007	(s)	10.4	1.3	(s)	0.8	0.1	0.1	2.3	0.0	0.3	0.7	14.3	27.9	30.8	58.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	5	5	1,780	93	2,615	35	816	5,339	20	--	--	258	--	--	--
1965	4	5	2,177	108	2,455	15	642	5,397	38	--	--	246	--	--	--
1970	5	7	2,332	298	2,209	35	911	5,784	35	--	--	281	--	--	--
1975	59	6	1,635	527	1,626	52	884	4,725	36	--	--	994	--	--	--
1980	127	5	1,640	1,090	1,473	95	646	4,943	32	--	--	1,322	--	--	--
1985	279	4	1,734	389	694	16	850	3,683	32	--	--	1,019	--	--	--
1990	223	6	2,377	1,632	489	36	797	5,330	0	--	--	1,657	--	--	--
1995	393	7	2,202	652	534	11	847	4,246	0	--	--	1,722	--	--	--
1996	398	8	2,284	709	540	40	1,155	4,728	0	--	--	1,785	--	--	--
1997	436	8	2,055	503	566	55	1,371	4,551	0	--	--	1,841	--	--	--
1998	450	6	1,913	433	386	95	1,310	4,137	0	--	--	1,868	--	--	--
1999	489	6	2,036	341	446	80	1,894	4,797	0	--	--	1,949	--	--	--
2000	602	5	1,930	625	418	63	1,746	4,783	0	--	--	2,003	--	--	--
2001	378	5	1,978	440	631	101	1,086	4,237	0	--	--	1,666	--	--	--
2002	306	11	1,776	1,117	627	103	1,058	4,681	0	--	--	1,604	--	--	--
2003	368	12	1,701	684	692	46	1,350	4,473	0	--	--	1,627	--	--	--
2004	245	12	1,748	989	829	80	1,183	4,830	0	--	--	1,891	--	--	--
2005	277	11	1,804	773	791	62	1,833	5,263	0	--	--	1,840	--	--	--
2006	275	11	1,696	R 818	845	28	1,681	R 5,068	0	--	--	1,952	--	--	--
2007	272	21	2,108	830	557	22	1,059	4,576	0	--	--	2,161	--	--	--
Trillion Btu															
1960	0.1	5.3	10.4	0.4	13.7	0.2	5.3	30.0	0.2	0.3	0.0	0.9	36.9	2.2	39.0
1965	0.1	4.7	12.7	0.4	12.9	0.1	4.2	30.3	0.4	0.3	0.0	0.8	36.6	2.0	38.6
1970	0.1	6.8	13.6	1.1	11.6	0.2	6.0	32.6	0.4	0.5	0.0	1.0	41.3	2.3	43.6
1975	1.1	5.8	9.5	2.0	8.5	0.3	5.9	26.2	0.4	0.8	0.0	3.4	37.7	8.2	45.8
1980	2.4	4.7	9.6	4.0	7.7	0.6	4.3	26.2	0.3	0.7	0.0	4.5	38.8	10.9	49.7
1985	4.8	3.6	10.1	1.4	3.6	0.1	5.6	20.9	0.3	0.9	0.0	3.5	34.0	8.0	42.0
1990	3.9	6.0	13.8	5.9	2.6	0.2	5.3	27.8	0.0	0.2	(s)	5.7	43.7	13.1	56.8
1995	6.8	7.4	12.8	2.4	2.8	0.1	5.6	23.6	0.0	0.3	(s)	5.9	44.1	13.3	57.4
1996	6.9	7.7	13.3	2.6	2.8	0.3	7.6	26.6	0.0	0.3	(s)	6.1	47.6	13.8	61.4
1997	7.6	8.0	12.0	1.8	2.9	0.3	9.1	26.2	0.0	0.4	(s)	6.3	48.4	14.2	62.6
1998	7.9	6.5	11.1	1.6	2.0	0.6	8.7	24.0	0.0	0.3	(s)	6.4	45.1	14.5	59.5
1999	8.6	5.9	11.9	1.2	2.3	0.5	12.6	28.5	0.0	0.3	0.1	6.6	50.0	15.2	65.2
2000	12.6	5.3	11.2	2.3	2.2	0.4	11.6	27.6	0.0	0.3	0.1	6.8	52.7	15.5	68.3
2001	6.4	4.7	11.5	1.6	3.3	0.6	7.2	24.2	0.0	0.3	0.1	5.7	41.4	12.7	54.1
2002	5.2	11.3	10.3	4.0	3.3	0.7	7.0	25.3	0.0	0.2	0.1	5.5	47.5	12.2	59.7
2003	6.2	12.0	9.9	2.5	3.6	0.3	8.9	25.2	0.0	0.2	(s)	5.6	49.2	12.2	61.4
2004	4.1	11.8	10.2	3.6	4.3	0.5	7.8	26.4	0.0	0.2	(s)	6.5	49.0	14.3	63.2
2005	4.6	11.3	10.5	2.8	4.1	0.4	12.1	30.0	0.0	0.2	(s)	6.3	52.4	13.7	66.1
2006	4.6	11.0	9.9	R 3.0	4.4	0.2	11.1	28.5	0.0	0.2	(s)	6.7	R 51.0	14.4	R 65.4
2007	4.6	21.3	12.3	3.0	2.9	0.1	7.0	25.3	0.0	0.2	0.1	7.4	58.9	15.9	74.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emu/states/\\_seds.html](http://www.eia.doe.gov/emu/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	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	--	--	--
1965	(s)	(s)	128	635	1,111	24	143	6,454	1	8,496	0	0	--	--	--
1970	(s)	(s)	99	929	1,173	50	151	7,645	6	10,052	0	0	--	--	--
1975	(s)	(s)	77	1,337	1,056	57	140	8,952	1	11,618	0	0	--	--	--
1980	0	(s)	97	1,977	1,311	69	156	8,150	0	11,760	0	0	--	--	--
1985	0	(s)	87	2,322	1,019	24	142	8,487	0	12,081	90	0	--	--	--
1990	0	(s)	93	2,352	1,097	23	160	8,419	(s)	12,145	133	0	--	--	--
1995	0	3	46	3,203	1,463	15	152	9,462	0	14,341	479	0	--	--	--
1996	0	3	53	3,346	1,014	14	148	9,596	0	14,171	338	0	--	--	--
1997	0	3	48	3,325	697	9	156	9,588	0	R 13,824	377	0	--	--	--
1998	0	3	33	3,274	R 819	12	164	10,043	0	R 14,345	441	0	--	--	--
1999	0	6	59	3,447	770	5	165	9,880	0	14,326	487	0	--	--	--
2000	0	6	51	3,425	1,024	14	163	9,875	0	14,551	532	0	--	--	--
2001	0	6	42	3,614	967	13	149	9,543	0	14,328	488	0	--	--	--
2002	0	6	29	4,551	919	25	147	9,944	0	15,616	555	0	--	--	--
2003	0	6	34	3,909	769	15	136	9,604	0	14,467	545	0	--	--	--
2004	0	6	38	4,311	776	10	138	9,548	0	14,821	508	0	--	--	--
2005	0	6	31	4,562	996	13	137	9,470	0	15,209	R 620	0	--	--	--
2006	0	5	51	4,752	945	12	134	9,360	0	15,254	R 578	0	--	--	--
2007	0	6	50	5,142	880	16	138	9,761	0	15,988	782	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	0.3	0.0	65.5	0.0	65.5
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	1.7	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	1.2	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	1.3	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	1.7	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	1.9	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	1.7	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	2.0	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	1.9	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	1.8	0.0	86.7	0.0	86.7
2005	0.0	5.8	0.2	26.6	5.6	(s)	0.8	49.4	0.0	82.7	R 2.2	0.0	88.5	0.0	88.5
2006	0.0	5.4	0.3	27.7	5.4	(s)	0.8	48.8	0.0	83.0	R 2.0	0.0	88.4	0.0	88.4
2007	0.0	5.7	0.3	30.0	5.0	0.1	0.8	50.9	0.0	87.0	2.8	0.0	92.7	0.0	92.7

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, South Dakota

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	1,880	4	0	52	0	52	0	3,075	--	0	0	158	(s)	--
2006	2,064	3	0	19	0	19	0	3,397	--	0	0	149	0	--
2007	1,691	4	0	140	0	140	0	2,917	--	0	0	150	(s)	--
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	4.6	0.0	0.6	0.0	0.6	0.0	35.5	0.0	0.0	0.0	(s)	(s)	78.5
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
2005	32.3	3.6	0.0	0.3	0.0	0.3	0.0	30.7	0.0	0.0	0.0	1.6	(s)	68.6
2006	35.0	3.4	0.0	0.1	0.0	0.1	0.0	33.7	0.0	0.0	0.0	1.5	0.0	73.6
2007	28.6	4.3	0.0	0.8	0.0	0.8	0.0	28.8	0.0	0.0	0.0	1.5	(s)	64.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Tennessee

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh		Wood and Waste <sup>f,g</sup>				
1960	15,438	147	5,291	570	1,311	27,268	188	7,623	42,250	0	8,676	--	--	--	--	--
1965	14,172	202	7,295	1,174	1,912	32,481	287	12,096	55,245	0	8,750	--	--	--	--	--
1970	17,726	256	10,952	3,335	3,182	41,869	597	14,914	74,849	0	8,067	--	--	--	--	--
1975	21,308	217	17,479	3,936	3,830	53,735	714	13,024	92,718	0	11,806	--	--	--	--	--
1980	24,687	230	19,176	4,154	2,787	54,948	1,499	14,655	97,218	519	8,764	--	--	--	--	--
1985	25,167	190	22,594	4,862	2,281	58,047	539	13,091	101,415	9,672	6,539	--	--	--	--	--
1990	24,878	220	24,502	4,181	2,906	58,001	307	17,956	107,853	14,003	10,015	--	--	--	--	--
1995	27,399	257	25,839	8,096	3,416	64,822	362	19,011	121,546	15,708	9,629	--	--	--	--	--
1996	26,744	280	26,831	9,317	4,303	64,868	210	13,394	118,924	22,924	11,467	--	--	--	--	--
1997	28,207	283	26,946	R 9,437	4,028	66,148	156	13,068	R 119,783	24,648	11,038	--	--	--	--	--
1998	26,786	279	29,043	R 9,864	3,264	67,522	157	15,463	R 125,313	28,388	10,806	--	--	--	--	--
1999	26,613	279	26,610	11,816	4,709	69,769	50	16,286	129,241	27,227	7,802	--	--	--	--	--
2000	28,862	271	28,047	12,857	5,514	68,862	66	15,430	130,776	25,825	6,396	--	--	--	--	--
2001	28,202	256	28,590	12,561	4,469	68,392	150	22,630	136,794	28,576	6,947	--	--	--	--	--
2002	28,034	256	29,731	13,442	5,837	71,963	135	21,556	142,665	27,574	7,974	--	--	--	--	--
2003	26,677	257	32,349	13,376	4,278	72,552	255	21,814	144,623	24,153	12,004	--	--	--	--	--
2004	28,135	231	33,312	13,623	4,614	72,968	342	23,968	148,826	28,612	10,408	--	--	--	--	--
2005	29,301	230	34,810	13,915	4,557	74,371	360	25,089	153,103	27,803	9,310	--	--	--	--	--
2006	30,275	R 222	34,144	14,207	4,687	74,910	189	24,498	152,634	24,679	7,749	--	--	--	--	--
2007	30,399	221	35,315	13,811	4,069	76,076	175	21,965	151,411	28,700	4,940	--	--	--	--	--

  

Trillion Btu																
1960	374.5	151.7	30.8	3.1	5.3	143.2	1.2	44.9	228.5	0.0	93.4	45.4	0.0	69.5	0.0	962.9
1965	338.9	211.1	42.5	6.5	7.7	170.6	1.8	71.8	300.9	0.0	91.5	46.5	0.0	158.1	0.0	1,147.0
1970	403.7	261.8	63.8	18.8	12.0	219.9	3.8	88.4	406.7	0.0	84.7	53.8	0.0	172.7	0.0	1,383.3
1975	471.9	224.1	101.8	22.2	14.2	282.3	4.5	78.6	503.6	0.0	122.9	54.4	0.0	249.6	0.0	1,626.5
1980	576.9	233.3	111.7	23.4	10.2	288.6	9.4	86.2	529.7	5.7	91.0	69.3	0.0	249.7	(s)	1,755.6
1985	599.7	196.7	131.6	27.5	8.2	304.9	3.4	78.7	554.3	102.7	68.3	93.2	0.0	112.2	2.4	1,729.6
1990	600.5	227.5	142.7	23.6	10.5	304.7	1.9	106.9	590.4	148.2	104.2	56.5	0.1	119.2	2.1	1,848.7
1995	669.0	264.9	150.5	45.9	12.4	338.0	2.3	111.9	661.0	165.0	99.3	60.4	0.1	84.3	(s)	2,004.1
1996	650.8	R 289.4	156.3	52.8	15.5	338.3	1.3	81.6	R 646.0	240.8	118.6	56.0	0.1	69.4	-0.1	2,070.8
1997	680.6	291.8	157.0	53.5	14.6	344.8	1.0	79.4	R 650.3	258.7	112.7	47.3	0.1	15.8	(s)	2,057.2
1998	651.8	287.4	169.2	55.9	11.8	351.9	1.0	94.7	R 684.5	297.8	110.2	46.5	0.1	43.0	(s)	2,121.3
1999	648.3	286.4	155.0	67.0	17.0	363.6	0.3	99.6	702.5	284.5	79.8	50.2	0.1	111.9	(s)	2,163.7
2000	705.1	280.7	163.4	72.9	19.9	358.8	0.4	94.5	709.9	269.3	65.2	53.0	0.1	113.5	(s)	2,196.8
2001	687.4	265.5	166.5	71.2	16.2	356.3	0.9	134.7	745.9	298.6	71.8	64.4	0.1	92.6	(s)	2,226.1
2002	655.9	276.0	173.2	76.2	21.1	374.8	0.9	127.8	773.9	287.8	81.1	63.5	0.1	146.9	(s)	2,285.3
2003	621.4	266.3	188.4	75.8	15.5	377.8	1.6	129.2	788.4	251.7	122.9	58.3	0.2	159.0	(s)	2,268.3
2004	648.0	239.2	194.0	77.2	16.7	380.5	2.1	141.4	812.1	298.3	104.3	71.6	0.2	R 130.7	(s)	R 2,304.4
2005	657.7	238.4	202.8	78.9	16.5	388.1	2.3	149.8	838.3	290.1	93.1	R 63.9	0.2	170.7	0.0	R 2,352.3
2006	677.2	R 230.0	198.9	80.6	16.9	390.9	1.2	146.1	834.5	257.5	76.9	R 55.0	0.7	185.7	0.0	R 2,317.5
2007	672.4	229.7	205.7	78.3	14.6	397.0	1.1	130.3	827.1	301.0	48.8	54.1	0.7	196.7	0.0	2,330.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

**Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Tennessee**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	563	34	80	797	862	1,740	1,269	--	--	8,683	--	--	--
1965	378	37	100	881	1,136	2,117	949	--	--	12,134	--	--	--
1970	304	47	169	2,027	2,316	4,512	806	--	--	17,942	--	--	--
1975	98	44	237	1,316	2,767	4,320	840	--	--	23,034	--	--	--
1980	49	45	308	549	1,501	2,358	971	--	--	26,207	--	--	--
1985	37	39	269	737	1,209	2,215	1,725	--	--	25,546	--	--	--
1990	44	46	275	324	1,716	2,315	918	--	--	28,757	--	--	--
1995	19	60	260	372	2,129	2,761	737	--	--	30,967	--	--	--
1996	13	70	269	456	2,857	3,581	765	--	--	35,333	--	--	--
1997	14	64	237	437	2,582	3,255	407	--	--	33,367	--	--	--
1998	3	59	230	424	2,432	3,087	362	--	--	35,428	--	--	--
1999	12	61	230	423	3,047	3,701	381	--	--	35,425	--	--	--
2000	12	68	174	378	3,447	3,999	409	--	--	36,622	--	--	--
2001	15	68	166	247	2,701	3,114	331	--	--	36,932	--	--	--
2002	8	69	115	168	3,210	3,492	336	--	--	38,752	--	--	--
2003	17	70	117	231	2,840	3,188	354	--	--	37,697	--	--	--
2004	7	65	125	292	2,791	3,208	363	--	--	38,526	--	--	--
2005	3	66	102	284	2,561	2,947	R 524	--	--	41,132	--	--	--
2006	R 4	61	107	283	R 2,496	R 2,887	R 477	--	--	40,816	--	--	--
2007	6	61	127	204	2,329	2,660	526	--	--	42,880	--	--	--

  

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	215.5	381.6
1985	0.9	40.8	1.6	4.2	4.4	10.1	34.5	0.0	0.0	87.2	173.4	200.7	374.2
1990	1.1	48.0	1.6	1.8	6.2	9.7	18.4	(s)	0.1	98.1	175.3	226.9	402.2
1995	0.5	61.9	1.5	2.1	7.7	11.3	14.7	(s)	0.1	105.7	194.2	239.9	434.1
1996	0.3	72.7	1.6	2.6	10.3	14.5	15.3	(s)	0.1	120.6	223.4	274.1	497.6
1997	0.4	66.1	1.4	2.5	9.3	13.2	8.1	(s)	0.1	113.8	201.8	257.9	459.7
1998	0.1	61.2	1.3	2.4	8.8	12.5	7.2	(s)	0.1	120.9	202.0	274.1	476.1
1999	0.3	62.2	1.3	2.4	11.0	14.8	7.6	(s)	0.1	120.9	205.9	276.5	482.3
2000	0.3	71.0	1.0	2.1	12.4	15.6	8.2	(s)	0.1	125.0	220.1	284.2	504.3
2001	0.4	70.6	1.0	1.4	9.8	12.1	6.6	0.1	0.1	126.0	215.8	280.8	496.6
2002	0.2	74.9	0.7	1.0	11.6	13.2	6.7	0.1	(s)	132.2	227.4	294.7	522.1
2003	0.4	72.2	0.7	1.3	10.3	12.3	7.1	0.1	(s)	128.6	220.7	283.8	504.5
2004	0.2	67.6	0.7	1.7	10.1	12.5	7.3	0.1	(s)	131.4	219.1	290.9	509.9
2005	0.1	68.6	0.6	1.6	9.3	11.5	R 10.5	0.1	(s)	140.3	R 231.1	307.0	R 538.1
2006	0.1	63.4	0.6	1.6	R 9.0	R 11.2	R 9.5	0.1	(s)	139.3	R 223.6	301.1	R 524.8
2007	0.2	63.1	0.7	1.2	8.4	10.3	10.5	0.1	(s)	146.3	230.5	315.7	546.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Tennessee

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>g,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	391	24	200	157	152	173	(s)	682	0	--	--	2,796	--	--	--
1965	285	28	248	173	200	277	(s)	899	0	--	--	4,274	--	--	--
1970	239	43	422	399	409	392	1	1,622	0	--	--	6,352	--	--	--
1975	228	42	589	259	488	419	1	1,757	0	--	--	7,440	--	--	--
1980	185	44	1,015	104	265	465	48	1,897	0	--	--	14,216	--	--	--
1985	132	43	3,204	167	213	337	98	4,019	0	--	--	9,856	--	--	--
1990	174	44	739	69	303	464	33	1,607	0	--	--	13,075	--	--	--
1995	126	51	739	80	376	50	14	1,258	0	--	--	6,234	--	--	--
1996	97	58	906	89	504	49	28	1,576	0	--	--	6,543	--	--	--
1997	117	55	827	99	456	49	44	1,474	0	--	--	25,839	--	--	--
1998	22	52	949	123	429	49	1	1,552	0	--	--	25,859	--	--	--
1999	86	53	959	52	538	49	0	1,598	0	--	--	26,260	--	--	--
2000	100	53	1,078	105	608	49	0	1,840	0	--	--	26,814	--	--	--
2001	124	53	935	90	477	53	0	1,555	0	--	--	27,049	--	--	--
2002	56	54	1,034	47	566	53	0	1,700	0	--	--	27,634	--	--	--
2003	116	57	1,066	54	501	53	0	1,674	0	--	--	27,481	--	--	--
2004	63	54	1,071	43	493	53	13	1,673	0	--	--	28,249	--	--	--
2005	30	54	780	40	452	54	0	1,326	0	--	--	29,146	--	--	--
2006	38	52	650	28	R 440	55	0	R 1,173	0	--	--	29,033	--	--	--
2007	58	51	952	24	411	55	8	1,451	0	--	--	29,985	--	--	--
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	116.9	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	0.0	4.9	0.0	44.6	107.3	103.2	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	199.7	360.3
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	200.1	354.9
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	204.9	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	208.1	370.7
2001	3.0	55.0	5.4	0.5	1.7	0.3	0.0	8.0	0.0	2.5	0.0	92.3	160.7	205.7	366.4
2002	1.4	58.0	6.0	0.3	2.0	0.3	0.0	8.6	0.0	1.6	0.0	94.3	163.9	210.2	374.1
2003	2.8	58.6	6.2	0.3	1.8	0.3	0.0	8.6	0.0	1.2	0.0	93.8	164.9	206.9	371.9
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	213.3	377.1
2005	0.7	56.2	4.5	0.2	1.6	0.3	0.0	6.7	0.0	R 1.7	0.0	99.4	164.7	217.5	R 382.2
2006	0.9	53.5	3.8	0.2	1.6	0.3	0.0	5.8	0.0	R 1.6	0.0	99.1	160.9	214.2	R 375.1
2007	1.4	53.1	5.5	0.1	1.5	0.3	0.1	7.5	0.0	1.6	0.0	102.3	166.0	220.7	386.7

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Tennessee

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,307	76	2,096	275	627	180	5,124	8,301	0	--	--	27,514	--	--
1965	2,862	97	2,601	522	484	264	9,539	13,410	0	--	--	28,362	--	--
1970	2,452	123	3,172	363	235	593	11,881	16,245	0	--	--	27,776	--	--
1975	2,134	112	4,712	455	117	523	10,572	16,379	0	--	--	37,904	--	--
1980	2,774	123	4,252	960	36	1,445	13,036	19,730	0	--	--	32,968	--	--
1985	4,145	97	3,615	693	642	441	11,418	16,810	0	--	--	33,624	--	--
1990	3,846	110	3,399	761	583	269	16,697	21,710	0	--	--	35,313	--	--
1995	3,777	126	3,682	777	865	346	17,501	23,172	827	--	--	44,828	--	--
1996	3,670	127	3,733	810	890	181	11,978	17,591	888	--	--	45,781	--	--
1997	3,613	139	4,333	871	937	108	11,543	17,792	965	--	--	27,710	--	--
1998	3,441	145	3,978	400	630	156	14,072	19,235	799	--	--	30,461	--	--
1999	3,299	145	2,647	1,066	569	50	14,986	19,317	652	--	--	31,493	--	--
2000	3,349	130	2,443	1,384	561	66	14,118	18,571	520	--	--	32,289	--	--
2001	3,575	119	2,620	1,277	954	146	21,588	26,586	404	--	--	32,149	--	--
2002	3,340	118	2,217	1,947	902	133	20,552	25,751	656	--	--	31,845	--	--
2003	3,354	112	2,972	843	980	247	20,808	25,849	917	--	--	32,278	--	--
2004	3,233	99	3,538	1,168	1,217	287	22,943	29,152	759	--	--	32,885	--	--
2005	3,149	95	4,046	1,323	1,212	302	24,068	30,950	772	--	--	33,625	--	--
2006	3,018	R 94	3,433	R 1,520	1,369	177	23,518	R 30,017	581	--	--	34,081	--	--
2007	2,986	92	3,569	1,167	1,866	162	21,034	27,798	0	--	--	33,850	--	--
Trillion Btu														
1960	58.1	78.6	12.2	1.1	3.3	1.1	31.2	48.9	0.0	19.5	0.0	93.9	299.0	531.2
1965	71.4	101.9	15.2	2.1	2.5	1.7	57.8	79.2	0.0	27.2	0.0	96.8	376.5	607.6
1970	58.0	125.9	18.5	1.4	1.2	3.7	71.1	95.9	0.0	37.3	0.0	94.8	411.9	641.2
1975	49.9	115.1	27.4	1.7	0.6	3.3	64.4	97.5	0.0	37.3	0.0	129.3	429.2	740.2
1980	67.2	125.1	24.8	3.5	0.2	9.1	77.0	114.5	0.0	49.4	0.0	112.5	468.7	739.8
1985	102.2	R 100.6	21.1	2.5	3.4	2.8	69.1	98.8	0.0	57.9	0.0	114.7	474.2	738.4
1990	96.8	113.6	19.8	2.8	3.1	1.7	99.6	126.9	0.0	33.3	0.0	120.5	491.1	769.7
1995	94.9	R 129.8	21.5	2.8	4.5	2.2	103.4	134.3	8.5	40.7	0.0	153.0	561.2	908.6
1996	91.8	130.6	21.7	2.9	4.6	1.1	73.5	104.0	9.2	35.3	0.0	156.2	527.0	882.2
1997	90.3	143.2	25.2	3.1	4.9	0.7	70.7	104.7	9.9	33.7	0.0	94.5	476.3	690.5
1998	86.1	149.0	23.2	1.4	3.3	1.0	86.6	115.5	8.1	34.9	0.0	103.9	497.5	733.2
1999	82.5	148.5	15.4	3.9	3.0	0.3	92.0	114.5	6.7	38.3	0.0	107.5	498.0	743.8
2000	87.4	R 134.6	14.2	5.0	2.9	0.4	86.9	109.5	5.3	40.6	0.0	110.2	487.4	738.0
2001	92.0	123.0	15.3	4.6	5.0	0.9	128.6	154.3	4.2	54.8	0.0	109.7	538.0	782.5
2002	87.0	127.9	12.9	7.0	4.7	0.8	121.9	147.4	6.7	54.8	0.0	108.7	532.3	774.6
2003	87.2	116.4	17.3	3.1	5.1	1.6	123.4	150.4	9.4	49.6	0.0	110.1	523.2	766.2
2004	84.0	102.2	20.6	4.2	6.3	1.8	135.4	168.4	7.6	62.9	0.0	112.2	R 537.4	785.6
2005	81.6	98.3	23.6	4.8	6.3	1.9	143.8	180.4	7.7	51.4	0.0	114.7	534.1	785.1
2006	78.2	R 97.3	20.0	R 5.5	7.1	1.1	140.4	R 174.1	5.8	R 43.6	0.0	116.3	R 515.3	R 766.7
2007	77.4	95.7	20.8	4.2	9.7	1.0	124.9	160.6	0.0	41.7	0.0	115.5	490.9	740.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Tennessee

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	40	5	1,040	2,914	570	22	505	26,468	8	31,527	0	(s)	--	--	--
1965	9	23	1,024	4,346	1,174	54	479	31,721	22	38,819	0	(s)	--	--	--
1970	4	26	116	7,189	3,335	94	491	41,241	3	52,469	0	(s)	--	--	--
1975	(s)	19	70	10,631	3,936	120	807	53,199	191	68,953	0	(s)	--	--	--
1980	0	16	290	13,196	4,154	61	676	54,446	6	72,828	0	(s)	--	--	--
1985	0	10	154	15,268	4,862	166	615	57,068	0	78,134	675	(s)	--	--	--
1990	0	20	174	19,857	4,181	126	692	56,954	5	81,989	572	(s)	--	--	--
1995	0	18	397	20,702	8,096	135	660	63,907	2	93,899	353	1	--	--	--
1996	0	24	231	21,464	9,317	133	641	63,928	2	95,715	7	1	--	--	--
1997	0	23	312	21,175	R 9,437	120	677	65,162	4	R 96,887	7	1	--	--	--
1998	0	16	136	22,438	R 9,864	3	709	66,842	0	R 99,991	8	2	--	--	--
1999	0	15	109	21,732	11,816	58	716	69,151	0	103,583	0	2	--	--	--
2000	0	14	124	23,293	12,857	75	705	68,252	0	105,305	0	2	--	--	--
2001	0	14	60	23,977	12,561	14	646	67,385	4	104,648	0	2	--	--	--
2002	0	12	150	25,921	13,442	114	639	71,009	3	111,278	0	2	--	--	--
2003	0	13	131	27,374	13,376	94	590	71,519	8	113,092	0	2	--	--	--
2004	0	11	93	28,266	13,623	162	598	71,698	42	114,481	0	1	--	--	--
2005	0	9	102	29,483	13,915	221	595	73,105	58	117,480	R 3,366	1	--	--	--
2006	0	9	89	29,694	14,207	231	580	73,486	12	118,298	R 3,546	1	--	--	--
2007	0	10	104	30,389	13,811	162	599	74,155	5	119,225	4,507	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	2.4	(s)	434.2	(s)	434.2
1990	0.0	20.3	0.9	115.7	23.6	0.5	4.2	299.2	(s)	444.0	2.0	(s)	466.3	(s)	466.3
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)	R 557.0	(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
2005	0.0	9.5	0.5	171.7	78.9	0.8	3.6	381.5	0.4	637.4	R 11.9	(s)	646.9	(s)	646.9
2006	0.0	R 9.0	0.4	173.0	80.6	0.8	3.5	383.4	0.1	641.8	R 12.5	(s)	650.9	(s)	650.9
2007	0.0	10.4	0.5	177.0	78.3	0.6	3.6	387.0	(s)	647.1	15.9	(s)	657.5	(s)	657.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Tennessee

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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)	--
2005	26,119	6	0	400	0	400	27,803	8,538	--	0	0	3	0	--
2006	27,216	7	0	260	0	260	24,679	7,167	--	0	0	55	0	--
2007	27,348	7	0	278	0	278	28,700	4,940	--	0	0	50	0	--
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	0.0	0.0	0.0	0.0	0.0	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
2005	575.3	5.8	0.0	2.3	0.0	2.3	290.1	85.4	0.3	0.0	0.0	(s)	0.0	959.3
2006	597.9	6.9	0.0	1.5	0.0	1.5	257.5	71.1	0.3	0.0	0.0	0.5	0.0	935.7
2007	593.4	7.5	0.0	1.6	0.0	1.6	301.0	48.8	0.2	0.0	0.0	0.5	0.0	953.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Texas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	1,067	2,720	24,400	10,842	73,297	91,841	22,584	72,395	295,360	0	1,102	--	--	--	--	--
1965	1,146	3,068	24,854	15,365	109,109	107,851	14,322	99,052	370,553	0	743	--	--	--	--	--
1970	1,154	4,093	32,410	24,430	151,223	141,393	14,146	125,875	489,477	0	1,005	--	--	--	--	--
1975	12,765	3,944	54,706	27,308	157,246	175,538	38,536	145,889	599,224	0	1,927	--	--	--	--	--
1980	48,602	4,091	72,513	30,934	189,802	180,997	65,070	251,131	790,447	0	979	--	--	--	--	--
1985	77,017	3,386	79,984	74,500	256,932	205,419	28,713	159,901	805,449	0	1,401	--	--	--	--	--
1990	91,415	3,729	67,909	95,903	293,043	205,402	27,463	200,482	890,202	15,859	1,794	--	--	--	--	--
1995	92,612	3,893	88,126	83,002	370,395	213,428	22,544	206,963	984,458	36,151	1,703	--	--	--	--	--
1996	98,997	4,132	96,751	99,870	395,062	226,381	20,292	235,016	1,073,371	35,767	960	--	--	--	--	--
1997	101,303	4,116	98,062	R 105,655	449,056	224,997	22,092	250,226	R 1,150,088	37,358	1,791	--	--	--	--	--
1998	99,097	4,206	106,480	R 108,635	447,111	236,779	25,507	238,069	R 1,162,581	38,685	1,425	--	--	--	--	--
1999	102,151	4,010	104,717	104,896	445,191	242,992	18,115	236,194	1,152,105	36,760	1,120	--	--	--	--	--
2000	101,578	4,422	111,848	102,717	406,539	249,819	21,810	232,234	1,124,965	37,556	829	--	--	--	--	--
2001	96,894	4,279	119,392	112,845	391,010	256,553	17,237	216,709	1,113,745	38,163	1,200	--	--	--	--	--
2002	99,785	4,328	114,102	115,598	419,078	268,490	16,993	216,741	1,151,002	35,618	1,123	--	--	--	--	--
2003	104,542	4,074	114,604	R 101,335	427,336	269,532	18,554	229,381	1,160,742	33,437	897	--	--	--	--	--
2004	105,922	3,933	120,621	88,821	446,608	275,724	21,548	246,810	1,200,131	40,435	1,301	--	--	--	--	--
2005	105,327	3,526	127,873	80,382	413,487	278,350	26,026	236,345	1,162,464	38,232	1,333	--	--	--	--	--
2006	103,763	R 3,460	141,350	81,452	R 422,030	285,419	27,958	240,963	R 1,199,172	41,264	662	--	--	--	--	--
2007	104,779	3,542	144,541	75,409	433,291	290,606	32,671	231,486	1,208,003	40,955	1,644	--	--	--	--	--
Trillion Btu																
1960	25.0	2,815.5	142.1	58.6	294.0	482.4	142.0	432.8	1,552.0	0.0	11.9	38.3	0.0	-9.8	-0.6	4,432.1
1965	29.2	3,181.5	144.8	84.3	437.6	566.5	90.0	585.7	1,909.0	0.0	7.8	41.2	0.0	-10.3	-0.3	5,158.1
1970	30.8	4,203.9	188.8	135.9	571.5	742.7	88.9	741.2	2,469.1	0.0	10.5	52.2	0.0	14.9	-0.4	6,781.0
1975	196.2	4,046.9	318.7	152.7	584.2	922.1	242.3	854.5	3,074.4	0.0	20.1	55.8	0.0	-24.3	-1.2	7,367.8
1980	734.1	4,226.1	422.4	173.3	697.3	950.8	409.1	1,439.3	4,092.2	0.0	10.2	55.6	0.0	-85.6	-2.0	9,030.7
1985	1,149.0	3,514.4	465.9	420.5	925.7	1,079.1	180.5	927.0	3,998.8	0.0	14.6	78.8	0.0	70.0	2.8	8,828.5
1990	1,333.7	R 3,877.8	395.6	542.1	1,062.3	1,079.0	172.7	1,155.9	4,407.5	167.8	18.7	96.0	0.6	42.5	0.6	9,945.1
1995	1,364.8	4,037.5	513.3	470.5	1,341.9	1,113.0	141.7	1,182.0	4,762.6	379.8	17.6	99.5	0.9	-13.4	-3.2	10,646.1
1996	1,485.6	4,268.7	563.6	566.2	1,427.4	1,180.8	127.6	1,334.3	5,199.8	375.7	9.9	98.8	1.8	58.6	-3.5	11,495.4
1997	1,523.2	4,231.6	571.2	R 599.0	1,623.8	1,172.9	138.9	1,422.5	R 5,528.4	392.0	18.3	102.6	1.8	58.6	-2.0	R 11,854.5
1998	1,488.6	4,378.0	620.2	R 616.0	1,615.9	1,234.1	160.4	1,353.4	R 5,599.9	405.8	14.5	93.7	1.9	53.9	2.5	R 12,038.8
1999	1,530.4	4,138.1	610.0	594.8	1,609.8	1,266.2	113.9	1,335.9	5,530.5	384.1	11.5	78.4	4.4	22.0	0.6	11,700.0
2000	1,548.2	4,550.1	651.5	582.4	1,466.4	1,301.6	137.1	1,310.5	5,449.4	391.7	8.5	81.7	6.2	32.2	-0.1	12,067.9
2001	1,493.0	R 4,389.9	695.5	639.8	1,413.1	1,336.6	108.4	1,244.7	5,438.1	398.7	12.4	70.7	13.5	77.8	-1.5	11,892.5
2002	1,550.3	4,721.9	664.6	655.4	1,514.1	1,398.3	106.8	1,246.0	5,585.3	371.8	11.4	81.3	28.3	45.9	-0.7	12,395.5
2003	1,604.0	4,522.5	667.6	574.6	1,550.8	1,403.5	116.7	1,319.9	5,632.9	348.5	9.2	78.9	27.8	105.7	-0.7	12,328.7
2004	1,626.0	3,933.0	702.6	503.6	1,615.8	1,437.9	135.5	1,416.4	5,811.9	421.6	13.0	74.8	33.0	R 46.4	-0.7	R 11,959.1
2005	1,627.9	3,625.1	744.9	455.8	1,496.8	1,452.4	163.6	1,361.8	5,675.3	399.0	13.3	R 80.1	44.1	95.1	-0.7	R 11,559.2
2006	1,610.3	R 3,549.5	823.4	461.8	R 1,521.4	1,489.3	175.8	1,397.0	R 5,868.7	430.6	6.6	R 78.9	68.1	132.7	-0.7	R 11,744.6
2007	1,609.1	3,641.4	842.0	427.6	1,555.9	1,516.7	205.4	1,339.3	5,886.9	429.5	16.3	85.6	91.2	75.4	-0.8	11,834.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Texas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	10	172	96	6	10,083	10,185	705	--	--	11,316	--	--	--
1965	3	183	71	7	13,052	13,131	469	--	--	18,745	--	--	--
1970	1	232	134	33	15,397	15,565	322	--	--	32,591	--	--	--
1975	0	232	270	39	11,419	11,728	378	--	--	40,892	--	--	--
1980	(s)	225	8	198	6,131	6,337	647	--	--	57,178	--	--	--
1985	2	213	27	112	7,262	7,402	1,319	--	--	71,740	--	--	--
1990	2	211	2	26	6,133	6,161	1,107	--	--	82,548	--	--	--
1995	0	206	6	22	3,319	3,347	688	--	--	92,831	--	--	--
1996	0	229	(s)	38	2,312	2,351	715	--	--	99,656	--	--	--
1997	(s)	235	(s)	45	3,503	3,548	543	--	--	101,094	--	--	--
1998	2	199	(s)	31	4,552	4,583	483	--	--	110,434	--	--	--
1999	1	176	2	31	9,091	9,125	508	--	--	108,591	--	--	--
2000	1	194	3	30	10,755	10,788	546	--	--	116,895	--	--	--
2001	2	208	1	58	12,217	12,276	588	--	--	117,343	--	--	--
2002	8	210	4	17	10,943	10,964	597	--	--	121,435	--	--	--
2003	18	207	(s)	18	10,127	10,146	628	--	--	121,355	--	--	--
2004	1	192	145	12	7,348	7,504	644	--	--	120,330	--	--	--
2005	1	185	5	15	8,996	9,016	<sup>R</sup> 915	--	--	126,562	--	--	--
2006	(s)	166	(s)	7	<sup>R</sup> 7,109	<sup>R</sup> 7,116	<sup>R</sup> 833	--	--	126,843	--	--	--
2007	(s)	200	(s)	9	6,211	6,221	918	--	--	124,921	--	--	--
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	470.2	933.7
1985	(s)	221.0	0.2	0.6	26.2	27.0	26.4	0.0	0.0	244.8	519.1	563.7	1,082.9
1990	0.1	219.5	(s)	0.1	22.2	22.4	22.1	0.2	0.4	281.7	546.3	651.3	1,197.6
1995	0.0	215.2	(s)	0.1	12.0	12.2	13.8	0.2	0.5	316.7	558.6	719.3	1,277.9
1996	0.0	237.7	(s)	0.2	8.4	8.6	14.3	0.3	0.5	340.0	601.4	773.2	1,374.6
1997	(s)	242.1	(s)	0.3	12.7	12.9	10.9	0.3	0.5	344.9	611.6	781.5	1,393.1
1998	(s)	209.4	(s)	0.2	16.5	16.6	9.7	0.3	0.6	376.8	613.4	854.5	1,467.9
1999	(s)	182.5	(s)	0.2	32.9	33.1	10.2	0.3	0.6	370.5	597.2	847.5	1,444.7
2000	(s)	200.0	(s)	0.2	38.8	39.0	10.9	0.3	0.6	398.8	649.7	907.2	1,556.9
2001	(s)	<sup>R</sup> 213.4	(s)	0.3	44.2	44.5	11.8	0.4	0.6	400.4	670.9	892.2	1,563.2
2002	0.1	237.5	(s)	0.1	39.5	39.7	11.9	0.4	0.6	414.3	704.6	923.6	1,628.2
2003	0.4	239.7	(s)	0.1	36.8	36.9	12.6	0.5	0.6	414.1	704.6	913.7	1,618.3
2004	(s)	<sup>R</sup> 189.1	0.8	0.1	26.6	27.5	12.9	0.6	0.6	410.6	<sup>R</sup> 641.2	908.4	1,549.7
2005	(s)	190.3	(s)	0.1	32.6	32.7	<sup>R</sup> 18.3	0.7	0.6	431.8	<sup>R</sup> 674.4	944.5	<sup>R</sup> 1,618.9
2006	(s)	170.6	(s)	(s)	<sup>R</sup> 25.6	<sup>R</sup> 25.7	<sup>R</sup> 16.7	0.8	0.6	432.8	<sup>R</sup> 647.1	935.9	<sup>R</sup> 1,582.9
2007	(s)	205.9	(s)	0.1	22.3	22.4	18.4	0.9	0.7	426.2	674.5	919.6	1,594.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Texas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Million Kilowatthours					
1960	7	60	595	656	1,779	663	191	3,884	0	--	--	9,801	--	--	--
1965	3	81	440	788	2,303	711	64	4,307	0	--	--	14,804	--	--	--
1970	1	146	830	3,603	2,717	692	78	7,920	0	--	--	22,869	--	--	--
1975	0	117	1,669	4,192	2,015	687	677	9,240	0	--	--	33,884	--	--	--
1980	1	169	2,842	3,251	1,082	3,299	2,569	13,043	0	--	--	44,062	--	--	--
1985	5	152	6,778	250	1,282	1,954	252	10,516	0	--	--	60,150	--	--	--
1990	8	172	2,225	25	1,082	2,294	71	5,696	0	--	--	70,781	--	--	--
1995	0	210	2,669	46	586	164	(s)	3,465	0	--	--	80,354	--	--	--
1996	0	179	2,680	38	408	163	0	3,289	0	--	--	83,477	--	--	--
1997	(s)	216	2,411	38	618	163	0	3,230	0	--	--	85,162	--	--	--
1998	13	170	3,072	52	803	163	0	4,091	0	--	--	91,548	--	--	--
1999	7	172	2,871	57	1,604	165	0	4,696	0	--	--	93,492	--	--	--
2000	11	190	5,657	48	1,898	167	0	7,770	0	--	--	99,748	--	--	--
2001	15	172	3,627	84	2,156	176	11	6,054	0	--	--	102,459	--	--	--
2002	58	226	2,316	58	1,931	178	23	4,506	0	--	--	97,115	--	--	--
2003	122	219	2,626	35	1,787	177	0	4,625	0	--	--	96,694	--	--	--
2004	10	193	1,796	34	1,297	178	0	3,306	0	--	--	99,616	--	--	--
2005	11	160	2,717	44	1,587	180	0	4,528	0	--	--	110,784	--	--	--
2006	(s)	R 147	2,420	74	R 1,254	187	0	R 3,935	0	--	--	111,130	--	--	--
2007	(s)	161	2,441	43	1,096	372	14	3,966	0	--	--	110,540	--	--	--
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	362.4	759.2
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	472.7	893.8
1990	0.2	179.6	13.0	0.1	3.9	12.0	0.4	29.5	0.0	2.5	(s)	241.5	453.3	558.5	1,011.8
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	622.6	1,136.1
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	647.7	1,138.0
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	658.3	1,191.2
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	708.4	1,223.0
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	729.7	1,252.7
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	774.1	1,354.6
2001	0.4	175.9	21.1	0.5	7.8	0.9	0.1	30.4	0.0	2.2	0.3	349.6	558.6	779.1	1,337.7
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	738.6	1,351.5
2003	2.4	253.4	15.3	0.2	6.5	0.9	0.0	22.9	0.0	2.8	0.4	329.9	611.8	728.0	1,339.8
2004	0.3	190.5	10.5	0.2	4.7	0.9	0.0	16.3	0.0	2.5	0.4	339.9	549.9	752.1	1,301.9
2005	0.3	164.4	15.8	0.2	5.7	0.9	0.0	22.8	0.0	R 3.3	0.5	378.0	569.3	826.8	R 1,396.1
2006	(s)	151.2	14.1	0.4	R 4.5	1.0	0.0	R 20.0	0.0	R 3.2	0.5	379.2	554.1	819.9	R 1,374.0
2007	(s)	166.3	14.2	0.2	3.9	1.9	0.1	20.4	0.0	3.4	0.6	377.2	567.8	813.8	1,381.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Texas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	1,031	2,029	10,118	59,411	3,798	4,615	66,692	144,635	0	--	--	14,602	--	--	--
1965	1,136	2,098	8,519	89,166	2,563	1,879	92,985	195,111	0	--	--	23,685	--	--	--
1970	1,150	2,557	8,947	127,521	1,410	2,297	118,609	258,783	0	--	--	40,274	--	--	--
1975	3,720	2,160	15,301	138,844	997	11,070	138,608	304,819	5	--	--	54,712	--	--	--
1980	3,250	2,163	20,250	181,940	470	16,029	244,509	463,198	0	--	--	78,190	--	--	--
1985	5,192	1,732	19,330	247,779	4,704	5,969	156,484	434,265	0	--	--	81,235	--	--	--
1990	4,157	2,105	17,592	285,349	4,336	1,273	197,638	506,188	0	--	--	84,087	--	--	--
1995	4,255	2,188	19,960	366,168	3,944	2,459	201,925	594,456	0	--	--	90,093	--	--	--
1996	4,808	2,442	23,185	392,068	4,040	2,092	229,967	651,352	0	--	--	95,308	--	--	--
1997	4,766	2,351	21,893	444,688	4,236	1,847	245,101	717,766	0	--	--	100,429	--	--	--
1998	4,422	2,329	23,835	441,020	4,961	856	232,909	703,580	0	--	--	102,702	--	--	--
1999	4,397	2,146	21,472	434,130	2,501	635	230,854	689,593	0	--	--	99,741	--	--	--
2000	4,490	2,397	21,192	393,652	2,576	401	226,718	644,540	0	--	--	101,588	--	--	--
2001	4,439	2,321	20,895	376,051	4,632	519	212,223	614,320	0	--	--	98,208	--	--	--
2002	4,047	2,251	19,710	405,724	5,005	796	211,430	642,665	0	--	--	102,251	--	--	--
2003	4,132	2,137	19,010	414,937	5,244	1,408	225,885	666,483	0	--	--	104,547	--	--	--
2004	4,148	2,096	16,873	437,390	6,023	1,077	241,963	703,325	0	--	--	100,588	--	--	--
2005	4,082	1,632	20,031	402,436	5,766	3,537	231,368	663,138	0	--	--	96,841	--	--	--
2006	4,102	1,595	20,274	R 413,147	6,096	3,923	235,824	R 679,264	0	--	--	104,689	--	--	--
2007	1,863	1,616	22,582	425,622	4,580	3,121	227,182	683,086	0	--	--	108,300	--	--	--
Trillion Btu															
1960	24.4	2,100.3	58.9	238.3	19.9	29.0	401.8	748.0	0.0	23.9	0.0	49.8	2,946.5	123.2	3,069.7
1965	29.0	2,175.3	49.6	357.6	13.5	11.8	552.7	985.2	0.0	30.7	0.0	80.8	3,301.1	193.0	3,494.1
1970	30.7	2,626.3	52.1	481.9	7.4	14.4	700.6	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	89.1	515.8	5.2	69.6	813.4	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	118.0	668.4	2.5	100.8	1,401.8	2,291.4	0.0	41.6	0.0	266.8	4,892.8	643.0	5,535.8
1985	85.4	1,799.3	112.6	892.7	24.7	37.5	907.8	1,975.4	0.0	48.7	0.0	277.2	4,186.0	638.4	4,824.4
1990	61.5	R 2,194.1	102.5	1,034.4	22.8	8.0	1,139.5	2,307.2	0.0	68.1	0.0	286.9	4,917.2	663.5	5,580.6
1995	63.7	2,280.6	116.3	1,326.6	20.6	15.5	1,152.3	2,631.2	0.0	83.4	0.0	307.4	5,366.2	698.1	6,064.3
1996	73.8	2,531.9	135.1	1,416.5	21.1	13.2	1,304.4	2,890.2	0.0	81.9	0.0	325.2	5,903.0	739.5	6,642.5
1997	74.1	2,421.8	127.5	1,608.0	22.1	11.6	1,392.3	3,161.5	0.0	89.1	0.0	342.7	6,089.2	776.3	6,865.6
1998	62.9	2,445.0	138.8	1,593.8	25.9	5.4	1,322.8	3,086.7	0.0	81.6	0.0	350.4	6,026.7	794.7	6,821.4
1999	62.6	2,227.0	125.1	1,569.8	13.0	4.0	1,304.4	3,016.3	0.0	65.7	0.0	340.3	5,711.9	778.4	6,490.3
2000	73.1	2,477.4	123.4	1,419.9	13.4	2.5	1,277.8	2,837.1	0.0	68.0	0.0	346.6	5,802.2	788.4	6,590.6
2001	75.5	R 2,376.0	121.7	1,359.0	24.1	3.3	1,218.1	2,726.3	0.0	55.9	0.0	335.1	5,567.9	746.7	6,314.6
2002	71.6	2,546.3	114.8	1,465.9	26.1	5.0	1,214.4	2,826.2	0.0	65.0	0.0	348.9	5,858.0	777.7	6,635.7
2003	72.5	2,477.8	110.7	1,505.8	27.3	8.9	1,299.3	2,952.0	0.0	60.1	0.0	356.7	5,919.1	787.1	R 6,706.3
2004	70.9	R 2,069.8	98.3	1,582.5	31.4	6.8	1,387.7	3,106.6	0.0	56.5	0.0	343.2	R 5,647.1	759.4	R 6,406.5
2005	70.1	1,677.6	116.7	1,456.8	30.1	22.2	1,332.3	2,958.1	0.0	55.8	0.0	330.4	5,092.0	722.7	5,814.7
2006	70.9	R 1,637.0	118.1	R 1,489.4	31.8	24.7	1,366.5	R 3,030.5	0.0	R 56.3	0.0	357.2	R 5,152.0	772.4	R 5,924.4
2007	40.3	1,666.9	131.5	1,528.4	23.9	19.6	1,313.8	3,017.3	0.0	59.6	0.0	369.5	5,153.7	797.3	5,950.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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



**Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Texas**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	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	--	--	--
1965	4	68	3,457	15,810	15,365	4,588	1,814	104,577	12,346	157,957	0	4	--	--	--
1970	2	96	2,007	22,454	24,430	5,587	1,623	139,292	11,667	207,059	0	0	--	--	--
1975	1	82	1,312	37,391	27,308	4,969	1,738	173,854	25,049	271,622	0	0	--	--	--
1980	0	105	1,264	48,286	30,934	649	1,909	177,228	45,812	306,082	0	0	--	--	--
1985	0	92	1,317	53,074	74,500	609	1,738	198,761	21,610	351,609	781	0	--	--	--
1990	0	106	838	47,369	95,903	479	1,955	198,773	25,865	371,182	565	0	--	--	--
1995	0	82	645	64,957	83,002	322	1,865	209,319	20,024	380,135	1,192	0	--	--	--
1996	0	76	625	70,191	99,870	274	1,810	222,177	17,866	412,812	444	8	--	--	--
1997	0	82	658	73,424	R 105,655	246	1,912	220,599	20,220	R 422,714	1,048	19	--	--	--
1998	0	67	555	79,063	R 108,635	735	2,002	231,655	24,640	R 447,285	1,549	21	--	--	--
1999	0	71	796	79,575	104,896	365	2,023	240,326	17,471	445,453	1,349	19	--	--	--
2000	0	63	609	82,848	102,717	234	1,992	247,076	21,007	456,482	1,545	30	--	--	--
2001	0	71	468	91,945	112,845	586	1,826	251,744	16,090	475,504	1,552	34	--	--	--
2002	0	91	533	91,635	115,598	480	1,804	263,306	16,088	R 489,445	676	44	--	--	--
2003	0	58	511	90,414	R 101,335	485	1,668	264,111	16,648	475,172	550	90	--	--	--
2004	0	58	485	101,506	88,821	573	1,690	269,523	20,281	482,878	650	81	--	--	--
2005	0	83	512	104,804	80,382	468	1,681	272,404	22,460	482,711	R 393	71	--	--	--
2006	0	87	495	118,413	81,452	520	1,638	279,135	23,981	505,634	R 10,594	62	--	--	--
2007	0	92	493	119,276	75,409	362	1,691	285,654	29,491	512,376	15,203	67	--	--	--

  

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	2.8	0.0	2,027.4	0.0	2,027.4
1990	0.0	110.5	4.2	275.9	542.1	1.7	11.9	1,044.2	162.6	2,042.7	2.0	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	4.2	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	R 599.0	0.9	11.6	1,150.0	127.1	R 2,319.7	3.7	0.1	R 2,404.6	0.1	R 2,404.7
1998	0.0	69.9	2.8	460.5	R 616.0	2.7	12.1	1,207.4	154.9	R 2,456.4	5.5	0.1	R 2,526.4	0.2	R 2,526.5
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	5.5	0.1	2,676.8	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	67.7	2.6	526.7	574.6	1.8	10.1	1,375.2	104.7	2,595.6	1.9	0.3	2,663.6	0.7	2,664.3
2004	0.0	R 57.3	2.4	591.3	503.6	2.1	10.2	1,405.6	127.5	2,642.7	2.3	0.3	R 2,700.3	0.6	2,701.0
2005	0.0	85.4	2.6	610.5	455.8	1.7	10.2	1,421.4	141.2	2,643.3	R 1.4	0.2	2,729.0	0.5	2,729.5
2006	0.0	R 89.4	2.5	689.8	461.8	1.9	9.9	1,456.5	150.8	2,773.2	R 37.5	0.2	R 2,862.8	0.5	R 2,863.3
2007	0.0	94.5	2.5	694.8	427.6	1.3	10.3	1,490.8	185.4	2,812.6	53.8	0.2	2,907.4	0.5	2,907.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Texas

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	(s)	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	--
2005	101,233	1,466	29	317	2,726	3,071	38,232	1,333	--	0	0	4,237	-220	--
2006	99,661	1,464	55	242	2,926	3,224	41,264	662	--	0	0	6,671	-212	--
2007	102,916	1,474	46	241	2,068	2,355	40,955	1,644	--	0	0	9,006	-243	--
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	R 1,174.0	1.6	4.2	0.0	5.8	167.8	18.7	3.3	0.0	(s)	0.0	-0.2	2,640.8
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	R 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	R 1,551.6	3.9	17.0	12.4	33.3	398.7	12.4	0.9	0.0	(s)	12.3	(s)	3,425.7
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	R 1,426.2	1.2	1.8	15.8	18.8	421.6	13.0	2.9	0.0	0.0	31.4	-0.7	R 3,468.1
2005	1,557.5	1,507.4	0.2	1.8	16.4	18.4	399.0	13.3	2.7	0.0	0.0	42.4	-0.7	3,539.9
2006	1,539.4	1,501.2	0.3	1.4	17.6	19.4	430.6	6.6	2.7	0.0	0.0	66.2	-0.7	3,565.3
2007	1,568.7	1,507.8	0.3	1.4	12.5	14.1	429.5	16.3	4.2	0.0	0.0	89.0	-0.8	3,628.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	3,449	70	3,775	1,003	452	7,813	5,715	3,584	22,341	0	304	--	--	--	--	--
1965	2,857	108	4,193	1,244	677	9,001	5,662	4,251	25,029	0	913	--	--	--	--	--
1970	3,025	122	5,107	1,808	939	12,308	4,656	4,632	29,450	0	741	--	--	--	--	--
1975	4,636	124	9,165	1,903	1,169	15,063	4,603	4,488	36,391	0	1,074	--	--	--	--	--
1980	7,106	115	8,401	2,637	1,301	15,534	3,495	4,615	35,983	0	821	--	--	--	--	--
1985	8,303	115	5,715	3,808	1,486	16,240	431	4,129	31,809	0	1,019	--	--	--	--	--
1990	15,738	117	7,162	5,281	1,074	16,724	367	4,475	35,082	0	508	--	--	--	--	--
1995	15,675	157	8,469	5,658	1,531	20,771	294	4,995	41,718	0	969	--	--	--	--	--
1996	15,615	161	8,746	6,303	2,621	21,170	87	5,703	44,628	0	1,049	--	--	--	--	--
1997	16,507	165	9,976	R 6,279	750	22,024	149	5,349	R 44,529	0	1,344	--	--	--	--	--
1998	17,482	170	10,398	R 6,379	430	22,735	96	5,413	R 45,452	0	1,315	--	--	--	--	--
1999	16,611	160	9,793	7,443	1,013	23,141	60	5,356	46,806	0	1,255	--	--	--	--	--
2000	17,373	165	10,629	7,701	1,804	23,895	71	5,080	49,179	0	746	--	--	--	--	--
2001	16,748	159	11,236	6,880	1,988	22,993	18	5,052	48,167	0	508	--	--	--	--	--
2002	16,434	163	11,482	6,416	1,280	24,158	82	4,188	47,607	0	458	--	--	--	--	--
2003	16,975	154	11,731	6,758	716	24,325	111	6,256	49,897	0	421	--	--	--	--	--
2004	18,150	156	12,264	7,137	805	24,744	171	5,503	50,625	0	450	--	--	--	--	--
2005	18,594	160	13,717	7,394	1,473	24,677	220	5,498	52,978	0	784	--	--	--	--	--
2006	17,324	R 187	17,292	7,560	R 1,399	25,312	243	5,209	R 57,015	0	747	--	--	--	--	--
2007	17,522	220	15,946	7,085	1,453	26,054	309	4,842	55,689	0	539	--	--	--	--	--
Trillion Btu																
1960	91.0	72.4	22.0	5.4	1.8	41.0	35.9	21.5	127.6	0.0	3.3	2.2	0.0	6.8	0.0	303.3
1965	75.4	99.8	24.4	6.8	2.7	47.3	35.6	25.6	142.4	0.0	9.5	2.0	0.0	10.5	0.0	339.6
1970	78.8	114.4	29.8	10.0	3.5	64.7	29.3	28.6	165.8	0.0	7.8	2.3	0.0	28.0	0.0	397.0
1975	115.7	118.0	53.4	10.6	4.3	79.1	28.9	27.5	203.9	0.0	11.2	2.9	0.0	29.3	0.0	480.9
1980	168.3	125.0	48.9	14.6	4.8	81.6	22.0	28.5	200.4	0.0	8.5	4.5	0.0	-1.7	0.0	504.9
1985	199.4	123.8	33.3	21.3	5.4	85.3	2.7	26.0	174.0	0.0	10.6	6.9	2.3	-16.1	(s)	500.9
1990	366.8	126.9	41.7	29.7	3.9	87.9	2.3	27.7	193.2	0.0	5.3	3.4	3.7	-147.8	(s)	551.5
1995	361.4	166.9	49.3	31.8	5.5	108.3	1.9	31.4	228.3	0.0	10.0	3.6	3.5	-128.5	0.0	645.2
1996	360.0	168.1	50.9	35.7	9.5	110.4	0.5	35.7	242.8	0.0	10.8	3.8	4.6	-115.4	0.0	674.7
1997	375.1	172.2	58.1	35.6	2.7	114.8	0.9	33.3	245.5	0.0	13.7	4.4	4.1	-123.1	0.1	692.1
1998	396.1	178.0	60.6	R 36.2	1.6	118.5	0.6	34.1	251.5	0.0	13.4	3.9	3.9	-129.3	(s)	717.5
1999	384.1	169.3	57.0	42.2	3.7	120.6	0.4	33.7	257.5	0.0	12.8	5.4	3.8	-123.0	0.0	710.0
2000	403.1	173.4	61.9	43.7	6.5	124.5	0.4	32.0	269.0	0.0	7.6	5.7	3.8	-112.4	0.0	750.3
2001	384.5	167.6	65.4	39.0	7.2	119.8	0.1	31.1	262.6	0.0	5.3	3.4	3.8	-109.0	0.0	718.1
2002	370.6	172.9	66.9	36.4	4.6	125.8	0.5	25.4	259.6	0.0	4.7	3.4	5.2	-122.1	(s)	694.2
2003	379.2	163.1	68.3	38.3	2.6	126.7	0.7	39.0	275.6	0.0	4.3	3.4	4.7	-126.7	(s)	703.7
2004	399.7	164.9	71.4	40.5	2.9	129.0	1.1	33.9	278.8	0.0	4.5	3.5	4.7	-117.2	0.1	R 739.1
2005	405.5	168.9	79.9	41.9	5.3	128.8	1.4	33.7	291.0	0.0	7.8	R 6.2	4.6	-125.5	0.1	R 758.8
2006	382.8	R 198.1	100.7	42.9	R 5.0	132.1	1.5	31.7	R 314.0	0.0	7.4	R 5.8	4.7	-125.0	(s)	R 787.8
2007	391.3	232.2	92.9	40.2	5.2	136.0	1.9	29.4	305.6	0.0	5.3	6.2	4.2	-139.2	-0.1	805.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	147	23	100	1	249	349	92	--	--	1,012	--	--	--
1965	103	31	98	20	505	624	79	--	--	1,243	--	--	--
1970	61	45	143	6	694	844	87	--	--	1,688	--	--	--
1975	39	60	357	4	564	925	101	--	--	2,493	--	--	--
1980	50	58	112	0	349	460	189	--	--	3,116	--	--	--
1985	55	59	67	10	631	707	301	--	--	3,985	--	--	--
1990	53	43	139	5	424	567	148	--	--	4,246	--	--	--
1995	10	49	72	3	210	285	150	--	--	5,041	--	--	--
1996	11	54	74	4	251	329	155	--	--	5,481	--	--	--
1997	14	58	88	5	489	582	177	--	--	5,661	--	--	--
1998	12	57	70	4	148	222	157	--	--	5,756	--	--	--
1999	14	55	79	4	312	396	166	--	--	6,236	--	--	--
2000	6	56	79	4	590	672	178	--	--	6,514	--	--	--
2001	7	55	91	3	1,003	1,097	99	--	--	6,693	--	--	--
2002	24	59	83	2	621	705	101	--	--	6,938	--	--	--
2003	8	55	67	2	548	618	106	--	--	7,166	--	--	--
2004	21	61	85	2	569	655	109	--	--	7,325	--	--	159.6
2005	4	58	26	1	943	970	R 225	--	--	7,567	--	--	--
2006	3	60	29	2	R 797	R 828	R 205	--	--	8,232	--	--	--
2007	2	61	28	2	816	847	226	--	--	8,752	--	--	--
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	0.1	(s)	14.5	68.4	33.5	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	44.5	128.2
1999	0.3	58.6	0.5	(s)	1.1	1.6	3.3	(s)	(s)	21.3	85.2	48.7	133.8
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	57.9	0.5	(s)	3.6	4.2	2.0	(s)	(s)	22.8	87.1	50.9	138.0
2002	0.6	63.2	0.5	(s)	2.2	2.7	2.0	(s)	(s)	23.7	92.2	52.8	145.0
2003	0.2	58.1	0.4	(s)	2.0	2.4	2.1	(s)	(s)	24.5	87.3	54.0	141.3
2004	0.5	64.3	0.5	(s)	2.1	2.6	2.2	(s)	(s)	25.0	94.6	55.3	149.9
2005	0.1	61.2	0.2	(s)	3.4	3.6	R 4.5	(s)	(s)	25.8	R 95.3	56.5	R 151.7
2006	0.1	63.5	0.2	(s)	2.9	3.1	R 4.1	(s)	(s)	28.1	R 98.9	60.7	R 159.6
2007	(s)	64.4	0.2	(s)	2.9	3.1	4.5	(s)	0.1	29.9	102.0	64.4	166.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours							
1960	102	10	362	6	44	281	656	1,349	0	--	--	640	--	--	--	
1965	78	16	356	148	89	234	1,072	1,899	0	--	--	1,128	--	--	--	
1970	48	10	521	46	122	202	795	1,687	0	--	--	1,890	--	--	--	
1975	92	6	1,300	28	99	210	1,098	2,736	0	--	--	2,479	--	--	--	
1980	187	(s)	1,028	34	62	81	1,051	2,255	0	--	--	3,141	--	--	--	
1985	197	9	484	19	111	88	45	747	0	--	--	4,596	--	--	--	
1990	214	16	364	5	75	96	73	613	0	--	--	5,389	--	--	--	
1995	67	27	382	1	37	21	13	454	0	--	--	6,462	--	--	--	
1996	83	30	374	3	44	21	14	456	0	--	--	6,717	--	--	--	
1997	109	31	406	4	86	21	11	527	0	--	--	7,285	--	--	--	
1998	101	31	524	5	26	21	3	579	0	--	--	7,433	--	--	--	
1999	100	30	593	4	55	21	10	682	0	--	--	8,074	--	--	--	
2000	52	31	366	4	104	22	16	513	0	--	--	8,746	--	--	--	
2001	53	31	696	8	177	23	18	922	0	--	--	9,102	--	--	--	
2002	174	34	558	4	110	23	0	694	0	--	--	9,293	--	--	--	
2003	53	31	527	5	97	23	0	652	0	--	--	9,024	--	--	--	
2004	192	31	490	8	100	24	0	622	0	--	--	9,345	--	--	--	
2005	41	34	343	11	166	24	3	548	0	--	--	9,417	--	--	--	
2006	R 32	34	437	6	R 141	25	1	R 609	0	--	--	9,749	--	--	--	
2007	19	34	452	4	144	25	0	625	0	--	--	10,241	--	--	--	
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	0.0	0.3	0.1	18.4	44.8	42.5	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	121.6	
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	32.5	4.1	(s)	0.6	0.1	0.1	5.0	0.0	0.3	0.2	31.1	70.3	69.2	139.5	
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	70.7	146.5	
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	67.9	137.1	
2004	4.5	33.1	2.9	(s)	0.4	0.1	0.0	3.4	0.0	0.4	0.2	31.9	73.5	R 70.6	144.0	
2005	1.0	36.3	2.0	0.1	0.6	0.1	(s)	2.8	0.0	R 0.7	0.3	32.1	R 73.2	70.3	R 143.5	
2006	0.8	36.0	2.5	(s)	0.5	0.1	(s)	3.2	0.0	R 0.8	0.3	33.3	R 74.3	71.9	R 146.2	
2007	0.4	36.6	2.6	(s)	0.5	0.1	0.0	3.3	0.0	0.8	0.3	34.9	76.4	75.4	151.8	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	2,640	33	990	124	299	2,399	2,831	6,642	(s)	--	--	1,822	--	--
1965	2,306	57	1,163	70	233	2,895	3,550	7,910	3	--	--	1,404	--	--
1970	2,477	63	1,564	116	261	2,068	4,240	8,249	3	--	--	1,648	--	--
1975	2,478	55	3,356	495	266	3,285	4,138	11,541	0	--	--	2,968	--	--
1980	1,974	51	2,220	876	165	2,386	4,249	9,897	0	--	--	4,448	--	--
1985	1,726	46	989	668	220	360	3,831	6,068	0	--	--	4,458	--	--
1990	1,907	55	1,520	524	198	245	4,161	6,649	0	--	--	5,766	--	--
1995	1,905	69	1,383	1,252	323	282	4,738	7,977	0	--	--	6,957	--	--
1996	1,559	69	1,360	2,301	331	73	5,460	9,525	0	--	--	7,660	--	--
1997	1,729	69	1,803	160	334	139	5,086	7,522	0	--	--	7,430	--	--
1998	2,275	73	2,188	254	248	94	5,150	7,934	0	--	--	7,511	--	--
1999	1,486	65	1,783	612	236	50	5,070	7,750	0	--	--	7,568	--	--
2000	2,151	64	1,730	1,068	240	54	4,785	7,877	0	--	--	7,917	--	--
2001	1,783	54	1,802	752	500	0	4,781	7,834	0	--	--	7,411	--	--
2002	592	49	1,819	503	517	82	3,930	6,851	0	--	--	7,019	--	--
2003	611	46	2,400	47	551	111	6,019	9,129	0	--	--	7,646	--	--
2004	1,330	46	2,095	88	591	171	5,244	8,188	0	--	--	7,816	--	--
2005	1,431	46	3,252	317	587	217	5,208	9,580	0	--	--	7,989	--	--
2006	680	53	3,683	R 398	612	242	4,925	R 9,860	0	--	--	8,356	--	--
2007	909	56	2,647	453	524	309	4,587	8,521	0	--	--	8,759	--	--
Trillion Btu														
1960	70.5	34.7	5.8	0.5	1.6	15.1	17.5	40.4	(s)	0.3	0.0	6.2	15.4	167.5
1965	61.5	52.3	6.8	0.3	1.2	18.2	21.8	48.2	(s)	0.3	0.0	4.8	11.4	178.6
1970	65.2	59.2	9.1	0.4	1.4	13.0	26.4	50.3	(s)	0.5	0.0	5.6	13.6	194.5
1975	64.7	52.3	19.6	1.8	1.4	20.7	25.6	69.0	0.0	0.8	0.0	10.1	24.4	221.3
1980	50.7	55.8	12.9	3.2	0.9	15.0	26.4	58.4	0.0	0.6	0.0	15.2	36.6	217.3
1985	44.1	49.9	5.8	2.4	1.2	2.3	24.3	35.9	0.0	0.7	0.0	15.2	35.0	180.9
1990	48.7	60.1	8.9	1.9	1.0	1.5	25.9	39.2	0.0	0.2	0.2	19.7	45.5	213.6
1995	47.6	73.8	8.1	4.5	1.7	1.8	29.9	46.0	0.0	0.2	0.3	23.7	53.9	245.4
1996	40.0	72.3	7.9	8.3	1.7	0.5	34.3	52.7	0.0	0.3	0.3	26.1	59.4	251.1
1997	44.0	71.7	10.5	0.6	1.7	0.9	31.8	45.5	0.0	0.3	0.3	25.4	57.4	244.5
1998	56.7	76.4	12.7	0.9	1.3	0.6	32.6	48.1	0.0	0.2	0.3	25.6	58.1	265.4
1999	37.5	68.3	10.4	2.2	1.2	0.3	32.0	46.2	0.0	0.2	0.3	25.8	59.1	237.4
2000	54.1	67.3	10.1	3.9	1.3	0.3	30.3	45.8	0.0	0.2	0.4	27.0	61.4	256.3
2001	44.0	56.4	10.5	2.7	2.6	0.0	29.5	45.3	0.0	0.3	0.4	25.3	56.4	228.0
2002	13.6	51.7	10.6	1.8	2.7	0.5	23.9	39.5	0.0	0.2	0.4	24.0	53.4	182.7
2003	14.2	49.0	14.0	0.2	2.9	0.7	37.6	55.3	0.0	0.2	0.3	26.1	57.6	202.6
2004	28.0	48.7	12.2	0.3	3.1	1.1	32.4	49.1	0.0	0.2	0.3	26.7	59.0	211.9
2005	33.0	49.0	18.9	1.1	3.1	1.4	32.1	56.6	0.0	0.2	0.4	27.3	59.6	226.1
2006	15.7	R 56.1	21.5	R 1.4	3.2	1.5	30.1	R 57.7	0.0	0.2	0.4	28.5	R 61.6	R 220.4
2007	20.7	59.6	15.4	1.6	2.7	1.9	27.9	49.6	0.0	0.2	0.4	29.9	64.5	224.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	45	(s)	595	2,312	1,003	35	152	7,232	370	11,698	0	0	--	--	--
1965	8	(s)	383	2,569	1,244	12	151	8,534	98	12,991	0	0	--	--	--
1970	4	(s)	178	2,870	1,808	6	161	11,845	25	16,893	0	0	--	--	--
1975	(s)	(s)	161	4,141	1,903	11	158	14,586	68	21,028	0	0	--	--	--
1980	0	1	139	4,974	2,637	14	194	15,288	0	23,245	0	0	--	--	--
1985	0	1	94	4,121	3,808	76	176	15,932	0	24,207	11	0	--	--	--
1990	0	1	106	5,056	5,281	51	198	16,430	48	27,169	1	0	--	--	--
1995	0	3	64	6,566	5,658	32	189	20,428	0	32,936	0	0	--	--	--
1996	0	4	52	6,878	6,303	25	184	20,818	0	34,260	21	0	--	--	--
1997	0	3	61	7,621	R 6,279	16	194	21,670	0	R 35,840	0	0	--	--	--
1998	0	3	51	7,549	R 6,379	2	203	22,466	0	R 36,649	294	0	--	--	--
1999	0	3	73	7,283	7,443	34	205	22,884	0	37,923	250	1	--	--	--
2000	0	4	84	8,353	7,701	43	202	23,633	0	40,015	284	8	--	--	--
2001	0	5	76	8,537	6,880	56	185	22,470	0	38,204	369	10	--	--	--
2002	0	6	69	8,926	6,416	47	183	23,618	0	39,259	98	16	--	--	--
2003	0	8	60	8,675	6,758	24	169	23,751	0	39,438	75	25	--	--	--
2004	0	9	78	9,535	7,137	48	171	24,129	0	41,100	36	25	--	--	--
2005	0	9	107	10,021	7,394	47	170	24,067	0	41,806	R 604	28	--	--	--
2006	0	11	110	13,018	7,560	64	166	24,676	0	45,593	R 508	29	--	--	--
2007	0	12	78	12,745	7,085	39	171	25,505	0	45,624	881	34	--	--	--
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	(s)	0.0	132.1	0.0	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	R 36.2	(s)	1.2	117.1	0.0	198.7	1.0	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)	212.4	0.1	212.5
2002	0.0	6.9	0.3	52.0	36.4	0.2	1.1	123.0	0.0	213.0	0.3	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	222.6
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
2005	0.0	9.5	0.5	58.4	41.9	0.2	1.0	125.6	0.0	227.6	R 2.1	0.1	237.3	0.2	237.5
2006	0.0	12.0	0.6	75.8	42.9	0.2	1.0	128.8	0.0	249.2	R 1.8	0.1	R 261.3	0.2	261.6
2007	0.0	12.9	0.4	74.2	40.2	0.1	1.0	133.1	0.0	249.1	3.1	0.1	262.1	0.2	262.4

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

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



Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Utah

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	152	0	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	--
2005	17,118	12	0	74	0	74	0	784	--	185	0	0	R 40	--
2006	16,609	29	0	126	0	126	0	747	--	191	0	0	14	--
2007	16,593	56	0	73	0	73	0	539	--	164	0	0	-16	--
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	0.0	3.2	0.0	0.0	0.0	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	15.8	0.0	0.6	0.0	0.6	0.0	5.3	0.8	3.2	0.0	0.0	0.0	364.8
2002	352.3	15.5	0.0	0.6	0.0	0.6	0.0	4.7	0.8	4.6	0.0	0.0	(s)	378.4
2003	363.6	14.5	0.0	0.4	0.0	0.4	0.0	4.3	0.7	4.2	0.0	0.0	(s)	387.7
2004	366.7	9.4	0.0	0.3	0.0	0.3	0.0	4.5	0.8	4.1	0.0	0.0	0.1	385.9
2005	371.5	12.8	0.0	0.4	0.0	0.4	0.0	7.8	0.8	3.9	0.0	0.0	0.1	397.3
2006	366.2	30.4	0.0	0.7	0.0	0.7	0.0	7.4	0.8	4.0	0.0	0.0	(s)	409.5
2007	370.1	58.7	0.0	0.4	0.0	0.4	0.0	5.3	0.6	3.4	0.0	0.0	-0.1	438.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	137	0	2,958	82	404	3,332	478	1,178	8,431	0	873	--	--	--	--	--
1965	105	0	4,285	79	450	3,789	910	1,059	10,572	0	714	--	--	--	--	--
1970	87	3	5,741	121	542	5,077	905	898	13,285	0	786	--	--	--	--	--
1975	31	4	4,642	177	833	5,698	796	502	12,647	3,561	938	--	--	--	--	--
1980	22	4	4,095	155	666	5,437	471	506	11,331	2,979	813	--	--	--	--	--
1985	80	5	4,583	201	791	5,813	122	1,065	12,574	2,999	922	--	--	--	--	--
1990	8	7	4,566	180	1,401	6,696	237	419	13,499	3,616	1,365	--	--	--	--	--
1995	3	7	5,361	127	1,673	7,211	215	535	15,121	3,859	973	--	--	--	--	--
1996	2	7	5,732	99	1,834	7,331	282	603	15,882	3,799	1,231	--	--	--	--	--
1997	110	8	5,344	106	1,540	7,606	323	1,153	16,073	4,267	1,067	--	--	--	--	--
1998	2	8	5,215	121	1,777	7,510	274	752	15,650	3,358	1,194	--	--	--	--	--
1999	82	8	5,441	143	1,617	7,699	220	612	15,732	4,059	1,196	--	--	--	--	--
2000	1	10	5,276	144	1,769	8,394	309	721	16,613	4,548	1,221	--	--	--	--	--
2001	2	8	5,371	120	2,425	8,021	241	806	16,984	4,171	884	--	--	--	--	--
2002	1	8	4,866	65	2,352	8,164	253	466	16,166	3,963	1,115	--	--	--	--	--
2003	1	8	5,251	68	1,867	8,304	292	530	16,311	4,444	1,154	--	--	--	--	--
2004	1	9	5,861	309	1,987	8,407	297	1,037	17,899	3,858	1,187	--	--	--	--	--
2005	1	8	5,194	423	2,234	8,408	300	693	17,251	4,072	1,211	--	--	--	--	--
2006	1	8	5,085	376	2,288	8,406	260	591	17,006	5,107	1,519	--	--	--	--	--
2007	1	9	4,917	317	2,152	8,354	238	689	16,668	4,704	647	--	--	--	--	--
Trillion Btu																
1960	3.5	0.0	17.2	0.4	1.6	17.5	3.0	6.9	46.7	0.0	9.4	7.9	0.0	0.9	0.2	68.6
1965	2.7	0.0	25.0	0.4	1.8	19.9	5.7	6.2	59.0	0.0	7.5	6.9	0.0	6.9	0.1	83.2
1970	2.1	2.7	33.4	0.7	2.0	26.7	5.7	5.4	73.9	0.0	8.2	6.5	0.0	19.6	0.2	113.2
1975	0.7	4.0	27.0	1.0	3.1	29.9	5.0	2.9	68.9	39.2	9.8	6.6	0.0	-15.1	0.3	114.4
1980	0.5	4.0	23.9	0.9	2.4	28.6	3.0	2.9	61.6	32.5	8.4	14.4	0.0	3.8	0.6	125.9
1985	2.0	5.0	26.7	1.1	2.8	30.5	0.8	6.4	68.3	31.9	9.6	17.3	0.0	-0.5	1.1	134.6
1990	0.2	6.7	26.6	1.0	5.1	35.2	1.5	2.4	71.7	38.3	14.2	5.3	(s)	-6.5	5.8	135.7
1995	0.1	7.3	31.2	0.7	6.1	37.6	1.4	3.3	80.3	40.5	10.0	9.1	(s)	-10.7	13.5	150.1
1996	(s)	7.5	33.4	0.6	6.6	38.2	1.8	3.7	84.3	39.9	12.7	9.1	(s)	-9.7	12.0	155.9
1997	2.7	8.3	31.1	0.6	5.6	39.7	2.0	7.3	86.3	44.8	10.9	9.0	(s)	-13.9	13.6	161.7
1998	0.1	7.8	30.4	0.7	6.4	39.1	1.7	4.4	82.8	35.2	12.2	8.1	(s)	-5.0	13.2	154.3
1999	2.0	8.1	31.7	0.8	5.8	40.1	1.4	3.7	83.5	42.4	12.2	8.4	0.2	-23.5	26.2	159.5
2000	(s)	R 10.6	30.7	0.8	6.4	43.7	1.9	4.2	87.9	47.4	12.5	8.8	0.2	-16.1	13.4	164.6
2001	0.1	R 8.0	31.3	0.7	8.8	41.8	1.5	4.9	88.9	43.6	9.1	8.0	0.2	-5.9	10.1	162.1
2002	(s)	R 8.4	28.3	0.4	8.5	42.5	1.6	2.8	84.1	41.4	11.3	11.2	0.1	-7.5	8.3	157.4
2003	(s)	R 8.5	30.6	0.4	6.8	43.2	1.8	3.1	85.9	46.3	11.8	12.2	0.2	-15.9	6.5	155.5
2004	(s)	8.7	34.1	1.8	7.2	43.8	1.9	6.3	95.1	40.2	11.9	10.0	0.2	-3.7	6.6	169.1
2005	(s)	8.4	30.3	2.4	8.1	43.9	1.9	4.1	90.6	42.5	12.1	R 8.7	0.2	-3.1	7.2	R 166.5
2006	(s)	8.1	29.6	2.1	8.2	43.9	1.6	3.5	89.0	53.3	15.1	R 9.2	0.2	-19.9	8.3	R 163.1
2007	(s)	8.9	28.6	1.8	7.7	43.6	1.5	4.2	87.5	49.3	6.4	8.6	0.2	-7.2	8.5	162.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seeds.html](http://www.eia.doe.gov/emeu/states/_seeds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	45	0	2,044	701	258	3,003	173	--	--	451	--	--	--
1965	27	0	3,110	649	316	4,075	137	--	--	678	--	--	--
1970	16	1	3,873	436	356	4,665	105	--	--	1,216	--	--	--
1975	5	1	3,101	235	555	3,891	123	--	--	1,427	--	--	--
1980	2	1	2,171	230	356	2,757	215	--	--	1,781	--	--	--
1985	10	1	2,482	514	601	3,597	155	--	--	1,538	--	--	--
1990	1	2	2,293	193	1,109	3,595	99	--	--	1,809	--	--	--
1995	(s)	2	2,321	180	1,223	3,724	108	--	--	1,973	--	--	--
1996	(s)	3	2,368	203	1,378	3,950	113	--	--	2,006	--	--	--
1997	(s)	3	2,309	238	1,229	3,776	82	--	--	1,992	--	--	--
1998	(s)	2	2,008	326	1,388	3,722	73	--	--	1,951	--	--	--
1999	(s)	3	2,016	262	1,356	3,634	76	--	--	1,999	--	--	--
2000	(s)	3	2,450	326	1,315	4,091	82	--	--	2,037	--	--	--
2001	(s)	3	2,220	320	1,804	4,344	65	--	--	2,009	--	--	--
2002	(s)	3	2,114	186	1,804	4,104	66	--	--	2,047	--	--	--
2003	(s)	3	2,301	276	1,465	4,042	69	--	--	2,011	--	--	--
2004	(s)	3	2,696	400	1,561	4,657	71	--	--	2,109	--	--	--
2005	(s)	3	2,257	381	1,672	4,310	R 50	--	--	2,189	--	--	--
2006	(s)	3	2,119	355	R 1,590	R 4,064	R 45	--	--	2,142	--	--	--
2007	(s)	3	2,157	248	1,639	4,044	50	--	--	2,170	--	--	--
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	14.6	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	0.0	(s)	6.2	28.8	14.3	43.0
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)	R 2.8	12.9	1.8	6.5	21.3	1.3	(s)	(s)	6.9	32.2	15.3	47.5
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	15.1	46.9
2004	(s)	3.1	15.7	2.3	5.6	23.6	1.4	(s)	(s)	7.2	R 35.4	15.9	51.3
2005	(s)	3.1	13.1	2.2	6.1	21.4	R 1.0	(s)	(s)	7.5	R 33.0	16.3	R 49.3
2006	(s)	2.9	12.3	2.0	R 5.7	R 20.1	R 0.9	(s)	0.1	7.3	R 31.3	15.8	R 47.1
2007	(s)	3.2	12.6	1.4	5.9	19.9	1.0	(s)	0.1	7.4	31.6	16.0	47.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	31	0	418	43	46	127	225	859	0	--	--	233	--	--	--
1965	21	0	636	40	56	24	422	1,177	0	--	--	303	--	--	--
1970	13	1	792	27	63	25	414	1,320	0	--	--	609	--	--	--
1975	11	1	634	15	98	30	373	1,149	0	--	--	709	--	--	--
1980	9	1	620	44	63	33	237	996	0	--	--	923	--	--	--
1985	36	2	591	36	106	40	24	797	0	--	--	959	--	--	--
1990	6	2	669	12	196	41	119	1,037	0	--	--	1,526	--	--	--
1995	3	3	692	14	216	7	71	999	0	--	--	1,647	--	--	--
1996	1	3	795	13	243	7	72	1,131	0	--	--	1,696	--	--	--
1997	2	3	850	21	217	7	111	1,205	0	--	--	1,759	--	--	--
1998	2	3	938	32	245	7	107	1,328	0	--	--	1,878	--	--	--
1999	2	2	946	35	239	7	71	1,298	0	--	--	1,941	--	--	--
2000	1	3	1,040	23	232	7	101	1,403	0	--	--	1,956	--	--	--
2001	2	2	1,009	35	318	7	92	1,461	0	--	--	1,968	--	--	--
2002	1	2	865	16	318	7	121	1,327	0	--	--	1,991	--	--	--
2003	1	3	942	21	259	7	151	1,380	0	--	--	1,881	--	--	--
2004	1	3	1,036	34	276	7	147	1,499	0	--	--	1,978	--	--	--
2005	1	3	858	31	295	7	145	1,336	0	--	--	2,051	--	--	--
2006	1	2	812	26	R 281	7	130	R 1,255	0	--	--	2,027	--	--	--
2007	1	3	766	27	289	7	87	1,176	0	--	--	2,059	--	--	--
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	0.0	0.2	0.0	5.2	13.2	12.0	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	15.0	32.3
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	15.1	31.7
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	14.2	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	14.9	32.8
2005	(s)	2.6	5.0	0.2	1.1	(s)	0.9	7.2	0.0	0.2	0.0	R 7.0	R 17.0	15.3	R 32.3
2006	(s)	2.4	4.7	0.1	1.0	(s)	0.8	R 6.7	0.0	R 0.1	0.0	6.9	R 16.2	15.0	31.2
2007	(s)	2.6	4.5	0.2	1.0	(s)	0.5	6.2	0.0	0.2	0.0	7.0	16.1	15.2	31.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	41	0	234	99	0	252	346	931	64	--	--	191	--	--
1965	14	0	316	77	100	484	301	1,278	53	--	--	352	--	--
1970	3	1	463	121	68	466	372	1,489	62	--	--	787	--	--
1975	2	2	364	179	77	421	196	1,237	67	--	--	858	--	--
1980	2	2	501	245	19	235	156	1,155	70	--	--	1,247	--	--
1985	6	2	500	70	117	98	445	1,230	70	--	--	1,518	--	--
1990	1	2	554	85	81	115	146	981	17	--	--	1,381	--	--
1995	0	2	328	220	89	144	278	1,058	18	--	--	1,484	--	--
1996	0	2	326	196	90	210	327	1,149	16	--	--	1,537	--	--
1997	107	2	345	77	95	212	830	1,560	22	--	--	1,561	--	--
1998	0	2	379	144	76	168	329	1,095	24	--	--	1,534	--	--
1999	80	3	409	19	82	149	248	908	20	--	--	1,587	--	--
2000	0	4	381	223	79	207	277	1,166	20	--	--	1,646	--	--
2001	0	3	366	303	170	149	358	1,344	16	--	--	1,608	--	--
2002	0	3	338	229	179	132	205	1,083	16	--	--	1,592	--	--
2003	0	2	432	139	210	141	178	1,099	6	--	--	1,460	--	--
2004	0	3	586	145	237	151	537	1,656	21	--	--	1,577	--	--
2005	0	3	560	259	235	156	210	1,419	21	--	--	1,644	--	--
2006	0	3	509	R 411	264	130	149	R 1,463	22	--	--	1,626	--	--
2007	0	3	396	220	198	151	352	1,318	2	--	--	1,635	--	--
Trillion Btu														
1960	1.1	0.0	1.4	0.4	0.0	1.6	2.2	5.5	0.7	4.4	0.0	0.7	12.4	14.0
1965	0.4	0.0	1.8	0.3	0.5	3.0	1.9	7.6	0.6	4.1	0.0	1.2	13.9	16.7
1970	0.1	1.1	2.7	0.5	0.4	2.9	2.4	8.8	0.6	4.3	0.0	2.7	17.6	24.1
1975	0.1	1.5	2.1	0.7	0.4	2.6	1.1	7.0	0.7	4.1	0.0	2.9	16.3	23.3
1980	(s)	1.6	2.9	0.9	0.1	1.5	0.9	6.3	0.7	9.5	0.0	4.3	22.5	32.7
1985	0.1	1.9	2.9	0.3	0.6	0.6	2.8	7.2	0.7	11.2	0.0	5.2	26.3	38.2
1990	(s)	1.8	3.2	0.3	0.4	0.7	0.8	5.5	0.2	2.1	0.0	4.7	14.4	25.3
1995	0.0	2.1	1.9	0.8	0.5	0.9	1.8	5.9	0.2	3.2	0.0	5.1	16.5	28.0
1996	0.0	2.0	1.9	0.7	0.5	1.3	2.1	6.5	0.2	2.9	0.0	5.2	16.9	28.8
1997	2.6	2.4	2.0	0.3	0.5	1.3	5.5	9.6	0.2	3.2	0.0	5.3	23.4	35.4
1998	0.0	2.1	2.2	0.5	0.4	1.1	2.0	6.2	0.2	2.7	0.0	5.2	16.5	28.4
1999	2.0	2.9	2.4	0.1	0.4	0.9	1.6	5.4	0.2	2.5	0.0	5.4	18.4	30.8
2000	0.0	4.0	2.2	0.8	0.4	1.3	1.7	6.5	0.2	3.0	0.0	5.6	19.3	32.0
2001	0.0	2.6	2.1	1.1	0.9	0.9	2.3	7.4	0.2	2.6	0.0	5.5	18.2	30.4
2002	0.0	3.1	2.0	0.8	0.9	0.8	1.3	5.9	0.2	1.3	0.0	5.4	15.9	28.0
2003	0.0	2.5	2.5	0.5	1.1	0.9	1.1	6.1	0.1	1.2	0.0	5.0	14.8	25.8
2004	0.0	2.8	3.4	0.5	1.2	0.9	3.5	9.6	0.2	1.5	0.0	5.4	19.5	31.4
2005	0.0	2.6	3.3	0.9	1.2	1.0	1.3	7.7	0.2	2.2	0.0	5.6	18.4	30.7
2006	0.0	2.8	3.0	R 1.5	1.4	0.8	1.0	R 7.6	0.2	2.3	0.0	5.5	R 18.4	R 30.4
2007	0.0	3.0	2.3	0.8	1.0	1.0	2.3	7.4	(s)	1.4	0.0	5.6	17.4	29.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	1	0	19	254	82	(s)	68	3,205	0	3,629	0	0	--	--	--
1965	(s)	0	25	185	79	1	44	3,665	0	4,000	0	0	--	--	--
1970	(s)	0	14	346	121	3	49	4,985	2	5,519	0	0	--	--	--
1975	(s)	0	11	504	129	1	45	5,591	2	6,284	0	0	--	--	--
1980	0	0	25	757	137	2	52	5,386	0	6,359	0	0	--	--	--
1985	0	(s)	22	977	201	13	47	5,656	0	6,916	0	0	--	--	--
1990	0	(s)	15	1,043	180	11	53	6,574	3	7,878	0	0	--	--	--
1995	0	(s)	12	1,981	127	15	51	7,116	0	9,302	0	0	--	--	--
1996	0	(s)	10	2,227	99	16	49	7,234	0	9,636	0	0	--	--	--
1997	0	(s)	12	1,809	106	17	52	7,504	0	9,501	0	0	--	--	--
1998	0	(s)	10	1,784	121	(s)	55	7,428	0	9,398	0	(s)	--	--	--
1999	0	(s)	12	2,006	143	2	55	7,610	0	9,828	0	0	--	--	--
2000	0	(s)	40	1,245	144	0	54	8,309	0	9,793	0	0	--	--	--
2001	0	(s)	44	1,690	120	(s)	50	7,844	0	9,748	0	0	--	--	--
2002	0	(s)	10	1,518	65	(s)	49	7,978	0	9,621	0	0	--	--	--
2003	0	(s)	9	1,519	68	4	45	8,088	0	9,733	0	0	--	--	--
2004	0	(s)	21	1,498	309	5	46	8,164	0	10,042	0	0	--	--	--
2005	0	(s)	26	1,506	423	8	46	8,166	0	10,174	R 46	0	--	--	--
2006	0	(s)	16	1,636	376	8	45	8,135	0	10,216	R 66	0	--	--	--
2007	0	(s)	16	1,589	317	4	46	8,149	0	10,122	96	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	0.0	0.0	37.0	0.0	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
2005	0.0	(s)	0.1	8.8	2.4	(s)	0.3	42.6	0.0	54.2	R 0.2	0.0	54.2	0.0	54.2
2006	0.0	(s)	0.1	9.5	2.1	(s)	0.3	42.4	0.0	54.5	R 0.2	0.0	54.5	0.0	54.5
2007	0.0	(s)	0.1	9.3	1.8	(s)	0.3	42.5	0.0	54.0	0.3	0.0	54.0	0.0	54.0

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Vermont

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	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	--
2005	0	(s)	0	12	0	12	4,072	1,190	--	0	0	11	2,116	--
2006	0	(s)	0	8	0	8	5,107	1,497	--	0	0	11	2,429	--
2007	0	(s)	0	9	0	9	4,704	645	--	0	0	11	2,488	--
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	1.0	0.0	0.0	0.0	5.8	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
2005	0.0	(s)	0.0	0.1	0.0	0.1	42.5	11.9	5.3	0.0	0.0	0.1	7.2	67.1
2006	0.0	(s)	0.0	(s)	0.0	(s)	53.3	14.8	5.8	0.0	0.0	0.1	8.3	82.5
2007	0.0	(s)	0.0	0.1	0.0	0.1	49.3	6.4	6.0	0.0	0.0	0.1	8.5	70.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/Losses <sup>i</sup>	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	12,141	66	14,146	4,441	1,146	31,077	17,825	9,512	78,148	0	1,267	--	--	--	--	--
1965	14,904	96	18,609	6,504	1,658	36,104	16,780	12,257	91,912	0	883	--	--	--	--	--
1970	11,294	137	24,640	11,093	2,412	48,684	33,373	12,231	132,434	0	691	--	--	--	--	--
1975	7,130	121	22,996	11,602	3,077	59,293	40,953	8,265	146,186	8,970	1,311	--	--	--	--	--
1980	9,291	158	24,599	12,279	3,131	59,035	24,651	15,736	139,431	11,466	892	--	--	--	--	--
1985	11,656	139	26,519	11,038	3,932	62,979	8,571	14,020	127,059	22,303	845	--	--	--	--	--
1990	13,960	184	29,812	15,806	4,088	70,333	7,807	11,097	138,942	23,820	1,309	--	--	--	--	--
1995	15,084	276	30,580	10,589	4,783	78,828	5,482	11,503	141,765	25,135	995	--	--	--	--	--
1996	16,931	260	35,832	9,204	5,156	79,164	4,082	12,644	146,082	26,286	1,429	--	--	--	--	--
1997	17,165	249	37,717	R 9,406	5,216	81,440	5,202	13,140	R 152,122	27,084	1,020	--	--	--	--	--
1998	17,320	260	35,855	R 10,192	4,006	82,197	7,332	14,127	R 153,709	27,234	1,283	--	--	--	--	--
1999	17,431	277	35,952	9,314	4,587	84,814	7,492	14,510	156,669	28,301	682	--	--	--	--	--
2000	19,606	269	39,664	9,943	6,097	85,628	9,895	13,345	164,572	28,321	712	--	--	--	--	--
2001	19,049	238	39,291	9,981	4,825	90,793	9,099	14,862	168,851	25,759	1,014	--	--	--	--	--
2002	18,876	258	37,379	9,955	5,345	91,548	6,734	13,256	164,216	27,346	868	--	--	--	--	--
2003	18,709	263	42,026	11,461	5,686	93,019	10,664	14,246	177,102	24,816	1,782	--	--	--	--	--
2004	18,205	277	45,636	16,754	5,452	94,821	11,525	15,508	189,696	28,315	1,583	--	--	--	--	--
2005	18,335	300	45,306	18,845	5,767	95,311	9,875	14,751	189,855	27,918	1,484	--	--	--	--	--
2006	17,289	274	45,937	18,809	5,171	97,076	3,709	14,513	185,214	27,594	1,351	--	--	--	--	--
2007	18,119	320	44,591	19,024	5,231	99,021	5,143	13,759	186,770	27,268	1,248	--	--	--	--	--
Trillion Btu																
1960	316.4	68.4	82.4	24.0	4.6	163.2	112.1	56.1	442.5	0.0	13.6	56.1	0.0	-45.5	0.0	851.5
1965	386.3	98.6	108.4	35.8	6.6	189.7	105.5	72.3	518.2	0.0	9.2	54.2	0.0	-15.8	0.0	1,050.8
1970	275.3	140.1	143.5	61.9	9.1	255.7	209.8	72.1	752.2	0.0	7.3	55.5	0.0	55.3	0.0	1,285.6
1975	169.2	123.6	133.9	64.9	11.4	311.5	257.5	49.5	828.8	98.8	13.6	53.2	0.0	77.0	0.0	1,364.2
1980	231.8	R 161.0	143.3	68.8	11.5	310.1	155.0	90.8	779.4	125.1	9.3	76.3	0.0	190.9	-0.1	1,573.6
1985	297.1	R 144.9	154.5	61.7	14.2	330.8	53.9	82.9	697.9	236.9	8.8	90.5	0.0	209.2	1.9	1,687.3
1990	355.1	R 192.1	173.7	88.5	14.8	369.5	49.1	67.5	763.0	252.1	13.6	90.4	0.3	295.8	1.3	1,963.7
1995	385.1	R 284.3	178.1	60.0	17.3	411.1	34.5	68.4	769.4	264.1	10.3	115.4	0.4	315.8	-0.5	2,144.3
1996	428.7	R 270.6	208.7	52.2	18.6	412.9	25.7	74.3	792.4	276.1	14.8	121.0	0.4	304.5	-0.7	2,207.8
1997	432.8	R 259.9	219.7	53.3	18.9	424.5	32.7	77.2	826.4	284.2	10.4	112.5	0.4	286.8	-0.4	R 2,213.1
1998	438.5	R 271.5	208.9	R 57.8	14.5	428.4	46.1	83.1	R 838.8	285.7	13.1	109.2	0.5	285.4	-0.2	R 2,242.6
1999	444.5	R 287.3	209.4	52.8	16.6	442.0	47.1	86.0	853.8	295.7	7.0	112.8	0.5	294.9	-0.2	2,296.5
2000	507.0	R 278.2	231.0	56.4	22.0	446.1	62.2	78.5	896.2	295.4	7.3	106.4	0.5	294.3	-0.5	2,384.7
2001	487.6	R 246.7	228.9	56.6	17.4	473.0	57.2	87.3	920.4	269.1	10.5	81.6	0.6	301.3	-0.2	2,317.5
2002	482.8	R 267.2	217.7	56.4	19.3	476.8	42.3	77.3	889.9	285.5	8.8	67.4	0.7	339.6	-0.1	2,341.8
2003	464.4	R 272.2	244.8	65.0	20.6	484.4	67.0	83.4	965.2	258.6	18.2	85.3	0.9	358.4	-0.4	2,422.7
2004	452.6	R 284.9	265.8	95.0	19.7	494.5	72.5	91.0	1,038.5	295.2	15.9	94.0	1.0	365.4	-0.1	2,547.3
2005	458.5	R 312.3	263.9	106.9	20.9	497.3	62.1	86.9	1,038.0	291.3	14.8	R 105.5	1.2	383.8	-0.2	R 2,605.2
2006	433.6	R 284.3	267.6	106.6	18.6	506.5	23.3	85.8	1,008.6	287.9	13.4	R 101.9	1.3	415.3	(s)	R 2,546.3
2007	457.9	332.7	259.7	107.9	18.8	516.8	32.3	81.1	1,016.6	286.0	12.3	100.3	1.6	403.6	-0.1	2,610.9

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	766	27	6,520	4,655	734	11,909	1,499	--	--	4,099	--	--	--
1965	454	36	7,471	4,847	1,133	13,452	1,110	--	--	6,557	--	--	--
1970	264	50	9,734	4,544	1,430	15,708	882	--	--	11,546	--	--	--
1975	97	49	9,091	2,056	1,561	12,708	925	--	--	15,871	--	--	--
1980	41	55	7,380	1,403	1,506	10,289	1,027	--	--	19,731	--	--	--
1985	60	49	5,738	3,611	1,805	11,154	1,259	--	--	22,568	--	--	--
1990	47	51	6,069	1,160	2,124	9,352	518	--	--	28,130	--	--	--
1995	37	69	5,162	1,220	2,874	9,256	779	--	--	33,472	--	--	--
1996	47	76	5,770	1,544	3,188	10,502	809	--	--	34,651	--	--	--
1997	20	74	5,214	1,583	3,438	10,235	618	--	--	33,923	--	--	--
1998	19	63	5,021	2,053	2,624	9,697	549	--	--	34,703	--	--	--
1999	15	69	4,951	1,548	2,927	9,426	578	--	--	35,779	--	--	--
2000	9	80	5,679	1,642	3,500	10,820	621	--	--	37,541	--	--	--
2001	14	70	5,187	1,681	3,179	10,046	395	--	--	37,325	--	--	--
2002	9	75	4,884	935	3,059	8,878	401	--	--	40,358	--	--	--
2003	14	85	5,144	1,261	3,869	10,274	422	--	--	40,877	--	--	--
2004	9	83	5,601	1,454	3,944	10,999	433	--	--	42,503	--	--	--
2005	10	85	5,390	1,426	3,787	10,603	R 530	--	--	44,662	--	--	--
2006	2	72	4,524	1,139	R 3,097	R 8,761	R 483	--	--	42,906	--	--	--
2007	8	81	4,358	740	3,474	8,572	532	--	--	45,481	--	--	--
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	200.9	162.3	363.2
1985	1.5	R 50.7	33.4	20.5	6.5	60.4	25.2	0.0	0.0	77.0	214.6	177.3	391.9
1990	1.2	53.6	35.4	6.6	7.7	49.6	10.4	0.1	0.1	96.0	211.0	221.9	432.9
1995	0.9	R 70.8	30.1	6.9	10.4	47.4	15.6	0.1	0.1	114.2	249.1	259.4	508.4
1996	1.2	R 79.2	33.6	8.8	11.5	53.9	16.2	0.1	0.1	118.2	268.7	268.9	537.6
1997	0.5	R 77.1	30.4	9.0	12.4	51.8	12.4	0.1	0.1	115.7	257.7	262.2	519.9
1998	0.5	R 66.0	29.2	11.6	9.5	50.4	11.0	0.1	0.1	118.4	246.5	268.5	515.0
1999	0.4	71.8	28.8	8.8	10.6	48.2	11.6	0.2	0.1	122.1	254.3	279.2	533.5
2000	0.2	R 82.5	33.1	9.3	12.6	55.0	12.4	0.2	0.1	128.1	278.4	291.4	569.7
2001	0.4	72.9	30.2	9.5	11.5	51.2	7.9	0.2	0.2	127.4	260.0	283.8	543.8
2002	0.2	78.2	28.4	5.3	11.1	44.8	8.0	0.2	0.2	137.7	269.4	307.0	576.3
2003	0.3	R 88.4	30.0	7.1	14.0	51.2	8.4	0.3	0.2	139.5	288.2	307.8	595.9
2004	0.2	R 85.0	32.6	8.2	14.3	55.1	8.7	0.3	0.2	145.0	294.5	320.9	615.4
2005	0.2	R 89.2	31.4	8.1	13.7	53.2	R 10.6	0.3	0.3	152.4	R 306.2	333.3	R 639.5
2006	0.1	74.5	26.4	6.5	R 11.2	R 44.0	R 9.7	0.4	0.4	146.4	R 275.4	316.6	R 592.0
2007	0.2	84.5	25.4	4.2	12.5	42.1	10.6	0.5	0.6	155.2	293.6	334.8	628.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	533	11	1,388	93	130	223	175	2,009	0	--	--	3,676	--	--	--
1965	342	15	1,591	97	200	275	211	2,373	0	--	--	6,192	--	--	--
1970	207	30	2,072	91	252	210	118	2,744	0	--	--	10,804	--	--	--
1975	226	32	1,935	41	275	310	245	2,807	0	--	--	14,014	--	--	--
1980	152	38	1,634	46	266	371	443	2,759	0	--	--	16,969	--	--	--
1985	211	34	2,747	214	319	456	443	4,179	0	--	--	21,491	--	--	--
1990	189	41	2,815	139	375	478	218	4,025	0	--	--	28,082	--	--	--
1995	248	57	2,657	275	507	132	205	3,776	0	--	--	33,051	--	--	--
1996	348	59	3,398	277	563	130	253	4,621	0	--	--	33,839	--	--	--
1997	162	62	2,974	372	607	137	128	4,217	0	--	--	34,165	--	--	--
1998	153	58	3,097	433	463	123	112	4,229	0	--	--	35,793	--	--	--
1999	109	62	2,864	317	517	166	182	4,045	0	--	--	36,893	--	--	--
2000	74	66	3,322	276	618	122	431	4,768	0	--	--	38,459	--	--	--
2001	115	60	2,959	228	561	124	282	4,154	0	--	--	39,329	--	--	--
2002	68	63	2,457	88	540	127	74	3,285	0	--	--	40,642	--	--	--
2003	92	64	3,150	195	683	123	405	4,556	0	--	--	41,179	--	--	--
2004	83	65	3,027	242	696	124	316	4,405	0	--	--	43,025	--	--	--
2005	111	66	2,980	203	668	115	83	4,049	0	--	--	44,670	--	--	--
2006	24	62	2,692	168	R 547	100	37	R 3,543	0	--	--	44,654	--	--	--
2007	69	66	2,088	162	613	116	18	2,998	0	--	--	46,971	--	--	--
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	R 35.3	16.0	1.2	1.1	2.4	2.8	23.5	0.0	0.6	0.0	73.3	137.9	168.9	306.8
1990	4.7	42.8	16.4	0.8	1.4	2.5	1.4	22.4	0.0	7.3	(s)	95.8	173.1	221.6	394.6
1995	6.2	R 58.7	15.5	1.6	1.8	0.7	1.3	20.8	0.0	5.4	0.1	112.8	204.0	256.1	460.1
1996	8.7	R 61.6	19.8	1.6	2.0	0.7	1.6	25.7	0.0	9.1	0.1	115.5	220.5	262.6	483.1
1997	4.0	R 64.6	17.3	2.1	2.2	0.7	0.8	23.1	0.0	9.5	0.2	116.6	217.9	264.1	482.0
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	497.4
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	287.9	512.3
2000	1.9	R 68.4	19.3	1.6	2.2	0.6	2.7	26.5	0.0	10.1	0.2	131.2	238.2	298.5	536.7
2001	2.9	R 62.1	17.2	1.3	2.0	0.6	1.8	23.0	0.0	6.2	0.3	134.2	228.5	299.0	527.5
2002	1.7	65.0	14.3	0.5	2.0	0.7	0.5	17.9	0.0	5.4	0.3	138.7	228.9	309.1	538.0
2003	2.3	R 66.3	18.3	1.1	2.5	0.6	2.5	25.1	0.0	6.4	0.4	140.5	240.9	310.0	551.0
2004	2.1	R 66.3	17.6	1.4	2.5	0.6	2.0	24.2	0.0	7.2	0.4	146.8	246.9	324.8	571.7
2005	2.8	R 68.8	17.4	1.2	2.4	0.6	0.5	22.0	0.0	R 7.7	0.5	152.4	254.2	333.4	R 587.6
2006	0.6	R 64.8	15.7	1.0	2.0	0.5	0.2	19.4	0.0	R 7.5	0.5	152.4	245.1	329.5	R 574.6
2007	1.7	69.4	12.2	0.9	2.2	0.6	0.1	16.0	0.0	6.9	0.6	160.3	254.7	345.8	600.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	4,503	22	2,133	275	882	5,739	3,931	12,961	79	--	--	3,786	--	--	--
1965	5,824	36	2,977	301	838	6,754	6,164	17,033	87	--	--	5,834	--	--	--
1970	4,172	45	4,415	682	653	4,170	5,954	15,874	41	--	--	7,467	--	--	--
1975	2,816	37	3,128	1,184	460	7,611	5,490	17,872	38	--	--	9,437	--	--	--
1980	3,538	55	3,573	1,312	278	5,203	13,540	23,905	27	--	--	11,637	--	--	--
1985	4,219	51	3,389	1,707	686	3,408	9,582	18,772	27	--	--	13,561	--	--	--
1990	4,641	75	3,625	1,526	705	2,853	9,186	17,896	0	--	--	16,399	--	--	--
1995	3,551	99	3,661	1,338	718	1,777	9,404	16,899	14	--	--	18,554	--	--	--
1996	3,594	86	4,366	1,349	766	1,790	10,241	18,512	9	--	--	19,021	--	--	--
1997	3,486	87	4,997	1,124	801	2,412	10,604	19,938	13	--	--	19,249	--	--	--
1998	3,385	94	4,431	884	794	2,012	10,995	19,115	11	--	--	20,024	--	--	--
1999	3,249	97	4,279	1,130	571	1,704	11,977	19,661	13	--	--	20,269	--	--	--
2000	3,425	78	4,857	1,945	569	1,867	10,777	20,015	13	--	--	20,619	--	--	--
2001	3,492	67	5,091	1,078	1,377	1,220	12,282	21,048	1	--	--	19,702	--	--	--
2002	3,382	77	4,570	1,727	1,392	686	11,599	19,974	2	--	--	19,521	--	--	--
2003	3,403	71	5,797	1,084	1,398	2,092	12,210	22,581	6	--	--	19,282	--	--	--
2004	3,230	76	6,758	766	1,741	2,446	13,205	24,916	(s)	--	--	19,734	--	--	--
2005	3,295	76	7,105	1,244	1,639	2,406	12,433	24,827	13	--	--	19,354	--	--	--
2006	3,068	74	6,872	R 1,455	1,732	1,126	12,690	R 23,874	6	--	--	18,998	--	--	--
2007	3,130	75	7,114	1,081	1,081	1,631	12,192	23,099	7	--	--	18,925	--	--	--
Trillion Btu															
1960	114.9	23.3	12.4	1.1	4.6	36.1	24.5	78.8	0.8	25.5	0.0	12.9	256.2	32.0	288.2
1965	147.4	36.6	17.3	1.2	4.4	42.5	38.0	103.4	0.9	31.6	0.0	19.9	339.8	47.5	387.3
1970	99.3	46.0	25.7	2.6	3.4	26.2	36.2	94.2	0.4	37.5	0.0	25.5	302.8	61.7	364.5
1975	66.1	37.3	18.2	4.4	2.4	47.9	33.8	106.7	0.4	34.4	0.0	32.2	277.0	77.4	354.5
1980	88.1	55.4	20.8	4.8	1.5	32.7	78.2	138.0	0.3	55.3	0.0	39.7	376.7	95.7	472.5
1985	106.7	R 52.8	19.7	6.1	3.6	21.4	57.6	108.6	0.3	64.8	0.0	46.3	379.2	106.6	485.8
1990	117.9	R 78.4	21.1	5.5	3.7	17.9	56.5	104.8	0.0	66.1	0.0	56.0	423.1	129.4	552.5
1995	90.7	R 101.8	21.3	4.8	3.7	11.2	56.3	97.4	0.1	81.4	0.0	63.3	434.7	143.8	578.5
1996	91.9	R 88.9	25.4	4.9	4.0	11.3	60.6	106.1	0.1	82.2	0.0	64.9	433.8	147.6	581.4
1997	88.8	R 90.4	29.1	4.1	4.2	15.2	62.7	115.2	0.1	78.0	0.0	65.7	438.0	148.8	586.8
1998	86.8	R 98.2	25.8	3.2	4.1	12.6	65.2	111.0	0.1	76.3	0.0	68.3	440.6	154.9	595.5
1999	83.4	R 100.3	24.9	4.1	3.0	10.7	71.4	114.1	0.1	78.0	0.0	69.2	445.1	158.2	603.3
2000	91.5	R 80.8	28.3	7.0	3.0	11.7	63.8	113.8	0.1	78.2	0.0	70.4	434.6	160.0	594.6
2001	92.9	69.4	29.7	3.9	7.2	7.7	72.6	121.0	(s)	61.0	0.0	67.2	411.5	149.8	561.3
2002	88.9	79.8	26.6	6.2	7.2	4.3	67.8	112.2	(s)	42.4	0.0	66.6	389.9	148.5	538.4
2003	90.9	R 73.8	33.8	3.9	7.3	13.1	71.7	129.9	0.1	58.4	0.0	65.8	418.6	145.2	563.8
2004	86.1	77.6	39.4	2.8	9.1	15.4	77.8	144.4	(s)	64.0	0.0	67.3	439.4	149.0	588.4
2005	86.9	79.9	41.4	4.5	8.6	15.1	73.7	143.3	0.1	73.4	0.0	66.0	449.7	144.4	594.1
2006	80.6	77.1	40.0	R 5.2	9.0	7.1	75.4	R 136.8	0.1	72.2	0.0	64.8	R 431.6	140.2	R 571.8
2007	82.3	78.2	41.4	3.9	5.6	10.3	72.1	133.3	0.1	69.6	0.0	64.6	428.1	139.3	567.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	77	4	382	4,099	4,441	7	451	29,972	11,780	51,134	0	0	--	--	--
1965	19	7	721	6,564	6,504	24	428	34,992	9,645	58,877	0	0	--	--	--
1970	7	8	356	7,698	11,093	47	430	47,821	12,000	79,446	0	0	--	--	--
1975	(s)	3	251	8,217	11,602	57	427	58,524	6,356	85,436	0	0	--	--	--
1980	0	8	218	11,219	12,279	47	530	58,386	4,419	87,098	0	32	--	--	--
1985	0	4	131	14,305	11,038	102	482	61,837	3,419	91,313	646	60	--	--	--
1990	0	7	70	16,749	15,806	63	542	69,150	3,316	105,696	374	86	--	--	--
1995	0	6	85	18,418	10,589	64	518	77,978	1,923	109,575	1	86	--	--	--
1996	0	8	79	21,422	9,204	56	502	78,268	1,217	110,748	944	85	--	--	--
1997	0	8	50	22,274	R 9,406	48	531	80,503	1,453	R 114,264	729	83	--	--	--
1998	0	7	90	22,842	R 10,192	35	555	81,280	1,258	R 116,253	910	88	--	--	--
1999	0	8	106	23,217	9,314	14	561	84,077	1,220	118,509	780	91	--	--	--
2000	0	8	97	24,840	9,943	35	553	84,937	4,225	124,630	884	96	--	--	--
2001	0	8	165	24,618	9,981	8	507	89,292	1,048	125,618	825	97	--	--	--
2002	0	8	134	24,930	9,955	18	501	90,030	838	126,404	1,455	97	--	--	--
2003	0	7	117	25,375	11,461	51	463	91,498	1,566	130,530	1,920	172	--	--	--
2004	0	6	138	29,026	16,754	46	469	92,956	1,829	141,219	2,016	162	--	--	--
2005	0	5	223	28,426	18,845	67	466	93,557	1,930	143,515	R 1,580	163	--	--	--
2006	0	6	61	31,389	18,809	72	454	95,243	1,695	147,724	R 4,071	163	--	--	--
2007	0	7	197	29,916	19,024	63	469	97,824	1,327	148,820	5,350	193	--	--	--
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	2.3	0.2	502.3	0.5	502.8
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	3.3	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	R 57.8	0.1	3.4	423.6	7.9	626.3	3.2	0.3	R 634.0	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	3.1	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	2.9	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	6.8	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	7.1	0.6	770.6	1.2	771.8
2005	0.0	5.3	1.1	165.6	106.9	0.2	2.8	488.2	12.1	776.9	R 5.6	0.6	782.8	1.2	784.1
2006	0.0	5.8	0.3	182.8	106.6	0.3	2.8	497.0	10.7	800.4	R 14.4	0.6	806.8	1.2	808.0
2007	0.0	7.4	1.0	174.3	107.9	0.2	2.8	510.5	8.3	805.1	18.9	0.7	813.1	1.4	814.5

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	(s)	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	--
2005	14,920	67	5,456	1,405	0	6,862	27,918	1,471	--	0	0	0	0	--
2006	14,194	60	851	460	0	1,312	27,594	1,345	--	0	0	0	0	--
2007	14,913	91	2,166	1,115	0	3,281	27,268	1,242	--	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	6.6	0.0	(s)	0.0	0.0	525.8
1995	287.3	R 46.4	9.9	4.0	0.0	13.9	264.1	10.1	12.9	0.0	(s)	0.0	0.0	634.6
1996	326.9	R 32.7	5.2	5.1	0.0	10.3	276.1	14.7	13.5	0.0	0.0	0.0	0.0	674.0
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	R 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	R 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	R 38.1	21.2	5.6	0.0	26.8	295.4	7.1	5.7	0.0	0.0	0.0	0.0	786.3
2001	391.4	34.1	41.2	8.4	0.0	49.5	269.1	10.5	6.6	0.0	0.0	0.0	0.0	761.2
2002	391.9	35.8	32.3	3.1	0.0	35.4	285.5	8.8	11.6	0.0	0.0	0.0	(s)	769.0
2003	370.9	36.2	41.5	14.9	0.0	56.4	258.6	18.2	12.0	0.0	0.0	0.0	(s)	752.3
2004	364.2	50.1	43.6	7.1	0.0	50.7	295.2	15.9	14.1	0.0	0.0	0.0	0.0	790.2
2005	368.6	69.1	34.3	8.2	0.0	42.5	291.3	14.7	13.8	0.0	0.0	0.0	0.0	799.9
2006	352.4	62.1	5.4	2.7	0.0	8.0	287.9	13.3	12.5	0.0	0.0	0.0	0.0	736.3
2007	373.7	93.3	13.6	6.5	0.0	20.1	286.0	12.3	13.1	0.0	0.0	0.0	0.0	798.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh		Wood and Waste <sup>f,g</sup>				
1960	608	65	18,123	4,502	548	23,076	9,300	7,709	63,257	0	34,349	--	--	--	--	--
1965	488	108	17,116	6,919	1,227	26,906	9,140	10,629	71,937	0	49,295	--	--	--	--	--
1970	245	150	18,201	10,637	1,659	36,068	10,384	13,212	90,161	2,614	69,525	--	--	--	--	--
1975	4,492	164	16,970	14,037	763	41,007	8,459	16,386	97,622	3,308	83,708	--	--	--	--	--
1980	5,443	129	18,471	12,036	1,487	42,653	17,277	13,446	105,370	2,041	83,111	--	--	--	--	--
1985	5,616	135	20,008	15,417	2,466	44,020	11,406	15,114	108,432	8,038	77,053	--	--	--	--	--
1990	5,147	163	20,155	22,343	2,292	53,464	16,272	21,122	135,649	5,742	87,467	--	--	--	--	--
1995	4,158	254	21,307	23,039	2,913	58,836	17,305	23,908	147,310	6,942	82,500	--	--	--	--	--
1996	5,682	274	22,488	22,323	3,195	61,611	12,768	25,075	147,460	5,588	98,518	--	--	--	--	--
1997	4,948	256	24,543	R 22,464	5,116	61,213	12,924	22,709	R 148,970	6,244	104,171	--	--	--	--	--
1998	6,241	290	21,859	R 21,879	4,716	61,833	9,632	29,206	R 149,126	6,916	79,815	--	--	--	--	--
1999	5,838	287	24,237	22,155	4,458	63,239	7,989	31,723	153,801	6,086	96,989	--	--	--	--	--
2000	6,501	287	25,122	24,726	6,456	63,053	7,551	25,689	152,597	8,605	80,263	--	--	--	--	--
2001	6,151	312	24,128	21,815	7,083	63,492	6,415	19,627	142,561	8,250	54,734	--	--	--	--	--
2002	6,252	234	24,826	18,076	4,830	64,544	5,447	18,481	136,204	9,048	78,167	--	--	--	--	--
2003	7,427	250	23,551	17,493	2,735	64,317	6,071	19,434	133,600	7,615	71,757	--	--	--	--	--
2004	6,986	262	24,003	19,219	2,752	64,302	6,535	20,042	136,854	8,982	71,576	--	--	--	--	--
2005	7,067	265	24,753	18,480	2,779	65,216	7,785	22,067	141,080	8,242	72,075	--	--	--	--	--
2006	4,219	263	29,918	18,588	R 2,773	65,712	6,207	22,694	R 145,891	9,328	82,008	--	--	--	--	--
2007	5,818	273	30,471	20,451	2,667	65,893	9,983	22,687	152,152	8,109	78,829	--	--	--	--	--
Trillion Btu																
1960	15.2	67.2	105.6	24.4	2.2	121.2	58.5	45.1	356.9	0.0	369.6	58.5	0.0	-59.9	-0.2	807.4
1965	12.1	116.2	99.7	38.2	4.9	141.3	57.5	64.4	406.0	0.0	515.3	66.2	0.0	-117.5	-1.6	996.8
1970	5.9	158.2	106.0	59.3	6.3	189.5	65.3	80.3	506.7	28.7	729.6	66.5	0.0	-203.4	2.1	1,294.3
1975	76.2	171.2	98.8	78.8	2.8	215.4	53.2	99.8	548.9	36.4	871.1	64.3	0.0	-314.7	5.9	1,459.3
1980	91.0	135.5	107.6	67.5	5.5	224.1	108.6	81.5	594.7	22.3	863.4	88.3	0.0	-159.3	2.9	1,638.7
1985	93.7	R 140.0	116.5	86.6	8.9	231.2	71.7	92.5	607.5	85.4	805.0	112.0	0.0	-118.9	3.1	1,727.7
1990	85.6	R 167.6	117.4	126.0	8.3	280.8	102.3	128.3	763.2	60.8	909.8	93.4	0.4	-22.6	1.4	2,059.6
1995	69.8	264.5	124.1	130.4	10.6	306.8	108.8	145.0	825.7	72.9	850.7	90.1	0.6	-44.6	-2.6	2,127.0
1996	90.9	283.9	131.0	126.5	11.5	321.4	80.3	152.4	823.1	58.7	1,018.7	89.7	0.6	-241.6	15.7	2,139.7
1997	80.5	268.1	143.0	R 127.4	18.5	319.1	81.3	138.4	827.6	65.5	1,063.9	94.2	0.6	-240.1	12.4	2,172.7
1998	103.5	303.3	127.3	R 124.1	17.0	322.3	60.6	177.7	R 829.0	72.6	813.9	87.1	0.7	16.0	8.4	R 2,234.4
1999	96.9	302.3	141.2	125.6	16.1	329.5	50.2	192.9	855.6	63.6	991.8	89.4	0.7	-83.5	6.2	2,322.9
2000	106.2	297.6	146.3	140.2	23.3	328.5	47.5	157.2	843.0	89.7	818.8	89.6	0.7	-18.9	-3.9	2,222.8
2001	99.4	322.4	140.5	123.7	25.6	330.8	40.3	119.1	780.0	86.2	565.6	92.7	0.6	35.7	-17.3	1,965.4
2002	100.8	238.2	144.6	102.5	17.5	336.1	34.2	112.3	747.3	94.5	795.2	87.6	4.9	-205.1	-4.1	1,859.2
2003	118.2	255.1	137.2	99.2	9.9	334.9	38.2	117.4	736.8	79.4	734.9	95.7	6.9	-145.8	-6.7	1,874.4
2004	112.5	268.5	139.8	109.0	10.0	335.3	41.1	121.3	756.5	93.7	717.3	R 92.6	8.1	-113.5	-16.5	1,919.2
2005	112.3	272.7	144.2	104.8	10.1	340.3	48.9	133.5	781.8	86.0	720.7	R 83.4	5.8	-83.1	-10.3	R 1,969.3
2006	69.2	271.6	174.3	105.4	R 10.0	342.9	39.0	137.4	R 809.0	97.3	813.4	R 107.0	11.1	-111.9	-29.5	R 2,037.1
2007	95.7	279.7	177.5	116.0	9.6	343.9	62.8	137.1	846.8	85.0	779.1	82.5	25.0	-115.5	-11.1	2,067.2

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	106	8	7,303	0	347	7,650	888	--	--	8,755	--	--	--
1965	83	17	6,495	9	894	7,399	624	--	--	11,015	--	--	--
1970	19	32	7,035	115	1,145	8,296	479	--	--	15,355	--	--	--
1975	6	34	4,806	203	404	5,413	513	--	--	19,209	--	--	--
1980	34	30	3,422	65	626	4,113	487	--	--	24,445	--	--	--
1985	47	33	3,010	86	553	3,648	849	--	--	27,933	--	--	--
1990	13	40	2,675	49	657	3,381	665	--	--	28,809	--	--	--
1995	10	53	2,003	86	1,237	3,327	854	--	--	30,147	--	--	--
1996	3	63	2,202	110	1,258	3,570	886	--	--	32,012	--	--	--
1997	2	62	1,851	133	2,404	4,389	749	--	--	31,749	--	--	--
1998	2	62	1,757	123	2,182	4,062	666	--	--	31,362	--	--	--
1999	2	72	1,891	86	2,005	3,983	701	--	--	32,817	--	--	--
2000	2	72	1,737	65	2,070	3,872	754	--	--	33,036	--	--	--
2001	2	84	1,896	101	2,255	4,252	1,189	--	--	31,608	--	--	--
2002	3	73	1,896	35	3,078	5,008	1,207	--	--	32,066	--	--	--
2003	3	71	1,456	101	1,776	3,332	1,271	--	--	31,872	--	--	--
2004	2	71	1,354	69	1,768	3,191	1,303	--	--	32,455	--	--	--
2005	0	74	1,250	54	1,958	3,262	<sup>R</sup> 660	--	--	33,212	--	--	--
2006	<sup>R</sup> (s)	75	1,229	31	<sup>R</sup> 1,908	<sup>R</sup> 3,169	<sup>R</sup> 601	--	--	34,439	--	--	--
2007	(s)	80	1,102	13	1,840	2,954	663	--	--	35,389	--	--	--
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	201.0	348.8
1985	1.1	<sup>R</sup> 34.3	17.5	0.5	2.0	20.0	17.0	0.0	0.0	95.3	167.7	219.5	387.2
1990	0.3	<sup>R</sup> 41.6	15.6	0.3	2.4	18.2	13.3	(s)	0.4	98.3	172.0	227.3	399.3
1995	0.2	55.0	11.7	0.5	4.5	16.6	17.1	(s)	0.4	102.9	192.2	233.6	425.8
1996	0.1	65.1	12.8	0.6	4.5	18.0	17.7	(s)	0.4	109.2	210.5	248.4	458.9
1997	0.1	64.8	10.8	0.8	8.7	20.2	15.0	(s)	0.4	108.3	208.8	245.4	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	256.1	476.8
2000	0.1	74.8	10.1	0.4	7.5	18.0	15.1	(s)	0.3	112.7	221.0	256.4	477.3
2001	0.1	87.4	11.0	0.6	8.1	19.8	23.8	(s)	0.3	107.8	239.1	240.3	479.5
2002	0.1	74.6	11.0	0.2	11.1	22.4	24.1	(s)	0.3	109.4	230.9	243.9	474.8
2003	0.1	72.7	8.5	0.6	6.4	15.5	25.4	(s)	0.2	108.7	222.7	240.0	462.7
2004	0.1	72.5	7.9	0.4	6.4	14.7	26.1	(s)	0.2	110.7	224.3	245.0	469.3
2005	0.0	76.0	7.3	0.3	7.1	14.7	<sup>R</sup> 13.2	(s)	0.1	113.3	<sup>R</sup> 217.4	247.9	<sup>R</sup> 465.2
2006	<sup>R</sup> (s)	77.9	7.2	0.2	<sup>R</sup> 6.9	<sup>R</sup> 14.2	<sup>R</sup> 12.0	0.1	0.1	117.5	<sup>R</sup> 221.9	254.1	<sup>R</sup> 476.0
2007	(s)	82.3	6.4	0.1	6.6	13.1	13.3	0.1	0.1	120.7	229.6	260.5	490.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass			Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>								
	Thousand Short Tons	Billion Cubic Feet							Thousand Barrels							
1960	74	6	2,308	0	61	222	441	3,032	0	--	--	3,220	--	--	--	
1965	63	11	2,053	1	158	255	412	2,880	0	--	--	4,380	--	--	--	
1970	15	18	2,224	15	202	304	481	3,226	0	--	--	6,723	--	--	--	
1975	14	32	1,519	26	71	374	355	2,345	0	--	--	10,377	--	--	--	
1980	127	31	1,073	18	111	478	426	2,105	0	--	--	13,845	--	--	--	
1985	168	35	4,154	206	98	357	748	5,562	0	--	--	18,965	--	--	--	
1990	53	39	1,865	14	116	281	53	2,329	85	--	--	21,510	--	--	--	
1995	68	43	1,264	14	218	59	110	1,665	83	--	--	23,912	--	--	--	
1996	21	48	989	8	222	60	168	1,447	77	--	--	25,147	--	--	--	
1997	19	47	1,087	13	424	60	45	1,630	79	--	--	25,209	--	--	--	
1998	12	46	856	24	385	63	33	1,362	75	--	--	25,876	--	--	--	
1999	15	51	950	12	354	321	28	1,665	82	--	--	26,695	--	--	--	
2000	18	50	902	12	365	275	27	1,580	70	--	--	28,047	--	--	--	
2001	20	57	1,204	22	398	146	7	1,776	57	--	--	27,528	--	--	--	
2002	20	46	1,155	23	543	187	3	1,912	0	--	--	27,528	--	--	--	
2003	23	48	1,067	29	313	83	1	1,493	53	--	--	28,039	--	--	--	
2004	21	48	746	30	312	85	0	1,173	73	--	--	28,226	--	--	--	
2005	0	50	1,038	48	345	137	0	1,569	49	--	--	28,100	--	--	--	
2006	<sup>R</sup> (s)	51	1,018	22	<sup>R</sup> 337	137	1	<sup>R</sup> 1,514	62	--	--	28,580	--	--	--	
2007	(s)	54	783	10	325	168	(s)	1,287	45	--	--	29,599	--	--	--	
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	208.5	
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	149.0	287.3	
1990	1.1	39.8	10.9	0.1	0.4	1.5	0.3	13.2	0.9	1.5	0.1	73.4	129.9	169.7	299.6	
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	325.3	
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	195.1	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	200.2	346.8	
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	208.3	365.4	
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	209.3	377.3	
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	209.4	365.5	
2003	0.5	48.9	6.2	0.2	1.1	0.4	(s)	8.0	0.5	4.5	0.5	95.7	158.5	211.1	369.6	
2004	0.5	<sup>R</sup> 49.5	4.3	0.2	1.1	0.4	0.0	6.1	0.7	4.4	0.5	96.3	158.0	213.1	371.1	
2005	0.0	51.3	6.0	0.3	1.3	0.7	0.0	8.3	0.5	<sup>R</sup> 2.1	0.6	95.9	158.7	209.7	<sup>R</sup> 368.4	
2006	<sup>R</sup> (s)	53.0	5.9	0.1	<sup>R</sup> 1.2	0.7	(s)	<sup>R</sup> 8.0	0.6	<sup>R</sup> 2.0	0.6	97.5	161.7	210.9	<sup>R</sup> 372.5	
2007	(s)	55.1	4.6	0.1	1.2	0.9	(s)	6.7	0.4	2.1	0.7	101.0	166.0	217.9	383.9	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	420	50	5,937	134	802	7,137	5,134	19,144	195	--	--	13,975	--	--
1965	341	79	5,546	155	765	7,281	9,804	23,551	190	--	--	18,703	--	--
1970	210	93	4,986	274	551	7,874	12,331	26,015	135	--	--	25,530	--	--
1975	463	92	4,025	250	438	5,924	15,456	26,094	181	--	--	27,416	--	--
1980	332	64	4,350	658	278	6,538	12,506	24,331	129	--	--	31,366	--	--
1985	208	63	2,689	1,487	692	5,167	14,164	24,199	129	--	--	29,431	--	--
1990	229	78	3,976	1,228	658	1,989	20,233	28,084	189	--	--	40,712	--	--
1995	223	110	3,724	1,278	555	644	23,090	29,291	197	--	--	34,276	--	--
1996	152	114	3,700	1,568	565	323	24,190	30,345	178	--	--	31,247	--	--
1997	156	111	3,449	2,190	593	303	21,860	28,395	217	--	--	33,956	--	--
1998	117	133	4,299	2,049	491	255	28,178	35,272	163	--	--	37,616	--	--
1999	95	124	3,608	2,085	506	351	30,810	37,361	216	--	--	39,499	--	--
2000	126	84	2,953	4,003	533	888	24,758	33,135	32	--	--	35,410	--	--
2001	128	75	3,586	4,405	1,040	138	18,878	28,046	3	--	--	19,339	--	--
2002	103	68	3,193	1,182	1,103	156	17,692	23,326	178	--	--	15,792	--	--
2003	90	66	2,886	545	1,115	83	18,642	23,270	2	--	--	18,180	--	--
2004	84	68	2,434	569	1,272	19	19,298	23,593	2	--	--	19,259	--	--
2005	71	67	2,900	237	1,261	12	21,262	25,672	2	--	--	22,112	--	--
2006	94	71	3,707	R 284	1,311	7	22,027	R 27,336	2	--	--	22,013	--	--
2007	136	74	3,970	336	969	3	22,044	27,322	3	--	--	20,753	--	--
Trillion Btu														
1960	10.9	51.8	34.6	0.5	4.2	44.9	31.6	115.8	2.1	40.4	0.0	47.7	117.9	386.7
1965	8.8	85.3	32.3	0.6	4.0	45.8	59.9	142.6	2.0	53.5	0.0	63.8	152.4	508.4
1970	5.1	98.3	29.0	1.0	2.9	49.5	75.4	157.8	1.4	56.8	0.0	87.1	210.8	617.3
1975	10.9	96.0	23.4	0.9	2.3	37.2	94.6	158.5	1.9	53.9	0.0	93.5	225.0	639.6
1980	7.1	67.0	25.3	2.4	1.5	41.1	76.2	146.5	1.3	78.3	0.0	107.0	258.0	665.2
1985	4.5	65.7	15.7	5.4	3.6	32.5	87.0	144.2	1.4	91.7	0.0	100.4	231.3	639.1
1990	5.2	R 80.8	23.2	4.5	3.5	12.5	123.2	166.8	2.0	75.0	0.0	138.9	321.2	789.8
1995	4.2	114.6	21.7	4.6	2.9	4.1	140.3	173.6	2.0	64.7	0.0	117.0	265.6	741.8
1996	3.0	118.6	21.6	5.7	2.9	2.0	147.4	179.6	1.8	62.9	0.0	106.6	242.4	715.1
1997	3.2	116.6	20.1	7.9	3.1	1.9	133.6	166.6	2.2	70.1	0.0	115.9	262.5	737.0
1998	2.7	139.3	25.0	7.4	2.6	1.6	171.9	208.5	1.7	64.9	0.0	128.3	291.1	836.5
1999	2.2	131.0	21.0	7.5	2.6	2.2	187.7	221.1	2.2	65.6	0.0	134.8	308.3	865.2
2000	2.8	87.3	17.2	14.4	2.8	5.6	151.9	191.9	0.3	62.2	0.0	120.8	274.8	740.2
2001	2.9	77.6	20.9	15.9	5.4	0.9	114.7	157.8	(s)	57.3	0.0	66.0	147.0	508.7
2002	2.3	68.9	18.6	4.3	5.7	1.0	107.8	137.4	1.8	50.1	0.0	53.9	120.1	434.5
2003	2.1	67.4	16.8	2.0	5.8	0.5	112.9	138.0	(s)	53.0	0.0	62.0	136.9	459.4
2004	1.8	69.3	14.2	2.1	6.6	0.1	117.1	140.1	(s)	51.1	0.0	65.7	145.4	473.5
2005	1.5	69.0	16.9	0.9	6.6	0.1	128.9	153.4	(s)	56.9	0.0	75.4	165.0	521.3
2006	2.0	73.1	21.6	R 1.0	6.8	(s)	133.6	R 163.1	(s)	R 82.2	0.0	75.1	R 395.5	R 557.9
2007	3.2	75.5	23.1	1.2	5.1	(s)	133.4	162.8	(s)	55.9	0.0	70.8	368.3	521.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	7	(s)	2,161	2,574	4,502	6	413	22,052	1,707	33,415	0	1	--	--	--
1965	1	1	434	3,022	6,919	21	381	25,886	1,443	38,104	0	2	--	--	--
1970	(s)	6	351	3,956	10,637	38	400	35,213	2,025	52,620	0	2	--	--	--
1975	(s)	6	274	6,616	14,036	37	428	40,196	2,109	63,696	0	2	--	--	--
1980	0	4	356	9,955	12,036	92	501	41,897	10,112	74,589	0	2	--	--	--
1985	0	3	202	10,139	15,417	329	456	42,971	5,492	75,005	14	14	--	--	--
1990	0	5	313	11,609	22,343	291	513	52,525	14,229	101,823	201	16	--	--	--
1995	0	9	229	14,082	23,039	179	490	58,222	16,551	112,793	731	18	--	--	--
1996	0	7	292	15,233	22,323	148	475	60,986	12,277	111,734	324	17	--	--	--
1997	0	9	202	17,668	R 22,464	97	502	60,559	12,576	R 114,068	615	18	--	--	--
1998	0	9	356	14,863	R 21,879	100	525	61,279	9,345	R 108,347	827	18	--	--	--
1999	0	8	283	17,767	22,155	13	531	62,412	7,610	110,771	700	20	--	--	--
2000	0	6	332	18,748	24,726	18	523	62,246	6,635	113,227	790	18	--	--	--
2001	0	9	148	16,924	21,815	25	479	62,306	6,271	107,968	570	19	--	--	--
2002	0	7	258	18,541	18,076	27	473	63,254	5,288	105,918	1,653	19	--	--	--
2003	0	7	225	18,113	17,493	101	438	63,119	5,987	105,475	1,592	42	--	--	--
2004	0	9	202	19,415	19,219	104	443	62,945	6,515	108,844	533	42	--	--	--
2005	0	9	262	19,543	18,480	239	441	63,818	7,773	110,556	R 2,068	2	--	--	--
2006	0	7	184	23,925	18,588	244	430	64,264	6,199	113,833	R 2,267	1	--	--	--
2007	0	8	176	24,589	20,451	167	444	64,756	9,979	120,562	2,868	2	--	--	--
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	(s)	(s)	414.0	0.1	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	1.1	0.1	622.8	0.1	622.9
1997	0.0	9.4	1.0	102.9	R 127.4	0.4	3.0	315.7	79.1	R 629.5	2.2	0.1	638.9	0.1	R 639.1
1998	0.0	9.7	1.8	86.6	R 124.1	0.4	3.2	319.4	58.8	R 594.1	2.9	0.1	R 603.9	0.1	R 604.0
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	2.0	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	5.9	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	5.6	0.1	582.3	0.3	582.6
2004	0.0	9.4	1.0	113.1	109.0	0.4	2.7	328.3	41.0	595.4	1.9	0.1	604.9	0.3	605.3
2005	0.0	9.0	1.3	113.8	104.8	0.9	2.7	333.0	48.9	605.4	R 7.3	(s)	614.3	(s)	614.4
2006	0.0	R 7.3	0.9	139.4	105.4	0.9	2.6	335.3	39.0	623.5	R 8.0	(s)	630.8	(s)	630.8
2007	0.0	8.1	0.9	143.2	116.0	0.6	2.7	338.0	62.7	664.1	10.2	(s)	672.2	(s)	672.2

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Washington

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	6,996	66	0	21	0	21	8,242	72,023	--	0	0	498	-3,005	--
2006	4,125	59	0	39	0	39	9,328	81,944	--	0	0	1,038	-8,657	--
2007	5,681	57	0	27	0	27	8,109	78,781	--	0	0	2,438	-3,259	--
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	7.4	0.0	0.0	0.0	-17.3	829.0
2002	98.0	40.6	0.0	0.2	0.0	0.2	94.5	793.4	9.1	0.0	0.0	4.2	-4.1	1,035.9
2003	115.5	59.1	0.0	0.2	0.0	0.2	79.4	734.3	12.8	0.0	0.0	6.2	-6.7	1,000.7
2004	110.2	67.7	0.0	0.3	0.0	0.3	93.7	716.6	11.0	0.0	0.0	7.4	-16.5	990.2
2005	110.8	67.3	0.0	0.1	0.0	0.1	86.0	720.2	11.2	0.0	0.0	5.0	-10.3	990.3
2006	67.1	60.3	0.0	0.2	0.0	0.2	97.3	812.8	10.9	0.0	0.0	10.3	-29.5	1,029.4
2007	92.5	58.6	0.0	0.2	0.0	0.2	85.0	778.7	11.2	0.0	0.0	24.1	-11.1	1,039.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	14,058	150	2,473	169	558	11,609	1,481	6,574	22,864	0	938	--	--	--	--	--
1965	19,049	164	2,837	130	961	12,762	2,153	13,871	32,714	0	828	--	--	--	--	--
1970	25,376	181	3,917	290	1,230	15,831	2,065	16,469	39,801	0	996	--	--	--	--	--
1975	34,469	158	5,922	249	1,498	19,314	2,504	18,556	48,043	0	1,063	--	--	--	--	--
1980	34,939	143	10,541	357	3,435	19,390	1,463	22,344	57,530	0	1,114	--	--	--	--	--
1985	34,999	117	10,414	235	1,157	18,513	970	15,651	46,939	0	1,058	--	--	--	--	--
1990	34,896	120	10,597	273	1,612	19,643	1,268	20,782	54,174	0	1,295	--	--	--	--	--
1995	35,381	149	11,287	174	1,944	20,891	197	15,243	49,736	0	1,193	--	--	--	--	--
1996	37,104	155	9,197	170	2,199	18,899	352	5,089	35,906	0	1,425	--	--	--	--	--
1997	38,098	160	10,526	172	2,874	19,752	231	5,081	38,636	0	1,139	--	--	--	--	--
1998	39,877	143	12,378	175	2,157	19,724	72	6,261	40,767	0	1,086	--	--	--	--	--
1999	40,351	140	11,854	184	1,076	19,491	93	6,126	38,823	0	930	--	--	--	--	--
2000	39,892	148	12,539	189	1,578	19,424	293	5,332	39,354	0	1,151	--	--	--	--	--
2001	35,622	141	12,554	191	1,386	19,717	228	14,250	48,326	0	952	--	--	--	--	--
2002	40,779	146	15,060	249	992	19,288	113	14,544	50,245	0	1,066	--	--	--	--	--
2003	40,223	127	12,346	262	1,192	19,592	50	14,238	47,680	0	1,356	--	--	--	--	--
2004	38,747	122	13,761	252	1,638	20,341	344	16,662	52,998	0	1,318	--	--	--	--	--
2005	40,306	117	14,406	238	1,048	20,203	440	15,599	51,935	0	1,448	--	--	--	--	--
2006	40,087	113	14,953	231	1,491	20,326	336	15,688	53,025	0	1,572	--	--	--	--	--
2007	40,700	114	14,744	236	1,176	20,217	999	15,002	52,374	0	1,254	--	--	--	--	--
Trillion Btu																
1960	354.4	155.6	14.4	0.9	2.2	61.0	9.3	39.0	126.8	0.0	10.1	13.4	0.0	-42.2	0.0	618.1
1965	477.4	176.1	16.5	0.7	3.9	67.0	13.5	79.3	181.0	0.0	8.7	11.9	0.0	-57.0	0.0	798.0
1970	612.4	186.5	22.8	1.6	4.6	83.2	13.0	92.5	217.7	0.0	10.4	10.7	0.0	-178.7	0.0	859.1
1975	817.4	164.3	34.5	1.4	5.6	101.5	15.7	105.3	264.0	0.0	11.1	11.7	0.0	-412.0	0.0	856.5
1980	857.8	147.6	61.4	2.0	12.6	101.9	9.2	124.4	311.5	0.0	11.6	11.9	0.0	-457.7	0.0	882.6
1985	871.7	125.0	60.7	1.3	4.2	97.2	6.1	86.5	256.0	0.0	11.1	14.0	0.0	-549.9	0.0	727.9
1990	873.5	129.0	61.7	1.5	5.8	103.2	8.0	115.2	295.5	0.0	13.5	5.0	(s)	-492.7	0.0	823.8
1995	871.3	157.8	65.7	1.0	7.0	108.9	1.2	84.4	268.4	0.0	12.3	7.1	(s)	-491.7	0.0	825.2
1996	913.6	164.3	53.6	1.0	7.9	98.6	2.2	30.1	193.3	0.0	14.7	7.3	(s)	-545.1	0.0	748.1
1997	937.7	170.3	61.3	1.0	10.4	103.0	1.5	30.1	207.2	0.0	11.6	5.9	(s)	-585.6	0.0	747.2
1998	978.3	151.9	72.1	1.0	7.8	102.8	0.5	37.3	221.4	0.0	11.1	5.1	(s)	-591.6	0.0	776.3
1999	993.0	147.7	69.0	1.0	3.9	101.6	0.6	36.1	212.2	0.0	9.5	5.3	0.1	-609.4	0.0	758.5
2000	977.8	157.9	73.0	1.1	5.7	101.2	1.8	31.4	214.2	0.0	11.7	5.7	(s)	-592.2	0.0	775.3
2001	866.6	150.5	73.1	1.1	5.0	102.7	1.4	80.4	263.8	0.0	9.8	4.8	(s)	-495.3	0.0	800.3
2002	993.5	147.5	87.7	1.4	3.6	100.5	0.7	82.5	276.4	0.0	10.8	4.2	0.1	-612.9	0.0	819.6
2003	978.4	133.2	71.9	1.5	4.3	102.0	0.3	80.2	260.2	0.0	13.9	4.3	1.8	-609.4	0.0	782.4
2004	937.1	143.4	80.2	1.4	5.9	106.1	2.2	94.0	289.7	0.0	13.2	4.4	1.7	-559.9	0.0	<sup>R</sup> 829.6
2005	959.7	125.2	83.9	1.4	3.8	105.4	2.8	88.1	285.3	0.0	14.5	<sup>R</sup> 4.8	1.6	-585.0	0.0	<sup>R</sup> 806.1
2006	958.9	128.0	87.1	1.3	5.4	106.1	2.1	89.6	291.6	0.0	15.6	<sup>R</sup> 4.6	1.8	-571.0	0.0	<sup>R</sup> 829.5
2007	983.0	122.6	85.9	1.3	4.2	105.5	6.3	85.5	288.7	0.0	12.4	5.0	1.7	-563.0	0.0	850.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total	Wood <sup>c</sup>			Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords						
1960	144	50	204	148	226	578	416	--	--	1,714	--	--	--
1965	138	50	304	184	280	768	320	--	--	2,365	--	--	--
1970	107	58	250	267	266	783	287	--	--	3,459	--	--	--
1975	71	51	581	172	331	1,084	298	--	--	4,979	--	--	--
1980	33	48	1,169	408	395	1,973	375	--	--	6,606	--	--	--
1985	18	37	516	390	225	1,131	446	--	--	6,712	--	--	--
1990	36	33	682	210	416	1,308	162	--	--	7,578	--	--	--
1995	8	35	496	287	416	1,199	232	--	--	9,166	--	--	--
1996	13	37	599	377	479	1,455	241	--	--	9,277	--	--	--
1997	12	36	603	399	677	1,680	175	--	--	9,027	--	--	--
1998	18	30	547	473	512	1,532	156	--	--	9,053	--	--	--
1999	20	31	481	551	712	1,744	164	--	--	9,452	--	--	--
2000	24	32	524	340	751	1,616	176	--	--	9,738	--	--	--
2001	5	32	520	354	988	1,862	114	--	--	9,828	--	--	--
2002	4	31	504	262	630	1,396	115	--	--	10,444	--	--	--
2003	6	32	472	219	786	1,477	121	--	--	10,473	--	--	--
2004	6	30	430	255	1,149	1,833	124	--	--	10,756	--	--	--
2005	6	30	382	250	677	1,308	R 145	--	--	11,384	--	--	--
2006	2	26	380	188	R 897	R 1,465	R 132	--	--	11,014	--	--	--
2007	6	27	330	123	768	1,221	146	--	--	11,749	--	--	--
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	52.7	130.3
1990	0.9	34.9	4.0	1.2	1.5	6.7	3.2	0.0	(s)	25.9	71.6	59.8	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	70.0	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	74.7	153.4
2002	0.1	31.0	2.9	1.5	2.3	6.7	2.3	(s)	(s)	35.6	75.8	79.4	155.2
2003	0.1	33.8	2.7	1.2	2.9	6.8	2.4	(s)	(s)	35.7	79.0	78.9	157.8
2004	0.1	35.6	2.5	1.4	4.2	8.1	2.5	(s)	(s)	36.7	83.1	81.2	164.3
2005	R 0.2	31.9	2.2	1.4	2.4	6.1	R 2.9	(s)	(s)	38.8	R 79.9	85.0	R 164.9
2006	R 0.1	29.6	2.2	1.1	R 3.2	R 6.5	R 2.6	(s)	0.1	37.6	R 76.5	81.3	R 157.7
2007	0.1	28.5	1.9	0.7	2.8	5.4	2.9	(s)	0.1	40.1	77.1	86.5	163.6

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
1960	100	15	75	8	40	65	8	195	0	--	--	1,134	--	--	--
1965	104	15	111	9	49	66	12	248	0	--	--	1,620	--	--	--
1970	84	22	92	14	47	56	9	218	0	--	--	2,238	--	--	--
1975	167	25	213	9	58	59	9	349	0	--	--	2,858	--	--	--
1980	123	22	262	37	70	110	5	484	0	--	--	3,658	--	--	--
1985	63	17	674	129	40	307	5	1,154	0	--	--	4,462	--	--	--
1990	143	21	526	46	73	330	65	1,041	0	--	--	5,085	--	--	--
1995	57	26	357	37	73	20	0	487	0	--	--	5,944	--	--	--
1996	96	28	264	37	85	20	0	404	0	--	--	6,030	--	--	--
1997	93	26	316	51	120	19	0	506	0	--	--	6,040	--	--	--
1998	144	25	370	57	90	19	0	537	0	--	--	6,297	--	--	--
1999	148	27	318	64	126	19	0	527	0	--	--	6,565	--	--	--
2000	193	26	360	73	133	19	0	585	0	--	--	6,872	--	--	--
2001	43	28	406	63	174	20	0	663	0	--	--	6,863	--	--	--
2002	30	25	325	64	111	20	0	521	0	--	--	7,117	--	--	--
2003	37	27	226	92	139	20	0	476	0	--	--	7,136	--	--	--
2004	50	25	235	81	203	28	0	547	0	--	--	7,217	--	--	--
2005	74	25	230	63	119	28	0	441	0	--	--	7,452	--	--	--
2006	R 22	23	164	41	R 158	29	0	R 393	0	--	--	7,377	--	--	--
2007	54	23	162	25	135	30	0	352	0	--	--	7,769	--	--	--
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	0.0	0.4	0.0	17.4	49.9	40.1	90.0
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	100.5
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	51.2	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	52.2	110.1
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	54.1	107.2
2003	0.9	28.0	1.3	0.5	0.5	0.1	0.0	2.4	0.0	0.4	(s)	24.3	56.1	53.7	109.9
2004	1.2	29.6	1.4	0.5	0.7	0.1	0.0	2.7	0.0	0.4	(s)	24.6	58.6	54.5	113.0
2005	1.8	26.8	1.3	0.4	0.4	0.1	0.0	2.3	0.0	R 0.5	(s)	25.4	56.8	55.6	112.4
2006	0.6	26.6	1.0	0.2	0.6	0.2	0.0	1.9	0.0	0.4	(s)	25.2	54.7	54.4	109.1
2007	1.3	24.3	0.9	0.1	0.5	0.2	0.0	1.7	0.0	0.5	(s)	26.5	54.3	57.2	111.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	7,802	76	452	290	204	1,437	6,101	8,485	540	--	--	5,915	--	--	--
1965	10,747	81	890	627	155	2,080	13,280	17,033	493	--	--	7,984	--	--	--
1970	10,279	93	1,087	907	114	1,621	15,925	19,655	558	--	--	9,426	--	--	--
1975	8,424	68	1,533	1,095	78	1,787	18,078	22,571	595	--	--	9,102	--	--	--
1980	6,284	59	3,585	2,955	81	1,458	21,584	29,663	690	--	--	10,567	--	--	--
1985	3,551	45	2,119	871	229	964	14,865	19,048	690	--	--	9,673	--	--	--
1990	4,845	58	3,173	1,103	249	1,203	20,234	25,961	610	--	--	10,469	--	--	--
1995	3,768	60	3,315	1,443	194	197	14,648	19,797	556	--	--	10,867	--	--	--
1996	3,256	57	3,142	1,625	189	348	4,407	9,710	661	--	--	10,820	--	--	--
1997	2,569	65	2,842	2,077	199	231	4,358	9,708	509	--	--	11,180	--	--	--
1998	3,654	57	3,048	1,555	226	72	5,439	10,340	521	--	--	11,161	--	--	--
1999	3,156	51	3,040	237	187	93	5,224	8,781	433	--	--	11,126	--	--	--
2000	3,051	57	2,937	692	200	293	4,637	8,759	453	--	--	11,083	--	--	--
2001	2,880	48	3,168	223	316	228	13,559	17,495	439	--	--	10,978	--	--	--
2002	2,918	55	6,142	248	322	113	13,954	20,780	467	--	--	10,902	--	--	--
2003	2,712	48	3,273	252	349	50	13,685	17,608	726	--	--	10,687	--	--	--
2004	2,735	46	3,606	274	413	344	16,075	20,712	711	--	--	10,942	--	--	--
2005	2,351	40	4,267	239	393	440	14,976	20,315	556	--	--	11,312	--	--	--
2006	2,200	41	5,201	R 418	424	336	15,208	R 21,588	524	--	--	13,916	--	--	--
2007	2,583	40	5,298	261	349	999	14,596	21,503	449	--	--	14,661	--	--	--
Trillion Btu															
1960	204.4	78.4	2.6	1.2	1.1	9.0	36.3	50.2	5.8	4.9	0.0	20.2	363.8	49.9	413.7
1965	280.0	87.1	5.2	2.5	0.8	13.1	76.0	97.6	5.1	5.4	0.0	27.2	502.5	65.1	567.5
1970	260.2	95.7	6.3	3.4	0.6	10.2	89.4	109.9	5.9	4.9	0.0	32.2	508.8	77.8	586.6
1975	212.5	70.5	8.9	4.1	0.4	11.2	102.5	127.2	6.2	5.7	0.0	31.1	453.2	74.7	527.8
1980	162.4	61.4	20.9	10.9	0.4	9.2	120.1	161.4	7.2	4.2	0.0	36.1	432.5	86.9	519.5
1985	91.0	48.4	12.3	3.1	1.2	6.1	82.0	104.7	7.2	4.9	0.0	33.0	289.1	76.0	365.2
1990	124.3	61.7	18.5	4.0	1.3	7.6	112.0	143.4	6.3	1.4	0.0	35.7	372.8	82.6	455.5
1995	97.4	64.0	19.3	5.2	1.0	1.2	81.0	107.7	5.7	1.8	0.0	37.1	313.7	84.2	397.9
1996	84.2	60.0	18.3	5.9	1.0	2.2	26.1	53.5	6.8	1.8	0.0	36.9	243.2	84.0	327.2
1997	65.7	69.0	16.6	7.5	1.0	1.5	25.9	52.5	5.2	1.8	0.0	38.1	232.4	86.4	318.8
1998	95.2	60.3	17.8	5.6	1.2	0.5	32.5	57.5	5.3	1.5	0.0	38.1	257.8	86.4	344.2
1999	82.3	53.6	17.7	0.9	1.0	0.6	30.9	51.0	4.4	1.5	0.0	38.0	230.8	86.8	317.7
2000	81.1	60.7	17.1	2.5	1.0	1.8	27.4	49.8	4.6	1.4	0.0	37.8	235.5	86.0	321.5
2001	75.9	51.6	18.5	0.8	1.6	1.4	76.4	98.7	4.5	2.0	0.0	37.5	270.3	83.5	353.7
2002	77.0	55.5	35.8	0.9	1.7	0.7	79.1	118.1	4.7	1.4	0.0	37.2	293.9	82.9	376.9
2003	71.2	49.9	19.1	0.9	1.8	0.3	76.9	99.1	7.4	1.4	0.0	36.5	265.5	80.5	346.0
2004	70.7	54.4	21.0	1.0	2.2	2.2	90.6	116.9	7.1	1.4	0.0	37.3	287.9	82.6	370.5
2005	59.6	43.1	24.9	0.9	2.0	2.8	84.5	115.0	5.6	1.5	0.0	38.6	263.4	84.4	347.8
2006	55.9	46.4	30.3	R 1.5	2.2	2.1	86.8	122.9	5.2	1.6	0.0	47.5	R 279.6	102.7	382.2
2007	65.8	43.4	30.9	0.9	1.8	6.3	83.1	123.0	4.4	1.6	0.0	50.0	288.2	107.9	396.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	134	8	119	1,742	169	2	199	11,340	3	13,573	0	0	--	--	--
1965	35	18	201	1,530	130	4	198	12,541	0	14,603	0	0	--	--	--
1970	16	8	78	2,485	290	10	185	15,660	5	18,713	0	0	--	--	--
1975	1	14	58	3,589	242	14	239	19,176	0	23,318	0	0	--	--	--
1980	0	13	65	4,846	353	14	250	19,199	0	24,728	0	0	--	--	--
1985	0	18	39	6,736	235	22	228	17,977	(s)	25,236	0	0	--	--	--
1990	0	9	36	5,850	273	19	256	19,063	0	25,497	0	0	--	--	--
1995	0	26	27	6,781	174	12	244	20,678	0	27,916	32	0	--	--	--
1996	0	33	32	4,840	170	10	237	18,691	4	23,984	5	0	--	--	--
1997	0	32	22	6,472	172	(s)	250	19,533	0	26,451	5	0	--	--	--
1998	0	31	30	8,089	175	(s)	262	19,479	0	R 28,035	1	0	--	--	--
1999	0	30	22	7,694	184	1	265	19,284	0	27,451	(s)	0	--	--	--
2000	0	33	20	8,269	189	2	261	19,205	0	27,945	8	0	--	--	--
2001	0	30	35	8,039	191	(s)	239	19,381	0	27,884	124	0	--	--	--
2002	0	34	27	7,637	249	2	236	18,946	0	27,098	307	0	--	--	--
2003	0	18	24	7,951	262	15	218	19,224	0	27,694	403	0	--	--	--
2004	0	19	29	9,030	252	13	221	19,900	0	29,446	432	4	--	--	--
2005	0	20	89	9,178	238	13	220	19,783	0	29,522	R 110	4	--	--	--
2006	0	19	37	8,970	231	18	214	19,873	0	29,343	R 155	4	--	--	--
2007	0	21	36	8,631	236	11	221	19,839	0	28,974	220	4	--	--	--
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	0.0	0.0	155.6	0.0	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	1.4	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	1.5	(s)	181.7	(s)	181.8
2005	0.0	21.1	0.5	53.5	1.4	(s)	1.3	103.2	0.0	159.9	R 0.4	(s)	181.0	(s)	181.0
2006	0.0	21.5	0.2	52.3	1.3	0.1	1.3	103.7	0.0	158.8	R 0.5	(s)	180.3	(s)	180.3
2007	0.0	22.4	0.2	50.3	1.3	(s)	1.3	103.5	0.0	156.7	0.8	(s)	179.2	(s)	179.2

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, West Virginia

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	37,875	2	0	349	0	349	0	892	--	0	0	154	0	--
2006	37,863	4	0	237	0	237	0	1,048	--	0	0	174	0	--
2007	38,056	4	0	324	0	324	0	806	--	0	0	168	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	0.2	0.0	0.0	0.0	0.0	800.1
2002	915.7	2.0	0.0	2.6	0.0	2.6	0.0	6.1	(s)	0.0	0.0	0.1	0.0	926.5
2003	906.1	2.2	0.0	2.5	0.0	2.5	0.0	6.5	(s)	0.0	0.0	1.7	0.0	919.0
2004	865.0	1.5	0.0	2.7	0.0	2.7	0.0	6.1	(s)	0.0	0.0	1.6	0.0	876.9
2005	898.0	2.4	0.0	2.0	0.0	2.0	0.0	8.9	(s)	0.0	0.0	1.5	0.0	912.9
2006	902.3	3.8	0.0	1.4	0.0	1.4	0.0	10.4	0.0	0.0	0.0	1.7	0.0	919.7
2007	915.8	4.0	0.0	1.9	0.0	1.9	0.0	8.0	0.0	0.0	0.0	1.7	0.0	931.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	12,735	91	21,750	245	4,258	33,125	4,394	7,640	71,412	0	2,399	--	--	--	--	--
1965	14,528	200	23,508	629	5,246	36,295	3,209	6,830	75,716	0	2,131	--	--	--	--	--
1970	16,898	338	25,841	1,603	7,679	45,483	2,936	10,536	94,078	157	1,904	--	--	--	--	--
1975	12,733	365	26,561	2,206	8,448	51,548	2,106	7,067	97,936	10,293	2,037	--	--	--	--	--
1980	15,644	352	22,495	2,397	6,036	49,606	1,772	6,432	88,738	9,911	2,115	--	--	--	--	--
1985	18,034	308	23,154	1,663	5,377	46,557	402	5,324	82,478	10,979	2,546	--	--	--	--	--
1990	20,122	309	24,192	1,424	6,664	48,989	1,109	7,221	89,599	11,226	2,014	--	--	--	--	--
1995	23,151	381	23,471	2,044	8,753	55,053	829	9,317	99,467	10,970	2,378	--	--	--	--	--
1996	24,076	403	24,908	1,530	11,139	56,313	1,020	19,680	114,590	10,121	2,696	--	--	--	--	--
1997	25,487	401	24,999	R 1,950	9,935	55,696	1,065	21,907	R 115,552	3,916	2,483	--	--	--	--	--
1998	24,740	368	25,199	R 1,866	8,461	58,740	923	22,804	R 117,992	9,397	1,747	--	--	--	--	--
1999	25,276	381	28,622	3,407	11,009	58,976	1,011	23,042	126,066	11,495	1,985	--	--	--	--	--
2000	25,928	394	29,301	3,139	11,129	58,194	1,110	22,071	124,943	11,512	1,986	--	--	--	--	--
2001	25,921	360	31,694	2,590	10,094	58,870	918	12,103	116,269	11,507	2,056	--	--	--	--	--
2002	25,174	385	30,051	2,293	12,304	60,351	1,050	11,540	117,589	12,449	2,515	--	--	--	--	--
2003	26,197	395	25,586	1,336	10,658	60,902	930	12,813	112,226	12,215	1,843	--	--	--	--	--
2004	26,696	383	28,240	2,641	11,556	61,130	1,154	13,552	118,272	11,888	1,981	--	--	--	--	--
2005	26,727	410	27,309	2,858	11,337	61,367	1,468	13,028	117,367	9,921	1,740	--	--	--	--	--
2006	25,488	372	28,387	2,748	10,155	60,526	851	13,060	115,727	12,234	1,679	--	--	--	--	--
2007	25,588	398	28,085	2,227	10,363	62,275	800	12,402	116,153	12,910	1,516	--	--	--	--	--
Trillion Btu																
1960	304.6	93.8	126.7	1.3	17.1	174.0	27.6	46.2	393.0	0.0	25.8	39.2	0.0	-1.2	0.0	855.1
1965	347.9	204.1	136.9	3.5	21.0	190.7	20.2	41.2	413.5	0.0	22.3	39.4	0.0	4.6	0.0	1,031.8
1970	381.6	344.2	150.5	9.0	29.0	238.9	18.5	64.5	510.5	1.7	20.0	38.3	0.0	-6.8	0.0	1,289.5
1975	272.0	372.1	154.7	12.5	31.4	270.8	13.2	43.2	525.8	113.4	21.2	44.9	0.0	-5.3	0.0	1,344.1
1980	327.3	354.7	131.0	13.5	22.2	260.6	11.1	39.5	478.0	108.1	22.0	165.3	0.0	12.7	(s)	1,468.0
1985	360.7	311.4	134.9	9.3	19.4	244.6	2.5	31.8	442.5	116.6	26.6	191.2	(s)	59.1	0.1	1,508.2
1990	394.5	311.2	140.9	8.0	24.2	257.3	7.0	44.7	482.1	118.8	21.0	81.3	0.3	64.7	0.7	1,474.5
1995	441.6	385.3	136.7	11.6	31.7	287.1	5.2	56.9	529.2	115.3	24.5	86.1	0.3	101.8	(s)	1,684.2
1996	454.6	408.1	145.1	8.7	40.2	293.7	6.4	112.3	606.4	106.3	27.9	95.1	0.3	98.0	0.5	1,797.2
1997	486.6	405.0	145.6	11.1	35.9	290.3	6.7	126.0	615.7	41.1	25.4	96.9	0.3	138.2	3.0	1,812.2
1998	472.0	372.1	146.8	10.6	30.6	306.2	5.8	132.0	631.8	98.6	17.8	89.4	0.4	113.2	2.7	1,798.1
1999	480.7	385.1	166.7	19.3	39.8	307.3	6.4	133.2	672.8	120.1	20.3	93.1	0.4	106.6	1.4	1,880.5
2000	499.2	397.6	170.7	17.8	40.1	303.2	7.0	127.2	666.0	120.1	20.3	92.3	0.4	105.8	0.0	1,901.5
2001	494.0	363.0	184.6	14.7	36.5	306.7	5.8	74.3	622.5	120.2	21.2	99.0	1.1	98.0	0.0	1,819.2
2002	492.0	386.9	175.0	13.0	44.5	314.3	6.6	70.5	623.9	130.0	25.6	72.2	0.8	108.4	0.0	1,839.7
2003	488.2	397.5	149.0	7.6	38.7	317.1	5.8	79.1	597.4	127.3	18.9	84.5	1.4	113.8	(s)	1,828.9
2004	499.2	384.8	164.5	15.0	41.8	318.8	7.3	83.4	630.7	124.0	19.9	72.4	1.4	111.8	0.0	R 1,844.2
2005	522.5	415.6	159.1	16.2	41.0	320.2	9.2	80.2	625.9	103.5	17.4	R 86.2	1.3	97.0	(s)	R 1,869.5
2006	462.7	376.6	165.4	15.6	36.6	315.8	5.4	80.3	619.1	127.6	16.7	R 90.9	1.5	126.3	(s)	R 1,821.3
2007	464.9	403.9	163.6	12.6	37.2	325.0	5.0	76.0	619.5	135.4	15.0	84.8	1.7	121.1	(s)	1,846.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	1,622	47	11,206	1,227	2,675	15,107	974	--	--	5,298	--	--	--
1965	1,153	79	11,790	660	3,692	16,142	744	--	--	6,963	--	--	--
1970	724	105	11,721	1,608	5,606	18,935	595	--	--	9,825	--	--	--
1975	173	120	11,019	530	5,405	16,953	587	--	--	11,782	--	--	--
1980	11	123	8,155	124	2,983	11,261	1,103	--	--	13,597	--	--	--
1985	6	116	6,669	195	3,045	9,909	1,161	--	--	16,307	--	--	--
1990	1	114	5,385	29	4,187	9,601	734	--	--	16,385	--	--	--
1995	17	136	3,659	34	5,560	9,253	400	--	--	18,635	--	--	--
1996	13	148	3,869	41	7,463	11,372	415	--	--	18,685	--	--	--
1997	18	136	3,239	44	6,596	9,879	275	--	--	18,510	--	--	--
1998	14	116	2,801	39	5,926	8,767	245	--	--	19,087	--	--	--
1999	19	128	3,240	61	6,995	10,296	257	--	--	19,502	--	--	--
2000	18	135	3,027	44	6,589	9,660	277	--	--	19,929	--	--	--
2001	21	125	3,341	40	6,234	9,616	370	--	--	20,418	--	--	--
2002	15	137	2,855	30	7,447	10,332	376	--	--	21,575	--	--	--
2003	20	142	2,940	27	6,880	9,847	395	--	--	21,364	--	--	--
2004	15	135	2,919	40	6,680	9,639	405	--	--	21,192	--	--	--
2005	33	131	2,640	28	6,473	9,141	R 571	--	--	22,458	--	--	--
2006	R 3	121	2,365	27	R 5,611	R 8,003	R 519	--	--	21,779	--	--	--
2007	5	131	1,980	14	5,924	7,918	573	--	--	22,374	--	--	--
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	111.8	363.9
1985	0.1	R 117.4	38.8	1.1	11.0	50.9	23.2	0.0	0.0	55.6	247.3	128.1	375.4
1990	(s)	114.7	31.4	0.2	15.2	46.7	14.7	0.1	0.2	55.9	232.3	129.3	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	272.2	145.0	417.2
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	373.6
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	407.1
2001	0.5	126.3	19.5	0.2	22.5	42.2	7.4	0.1	0.2	69.7	246.5	155.2	401.7
2002	0.4	138.0	16.6	0.2	26.9	43.7	7.5	0.2	0.2	73.6	263.6	164.1	427.7
2003	0.5	143.3	17.1	0.2	25.0	42.2	7.9	0.2	0.2	72.9	267.2	160.9	428.0
2004	0.4	135.8	17.0	0.2	24.2	41.4	R 8.1	0.2	0.2	72.3	258.3	160.0	418.3
2005	0.6	133.0	15.4	0.2	23.4	39.0	R 11.4	0.3	0.2	76.6	R 261.0	167.6	R 428.6
2006	0.1	121.9	13.8	0.2	R 20.2	R 34.2	R 10.4	0.3	0.2	74.3	R 241.3	160.7	R 402.0
2007	0.1	132.9	11.5	0.1	21.3	32.9	11.5	0.4	0.2	76.3	254.3	164.7	419.0

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass		Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>						
	Thousand Short Tons	Billion Cubic Feet							Thousand Barrels							
1960	1,127	11	1,817	101	472	295	556	3,239	0	--	--	3,059	--	--	--	
1965	870	24	1,911	54	652	309	407	3,332	0	--	--	4,160	--	--	--	
1970	569	55	1,900	132	989	56	244	3,321	0	--	--	6,180	--	--	--	
1975	404	67	1,786	43	954	52	168	3,004	0	--	--	8,342	--	--	--	
1980	40	77	1,682	57	526	76	30	2,371	0	--	--	10,019	--	--	--	
1985	20	73	3,294	18	537	283	106	4,238	0	--	--	12,087	--	--	--	
1990	4	66	2,128	9	739	320	217	3,412	11	--	--	13,408	--	--	--	
1995	113	85	982	10	981	51	108	2,133	4	--	--	15,642	--	--	--	
1996	92	94	978	12	1,317	80	131	2,517	10	--	--	16,188	--	--	--	
1997	144	89	1,257	7	1,164	51	132	2,611	8	--	--	16,480	--	--	--	
1998	114	81	1,386	10	1,046	52	234	2,727	9	--	--	16,934	--	--	--	
1999	138	82	1,447	7	1,234	85	167	2,941	5	--	--	18,381	--	--	--	
2000	144	81	1,344	10	1,163	79	180	2,775	4	--	--	19,055	--	--	--	
2001	169	76	1,433	21	1,100	79	199	2,832	4	--	--	19,430	--	--	--	
2002	112	86	1,210	13	1,314	80	367	2,984	0	--	--	19,890	--	--	--	
2003	135	87	1,416	27	1,214	83	393	3,133	5	--	--	20,056	--	--	--	
2004	137	82	1,323	32	1,179	86	250	2,869	2	--	--	19,349	--	--	--	
2005	384	86	1,238	30	1,142	86	296	2,793	7	--	--	22,501	--	--	--	
2006	<sup>R</sup> 26	86	895	25	<sup>R</sup> 990	56	81	<sup>R</sup> 2,047	(s)	--	--	22,756	--	--	--	
2007	46	89	1,010	9	1,045	56	25	2,145	1	--	--	23,491	--	--	--	
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	0.1	1.9	0.0	45.7	132.8	105.8	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	131.0	289.1	
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	308.0	
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	314.0	
2001	4.1	76.7	8.3	0.1	4.0	0.4	1.2	14.1	(s)	1.7	0.0	66.3	163.0	147.7	310.7	
2002	2.7	86.3	7.0	0.1	4.7	0.4	2.3	14.6	0.0	1.6	0.0	67.9	173.1	151.3	324.4	
2003	3.3	87.9	8.2	0.2	4.4	0.4	2.5	15.7	0.1	1.6	0.0	68.4	177.0	151.0	328.0	
2004	3.3	82.5	7.7	0.2	4.3	0.4	1.6	14.2	(s)	1.8	0.0	66.0	167.9	146.1	313.9	
2005	7.3	87.2	7.2	0.2	4.1	0.5	1.9	13.8	0.1	<sup>R</sup> 2.2	0.0	76.8	187.4	167.9	<sup>R</sup> 355.3	
2006	0.6	87.3	5.2	0.1	3.6	0.3	0.5	<sup>R</sup> 9.7	(s)	<sup>R</sup> 2.0	0.0	77.6	177.3	167.9	<sup>R</sup> 345.2	
2007	1.1	90.2	5.9	0.1	3.8	0.3	0.2	10.1	(s)	2.2	0.0	80.2	183.9	172.9	356.8	

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	4,710	30	6,950	1,088	2,774	3,416	5,358	19,585	338	--	--	4,230	--	--	--
1965	5,789	82	7,654	866	2,541	2,371	4,987	18,419	306	--	--	6,153	--	--	--
1970	5,147	141	7,917	1,009	2,471	1,554	7,672	20,623	306	--	--	8,570	--	--	--
1975	2,439	152	7,150	1,996	2,027	1,105	5,788	18,065	318	--	--	10,823	--	--	--
1980	2,364	130	3,589	2,444	1,633	1,439	5,596	14,701	258	--	--	13,290	--	--	--
1985	2,132	115	3,192	1,611	1,137	158	4,511	10,610	258	--	--	17,195	--	--	--
1990	1,960	122	4,178	1,619	780	891	6,526	13,994	201	--	--	19,405	--	--	--
1995	1,949	146	4,111	2,089	934	699	8,245	16,078	266	--	--	23,690	--	--	--
1996	1,678	150	4,721	2,253	921	858	18,633	27,385	272	--	--	23,871	--	--	--
1997	1,757	156	4,615	2,077	914	921	20,668	29,194	280	--	--	25,103	--	--	--
1998	1,687	142	4,591	1,312	669	674	21,572	28,818	220	--	--	26,040	--	--	--
1999	1,651	146	6,962	2,727	753	835	22,086	33,364	246	--	--	25,665	--	--	--
2000	1,693	152	8,360	3,332	780	921	21,168	34,562	227	--	--	26,162	--	--	--
2001	1,651	133	9,726	2,662	1,186	714	11,107	25,396	152	--	--	25,370	--	--	--
2002	1,716	138	8,941	3,462	1,285	679	10,647	25,013	218	--	--	25,534	--	--	--
2003	1,723	138	5,037	2,439	1,323	535	11,965	21,298	185	--	--	25,821	--	--	--
2004	1,766	141	5,578	3,579	1,679	901	11,999	23,737	195	--	--	27,435	--	--	--
2005	1,695	131	5,646	3,549	1,710	1,071	11,583	23,558	203	--	--	25,376	--	--	--
2006	1,758	118	5,570	R 3,379	1,938	639	11,216	R 22,741	204	--	--	25,286	--	--	--
2007	1,757	121	5,670	3,234	1,677	740	10,496	21,817	179	--	--	25,436	--	--	--
Trillion Btu															
1960	116.6	30.8	40.5	4.4	14.6	21.5	33.3	114.2	3.6	19.3	0.0	14.4	299.0	35.7	334.7
1965	142.4	83.0	44.6	3.5	13.3	14.9	31.0	107.3	3.2	24.2	0.0	21.0	381.1	50.1	431.3
1970	119.6	143.6	46.1	3.8	13.0	9.8	48.2	120.8	3.2	26.1	0.0	29.2	442.6	70.8	513.3
1975	54.7	155.5	41.6	7.4	10.6	6.9	35.9	102.5	3.3	32.9	0.0	36.9	385.9	88.8	474.7
1980	54.6	130.6	20.9	9.0	8.6	9.0	34.7	82.2	2.7	142.1	0.0	45.3	457.4	109.3	566.7
1985	49.7	116.4	18.6	5.8	6.0	1.0	27.0	58.4	2.7	166.5	0.0	58.7	452.4	135.1	587.5
1990	47.3	122.6	24.3	5.9	4.1	5.6	40.6	80.5	2.1	61.3	0.0	66.2	380.1	153.1	533.2
1995	47.2	147.7	23.9	7.6	4.9	4.4	50.8	91.5	2.7	72.0	0.0	80.8	441.9	183.6	625.5
1996	40.1	R 151.5	27.5	8.1	4.8	5.4	106.3	152.1	2.8	79.8	0.0	81.4	507.7	185.2	693.0
1997	42.4	157.4	26.9	7.5	4.8	5.8	119.0	164.0	2.9	84.0	0.0	85.7	536.3	194.1	730.3
1998	41.0	143.5	26.7	4.7	3.5	4.2	125.0	164.2	2.2	76.6	0.0	88.8	516.4	201.5	717.9
1999	40.1	147.4	40.6	9.9	3.9	5.3	127.6	187.2	2.5	81.3	0.0	87.6	R 546.1	200.3	746.3
2000	40.1	153.4	48.7	12.0	4.1	5.8	121.9	192.4	2.3	80.0	0.0	89.3	557.6	203.0	760.6
2001	38.9	134.1	56.7	9.6	6.2	4.5	68.5	145.5	1.6	85.8	0.0	86.6	492.3	192.9	685.2
2002	40.2	138.5	52.1	12.5	6.7	4.3	65.2	140.8	2.2	58.0	0.0	87.1	466.8	194.2	661.0
2003	40.0	138.8	29.3	8.8	6.9	3.4	74.1	122.5	1.9	69.5	0.0	88.1	460.7	194.4	655.1
2004	40.9	141.7	32.5	12.9	8.8	5.7	74.2	134.0	2.0	54.6	0.0	93.6	R 466.9	207.1	674.0
2005	39.1	132.3	32.9	12.8	8.9	6.7	71.6	133.0	2.0	65.9	0.0	86.6	458.9	189.4	648.3
2006	39.9	119.7	32.4	R 12.2	10.1	4.0	69.3	R 128.0	2.0	R 70.4	0.0	86.3	R 446.3	186.6	R 632.9
2007	40.0	122.8	33.0	11.6	8.8	4.7	64.6	122.6	1.8	62.3	0.0	86.8	436.3	187.3	623.5

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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

Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours			
1960	81	1	427	1,773	245	23	527	30,056	378	33,430	0	0	--	--	--
1965	19	2	636	2,148	629	36	493	33,446	378	37,765	0	0	--	--	--
1970	8	7	332	4,179	1,603	74	552	42,956	6	49,703	0	0	--	--	--
1975	(s)	5	173	6,064	2,169	93	497	49,469	285	58,751	0	0	--	--	--
1980	0	8	124	8,570	2,397	84	523	47,897	235	59,829	0	0	--	--	--
1985	0	3	102	9,749	1,663	184	476	45,136	138	57,447	27	0	--	--	--
1990	0	4	122	12,388	1,424	118	535	47,890	2	62,478	191	0	--	--	--
1995	0	4	374	14,524	2,044	123	511	54,068	22	71,666	846	(s)	--	--	--
1996	0	4	367	15,179	1,530	106	495	55,313	32	73,023	1,338	(s)	--	--	--
1997	0	5	486	15,625	R 1,950	99	523	54,731	12	R 73,426	1,566	(s)	--	--	--
1998	0	4	454	16,092	R 1,866	176	548	58,019	14	R 77,169	814	(s)	--	--	--
1999	0	4	134	16,622	3,407	52	554	58,138	7	78,912	687	(s)	--	--	--
2000	0	4	112	16,286	3,139	45	545	57,334	7	77,468	769	(s)	--	--	--
2001	0	3	236	16,993	2,590	98	500	57,605	3	78,025	1,951	(s)	--	--	--
2002	0	4	126	16,910	2,293	81	494	58,986	4	78,894	3,116	(s)	--	--	--
2003	0	4	54	15,975	1,336	126	456	59,496	2	77,446	2,580	(s)	--	--	--
2004	0	4	162	18,147	2,641	119	462	59,364	3	80,899	2,440	(s)	--	--	--
2005	0	4	83	17,500	2,858	172	460	59,571	101	80,745	R 3,970	(s)	--	--	--
2006	0	3	71	19,311	2,748	176	448	58,533	131	81,418	R 3,595	(s)	--	--	--
2007	0	3	61	19,125	2,227	160	463	60,542	35	82,614	4,487	(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	0.1	0.0	311.1	0.0	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	341.1	0.0	341.1
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	4.7	(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	5.5	(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	2.4	(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	2.7	(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	6.9	(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	11.0	(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	9.1	(s)	417.7	(s)	417.8
2004	0.0	3.6	0.8	105.7	15.0	0.4	2.8	309.6	(s)	434.3	8.6	(s)	437.9	(s)	437.9
2005	0.0	3.8	0.4	101.9	16.2	0.6	2.8	310.8	0.6	433.4	R 14.0	(s)	437.3	(s)	437.3
2006	0.0	3.2	0.4	112.5	15.6	0.6	2.7	305.4	0.8	438.0	R 12.7	(s)	441.2	(s)	441.2
2007	0.0	3.0	0.3	111.4	12.6	0.6	2.8	316.0	0.2	443.9	15.9	(s)	446.9	(s)	446.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Wisconsin

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--	0	0	(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	--
2005	24,615	59	0	286	844	1,130	9,921	1,530	--	0	0	93	(s)	--
2006	23,702	44	0	246	1,273	1,519	12,234	1,475	--	0	0	101	(s)	--
2007	23,780	54	0	299	1,360	1,660	12,910	1,336	--	0	0	109	(s)	--
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	3.4	0.0	0.0	(s)	0.0	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	450.5	22.7	(s)	1.2	1.2	2.4	120.2	19.6	4.1	0.0	0.0	0.7	0.0	620.4
2002	448.7	20.0	0.0	0.8	1.4	2.2	130.0	23.4	5.1	0.0	0.0	0.5	0.0	629.7
2003	444.5	23.8	0.0	1.3	1.7	3.0	127.3	16.9	5.5	0.0	0.0	1.0	(s)	621.9
2004	454.6	21.2	0.0	1.6	5.2	6.7	124.0	17.9	7.8	0.0	0.0	1.0	0.0	633.3
2005	475.5	59.2	0.0	1.7	5.1	6.8	103.5	15.3	6.7	0.0	0.0	0.9	(s)	667.9
2006	422.1	44.5	0.0	1.4	7.7	9.1	127.6	14.6	8.1	0.0	0.0	1.0	(s)	627.1
2007	423.6	55.1	0.0	1.7	8.2	9.9	135.4	13.2	8.8	0.0	0.0	1.1	(s)	647.1

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum							Nuclear Electric Power	Hydro-electric Power <sup>e</sup>	Biomass	Geo-thermal, Solar/PV, and Wind <sup>g,h</sup>	Net Interstate Flow of Electricity/ Losses	Other <sup>j</sup>	Total <sup>g</sup>
			Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>	Total			Wood and Waste <sup>f,g</sup>				
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Million kWh						
1960	993	51	3,278	56	1,114	4,431	1,749	2,874	13,502	0	609	--	--	--	--	--
1965	2,109	59	3,696	74	1,171	4,739	2,171	3,550	15,401	0	884	--	--	--	--	--
1970	3,802	110	5,059	128	1,848	5,900	1,487	4,137	18,558	0	1,006	--	--	--	--	--
1975	7,628	87	7,656	124	1,815	7,354	2,076	4,296	23,321	0	1,120	--	--	--	--	--
1980	15,208	69	13,247	162	2,030	8,501	2,171	4,848	30,959	0	1,108	--	--	--	--	--
1985	23,155	82	7,216	154	1,942	7,671	211	4,087	21,280	0	1,068	--	--	--	--	--
1990	25,514	92	9,308	143	1,263	7,105	39	4,168	22,026	0	645	--	--	--	--	--
1995	25,933	98	10,323	160	1,979	7,936	20	3,274	23,693	0	799	--	--	--	--	--
1996	26,647	101	10,552	151	1,651	7,905	6	3,964	24,229	0	1,232	--	--	--	--	--
1997	26,096	101	11,306	121	308	7,603	4	4,054	23,397	0	1,381	--	--	--	--	--
1998	28,773	109	11,103	116	253	7,888	6	3,645	23,010	0	1,342	--	--	--	--	--
1999	27,677	97	13,668	174	480	7,879	8	4,086	26,294	0	1,170	--	--	--	--	--
2000	28,416	101	12,600	286	1,217	7,799	23	4,263	26,188	0	1,011	--	--	--	--	--
2001	27,984	99	14,020	331	1,238	8,102	68	5,140	28,898	0	879	--	--	--	--	--
2002	27,305	113	13,814	210	1,114	8,041	151	4,486	27,817	0	584	--	--	--	--	--
2003	27,575	115	14,305	166	1,093	8,009	143	5,196	28,911	0	594	--	--	--	--	--
2004	28,156	107	14,112	242	993	7,968	107	4,969	28,390	0	593	--	--	--	--	--
2005	27,752	108	14,112	204	1,241	8,187	133	5,029	28,905	0	808	--	--	--	--	--
2006	27,906	<sup>R</sup> 108	16,238	292	<sup>R</sup> 1,212	8,329	111	4,803	<sup>R</sup> 30,985	0	843	--	--	--	--	--
2007	28,372	113	16,328	378	1,469	8,523	76	4,866	31,640	0	729	--	--	--	--	--
Trillion Btu																
1960	15.8	52.8	19.1	0.3	4.5	23.3	11.0	17.6	75.7	0.0	6.6	1.6	0.0	-10.9	0.0	141.6
1965	34.5	54.8	21.5	0.4	4.7	24.9	13.6	21.5	86.7	0.0	9.2	1.6	0.0	-13.8	0.0	172.9
1970	63.5	112.5	29.5	0.7	7.0	31.0	9.3	25.2	102.7	0.0	10.6	1.6	0.0	-35.3	0.0	255.5
1975	128.0	<sup>R</sup> 81.4	44.6	0.7	6.7	38.6	13.1	25.9	129.6	0.0	11.7	1.6	0.0	-74.9	0.0	277.4
1980	268.1	<sup>R</sup> 73.1	77.2	0.9	7.5	44.7	13.6	29.7	173.6	0.0	11.5	2.7	0.0	-166.4	-0.1	362.5
1985	405.5	<sup>R</sup> 86.4	42.0	0.9	7.0	40.3	1.3	26.0	117.5	0.0	11.2	3.8	(s)	-266.3	-0.3	357.8
1990	459.8	101.3	54.2	0.8	4.6	37.3	0.2	25.7	122.8	0.0	6.7	2.1	0.7	-290.3	0.1	403.1
1995	463.5	103.8	60.1	0.9	7.2	41.4	0.1	20.0	129.7	0.0	8.2	1.5	0.7	-302.5	0.0	404.9
1996	474.1	107.6	61.5	0.9	6.0	41.2	(s)	24.1	133.6	0.0	12.7	1.3	0.7	-312.2	0.0	417.7
1997	468.3	107.9	65.9	0.7	1.1	39.6	(s)	24.8	132.1	0.0	14.1	1.4	0.7	-307.0	0.0	417.5
1998	516.3	116.5	64.7	0.7	0.9	41.1	(s)	22.3	129.7	0.0	13.7	1.2	0.7	-355.2	0.0	422.9
1999	496.2	101.7	79.6	1.0	1.7	41.1	0.1	25.1	148.5	0.0	12.0	1.3	0.8	-332.3	0.0	428.1
2000	506.1	106.0	73.4	1.6	4.4	40.6	0.1	26.3	146.5	0.0	10.3	1.4	3.2	-341.8	0.0	431.6
2001	499.8	104.0	81.7	1.9	4.5	42.2	0.4	30.8	161.5	0.0	9.1	0.9	4.4	-337.6	0.0	442.2
2002	480.4	117.8	80.5	1.2	4.0	41.9	0.9	26.5	155.0	0.0	5.9	0.9	5.2	-320.4	0.1	444.9
2003	493.9	120.9	83.3	0.9	4.0	41.7	0.9	31.0	161.8	0.0	6.1	0.9	4.5	-327.8	0.1	460.4
2004	500.5	111.6	82.2	1.4	3.6	41.6	0.7	29.4	158.7	0.0	5.9	0.9	6.9	-330.9	-0.2	453.5
2005	490.9	113.0	82.2	1.2	4.5	42.7	0.8	29.7	161.1	0.0	8.1	<sup>R</sup> 1.6	7.9	-320.3	-0.3	<sup>R</sup> 462.0
2006	489.3	<sup>R</sup> 113.0	94.6	1.7	<sup>R</sup> 4.4	43.5	0.7	28.2	<sup>R</sup> 173.0	0.0	8.4	<sup>R</sup> 1.5	8.2	-310.8	-0.2	<sup>R</sup> 482.5
2007	494.8	117.6	95.1	2.1	5.3	44.5	0.5	28.8	176.2	0.0	7.2	1.6	8.1	-309.0	-0.2	496.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>h</sup> Geothermal, solar thermal, photovoltaic, and wind energy.<sup>i</sup> 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.

<sup>j</sup> Includes: net imports of electricity; fuel ethanol blended into motor gasoline that is not included in the motor gasoline column, from 1981 through 1992; and beginning in 1980, an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 8. Residential Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Biomass	Geothermal <sup>d</sup>	Solar/PV <sup>d,e</sup>	Retail Electricity Sales	Net Energy <sup>d,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>d,f</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords			Million Kilowatthours			
1960	34	9	4	8	561	573	61	--	--	275	--	--	--
1965	25	11	7	32	532	570	51	--	--	442	--	--	--
1970	12	18	12	39	1,001	1,053	49	--	--	604	--	--	--
1975	15	12	26	11	960	997	55	--	--	891	--	--	--
1980	22	10	23	0	644	667	73	--	--	1,410	--	--	--
1985	24	14	45	8	496	550	115	--	--	1,815	--	--	--
1990	26	11	24	1	487	513	50	--	--	1,720	--	--	--
1995	19	12	47	1	592	640	48	--	--	1,939	--	--	--
1996	46	14	27	1	458	487	50	--	--	2,022	--	--	--
1997	15	13	45	2	119	165	53	--	--	2,007	--	--	--
1998	17	13	25	2	64	91	47	--	--	2,013	--	--	--
1999	12	12	28	1	239	268	49	--	--	2,025	--	--	--
2000	15	12	26	1	507	534	53	--	--	2,103	--	--	--
2001	15	11	25	2	709	736	28	--	--	2,146	--	--	--
2002	11	13	30	1	698	729	29	--	--	2,232	--	--	--
2003	13	12	28	1	692	722	30	--	--	2,286	--	--	--
2004	10	12	34	1	699	734	31	--	--	2,262	--	--	--
2005	6	12	31	1	801	833	R 61	--	--	2,377	--	--	--
2006	R 5	12	38	1	R 652	R 691	R 55	--	--	2,468	--	--	--
2007	5	12	31	1	983	1,015	61	--	--	2,592	--	--	--
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	R 15.1	0.3	(s)	1.8	2.1	2.3	0.0	0.0	6.2	26.0	14.3	40.2
1990	0.5	12.6	0.1	(s)	1.8	1.9	1.0	0.0	(s)	5.9	21.9	13.6	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	16.3	38.8
2002	0.2	14.0	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.6	25.1	17.0	42.1
2003	0.2	12.8	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.8	24.1	17.2	41.3
2004	0.2	12.6	0.2	(s)	2.5	2.7	0.6	(s)	(s)	7.7	23.9	17.1	40.9
2005	0.1	12.2	0.2	(s)	2.9	3.1	R 1.2	(s)	(s)	8.1	R 24.7	17.7	R 42.4
2006	0.1	12.2	0.2	(s)	2.4	2.6	R 1.1	(s)	(s)	8.4	R 24.4	18.2	R 42.6
2007	0.1	12.9	0.2	(s)	3.5	3.7	1.2	(s)	(s)	8.8	26.7	19.1	45.8

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Wood and wood-derived fuels.<sup>d</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>e</sup> 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 an explanation of estimation methodology.<sup>f</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in

net energy and total.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 9. Commercial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum						Hydro-electric Power <sup>e,f</sup>	Biomass	Geothermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	Kerosene	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total <sup>d</sup>		Wood and Waste <sup>f,g</sup>		Million Kilowatthours			
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million Kilowatthours	Million Kilowatthours					
1960	23	5	9	29	99	73	37	246	0	--	--	174	--	--	--
1965	19	8	16	119	94	73	40	341	0	--	--	594	--	--	--
1970	9	14	30	147	177	85	48	487	0	--	--	657	--	--	--
1975	35	10	63	43	169	72	83	431	0	--	--	775	--	--	--
1980	83	5	428	23	114	103	27	694	0	--	--	1,138	--	--	--
1985	83	9	394	6	88	67	69	624	0	--	--	2,321	--	--	--
1990	104	8	218	1	86	74	1	380	0	--	--	2,319	--	--	--
1995	127	10	265	2	104	8	(s)	379	0	--	--	2,443	--	--	--
1996	336	10	264	1	81	36	(s)	383	0	--	--	2,562	--	--	--
1997	125	11	219	1	21	8	(s)	249	0	--	--	2,568	--	--	--
1998	142	10	148	2	11	8	(s)	168	0	--	--	2,678	--	--	--
1999	92	10	364	(s)	42	8	0	415	0	--	--	2,693	--	--	--
2000	123	10	401	(s)	89	8	(s)	498	0	--	--	2,945	--	--	--
2001	124	10	415	1	125	47	0	588	0	--	--	3,104	--	--	--
2002	83	10	283	1	123	118	0	525	0	--	--	3,189	--	--	--
2003	87	10	152	(s)	122	148	0	423	0	--	--	3,282	--	--	--
2004	92	10	102	(s)	123	240	0	465	0	--	--	3,393	--	--	--
2005	64	9	95	(s)	141	306	0	543	0	--	--	3,754	--	--	--
2006	47	9	93	1	R 115	348	0	R 556	0	--	--	4,117	--	--	--
2007	48	9	87	(s)	174	429	0	690	0	--	--	4,214	--	--	--
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	R 9.6	2.3	(s)	0.3	0.4	0.4	3.4	0.0	0.1	0.0	7.9	22.4	18.2	40.6
1990	2.1	9.3	1.3	(s)	0.3	0.4	(s)	2.0	0.0	0.1	0.6	7.9	22.0	18.3	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	23.6	50.3
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	24.3	51.0
2003	1.6	10.5	0.9	(s)	0.4	0.8	0.0	2.1	0.0	0.1	0.7	11.2	26.2	24.7	50.9
2004	1.6	10.3	0.6	(s)	0.4	1.2	0.0	2.3	0.0	0.1	0.7	11.6	26.7	25.6	52.3
2005	1.1	9.6	0.6	(s)	0.5	1.6	0.0	2.7	0.0	R 0.2	0.7	12.8	R 27.1	28.0	R 55.1
2006	0.8	9.9	0.5	(s)	0.4	1.8	0.0	2.8	0.0	R 0.2	0.7	14.0	R 28.4	30.4	R 58.8
2007	0.9	9.8	0.5	(s)	0.6	2.2	0.0	3.4	0.0	0.2	0.6	14.4	29.2	31.0	60.3

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes small amounts of petroleum coke not shown separately.<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption. From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of

supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. • The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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



Table 10. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum					Hydro-electric Power <sup>e,f</sup>	Biomass	Geo-thermal <sup>f</sup>	Retail Electricity Sales	Net Energy <sup>f,h</sup>	Electrical System Energy Losses <sup>i</sup>	Total <sup>f,h</sup>
			Distillate Fuel Oil	LPG <sup>b</sup>	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Other <sup>d</sup>							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Million kWh	Wood and Waste <sup>f,g</sup>		Million kWh			
1960	119	35	1,458	384	320	756	2,615	5,534	0	--	--	270	--	--
1965	124	38	1,790	496	510	942	3,102	6,841	0	--	--	1,285	--	--
1970	210	70	1,931	578	552	960	3,610	7,631	0	--	--	1,896	--	--
1975	640	59	3,596	569	591	1,881	3,915	10,552	0	--	--	2,918	--	--
1980	1,605	48	6,255	1,199	365	2,144	4,566	14,529	0	--	--	4,621	--	--
1985	1,875	54	2,463	1,312	530	142	3,884	8,331	0	--	--	6,212	--	--
1990	1,857	67	2,296	663	417	39	3,977	7,391	0	--	--	7,729	--	--
1995	1,937	68	1,898	1,265	443	20	2,946	6,572	0	--	--	6,817	--	--
1996	1,835	70	2,281	1,095	451	6	3,606	7,439	0	--	--	6,891	--	--
1997	1,959	67	2,811	160	470	4	3,749	7,195	0	--	--	7,211	--	--
1998	1,939	74	2,840	154	249	6	3,333	6,581	0	--	--	6,950	--	--
1999	1,934	61	3,219	195	237	8	3,691	7,349	0	--	--	7,065	--	--
2000	1,913	63	3,370	611	240	23	3,826	8,070	0	--	--	7,321	--	--
2001	1,660	62	4,341	400	426	68	4,784	10,018	0	--	--	7,700	--	--
2002	1,535	72	4,138	291	451	151	4,101	9,132	0	--	--	7,453	--	--
2003	1,614	76	3,218	272	477	143	4,847	8,956	0	--	--	7,685	--	--
2004	1,627	72	3,360	149	532	107	4,620	8,769	0	--	--	7,884	--	--
2005	1,597	73	3,133	291	492	133	4,648	8,696	0	--	--	8,007	--	--
2006	1,685	R 73	4,736	R 438	513	111	4,422	R 10,221	0	--	--	8,362	--	--
2007	1,733	75	4,609	305	315	76	4,541	9,847	0	--	--	8,730	--	--
Trillion Btu														
1960	2.4	36.1	8.5	1.5	1.7	4.8	16.1	32.6	0.0	0.4	0.0	0.9	72.5	74.8
1965	2.5	35.2	10.4	2.0	2.7	5.9	19.1	40.1	0.0	0.5	0.0	4.4	82.7	93.2
1970	4.0	71.3	11.2	2.2	2.9	6.0	22.3	44.7	0.0	0.6	0.0	6.5	127.1	142.7
1975	11.8	55.2	20.9	2.1	3.1	11.8	23.9	61.8	0.0	0.4	0.0	10.0	139.2	163.1
1980	28.8	R 51.1	36.4	4.4	1.9	13.5	28.1	84.4	0.0	1.2	0.0	15.8	181.2	219.2
1985	32.9	R 56.3	14.3	4.7	2.8	0.9	24.8	47.6	0.0	1.5	0.0	21.2	159.3	208.1
1990	41.2	73.8	13.4	2.4	2.2	0.2	24.5	42.7	0.0	1.0	(s)	26.4	185.1	246.1
1995	42.5	72.6	11.1	4.6	2.3	0.1	18.2	36.3	0.0	0.4	(s)	23.3	175.0	227.9
1996	40.2	74.2	13.3	4.0	2.4	(s)	22.1	41.8	0.0	0.2	(s)	23.5	179.8	233.3
1997	42.3	71.2	16.4	0.6	2.5	(s)	23.1	42.5	0.0	0.2	(s)	24.6	180.8	236.5
1998	42.5	79.2	16.5	0.6	1.3	(s)	20.6	39.0	0.0	0.1	(s)	23.7	184.6	238.4
1999	42.4	64.0	18.8	0.7	1.2	0.1	22.9	43.7	0.0	0.1	(s)	24.1	174.3	229.5
2000	38.5	66.4	19.6	2.2	1.3	0.1	23.9	47.2	0.0	0.1	(s)	25.0	177.1	234.0
2001	33.2	65.6	25.3	1.4	2.2	0.4	28.9	58.2	0.0	0.3	(s)	26.3	183.6	242.2
2002	30.9	75.7	24.1	1.1	2.3	0.9	24.4	52.8	0.0	0.2	(s)	25.4	185.1	241.8
2003	32.0	80.3	18.7	1.0	2.5	0.9	29.1	52.2	0.0	0.2	(s)	26.2	190.9	248.8
2004	32.4	75.0	19.6	0.5	2.8	0.7	27.5	51.0	0.0	0.2	(s)	26.9	185.5	245.1
2005	31.6	75.9	18.2	1.1	2.6	0.8	27.6	50.3	0.0	0.2	(s)	27.3	185.3	245.1
2006	33.4	R 75.7	27.6	R 1.6	2.7	0.7	26.2	R 58.7	0.0	0.2	(s)	28.5	R 196.5	R 258.2
2007	34.4	77.7	26.8	1.1	1.6	0.5	27.0	57.0	0.0	0.2	(s)	29.8	199.1	263.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Liquefied petroleum gases.<sup>c</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, and 16 other petroleum products as described in the Technical Notes, Section 4, "Other Petroleum Products."<sup>e</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>h</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline but not shown in the motor gasoline column. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived,

but should be counted only once in net energy and total.

<sup>i</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

kWh = Kilowatthours. -- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emew/states/\\_seds.html](http://www.eia.doe.gov/emew/states/_seds.html) under "Complete Data Files."

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



Table 11. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Fuel Ethanol <sup>d</sup>	Retail Electricity Sales	Net Energy <sup>e,f</sup>	Electrical System Energy Losses <sup>g</sup>	Total <sup>e,f</sup>
			Aviation Gasoline	Distillate Fuel Oil	Jet Fuel	LPG <sup>b</sup>	Lubricants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total					
	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	--	--	--
1965	(s)	2	217	1,864	74	49	81	4,157	1,173	7,615	0	0	--	--	--
1970	(s)	6	256	3,072	128	91	85	5,262	469	9,363	0	0	--	--	--
1975	(s)	5	218	3,965	124	116	108	6,691	0	11,223	0	0	--	--	--
1980	0	6	108	6,419	162	73	151	8,034	0	14,946	0	0	--	--	--
1985	0	5	51	4,172	154	45	137	7,073	(s)	11,632	(s)	0	--	--	--
1990	0	5	35	6,671	143	27	154	6,613	0	13,643	21	0	--	--	--
1995	0	7	179	7,985	160	17	147	7,486	0	15,974	127	0	--	--	--
1996	0	8	213	7,869	151	16	143	7,418	0	15,810	46	0	--	--	--
1997	0	10	151	8,126	121	8	151	7,125	0	15,683	3	0	--	--	--
1998	0	12	151	8,010	116	25	158	7,631	0	16,090	0	0	--	--	--
1999	0	14	234	9,971	174	4	160	7,634	0	18,177	0	0	--	--	--
2000	0	14	277	8,737	286	10	157	7,551	0	17,019	0	0	--	--	--
2001	0	13	209	9,173	331	4	144	7,629	0	17,490	0	0	--	--	--
2002	0	13	241	9,287	210	3	142	7,473	0	17,356	0	0	--	--	--
2003	0	14	216	10,825	166	6	132	7,384	0	18,729	0	0	--	--	--
2004	0	13	215	10,524	242	21	133	7,196	0	18,331	0	0	--	--	--
2005	0	14	248	10,776	204	7	133	7,389	0	18,756	R 144	0	--	--	--
2006	0	14	250	11,283	292	6	129	7,468	0	19,429	R 144	0	--	--	--
2007	0	15	190	11,518	378	7	133	7,779	0	20,005	258	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	(s)	0.0	68.8	0.0	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	0.4	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
2005	0.0	14.8	1.3	62.8	1.2	(s)	0.8	38.6	0.0	104.6	R 0.5	0.0	119.4	0.0	119.4
2006	0.0	14.5	1.3	65.7	1.7	(s)	0.8	39.0	0.0	108.4	R 0.5	0.0	122.9	0.0	122.9
2007	0.0	15.2	1.0	67.1	2.1	(s)	0.8	40.6	0.0	111.6	0.9	0.0	126.9	0.0	126.9

<sup>a</sup> Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, natural gas consumed as vehicle fuel.

<sup>b</sup> Liquefied petroleum gases.

<sup>c</sup> Beginning in 1993, motor gasoline includes fuel ethanol blended into the product.

<sup>d</sup> Beginning in 1981, fuel ethanol is shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total. There is also a discontinuity in this time series between 2004 and 2005 due to changes in estimation methodology. See Section 5 of the Technical Notes.

<sup>e</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

<sup>f</sup> From 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column.

<sup>g</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

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

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

Table 12. Electric Power Sector Consumption Estimates, Selected Years, 1960-2007, Wyoming

Year	Coal	Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar/PV <sup>f,g</sup>	Wind <sup>f</sup>	Electricity Net Imports <sup>h</sup>	Total <sup>f,i</sup>
			Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total			Wood and Waste <sup>e,f</sup>					
	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	--
2005	26,086	1	0	77	0	77	0	808	--	0	0	717	-98	--
2006	26,170	1	0	88	0	88	0	843	--	0	0	759	-47	--
2007	26,585	2	0	84	0	84	0	729	--	0	0	755	-55	--
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
2005	458.2	0.5	0.0	0.4	0.0	0.4	0.0	8.1	0.0	0.0	0.0	7.2	-0.3	474.1
2006	455.0	0.8	0.0	0.5	0.0	0.5	0.0	8.4	0.0	0.0	0.0	7.5	-0.2	472.1
2007	459.4	2.0	0.0	0.5	0.0	0.5	0.0	7.2	0.0	0.0	0.0	7.5	-0.2	476.4

<sup>a</sup> Includes supplemental gaseous fuels.<sup>b</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil nos. 4, 5, and 6.<sup>c</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. For 1980 through 2000, distillate fuel oil includes fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and waste. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both

natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than +0.5 and greater than -0.5 or Btu value less than +0.05 and greater than -0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Through 1988, data are for electric utilities only. Beginning in 1989, data include independent power producers. • 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.

Web Page: All data available at [http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html) under "Complete Data Files."

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

# State Energy Data System 2007: 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 the Energy Information Administration's (EIA) website 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 website. 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.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](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 Portable Document Format (PDF) files show data for selected years from 1960 through 1995; thereafter, data are shown consecutively through 2007. 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 website. 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 are 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 presents the real gross domestic product by State used

to calculate total energy consumption per real dollar of economic output. Appendix E provides metric and other physical conversion factors for measures used in energy analyses. Appendix F summarizes changes in SEDS content made since the last complete release of data, which was in November 2008.

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 PDF data tables on the website.

## Data

**Estimation Methodologies.** Using SEDS, EIA develops estimates of energy consumption by principal energy sources and major end-use sectors, by State, for a 47-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 3, which summarizes the status of current data sources used). Some consumption estimates in SEDS are based on a variety of surrogate measures. The measures are 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 4 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 and the District of Columbia.

**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

### 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 oil, residual fuel oil, 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 consumption of **fuel ethanol**, by sector, is estimated, although the U.S. total is 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.



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

### 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 2007, the average short ton of coal consumed by the electric power sector contained 19.908 million Btu (Appendix B Table B13), the average barrel of distillate fuel oil contained 5.825 million Btu (page 158 of Appendix B), and the average cubic foot of natural gas consumed by the electric power sector contained 1,027 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 2007 the electric power sector consumed 40.6 quadrillion Btu of primary energy in order to provide 12.8 quadrillion Btu of electricity for sale. These data indicate that 68 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 32 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.

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 2007, 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 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 the real gross domestic product by State used to calculate total energy per chained (2000) dollar of output; Appendix E provides metric and other physical conversion factors for measures used in energy analyses; and Appendix F summarizes changes in SEDS content made since the last complete release of data.

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:

<b>Characters:</b>	<b>MG</b>	<b>TC</b>	<b>P</b>	<b>AL</b>
<b>Positions:</b>	1 and 2	3 and 4	5	6 and 7
<b>Identity:</b>	Type of Energy or Product	Energy activity or consumption end-use sector	Type of data	Geographic

The energy sources and products in SEDS, which are represented by the first two letters of the variable name, are:

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 oil
DK	= distillate fuel oil, including kerosene-type jet fuel
EL	= electricity
EN	= fuel 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
G1	= geothermal, solar thermal, photovoltaic, and wind 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 (including supplemental gaseous fuels)
NN	= natural gas (excluding supplemental gaseous fuels)
NU	= nuclear electric power
OC	= organic chemicals
OT	= other energy, including net electricity imports, energy losses and co-products from the production of fuel ethanol, and an adjustment to remove double-counting of supplemental gaseous fuels
P1	= asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products"
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 oil
SF	= supplemental gaseous fuels
SG	= still gas
SN	= special naphtha
SO	= photovoltaic and solar thermal energy
TE	= total energy
TN	= total net energy (net of electrical system energy losses)
UO	= unfinished oils
US	= unfractionated stream
WD	= wood
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
CA	= capacity
LP	= lease and plant fuel
IN	= deliveries to the industrial sector
OD	= distribution to other industrial users
VA	= value-added in manufacture

Combining the first two components (the first four letters) produces variable names, such as:

RFBK	= residual fuel oil sold for vessel bunkering
RFAC	= residual fuel oil consumed by the transportation sector
NGIN	= natural gas (including supplemental gaseous fuels) delivered to the industrial sector
NGIC	= natural gas (including supplemental gaseous fuels) 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 in million dollars

In general, 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 million dollars, and the variable names contain “V” in the fifth character.

There are a few variables that do not follow the convention:

TPOPP = resident population  
 GDPRX = real gross domestic product  
 TETGR = total energy consumption per real dollar of GDP

Per capita consumption is represented by “TP” in the third and fourth positions of the variable name.

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:

$$CLHCPZZ = (CLHDPZZ/CLHDPUS) * CLHCPUS$$

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:

$$CLRCPZZ = CLHCPZZ * CLRCSUS$$

$$CLRCPUS = \Sigma CLRCPZZ$$

$$CLCCPZZ = CLHCPZZ - CLRCPZZ$$

$$CLCCPUS = \Sigma CLCCPZZ$$

**Table TN2. Residential Sector Share of Combined Residential and Commercial Coal Consumption, 1960 Forward**

Years	CLRCSUS	Years	CLRCSUS	Years	CLRCSUS
1960–1962	0.59	1979	0.20	1994	0.15
1963, 1964	0.58	1980	0.21	1995	0.13
1965–1967	0.57	1981	0.18	1996	0.12
1968–1970	0.56	1982	0.17	1997, 1998	0.11
1971	0.49	1983	0.16	1999	0.12
1972	0.43	1984	0.19	2000, 2001	0.11
1973	0.37	1985	0.22	2002	0.12
1974	0.32	1986, 1987	0.23	2003	0.13
1975	0.30	1988	0.22	2004	0.10
1976	0.29	1989	0.21	2005	0.08
1977	0.28	1990	0.20	2006	0.09
1978	0.23	1991–1993	0.18	2007	0.10

To gain a perspective on these estimates: coal consumed by residential and commercial users combined in 2007 accounted for only 0.3 percent of all coal consumed—that is, 3 million short tons out of the 1,128 million short tons consumed in 2007.

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 allocators 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 distribution data for residential and commercial coal consumption. In many States, this leaves only one other sector withheld, which is derived by subtracting the other known sectors from the State total. In some cases withheld Census division values need to be subtracted out from known U.S. totals before the State-level estimates can be derived.

Beginning with 2001, additional State coal consumption values are withheld, making it no longer possible to subtract out estimates of coal consumed by coke plants for some States. To estimate the withheld consumption values, the known State-level coke plant coal consumption values are subtracted from the known Census division totals leaving a value to be distributed to the States that have withheld values in that division. Data for the same States from a different EIA data series on distribution of coal to coke plants are used to estimate the withheld consumption data. Distribution data for the three

years prior to the year being estimated are summed for each State and its division and each State's share of its division subtotal is used to allocate the withheld coke plant coal consumption to that State. For 2001, Utah was grouped with New York and Pennsylvania to create the subtotal used in the percentage calculations.

In 2006 and 2007, data for coal consumed by other industrial users (all industrial users except coke plants) are withheld for Hawaii and Oregon, making it impossible to estimate these States' coal use in this sector using the method described above. Instead, an estimate for the two States combined is derived by subtracting coal use in this sector in all other Pacific Census Division States from the Pacific Census Division total. The average Hawaii and Oregon other industrial sector shares (relative to each other) for 2002-2004 are then applied to the combined estimate to derive each State's other industrial sector consumption estimate in 2006 and 2007.

These derived series for the residential/commercial, coke plant, and other industrial sectors are used in SEDS as the distribution data series to calculate coal consumption estimates by State and sector that are consistent with State-level total coal consumption data published in other EIA reports.

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 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.

Note: 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 14 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](http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html). See Additional Note 4 on page 14 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](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, 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/table26.html> and [http://www.eia.doe.gov/cneaf/coal/page/acr/back\\_issues.html](http://www.eia.doe.gov/cneaf/coal/page/acr/back_issues.html). Data are from the report of the following year (e.g. final 2005 data in *Annual Coal Report 2006*), except the most recent year of data.

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 forward: EIA, *Domestic Distribution of U.S. Coal by Destination State, Consumer, Destination and Method of Transportation*, <http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coaldistributions.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, 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/table26.html> and [http://www.eia.doe.gov/cneaf/coal/page/acr/back\\_issues.html](http://www.eia.doe.gov/cneaf/coal/page/acr/back_issues.html). Data are from the report of the following year (e.g. final 2005 data in *Annual Coal Report 2006*), except the most recent year of data.

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 forward: Consumption data became available for some States and are used for this distribution series when available. See Additional Note 1 on page 13 for an explanation of the estimation methodology.
  - 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: 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/table26.html> and <http://www.eia.doe.gov/cneaf/coal/page/acr/backissues.html>. Data are from the report of the following year (e.g. final 2005 data in *Annual Coal Report 2006*), except the most recent year of data. EIA, *Domestic Distribution of U.S. Coal by Destination State, Consumer, Destination and Method of Transportation*, [http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coal\\_distributions.html](http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coal_distributions.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, 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/table26.html> and [http://www.eia.doe.gov/cneaf/coal/page/acr/back\\_issues.html](http://www.eia.doe.gov/cneaf/coal/page/acr/back_issues.html). Data are from the report of the following year (e.g. final 2005 data in *Annual Coal Report 2006*), except the most recent year of data.

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 for this distribution series when available. See Additional Note 1 on page 13 for an explanation of the estimation methodology.
  - 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/table26.html> and [http://www.eia.doe.gov/cneaf/coal/page/acr/back\\_issues.html](http://www.eia.doe.gov/cneaf/coal/page/acr/back_issues.html). Data are from the report of the following year (e.g. final 2005 data in *Annual Coal Report 2006*), except the most recent year of data.

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), Table 17 (2001 through 2005), and Table 14 (2006 and 2007), <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), Table 21 (2001 through 2005), and Table 18 (2006 and 2007), <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 *Natural Gas Annual* and *Electric Power Annual* 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 are 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 is 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 data 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" on page 23 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:

- NGEIKZZ = The factor for converting natural gas consumed by the electric power sector from physical units to Btu; and  
 NGTCKZZ = The factor for converting natural gas consumed by all sectors from physical units to Btu.

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:

$$\begin{aligned}\text{NGTCBUS} &= \sum \text{NGTCBZZ} \\ \text{NGEIBUS} &= \sum \text{NGEIBZZ} \\ \text{NGACBUS} &= \sum \text{NGACBZZ} \\ \text{NGCCBUS} &= \sum \text{NGCCBZZ}\end{aligned}$$

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.

### **Supplemental Gaseous Fuels**

Natural gas consumption contains a small amount of supplemental gaseous fuels (SGF). These fuels are introduced into or commingled with natural gas, and increase the volume available for disposition. Such fuels include, but are not limited to, synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas. Because SGF are mostly derived from fossil fuels, which are already accounted for, they are removed from total energy consumption in Btu (see Sections 6 and 7) to eliminate any double counting.

Annual data on SGF supplies in physical units are available for each State from 1980 forward in EIA's *Natural Gas Annual*. For all States except North Dakota, this data series is used to approximate SGF contained in the natural gas delivered to users. See "Additional Note 2" on page 23 for the method of assigning North Dakota SGF supplies to North Dakota and other States for consumption. Unknown quantities of SGF are included in the Btu consumption data for 1979 and earlier years.

NGSFPZZ = supplemental gaseous fuels supplies by State in million cubic feet.

It is assumed that SGF are commingled with natural gas consumed by the commercial, other industrial, residential, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel,

pipelines, or vehicle fuel. The estimated consumption of SGF within each sector is calculated using the sector's natural gas consumption share.

$$\text{NGTZPZZ} = \text{NGCCPZZ} + \text{NGINPZZ} + \text{NGRCPZZ} + \text{NGEIPZZ}$$

$$\text{SFCCPZZ} = \text{NGSFPZZ} * (\text{NGCCPZZ} / \text{NGTZPZZ})$$

$$\text{SFINPZZ} = \text{NGSFPZZ} * (\text{NGINPZZ} / \text{NGTZPZZ})$$

$$\text{SFRCPPZZ} = \text{NGSFPZZ} * (\text{NGRCPZZ} / \text{NGTZPZZ})$$

$$\text{SFEIPZZ} = \text{NGSFPZZ} * (\text{NGEIPZZ} / \text{NGTZPZZ})$$

To convert SGF from physical units to Btu, the appropriate natural gas conversion factors are used:

$$\text{SFCCBZZ} = \text{SFCCPZZ} * \text{NGTXKZZ}$$

$$\text{SFINBZZ} = \text{SFINPZZ} * \text{NGTXKZZ}$$

$$\text{SFRCBZZ} = \text{SFRCPPZZ} * \text{NGTXKZZ}$$

$$\text{SFEIBZZ} = \text{SFEIPZZ} * \text{NGEIKZZ}$$

Total SGF consumed by State in Btu is equal to the sum of the four sectors with SGF:

$$\text{SFTCBZZ} = \text{SFCCBZZ} + \text{SFINBZZ} + \text{SFRCBZZ} + \text{SFEIBZZ}$$

The U.S. consumption estimates for each of the variables and sectors and the U.S. total are calculated as the sum of the States' values.

### 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/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html):

$$\text{NGEIKUS} = \text{NGEIBUS} / \text{NGEIPUS}$$

$$\text{NGTCKUS} = \text{NGTCBUS} / \text{NGTCPUS}$$

$$\text{NGTXKUS} = (\text{NGTCBUS} - \text{NGEIBUS}) / (\text{NGTCPUS} - \text{NGEIPUS})$$

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:

$$\text{NGPZBZZ} = \text{NGPZPZZ} * \text{NGTXKZZ}$$

$$\text{NGVHBZZ} = \text{NGVHPZZ} * \text{NGTXKZZ}$$

$$\text{NGLPPZZ} = \text{NGLEPZZ} + \text{NGPLPZZ}$$

$$\text{NGLPBZZ} = \text{NGLPPZZ} * \text{NGTXKZZ}$$

The U.S. totals for each series are calculated as the sum of the States' values.

### Additional Notes

1. 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.
2. In general, SGF supplies are small relative to total natural gas consumption, and are assumed to be a good measure of SGF consumption. The only exception is North Dakota. Since 1985, North Dakota's volume of SGF supplies is significant and sometimes exceeds its total natural gas consumption. SEDS assumes that 10 percent of SGF produced in North Dakota is consumed in the State and the rest is distributed to Iowa, Illinois, and Indiana through the Northern Border Pipeline, according to the capacity of the pipeline going into each State. The percentage allocations of the supplemental gaseous fuels supplies in North Dakota are as follows:
  - From 1985 through 1998: North Dakota (10%), Iowa (90%).
  - From 1999 forward: North Dakota (10%), Iowa (62%), Illinois (22%), Indiana (6%).



## 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](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\\_a\\_EPG0\\_vcs\\_mmcfa.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vcs_mmcfa.htm) and published in the EIA, *Natural Gas Annual*, 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](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](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](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](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga_historical.html).
- 1993 through 1996: Unpublished data comparable to data contained in the *Natural Gas Annual*, Tables 26 through 76.

- 1997 forward: EIA, Natural Gas Navigator, [http://tonto.eia.doe.gov/dnav/ng/ng\\_cons\\_sum\\_a\\_EPG0\\_vin\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vin_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, 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\\_a\\_EPG0\\_vcl\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vcl_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, 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\\_a\\_EPG0\\_VCF\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_VCF_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, 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. This report is available only via the Internet at [http://www.eia.doe.gov/oil\\_gas/natural\\_gas/data\\_publications/historical\\_natural\\_gas\\_annual/hnga.html](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\\_a\\_EPG0\\_vgp\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vgp_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, 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](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\\_a\\_EPG0\\_vrs\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vrs_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, Tables 26 through 76.

NGSFPZZ ---- Supplemental gaseous fuels supplies by State.

- 1980 forward: EIA, Natural Gas Navigator, [http://tonto.eia.doe.gov/dnav/ng/ng\\_prod\\_ss\\_a\\_EPG0\\_ovi\\_mmcfc\\_a.htm](http://tonto.eia.doe.gov/dnav/ng/ng_prod_ss_a_EPG0_ovi_mmcfc_a.htm) and published in the EIA, *Natural Gas Annual*, Table 8.

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](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga.html).
- 1997 forward: EIA, *Natural Gas Annual*, Table 16, [http://www.eia.doe.gov/oil\\_gas/natural\\_gas/data\\_publications/natural\\_gas\\_annual/nga\\_historical.html](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga_historical.html) and unpublished revisions.

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](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/historical_natural_gas_annual/hnga.html).



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- 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\\_a\\_EPG0\\_vdv\\_mmcfa.htm](http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vdv_mmcfa.htm) and published in the EIA, *Natural Gas Annual*, Tables 26 through 76.

## Section 4. Petroleum

### Petroleum Overview

The 25 petroleum products included in the State Energy Data System (SEDS) are explained in this section. For 10 of these products, the means of estimating their individual consumption by State is described in individual sections. The 10 petroleum products are:

- asphalt and road oil (AR)
- aviation gasoline (AV)
- distillate fuel oil (DF)
- jet fuel (JF)
- kerosene (KS)
- liquefied petroleum gases (LG)
- lubricants (LU)
- motor gasoline (MG)
- petroleum coke (PC)
- residual fuel oil (RF)

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 25 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 oil 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 apportioning the U.S. consumption data to the States, they do not need to be converted into thousand barrels.

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 Oil (DF)	DFRC	+	DFCC	+	DFIC	+	DFAC	+	DFEI	=	DFTC
	+		+		+		+		+		+
Jet Fuel (JF)							JFAC		JFEU	=	JFTC
							+				+
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 Oil (RF)			RFCC		RFIC	+	RFAC	+	RFEI	=	RFTC
					+				+		+
Other Petroleum Products (PO)			PCCC <sup>1</sup>	+	POIC <sup>2</sup>			+	PCEI <sup>1</sup>	=	POTC
Total Petroleum (PA)	PARC	+	PACC	+	PAIC	+	PAAC	+	PAEI	=	PATC

<sup>1</sup> "Other petroleum products" are consumed in the industrial sector with the exception of petroleum coke consumed by the commercial and electric power sectors.

<sup>2</sup> "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.

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 =  $\Sigma$ ASINPZZ  
 RDINPUS =  $\Sigma$ 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 =  $\Sigma$ ASICPZZ

RDICPZZ =  $(\text{RDINPZZ} / \text{RDINPUS}) * \text{RDTCPUS}$   
 RDICPUS =  $\Sigma$ 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 =  $\Sigma$ ARICPZZ  
 ARTCPZZ = ASTCPZZ + RDTCPZZ  
 ARTCPUS =  $\Sigma$ 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 =  $\Sigma$ 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” (Beginning in 1983, this variable includes road oil.) The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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. Value entered in SEDS as zero.

RDTCPUS — 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. Value entered in SEDS as zero.

## 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:

AVTCBZZ = AVACBZZ  
AVTCBUS =  $\Sigma$ AVTCBZZ

### 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. Data for 2004 through 2007 are not available. Data for 2003 are used for those years for all States except 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

## Distillate Fuel Oil

### Physical Units

Since State-level and end-use consumption data for distillate fuel oil (except for that consumed by the electric power sector) are not available, sales of distillate fuel oil into or within each State, published by the Energy Information Administration (EIA) in the *Fuel Oil and Kerosene Sales Report*, are used to estimate distillate fuel oil consumption. The following variable names have been assigned to the sales series, in thousand barrels ("ZZ" in the variable names represents the two-letter State code that differs for each State):

- DFBKPZZ = distillate fuel oil 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 oil sales to commercial establishments for space heating, water heating, and cooking;

DFIBPZZ	= distillate fuel oil 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 oil sales to the Armed Forces, for all uses;
DFOCPZZ	= distillate fuel oil 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 oil 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 oil sales as diesel fuel for on-highway use (i.e., as engine fuel for trucks, buses, and automobiles);
DFOTPZZ	= distillate fuel oil sales for all other uses not identified in other sales categories;
DFRRPZZ	= distillate fuel oil sales to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations; and
DFRSPZZ	= distillate fuel oil sales to the residential sector for space heating, water heating, and cooking, excluding farm houses.

Three additional data series are used in calculating distillate fuel oil consumption estimates:

DKEIPZZ	= distillate fuel oil (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 oil total consumed in the United States, in thousand barrels.

Distillate fuel oil consumed by the electric power sector 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 oil section for further information on changes in this series' data definitions.) Before 2001, the data 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 oil data and accounted for in the jet fuel data described in a following

section of this documentation. Data for kerosene-type jet fuel consumed by electric utilities are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero. From 2001 forward, jet fuel consumed by the electric power sector is grouped under waste/other oil and is not accounted for in SEDS. DKEIPZZ is continued to be used to represent distillate fuel oil consumed by the electric power sector.

Total consumption of distillate fuel oil in the United States, DFTCPUS, is the product supplied series in the EIA publication *Petroleum Supply Annual*.

All of the State-level data series listed above 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 oil to the industrial sector for each State, DFINPZZ, is the sum of the distillate fuel oil 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 oil to the transportation sector for each State, DFTRPZZ, is the sum of the distillate fuel oil sales for vessel bunkering, military use, railroad use, and the diesel fuel used on-highway:

$$\begin{aligned} \text{DFTRPZZ} &= \text{DFBKPZZ} + \text{DFMIPZZ} + \text{DFRRPZZ} + \text{DFONPZZ} \\ \text{DFTRPUS} &= \Sigma \text{DFTRPZZ} \end{aligned}$$

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 oil 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 oil consumption by all sectors other than the electric power sector, DFNCPUZ, is calculated by subtracting the distillate fuel oil consumption by the electric power sector from the total U.S. distillate fuel oil consumption:

$$\text{DFNCPUZ} = \text{DFTCPUS} - \text{DFEIPUS}$$

This U.S. subtotal of distillate fuel oil consumption by the four end-use sectors, DFNCPUZ, 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 oil in proportion to the amount of sales to that State:

$$\text{DFNCPZZ} = (\text{DFNDPZZ} / \text{DFNDPUS}) * \text{DFNCPUZ}$$

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 oil 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 oil has a heat content value of approximately 5.825 million Btu per barrel. This factor is applied to convert distillate fuel oil 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 oil plus jet kerosene) in physical units. The Btu variable, DKEIB, is calculated as follows (See page 40 for description of JKEUB):

$$\begin{aligned} \text{DKEIBZZ} &= \text{DFEIBZZ} + \text{JKEUBZZ} \\ \text{DKEIBUS} &= \Sigma \text{DKEIBZZ} \end{aligned}$$

### Additional Notes on Distillate Fuel Oil

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 oil, 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 this 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 oil 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 oil 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 oil deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 distillate fuel oil 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 oil and residual fuel oil 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 through 2000, data on consumption of light fuel oil at all plant types combined and consumption of heavy fuel oil at all plant types combined are available by State. For 2001 forward, data on consumption of distillate fuel oil and residual fuel oil are available. 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 oil) and internal combustion and gas turbine plants (primarily distillate fuel oil 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 oil consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel oil plus jet kerosene consumption.
- 1980 through 2000 — total heavy oil consumption at all plant types is assumed to equal residual fuel oil consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel oil plus jet kerosene consumption.

The data series thus derived for SEDS for residual fuel oil and distillate fuel oil 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 Oil**

DFBKPZZ — Distillate fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VVB\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VVB_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VVB\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VVB_Mgal_a.htm).

DFCMPZZ — Distillate fuel oil 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 oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VCS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VCS_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VCS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VCS_Mgal_a.htm).

DFIBPZZ — Distillate fuel oil 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 oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_vin\\_Mgal\\_a.htm](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](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VFM_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_vin\\_Mgal\\_a.htm](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](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VFM_Mgal_a.htm).

DFMIPZZ — Distillate fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VMI\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VMI_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VMI\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VMI_Mgal_a.htm).

DFOCPZZ — Distillate fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VOC\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOC_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VOC\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOC_Mgal_a.htm).



DFOFPZZ — Distillate fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD2D\\_VHF\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHF_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD2D\\_VHF\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHF_Mgal_a.htm).

DFONPZZ — Distillate fuel oil 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.

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- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD2D\\_VHN\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHN_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD2D\\_VHN\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD2D_VHN_Mgal_a.htm).

DFOTPZZ — Distillate fuel oil 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.

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- 1983: EIA, *Petroleum Marketing Monthly*, July 1985 issue, Table A12.
- 1984 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VOE\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOE_Mgal_a.htm).
- 1988 through 1994: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VOE\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VOE_Mgal_a.htm).
- 1995 forward: Series discontinued; no data available. Values are assumed to be zero.

DFRRPZZ — Distillate fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VRR\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRR_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VRR\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRR_Mgal_a.htm).

DFRSPZZ — Distillate fuel oil 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 oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VRS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRS_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821dst\\_a\\_EPD0\\_VRS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_a_EPD0_VRS_Mgal_a.htm).

DFTCPUS — Distillate fuel 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 forward: EIA, *Petroleum Supply Annual*, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/petroleum\\_supply\\_annual/psa\\_volume1/psa\\_volume1\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

DKEIPZZ — Distillate fuel oil 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 oil consumption were created for each year by applying the shares of internal combustion and gas turbine plants (primarily distillate fuel oil plus small amounts of jet 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 internal combustion and gas turbine plants combined is assumed to equal distillate and jet fuel consumption.
  - 1980 through 2000: Consumption of light fuel oil at all plant types by State is available. This is assumed to equal distillate and jet kerosene consumption.
  - 2001 forward: Consumption of distillate fuel oil is available.

JKEUPZZ — Kerosene-type jet fuel consumed by the electric utility sector. (See data sources for JKEUPZZ under “Jet Fuel” on page 42.)

## 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 small amounts of kerosene-type jet fuel are also 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 in SEDS.

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. Data for 1984 through 1993 are taken from the EIA *Petroleum Marketing Annual (PMA)*. Data for 1994 forward are taken from unpublished data in thousand gallons and are available in thousand gallons per day in the EIA *PMA*. Prior to 1994, 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. Beginning in 1994, withheld data are interpolated.

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:

$$JKACPZZ = (JKTPPZZ / JKTTPUS) * JKACPUS$$

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:

$$\begin{aligned} JKACBZZ &= JKACPZZ * 5.670 \\ JKACBUS &= \Sigma JKACBZZ \\ JKEUBZZ &= JKEUPZZ * 5.670 \\ JKEUBUS &= \Sigma JKEUBZZ \\ JKTCBZZ &= JKTCPZZ * 5.670 \end{aligned}$$

JKTCBUS = ΣJKTCBZZ

**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.
6. For 2001 forward, jet fuel used for power generation is included in waste/other oil. Data for waste/other oil are not processed in SEDS because waste oil is not primary energy. Consumption of the petroleum products that produced the waste oil has been accounted for elsewhere.

**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



**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: Data not available. Values are assumed to be zero in SEDS.

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/petroleum\\_marketing\\_annual/pma\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_marketing_annual/pma_historical.html).
  - 1994 through 2006: Table 49.
  - 2007: Table 46.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

**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. Beginning in 2005, it is included in “Miscellaneous Petroleum Products,” and is assigned a zero value in SEDS.

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:

$$JNMIPUS = \sum JNMIPZZ$$

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:

$$\begin{aligned}\text{JNACPZZ} &= \text{JNTCPZZ} \\ \text{JNACPUS} &= \text{JNTCPUS}\end{aligned}$$

### **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:

$$\begin{aligned}\text{JNTCBZZ} &= \text{JNTCPZZ} * 5.355 \\ \text{JNTCBUS} &= \Sigma \text{JNTCBZZ} \\ \text{JNACBZZ} &= \text{JNTCBZZ} \\ \text{JNACBUS} &= \text{JNTCBUS}\end{aligned}$$

### **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.

3. Since total naphtha-type jet fuel product supplied is assumed to be zero beginning in 2005, naphtha-type jet fuel issued to the military is also assumed to be zero for 2005 forward.

### **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 through 2004: 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.
- 2005 forward: Value entered in SEDS as zero.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Data not reported separately. Volumes are included in "Miscellaneous Petroleum Products" in the *Petroleum Supply Annual*, Table 1. Value entered in SEDS as zero.

## 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:

$$\begin{aligned}
 \text{KSINPZZ} &= \text{KSOTPZZ} + \text{KSIHPZZ} \\
 \text{KSINPUS} &= \Sigma \text{KSINPZZ}
 \end{aligned}$$

Total sales of kerosene in each State is the sum of these three sectors' sales:

$$\begin{aligned} \text{KSTTPZZ} &= \text{KSRSPZZ} + \text{KSCMPZZ} + \text{KSINPZZ} \\ \text{KSTTPUS} &= \Sigma \text{KSTTPZZ} \end{aligned}$$

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 this 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 and are described in the July 1985 issue of the EIA, *Petroleum Marketing Monthly*. 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.)
- 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, subsequently revised in the EIA, Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821ker\\_a\\_EPPK\\_VCS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VCS_Mgal_a.htm).
  - 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](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VCS_Mgal_a.htm), select Excel file labeled "Download Series History."

KSHPZZ — 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, subsequently revised in the EIA, Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821ker\\_a\\_EPPK\\_vin\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_vin_Mgal_a.htm).
  - 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](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_vin_Mgal_a.htm), select Excel file labeled "Download Series History."

KSOTPZZ — 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, subsequently revised in the EIA, Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821ker\\_a\\_EPPK\\_VOE\\_Mgal\\_a.htm](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](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VFM_Mgal_a.htm).
  - 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](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](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, subsequently revised in the EIA, Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821ker\\_a\\_EPPK\\_VRS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821ker_a_EPPK_VRS_Mgal_a.htm).
  - 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](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://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/petroleum\\_supply\\_annual/psa\\_volume1/psa\\_volume1\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1988 through 2004: Table 2.
  - 2005 forward: Table 1.

## 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 heating, 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

LGTTTPZZ = 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 *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:

LGTRSUS = the transportation sector share of LPG internal combustion engine sales.

Its computation is described in detail in Note 2 on page 49.

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 = ΣLGCBPZZ

LGHCPCZZ = LGHCMZZ / 42

LGHCPU\$ = ΣLGHCPCZZ

An assumption is made that 85 percent of the LPG sold for residential and commercial use (LGHCPCZZ) 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 = LGHCPCZZ \* 0.85

LGCCPZZ = LGHCPCZZ \* 0.15

LPG consumption by the transportation sector is estimated to be the transportation share of the sales for internal combustion engine fuel:

LGACPZZ = LGCBPZZ \* LGTRSUS

An estimate of each State's total LPG consumption (LGTCPCZZ) is made by allocating the U.S. total consumption to the States in proportion to each State's share of the U.S. total sales:

LGTCPCZZ = (LGTTTPZZ / LGTTTPUS) \* LGTCPU\$

Industrial sector consumption (LGICPZZ) for each State is the difference between the State's total LPG consumption and the sum of its residential, commercial, and transportation sectors' consumption:

LGICPZZ = LGTCPCZZ - (LGRCPZZ + LGCCPZZ + 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 Btu, LGTCUKUS, 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. LGTCUKUS is shown in Table B1 on page 145 and

the individual product heat contents are listed beginning on page 158. 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:

$$\begin{aligned}\text{LGR CBZZ} &= \text{LGR CPZZ} * \text{LGTCKUS} \\ \text{LGCCBZZ} &= \text{LGCCPZZ} * \text{LGTCKUS} \\ \text{LGICBZZ} &= \text{LGICPZZ} * \text{LGTCKUS} \\ \text{LGACBZZ} &= \text{LGACPZZ} * \text{LGTCKUS}\end{aligned}$$

Total estimated consumption of LPG in Btu is the sum of the end-use consumption estimates:

$$\text{LGTCBZZ} = \text{LGR CBZZ} + \text{LGCCBZZ} + \text{LGICBZZ} + \text{LGACBZZ}$$

The U.S. Btu consumption estimates for the four sectors and total LGP 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.

**Table TN5. Percentages Used to Disaggregate Maryland and D.C. Combined LPG Sales Data**

Sales Category5	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

2. 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 57). The quantity of LPG included in special fuels is estimated each year (the LPG portion ranges from 8.4 percent in 1960 to 0.6 percent in 2007). 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. 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

**Table TN6. Transportation Sector Share of LPG Internal Combustion Engine Use, 1960 Forward**

Year	LGTRSUS	Year	LGTRSUS	Year	LGTRSUS
1960	0.229	1976	0.440	1992	0.425
1961	0.258	1977	0.478	1993	0.443
1962	0.266	1978	0.594	1994	0.734
1963	0.273	1979	0.536	1995	0.416
1964	0.259	1980	0.380	1996	0.337
1965	0.290	1981	0.671	1997	0.278
1966	0.325	1982	0.579	1998	0.592
1967	0.368	1983	0.578	1999	0.364
1968	0.389	1984	0.631	2000	0.215
1969	0.341	1985	0.440	2001	0.204
1970	0.363	1986	0.456	2002	0.325
1971	0.423	1987	0.375	2003	0.373
1972	0.392	1988	0.437	2004	0.365
1973	0.384	1989	0.428	2005	0.513
1974	0.381	1990	0.471	2006	0.496
1975	0.406	1991	0.426	2007	0.370



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.”

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.

**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

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 are combined for all years. The method for disaggregating the data is explained in Note 1, on page 49.

- 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.

LGHCMZZ — LPG sold for residential and commercial use by State.

Note: Data for Maryland and the District of Columbia are combined for all years. The method for disaggregating the data is explained in Note 1, on page 49.

- 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.

LGTCUS — 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 158. 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
    - 1981 through 2004: Table 2.
    - 2005 forward: Table 1.

LGTCUS — 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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 49.

LGTPZZ — LPG total sales for all uses by State.

Note: Data for Maryland and the District of Columbia are combined for all years. The method for disaggregating the data is explained in Note 1, on page 49.

- 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.

## 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,



**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

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.
- 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](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.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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 oil.
- 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 (MGTCPUS) 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  
 MGTCPUS = motor gasoline total consumed in the United States, in thousand barrels.

U.S. totals for the eight State-level 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 oil). 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:

$$\text{MGACPZZ} = (\text{MGTRPZZ} / \text{MGTPPZZ}) * \text{MGTCPPZZ}$$

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, MGTCKUS, 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 145, are used for each State:

$$\text{MGCCBZZ} = \text{MGCCPZZ} * \text{MGTCKUS}$$

$$\text{MGICBZZ} = \text{MGICPZZ} * \text{MGTCKUS}$$

$$\text{MGACBZZ} = \text{MGACPZZ} * \text{MGTCKUS}$$

$$\text{MGTCBZZ} = \text{MGCCBZZ} + \text{MGICBZZ} + \text{MGACBZZ}$$

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.

MGIYPZZ — 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.

MGTCCKUS — 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 145). 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>.

MGTCPUUS — 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

## Petroleum Coke

In the State Energy Data System consumption tables, petroleum coke is included in the category “other petroleum products” (see descriptions beginning on page 67 and summary table on page 28).

### 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:

$$\begin{aligned} \text{PCEIPZZ} &= \text{PCEIMZZ} * 5 \\ \text{PCEIPUS} &= \Sigma \text{PCEIPZZ} \end{aligned}$$

$$\begin{aligned} \text{PCCCPZZ} &= \text{PCC3MZZ} * 5 \\ \text{PCCCPUS} &= \Sigma \text{PCCCPZZ} \end{aligned}$$

$$\begin{aligned} \text{PCI3PZZ} &= \text{PCI3MZZ} * 5 \\ \text{PCI3PUS} &= \Sigma \text{PCI3PZZ} \end{aligned}$$

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:

$PCRFPZZ = PCRFPZZ$ , or  
 $PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPZ$  (1 through 7), or  
 $PCRFPZZ = (CTCAPZZ / CTCAPPZ) * PCRFPZ$  (1 through 5)  
 $PCRFPUS = \Sigma PCRFPZZ$

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:

$PCOCPUS = PCICPUS - PCI3PUS - PCRFPUS$

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). For 1993 forward, State-level aluminum production capacity is adjusted to account for under-utilization of the plants. 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:

$AICAPUS = \Sigma AICAPZZ$   
 $PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS$

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:

$PCICPZZ = PCI3PZZ + PCRFPZZ + PCOCPZZ$

Total petroleum coke consumption by State is the sum of commercial, industrial, and electric power sector use:

$PCTCPZZ = PCCCPZZ + PCICPZZ + PCEIPZZ$

### 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:

$PCCCBZZ = PCCCPZZ * 6.024$   
 $PCCCBUS = \Sigma PCCCBZZ$

$PCICBZZ = PCICPZZ * 6.024$   
 $PCICBUS = \Sigma PCICBZZ$

$PCEIBZZ = PCEIPZZ * 6.024$   
 $PCEIBUS = \Sigma PCEIBZZ$

$PCTCBZZ = PCCCBZZ + PCICBZZ + PCEIBZZ$   
 $PCTCBUS = \Sigma PCTCBZZ$

### 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:

$PCI3BZZ = PCI3PZZ * 6.024$   
 $PCI3BUS = \Sigma PCI3BZZ$

$PCOCBZZ = PCOCPZZ * 6.024$   
 $PCOCBUS = \Sigma PCOCBZZ$

$PCRFBZZ = PCRFPZZ * 6.024$   
 $PCRFBUS = \Sigma PCRFBZZ$

### Additional Notes on Petroleum Coke

The source for petroleum coke used at refineries, PCRFPUS and PCRFPZ, 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: U.S. Department of the Interior, U.S. Geological Survey, *Minerals Yearbook*.

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 through 2004: Table 36, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/petroleum\\_supply\\_annual/psa\\_volume1/psa\\_volume1\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html).
  - 2005 forward: EIA, *Refinery Capacity Report*, Table 1, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/refinery\\_capacity\\_data/refcap\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/refinery_capacity_data/refcap_historical.html).

PCC3MZZ — Petroleum coke consumed for combined heat and power in 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 for combined heat and power 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.

PCRFPZZ, PCRFPGZ, or PCRFPZZ — 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 through 2004: 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 through 2004: [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/petroleum\\_supply\\_annual/psa\\_volume1/psa\\_volume1\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), Table 47.
- 2005 forward: EIA, *Refinery Capacity Report*, Table 12, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/refinery\\_capacity\\_data/refcap\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/refinery_capacity_data/refcap_historical.html). Also available in the

Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_pnp\\_capfuel\\_a\\_\(na\)\\_8FPP0\\_Mbbl\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_pnp_capfuel_a_(na)_8FPP0_Mbbl_a.htm).

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled “Products Supplied.” The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

## Residual Fuel Oil

### Physical Units

Since State-level end-use consumption data for residual fuel oil (with the exception of electric power sector data) are not available, sales of residual fuel oil into or within each State, published by the Energy Information Administration (EIA) in the *Fuel Oil and Kerosene Sales Report*, are used to estimate residual fuel oil consumption. The following variable names have been assigned to the sales series, in thousand barrels (“ZZ” in the following variable names represents the two-letter State code that differs for each State):

- RFBKPZZ = residual fuel oil 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 oil sold to the commercial sector for heating;
- RFIBPZZ = residual fuel oil 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 oil sold to the Armed Forces, regardless of use;

RFMSPZZ = residual fuel oil sold for all other uses not identified in other sales categories;

RFOCPZZ = residual fuel oil 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 oil 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 oil are:

RFEIPZZ = residual fuel oil consumed by the electric power sector in each State, in thousand barrels.

RFTCPUS = residual fuel oil 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 oil section for further information on changes in this series' data definitions.)

Total U.S. consumption of residual fuel oil, RFTCPUS, is the product supplied series in EIA's publication *Petroleum Supply Annual*.

All State-level data series listed above are summed to provide totals for the United States.

The data series are then combined as closely as possible into the major end-use sectors used in the State Energy Data System (SEDS). No residual fuel oil is sold to the residential sector. residual fuel oil sales to the commercial sector is the RFCMPZZ series.

The sales of residual fuel oil to the industrial sector in each State, RFINPZZ, is the sum of the residual fuel oil 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 oil to the transportation sector in each State, RFTRPZZ, is the sum of the residual fuel oil 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 oil consumption for the United States by all sectors other than the electric power sector (RFNCPUS) is calculated by subtracting the total residual fuel oil consumption for the electric power sector from the total U.S. residual fuel oil consumption:

$$\text{RFNCPUS} = \text{RFTCPUS} - \text{RFEIPUS}$$

This U.S. subtotal of residual fuel oil 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 oil 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 oil in the United States by the major end-use sectors is estimated by adding the States' estimated consumption.

Total State residual fuel oil 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 oil has a heat content value of approximately 6.287 million Btu per barrel. This factor is applied to convert residual fuel oil 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 Oil**

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 oil 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 oil 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 oil deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 residual fuel oil 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 oil and residual fuel oil 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 through 2000, data on consumption of light oil at all plant types combined and consumption of heavy oil at all plant types combined are available by State. For 2001 forward, data on consumption of distillate fuel oil and residual fuel oil are available. 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 oil) and internal combustion and gas turbine plants (primarily distillate fuel oil 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 oil consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel oil plus jet kerosene consumption.
  - 1980 through 2000 — total heavy oil consumption at all plant types is assumed to equal residual fuel oil consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel oil plus jet kerosene consumption.

The data series thus derived for SEDS for residual fuel oil and distillate fuel oil 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 Oil

RFBKPZZ — Residual fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VVB\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VVB_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VVB\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VVB_Mgal_a.htm).

RFCMPZZ — Residual fuel oil sold to the commercial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of residual fuel oil 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 63.)

- 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VCS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VCS_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VCS\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VCS_Mgal_a.htm).

RFEIPZZ — Residual fuel oil 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 oil consumption were created for each year by applying the shares of steam plants (primarily residual fuel oil) 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 oil consumption.
  - 1980 through 2000: Consumption of heavy fuel at all plant types by State is available. This is assumed to equal residual fuel oil consumption.
  - 2001 forward: Consumption of residual fuel oil is available.

RFIBPZZ — Residual fuel oil 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 63.)

- 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_vin\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_vin_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_vin\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_vin_Mgal_a.htm).

RFMIPZZ — Residual fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VMI\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VMI_Mgal_a.htm).



- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VMI\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VMI_Mgal_a.htm).

RFMSPZZ — Residual fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VOE\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOE_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VOE\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOE_Mgal_a.htm).

RFOCPZZ — Residual fuel oil 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 through 1987: EIA, *Petroleum Marketing Monthly*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VOC\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOC_Mgal_a.htm).
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, also available in Petroleum Navigator, [http://tonto.eia.doe.gov/dnav/pet/pet\\_cons\\_821rsd\\_a\\_EPPR\\_VOC\\_Mgal\\_a.htm](http://tonto.eia.doe.gov/dnav/pet/pet_cons_821rsd_a_EPPR_VOC_Mgal_a.htm).

RFRRPZZ — Residual fuel oil 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 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 forward: EIA, *Petroleum Supply Annual*, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/petroleum\\_supply\\_annual/psa\\_volume1/psa\\_volume1\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

## 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:

$$\begin{aligned}\text{COICPZZ} &= \text{COTCPZZ} \\ \text{COICPUS} &= \text{COTCPUS}\end{aligned}$$

### 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:

$$\begin{aligned}\text{COTCBZZ} &= \text{COTCPZZ} * 5.800 \\ \text{COTCBUS} &= \Sigma \text{COTCBZZ} \\ \text{COICBZZ} &= \text{COTCBZZ} \\ \text{COICBUS} &= \text{COTCBUS}\end{aligned}$$

### 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 oil 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 fuel oils 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

fuel oils 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](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 through 2004: Tables 2, 4, 6, 8, 10, and 12.
- 2005 forward: Tables 1, 3, 5, 7, 9, and 11.

## 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:

$$\begin{aligned}\text{ABTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{ABTCPUS} \\ \text{ABICPZZ} &= \text{ABTCPZZ} \\ \text{ABICPUS} &= \text{ABTCPUS}\end{aligned}$$

Petroleum feedstocks, still gas, State and U.S. consumption are estimated:

$$\begin{aligned}\text{FSTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{FSTCPUS} \\ \text{FSICPZZ} &= \text{FSTCPZZ} \\ \text{FSICPUS} &= \text{FSTCPUS}\end{aligned}$$

Motor gasoline blending components State and U.S. consumption are estimated:

$$\begin{aligned}\text{MBTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{MBTCPUS} \\ \text{MBICPZZ} &= \text{MBTCPZZ} \\ \text{MBICPUS} &= \text{MBTCPUS}\end{aligned}$$

Still gas State and U.S. consumption are estimated:

$$\begin{aligned}\text{SGTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{SGTCPUS} \\ \text{SGICPZZ} &= \text{SGTCPZZ} \\ \text{SGICPUS} &= \text{SGTCPUS}\end{aligned}$$

Unfinished oils State and U.S. consumption are estimated:

$$\begin{aligned}\text{UOTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{UOTCPUS} \\ \text{UOICPZZ} &= \text{UOTCPZZ} \\ \text{UOICPUS} &= \text{UOTCPUS}\end{aligned}$$

### 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:

$$\begin{aligned}\text{ABTCBZZ} &= \text{ABTCPZZ} * 5.048 \\ \text{ABTCBUS} &= \Sigma \text{ABTCBZZ} \\ \text{ABICBZZ} &= \text{ABTCBZZ} \\ \text{ABICBUS} &= \text{ABTCBUS}\end{aligned}$$

$$\begin{aligned}\text{FSTCBZZ} &= \text{FSTCPZZ} * 6.000 \\ \text{FSTCBUS} &= \Sigma \text{FSTCBZZ} \\ \text{FSICBZZ} &= \text{FSTCBZZ} \\ \text{FSICBUS} &= \text{FSTCBUS}\end{aligned}$$

$$\begin{aligned}\text{MBTCBZZ} &= \text{MBTCPZZ} * 5.253 \\ \text{MBTCBUS} &= \Sigma \text{MBTCBZZ} \\ \text{MBICBZZ} &= \text{MBTCBZZ} \\ \text{MBICBUS} &= \text{MBTCBUS}\end{aligned}$$

$$\begin{aligned}\text{SGTCBZZ} &= \text{SGTCPZZ} * 6.000 \\ \text{SGTCBUS} &= \Sigma \text{SGTCBZZ} \\ \text{SGICBZZ} &= \text{SGTCBZZ} \\ \text{SGICBUS} &= \text{SGTCBUS}\end{aligned}$$

$$\begin{aligned}\text{UOTCBZZ} &= \text{UOTCPZZ} * 5.825 \\ \text{UOTCBUS} &= \Sigma \text{UOTCBZZ} \\ \text{UOICBZZ} &= \text{UOTCBZZ} \\ \text{UOICBUS} &= \text{UOTCBUS}\end{aligned}$$

### Data Sources

ABTCPUS — 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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](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 through 2004: Table 36.
- 2005 forward: EIA, *Refinery Capacity Report*, [http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/refinery\\_capacity\\_data/refcap\\_historical.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/refinery_capacity_data/refcap_historical.html), Table 1, column titled "Barrels Per Day, Operating".

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: Included in still gas (SGTCPUS).

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1986 through 2004: Table 2.
  - 2005 forward: Table 1.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1_historical.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

**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:

$$\begin{aligned}\text{FNTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{FNTCPUS} \\ \text{FNICPZZ} &= \text{FNTCPZZ} \\ \text{FNICPUS} &= \text{FNTCPUS}\end{aligned}$$

Petroleum feedstocks, other oils equal to or greater than 401° F, State and U.S. consumption are estimated:

$$\begin{aligned}\text{FOTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{FOTCPUS} \\ \text{FOICPZZ} &= \text{FOTCPZZ} \\ \text{FOICPUS} &= \text{FOTCPUS}\end{aligned}$$

Miscellaneous petroleum products State and U.S. consumption are estimated:

$$\begin{aligned}\text{MSTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{MSTCPUS} \\ \text{MSICPZZ} &= \text{MSTCPZZ} \\ \text{MSICPUS} &= \text{MSTCPUS}\end{aligned}$$

Natural gasoline (including isopentane) State and U.S. consumption are estimated:

$$\begin{aligned}\text{NATCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{NATCPUS} \\ \text{NAICPZZ} &= \text{NATCPZZ} \\ \text{NAICPUS} &= \text{NATCPUS}\end{aligned}$$

Plant condensate State and U.S. consumption are estimated:

$$\begin{aligned}\text{PLTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{PLTCPUS} \\ \text{PLICPZZ} &= \text{PLTCPZZ} \\ \text{PLICPUS} &= \text{PLTCPUS}\end{aligned}$$

Pentane plus State and U.S. consumption are estimated:

$$\begin{aligned}\text{PPTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{PPTCPUS} \\ \text{PPICPZZ} &= \text{PPTCPZZ} \\ \text{PPICPUS} &= \text{PPTCPUS}\end{aligned}$$

Unfractionated stream State and U.S. consumption are estimated:

$$\begin{aligned}\text{USTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{USTCPUS} \\ \text{USICPZZ} &= \text{USTCPZZ} \\ \text{USICPUS} &= \text{USTCPUS}\end{aligned}$$

### **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:

$$\begin{aligned}\text{FNTCBZZ} &= \text{FNTCPZZ} * 5.248 \\ \text{FNTCBUS} &= \Sigma \text{FNTCBZZ} \\ \text{FNICBZZ} &= \text{FNTCBZZ} \\ \text{FNICBUS} &= \text{FNTCBUS}\end{aligned}$$

$$\begin{aligned}\text{FOTCBZZ} &= \text{FOTCPZZ} * 5.825 \\ \text{FOTCBUS} &= \Sigma \text{FOTCBZZ} \\ \text{FOICBZZ} &= \text{FOTCBZZ} \\ \text{FOICBUS} &= \text{FOTCBUS}\end{aligned}$$

MSTCBZZ = MSTCPZZ \* 5.796  
 MSTCBUS =  $\Sigma$ MSTCBZZ  
 MSICBZZ = MSTCBZZ  
 MSICBUS = MSTCBUS

NATCBZZ = NATCPZZ \* 4.620  
 NATCBUS =  $\Sigma$ NATCBZZ  
 NAICBZZ = NATCBZZ  
 NAICBUS = NATCBUS

PLTCBZZ = PLTCPZZ \* 5.418  
 PLTCBUS =  $\Sigma$ PLTCBZZ  
 PLICBZZ = PLTCBZZ  
 PLICBUS = PLTCBUS

PPTCBZZ = PPTCPZZ \* 4.620  
 PPTCBUS =  $\Sigma$ PPTCBZZ  
 PPICBZZ = PPTCBZZ  
 PPICBUS = PPTCBUS

USTCBZZ = USTCPZZ \* 5.418  
 USTCBUS =  $\Sigma$ USTCBZZ  
 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html), column titled "Products Supplied." The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html). The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1. Naphtha-type jet fuel volumes (JNTCPUS) are included in "Miscellaneous Products" in the *Petroleum Supply Annual*, Table 1.

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: Included in pentanes plus (PPTCPUS).

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, 325120, and 325199 shown in the reports at <http://www.census.gov/econ/census02/guide/INDRPT31.HTM>. See Additional Note 2 on page 76 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: Included in pentanes plus (PPTCPUS).

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\\_volumel/psa\\_volumel.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volumel/psa_volumel.html), column titled "Products Supplied." The specific tables are:
  - 1984 through 2004: Table 2.
  - 2005 forward: Table 1.

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: Included in liquefied petroleum gases (LGTCPUS).

## 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:

$$\begin{aligned} \text{SNTCPZZ} &= (\text{PIVAVZZ} / \text{PIVAVUS}) * \text{SNTCPUS} \\ \text{SNICPZZ} &= \text{SNTCPZZ} \\ \text{SNICPUS} &= \text{SNTCPUS} \end{aligned}$$



**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:

$$\begin{aligned}\text{SNTCBZZ} &= \text{SNTCPZZ} * 5.248 \\ \text{SNTCBUS} &= \Sigma \text{SNTCBZZ} \\ \text{SNICBZZ} &= \text{SNTCBZZ} \\ \text{SNICBUS} &= \text{SNTCBUS}\end{aligned}$$

**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 76 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html). The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

**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:

$$\begin{aligned}\text{WXTCPZZ} &= (\text{CGVAVZZ} / \text{CGVAVUS}) * \text{WXTCPUS} \\ \text{WXICPZZ} &= \text{WXTCPZZ} \\ \text{WXICPUS} &= \text{WXTCPUS}\end{aligned}$$

**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:

$$\begin{aligned} \text{WXTCBZZ} &= \text{WXTCPZZ} * 5.537 \\ \text{WXTCBUS} &= \Sigma \text{WXTCBZZ} \\ \text{WXICBZZ} &= \text{WXTCBZZ} \\ \text{WXICBUS} &= \text{WXTCBUS} \end{aligned}$$

### 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 322211 shown in the reports at <http://www.census.gov/econ/census02/guide/INDRPT31.HTM>. See Additional Note 2 on page 76 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](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html). The specific tables are:
  - 1981 through 2004: Table 2.
  - 2005 forward: Table 1.

## 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:

$$\begin{aligned} \text{POICPZZ} &= \text{ABICPZZ} + \text{COICPZZ} + \text{FNICPZZ} + \text{FOICPZZ} + \\ &\quad \text{FSICPZZ} + \text{MBICPZZ} + \text{MSICPZZ} + \text{NAICPZZ} + \\ &\quad \text{PCICPZZ} + \text{PLICPZZ} + \text{PPICPZZ} + \text{SGICPZZ} + \\ &\quad \text{SNICPZZ} + \text{UOICPZZ} + \text{USICPZZ} + \text{WXICPZZ} \\ \text{POICPUS} &= \Sigma \text{POICPZZ} \end{aligned}$$

Total consumption of these products (including petroleum coke consumption in the commercial and electric power sectors) is calculated:

$$\begin{aligned} \text{POTCPZZ} &= \text{ABTCPZZ} + \text{COTCPZZ} + \text{FNTCPZZ} + \text{FOTCPZZ} + \\ &\quad \text{FSTCPZZ} + \text{MBTCPZZ} + \text{MSTCPZZ} + \text{NATCPZZ} + \\ &\quad \text{PCTCPZZ} + \text{PLTCPZZ} + \text{PPTCPZZ} + \text{SGTCPZZ} + \\ &\quad \text{SNTCPZZ} + \text{UOTCPZZ} + \text{USTCPZZ} + \text{WXTCPZZ} \\ \text{POTCPUS} &= \Sigma \text{POTCPZZ} \end{aligned}$$

### 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:

$$\begin{aligned}\text{POICBZZ} &= \text{ABICBZZ} + \text{COICBZZ} + \text{FNICBZZ} + \text{FOICBZZ} + \\ &\quad \text{FSICBZZ} + \text{MBICBZZ} + \text{MSICBZZ} + \text{NAICBZZ} + \\ &\quad \text{PCICBZZ} + \text{PLICBZZ} + \text{PPICBZZ} + \text{SGICBZZ} + \\ &\quad \text{SNICBZZ} + \text{UOICBZZ} + \text{USICBZZ} + \text{WXICBZZ} \\ \text{POICBUS} &= \Sigma \text{POICBZZ}\end{aligned}$$

State and U.S. total consumption of these products, which includes petroleum coke consumption in the commercial and electric power sectors, is calculated:

$$\begin{aligned}\text{POTCBZZ} &= \text{ABTCBZZ} + \text{COTCBZZ} + \text{FNTCBZZ} + \text{FOTCBZZ} + \\ &\quad \text{FSTCBZZ} + \text{MBTCBZZ} + \text{MSTCBZZ} + \text{NATCBZZ} + \\ &\quad \text{PCTCBZZ} + \text{PLTCBZZ} + \text{PPTCBZZ} + \text{SGTCBZZ} + \\ &\quad \text{SNTCBZZ} + \text{UOTCBZZ} + \text{USTCBZZ} + \text{WXTCBZZ} \\ \text{POTCBUS} &= \Sigma \text{POTCBZZ}\end{aligned}$$

### 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 website, [http://factfinder.census.gov/servlet/EconSectorServlet?\\_lang=en&ds\\_name=EC0200A1&SectorId=31](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 TN3 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 oil (DF), kerosene (KS), and liquefied petroleum gases (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:

$$\text{PARCBZZ} = \text{DFRCBZZ} + \text{KSRCBZZ} + \text{LGRCBZZ}$$

$$\text{PARCBUS} = \Sigma \text{PARCBZZ}$$

## Commercial Sector

The commercial sector's use of petroleum products includes: distillate fuel oil (DF), kerosene (KS), liquefied petroleum gases (LG), motor gasoline (MG), and residual fuel oil (RF). In physical units, the State and the U.S. totals for the commercial sector are calculated:

$$\text{PACCPZZ} = \text{DFCCPZZ} + \text{KSCCPZZ} + \text{LGCCPZZ} + \text{MGCCPZZ} + \text{RFCCPZZ} + \text{PCCCPZZ}$$

$$\text{PACCPUS} = \Sigma \text{PACCPZZ}$$

State and U.S. totals in Btu are:

$$\text{PACCBZZ} = \text{DFCCBZZ} + \text{KSCCBZZ} + \text{LGCCBZZ} + \text{MGCCBZZ} + \text{RFCCBZZ} + \text{PCCCBZZ}$$

$$\text{PACCBUS} = \Sigma \text{PACCBZZ}$$

## Industrial Sector

Petroleum used in the industrial sector includes: asphalt and road oil (AR); distillate fuel oil (DF); kerosene (KS); liquefied petroleum gases (LG); lubricants (LU); motor gasoline (MG); residual fuel oil (RF); and the 16 products that are already summed in the "other petroleum products" (PO) subtotal. The State and U.S. total estimates in physical units are:

$$\text{PAICPZZ} = \text{ARICPZZ} + \text{DFICPZZ} + \text{KSICPZZ} + \text{LGICPZZ} + \text{LUICPZZ} + \text{MGICPZZ} + \text{RFICPZZ} + \text{POICPZZ}$$

$$\text{PAICPUS} = \Sigma \text{PAICPZZ}$$

State and U.S. totals in Btu are:

$$\text{PAICBZZ} = \text{ARICBZZ} + \text{DFICBZZ} + \text{KSICBZZ} + \text{LGICBZZ} + \text{LUICBZZ} + \text{MGICBZZ} + \text{RFICBZZ} + \text{POICBZZ}$$

$$\text{PAICBUS} = \Sigma \text{PAICBZZ}$$

## Transportation Sector

Petroleum products used in the transportation sector are: aviation gasoline (AV), distillate fuel oil (DF), jet fuel (JF), liquefied petroleum gases (LG), lubricants (LU), motor gasoline (MG), and residual fuel oil (RF). The State and U.S. totals in physical units are:

$$\text{PAACPZZ} = \text{AVACPZZ} + \text{DFACPZZ} + \text{JFACPZZ} + \text{LGACPZZ} + \text{LUACPZZ} + \text{MGACPZZ} + \text{RFACPZZ}$$

$$\text{PAACPUS} = \Sigma \text{PAACPZZ}$$

State and U.S. totals in Btu are:

$$\text{PAACBZZ} = \text{AVACBZZ} + \text{DFACBZZ} + \text{JFACBZZ} + \text{LGACBZZ} + \text{LUACBZZ} + \text{MGACBZZ} + \text{RFACBZZ}$$

$$\text{PAACBUS} = \Sigma \text{PAACBZZ}$$

## Electric Power Sector

Petroleum products consumed by the electric power sector are: distillate fuel oil (DF), jet fuel (JF), petroleum coke (PC), and residual fuel oil (RF). In physical units, the State and U.S. totals are:

$$\text{PAEIPZZ} = \text{DFEIPZZ} + \text{JFEUPZZ} + \text{PCEIPZZ} + \text{RFEIPZZ}$$

$$\text{PAEIPUS} = \Sigma \text{PAEIPZZ}$$

State and U.S. totals in Btu are:

$$\text{PAEIBZZ} = \text{DFEIBZZ} + \text{JFEUBZZ} + \text{PCEIBZZ} + \text{RFEIBZZ}$$

$$\text{PAEIBUS} = \Sigma \text{PAEIBZZ}$$

## Total Consumption of Petroleum Products

Total consumption of all petroleum products is the sum of all of the individual product totals. The State and U.S. physical unit totals are:

$$\begin{aligned} \text{PATCPZZ} &= \text{ARTCPZZ} + \text{AVTCPZZ} + \text{DFTCPZZ} + \text{JFTCPZZ} + \\ &\quad \text{KSTCPZZ} + \text{LGTCPPZZ} + \text{LUTCPZZ} + \text{MGTCPPZZ} + \\ &\quad \text{RFTCPZZ} + \text{POTCPZZ} \\ \text{PATCPUS} &= \Sigma \text{PATCPZZ} \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned} \text{PATCBZZ} &= \text{ARTCBZZ} + \text{AVTCBZZ} + \text{DFTCBZZ} + \text{JFTCBZZ} + \\ &\quad \text{KSTCBZZ} + \text{LGTCBZZ} + \text{LUTCBZZ} + \text{MGTCBZZ} + \\ &\quad \text{RFTCBZZ} + \text{POTCBZZ} \\ \text{PATCBUS} &= \Sigma \text{PATCBZZ} \end{aligned}$$

### Additional Calculations

A few petroleum products are combined for display in the “Other Petroleum” column in tables on total energy consumption and industrial sector energy consumption. They include asphalt and road oil, aviation gasoline (total energy only), kerosene, lubricants, and the 16 petroleum products described in the “other petroleum products” section of the Technical Notes. The variables are calculated in physical unit and Btu, for each State and the United States:

$$\begin{aligned} \text{PITCP} &= \text{ARTCP} + \text{AVTCP} + \text{KSTCP} + \text{LUTCP} + \text{POTCP} \\ \text{PITCB} &= \text{ARTCB} + \text{AVTCB} + \text{KSTCB} + \text{LUTCB} + \text{POTCB} \end{aligned}$$

$$\begin{aligned} \text{P1ICP} &= \text{ARICP} + \text{KSICP} + \text{LUICP} + \text{POICP} \\ \text{P1ICB} &= \text{ARICB} + \text{KSICB} + \text{LUICB} + \text{POICB} \end{aligned}$$

Conversion factors for all petroleum products consumed by each sector, as well as data for the residential and commercial sectors combined, are calculated for use in EIA’s *Annual Energy Review* and *Monthly Energy Review*.

$$\begin{aligned} \text{PARCKUS} &= \text{PARCBUS} / \text{PARCPUS} \\ \text{PACCKUS} &= \text{PACCBUS} / \text{PACCPUS} \\ \text{PAICKUS} &= \text{PAICBUS} / \text{PAICPUS} \\ \text{PAACKUS} &= \text{PAACBUS} / \text{PAACPUS} \\ \text{PAEIKUS} &= \text{PAEIBUS} / \text{PAEIPUS} \\ \text{PATCKUS} &= \text{PATCBUS} / \text{PATCPUS} \end{aligned}$$

Consumption of all petroleum products by the residential and commercial sectors combined, in physical units, in Btu, and the average conversion factor, are calculated:

$$\begin{aligned} \text{PAHCPUS} &= \text{PARCPUS} + \text{PACCPUS} \\ \text{PAHCBUS} &= \text{PARCBUS} + \text{PACCBUS} \\ \text{PAHCKUS} &= \text{PAHCBUS} / \text{PAHCPUS} \end{aligned}$$



## Section 5. Renewable Energy

Renewable energy sources included in the State Energy Data System (SEDS) comprise fuel ethanol, wood, waste, hydroelectric, geothermal, wind, photovoltaic, and solar thermal energy.

### Fuel Ethanol

Fuel ethanol is used as a gasoline octane enhancer and oxygenate (blended up to 10 percent concentration). A small amount of fuel ethanol is used as an alternative fuel, such as E85. It is typically produced chemically from ethylene, or biologically from fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues from crops or wood. For 1981 forward, fuel 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 U.S. total fuel ethanol consumption 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 forward), and refinery and blender net inputs of fuel ethanol (all years). Through 2004, the State data series, used to allocate the U.S. total to the States, is from the U.S. Department of Transportation Federal Highway Administration (FHWA) data series on gasohol or fuel ethanol.

Beginning in 2005, the State data series is based on several EIA data series and estimates:

- prime supplier sales of conventional (including oxygenated) gasoline and reformulated gasoline by State;
- production of conventional and reformulated gasoline, total and blended with alcohol, by Petroleum Administration for Defense (PAD) District and Refining District;

- a standard ethanol-to-motor gasoline "blend ratio" of 10 percent for all States except California (5.7 percent) and Minnesota (12 percent); and
- estimated fuel ethanol "product supplied" by PAD District and Refining District.

First, a set of preliminary estimates for fuel ethanol blended into motor gasoline is calculated by multiplying the prime supplier sales for the two types of gasoline with the corresponding percent of gasoline blended with alcohol and the "blend ratio", and summing them together for each State. Next, total fuel ethanol "product supplied" by PAD District and Refining District is estimated by adding motor gasoline blending components and finished motor gasoline adjustments (disaggregated to the districts by applying the district shares derived from the fuel ethanol refinery and blending net inputs data) to the fuel ethanol refinery and blending net inputs. Finally, the preliminary fuel ethanol estimates are scaled to the fuel ethanol "product supplied" values by district.

The fuel 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):

- ENTCPUS = fuel ethanol total consumed in the United States, in thousand barrels.
- ENTRPZZ = fuel 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, ENTCPUS, is allocated to the States in proportion the State estimates, ENTRPZZ:

$$\begin{aligned} \text{ENTRPUS} &= \sum \text{ENTRPZZ} \\ \text{ENTCPZZ} &= (\text{ENTRPZZ} / \text{ENTRPUS}) * \text{ENTCPUS} \end{aligned}$$



Fuel ethanol total consumed by State, ENTCPZZ, is allocated to the commercial, industrial, and transportation sectors according to the motor gasoline consumption share for each sector:

$$\begin{aligned}\text{ENACPZZ} &= (\text{MGACPZZ} / \text{MGTCPZZ}) * \text{ENTCPZZ} \\ \text{ENCCPZZ} &= (\text{MGCCPZZ} / \text{MGTCPZZ}) * \text{ENTCPZZ} \\ \text{ENICPZZ} &= (\text{MGICPZZ} / \text{MGTCPZZ}) * \text{ENTCPZZ}\end{aligned}$$

The U.S. consumption estimates for the three sectors are calculated as the sum of the States' values:

$$\begin{aligned}\text{ENACPUS} &= \Sigma \text{ENACPZZ} \\ \text{ENCCPUS} &= \Sigma \text{ENCCPZZ} \\ \text{ENICPUS} &= \Sigma \text{ENICPZZ}\end{aligned}$$

Fuel ethanol is converted to equivalent British thermal units (Btu) by using a conversion factor of 3.539 million Btu per barrel.

$$\begin{aligned}\text{ENACBZZ} &= \text{ENACPZZ} * 3.539 \\ \text{ENCCBZZ} &= \text{ENCCPZZ} * 3.539 \\ \text{ENICBZZ} &= \text{ENICPZZ} * 3.539 \\ \text{ENACBUS} &= \Sigma \text{ENACBZZ} \\ \text{ENCCBUS} &= \Sigma \text{ENCCBZZ} \\ \text{ENICBUS} &= \Sigma \text{ENICBZZ}\end{aligned}$$

Total U.S. consumption in Btu is the sum of the sectors' consumption:

$$\text{ENTCBUS} = \text{ENACBUS} + \text{ENCCBUS} + \text{ENICBUS}$$

Beginning in 1981, energy losses and co-products from the production of fuel ethanol are incorporated into the U.S. industrial sector energy consumption. Individual State estimates are not available because reliable State allocators have not been identified.

$$\text{ENLCBUS} = \text{energy losses and co-products from the production of fuel ethanol for the United States, in billion Btu.}$$

### Additional Notes

Fuel ethanol data blended into motor gasoline (ENTRPZZ) are published in FHWA *Highway Statistics* from 1993 through 2001, 2003, and 2004.

In 2002, fuel ethanol blended into motor gasoline is not available from *Highway Statistics*. The ratio of each State's fuel 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 fuel ethanol consumed in gasohol in 2002. Fuel 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.

### Data Sources

ENLCBUS — Energy losses and co-products from the production of fuel ethanol for the United States.

- 1981 forward: EIA, *Annual Energy Review 2007*, Table 10.3.

ENTCPUS — Fuel ethanol consumed total 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 forward: 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 — Fuel 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 80.
- 2005 forward: EIA estimates based on sales of motor gasoline from the *Prime Supplier Report*, production of motor gasoline (with and without alcohol) and estimated ethanol "product supplied" from *PSA*, and State-level ethanol-to-motor-gasoline "blend ratios." See explanation of the estimation methodology on page 79.

## Geothermal Energy

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 geothermal 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 geothermal heat pumps in the industrial sector by State, in billion Btu; and
- GERCBZZ = direct use of geothermal energy and geothermal 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:

$$\begin{aligned} \text{GECCBUS} &= \Sigma \text{GECCBZZ} & \text{GEICBUS} &= \Sigma \text{GEICBZZ} \\ \text{GEEGPUS} &= \Sigma \text{GEEGPZZ} & \text{GERCBUS} &= \Sigma \text{GERCBZZ} \end{aligned}$$

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/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html).

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:

$$\begin{aligned} \text{GEEGBZZ} &= \text{GEEGPZZ} * \text{GEETKUS} \\ \text{GEEGBUS} &= \Sigma \text{GEEGBZZ} \end{aligned}$$

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.

$$\begin{aligned} \text{GETCBZZ} &= \text{GERCBZZ} + \text{GECCBZZ} + \text{GEICBZZ} + \text{GEEGBZZ} \\ \text{GETCBUS} &= \Sigma \text{GETCBZZ} \end{aligned}$$

### 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 forward 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.

### **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: Oregon Institute of Technology Geo-Heat Center, unpublished tables (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: Oregon Institute of Technology Geo-Heat Center, unpublished tables (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 forward: Oregon Institute of Technology Geo-Heat Center, unpublished tables based on informal surveys and estimations.

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: Oregon Institute of Technology Geo-Heat Center, unpublished tables (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: Oregon Institute of Technology Geo-Heat Center, unpublished tables, (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 forward: Oregon Institute of Technology Geo-Heat Center, unpublished tables based on informal surveys and estimations.

GERCBZZ — Direct use and heat pump geothermal energy in the residential sector.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Oregon Institute of Technology Geo-Heat Center, unpublished tables (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: Oregon Institute of Technology Geo-Heat Center, unpublished tables (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 forward: Oregon Institute of Technology Geo-Heat Center, unpublished tables based on informal surveys and estimations.

## 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 has 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 already accounted for. 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:

$$\begin{aligned}\text{HYCCPZZ} &= \text{HVC5PZZ} \\ \text{HYCCPUS} &= \Sigma \text{HYCCPZZ}\end{aligned}$$

$$\begin{aligned}\text{HYICPZZ} &= \text{HVI5PZZ} \\ \text{HYICPUS} &= \Sigma \text{HYICPZZ}\end{aligned}$$

$$\begin{aligned}\text{HYEGPZZ} &= \text{HVEGPZZ} \\ \text{HYEGPUS} &= \Sigma \text{HYEGPZZ}\end{aligned}$$

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/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html).

FFETKUS = factor for converting hydroelectric power from kilowatthours to Btu.

$$\begin{aligned}\text{HYCCBZZ} &= \text{HYCCPZZ} * \text{FFETKUS} \\ \text{HYICBZZ} &= \text{HYICPZZ} * \text{FFETKUS} \\ \text{HYEGBZZ} &= \text{HYEGPZZ} * \text{FFETKUS}\end{aligned}$$

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.

$$\begin{aligned}\text{HYTCPZZ} &= \text{HYCCPZZ} + \text{HYICPZZ} + \text{HYEGPZZ} \\ \text{HYTCPUS} &= \Sigma \text{HYTCPZZ}\end{aligned}$$

$$\begin{aligned}\text{HYTCBZZ} &= \text{HYCCBZZ} + \text{HYICBZZ} + \text{HYEGBZZ} \\ \text{HYTCBUS} &= \Sigma \text{HYTCBZZ}\end{aligned}$$

### Data Sources

FFETKUS — Fossil-fueled 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 Energy

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 forms. 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. See "Additional Notes on Solar Energy" on page 85 for more details. 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 = solar thermal direct use energy, and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), 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. residential/commercial solar energy use is allocated to the States as follows:

$$\begin{aligned}\text{SOTTPUS} &= \Sigma \text{SOTTPZZ} \\ \text{SOHCBZZ} &= (\text{SOTTPZZ} / \text{SOTTPUS}) * \text{SOHCBUS}\end{aligned}$$

## Electric Power Sector

The electric power sector includes estimates of electricity produced from photovoltaic and solar thermal energy sources by electric utilities for 1984 forward, and by both electric utilities and nonutility power producers for 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):

$$\text{SOEGPZZ} = \text{electricity produced from photovoltaic and solar thermal energy sources by the electric power sector, for each State, in million kilowatthours.}$$

The U.S. total for this series is calculated as the sum of the State data:

$$\text{SOEGPUS} = \Sigma \text{SOEGPZZ}$$

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/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html).

$$\text{FFETKUS} = \text{factor for converting electricity produced from solar energy sources from kilowatthours to Btu.}$$

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:

$$\begin{aligned}\text{SOEGBZZ} &= \text{SOEGPZZ} * \text{FFETKUS} \\ \text{SOEGBUS} &= \Sigma \text{SOEGBZZ}\end{aligned}$$

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:

$$\begin{aligned}\text{SOTCBZZ} &= \text{SOHCBZZ} + \text{SOEGBZZ} \\ \text{SOTCBUS} &= \Sigma \text{SOTCBZZ}\end{aligned}$$

## Additional Notes on Solar Energy

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.

California data for 1986 through 2004, Arizona data for 2005, and Nevada data for 2006, are reduced by the number of high-temperature solar thermal collectors used in the electric power sector as shown in the *Renewable Energy Annual*. See SOTTPZZ Data Sources on page 86 for source table details.

## Data Sources

FFETKUS — Fossil-fueled 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 photovoltaic and 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 — Solar thermal direct use energy, and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), 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 2008*, 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 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.
- 2006: Table 2.6.

Note: California data for 1986 through 2004, Arizona data for 2005, and Nevada data for 2006, 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.
  - 2006: Table 2.10.

## Wind Energy

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/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html).

FFETKUS = factor for converting electricity produced from wind 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:

$$\begin{aligned}\text{WYEGBZZ} &= \text{WYEGPZZ} * \text{FFETKUS} \\ \text{WYGBUS} &= \Sigma \text{WYEGBZZ}\end{aligned}$$

The State and U.S. totals for wind energy are calculated:

$$\begin{aligned}\text{WYTCBZZ} &= \text{WYGBZZ} \\ \text{WYTCBUS} &= \Sigma \text{WYTCBZZ}\end{aligned}$$

### Data Sources

FFETKUS — Fossil-fueled 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 energy 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. Wood includes wood and wood-derived fuels. Prior to 2001, waste also includes non-biomass waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

### 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, 2001, and 2005 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. For 2005, *RECS* only provides data for California, New York, and Texas. An estimate for Florida is derived from the 2005 *RECS* microdata. Estimates for the other States in 1993, 1997, 2001, and 2005, 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 =  $\Sigma$ 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 =  $\Sigma$ WDRCBZZ

## **Data Sources**

WDRCPZZ — 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 2008*, Table 10.2a 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 through 2004: 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, 2007,” column titled “July 1, 2001” at <http://www.census.gov/popest/housing/tables/HU-EST2007-01.xls>. This derived 2001 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 2001 through 2004.

- 2005 forward: Residential wood consumption data for U.S. Census divisions and for California, Florida, New York, and Texas are from Form EIA-457, “2005 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, 2007,” column titled “July 1, 2005” at <http://www.census.gov/popest/housing/tables/HU-EST2007-01.xls>. This derived 2005 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 2005 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:

$$\begin{aligned} \text{WDRCPUS} &= \Sigma \text{WDRCPZZ} \\ \text{WDC3BUS} &= \Sigma \text{WDC3BZZ} \\ \text{WSC3BUS} &= \Sigma \text{WSC3BZZ} \end{aligned}$$

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:

$$\begin{aligned} \text{WDC4BUS} &= \text{WDCCBUS} - \text{WDC3BUS} \\ \text{WDC4BZZ} &= (\text{WDRCPZZ} / \text{WDRCPUS}) * \text{WDC4BUS} \end{aligned}$$

State totals of commercial wood consumption is calculated as the sum of consumption by CHP facilities and the remaining commercial sector:

$$\text{WDCCBZZ} = \text{WDC3BZZ} + \text{WDC4BZZ}$$

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.

$$\begin{aligned} \text{WSCCBZZ} &= \text{WSC3BZZ} \\ \text{WSCCBUS} &= \Sigma \text{WSCCBZZ} \end{aligned}$$

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:

$$\begin{aligned} \text{WWCCBZZ} &= \text{WDCCBZZ} + \text{WSCCBZZ} \\ \text{WWCCBUS} &= \Sigma \text{WWCCBZZ} \end{aligned}$$

### 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 2008*, 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	= $\Sigma$ WDI3BZZ
WDI4BUS	= $\Sigma$ WDI4BZZ
WSI3BUS	= $\Sigma$ WSI3BZZ
WSI4BUS	= $\Sigma$ 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	= $\Sigma$ 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	= $\Sigma$ 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:

$$WWI4BZZ = WDI4BZZ + WSI4BZZ$$

$$WWI4BUS = \Sigma WWI4BZZ$$

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:

$$WWICBZZ = WDICBZZ + WSICBZZ$$

$$WWICBUS = \Sigma WWICBZZ$$

### 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 2008 (AER)*, Table 10.2b.
  - 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, 322, 337, and “Other” based on data from the Form EIA-846, “Manufacturing Energy Consumption Survey,” 1998 (for 1998–2001) and 2002 (for 2002 forward), table entitled “Selected Wood and Wood-Related Products in Fuel Consumption,” 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 2008 (AER)*, Table 10.2b.

— 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 use of wood and waste to generate electricity is based on data series from EIA Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms and is estimated in SEDS using two methods. From 1989 forward, the Btu content of the wood and waste consumed by electric power plants is reported on the data collection forms and used in SEDS. Prior to 1989, Btu data were not collected by the source data forms and data on electricity generation from wood and waste are used instead. Net generation of electricity is converted to equivalent Btu using the fossil-fueled steam-electric plant conversion factor, and the resulting Btu values are entered into SEDS. Rarely, power plants can use more electricity than they generate from wood and waste energy sources and a negative net generation (and, therefore, Btu consumption) value can be seen in SEDS. From 1960 through 1981, electricity generation from wood and waste are reported combined and from 1982 forward generation or Btu values from each source are reported separately.

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 =  $\Sigma$ WDEIBZZ
- WSEIBUS =  $\Sigma$ WSEIBZZ

$$\begin{aligned}\text{WWEIBZZ} &= \text{WDEIBZZ} + \text{WSEIBZZ} \\ \text{WWEIBUS} &= \Sigma \text{WWEIBZZ}\end{aligned}$$

### Data Sources

WDEIBZZ — Wood consumed by the electric power sector by State.

- 1960 through 1981: Data included in waste energy sources, see WSEIBZZ.
- 1982 through 1988: EIA, Form EIA-759, "Monthly Power Plant Report," electricity generation from wood converted to Btu using the fossil-fueled steam-electric power plant conversion factor shown in Table B1 ([http://www.eia.doe.gov/emeu/states/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html)).
- 1989 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 through 1988: EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms, electricity generation from waste (includes wood energy sources from 1960 through 1981) converted to Btu using the fossil-fueled steam-electric power plant conversion factor shown in Table B1 ([http://www.eia.doe.gov/emeu/states/seds\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_tech_notes.html)).
- 1989 forward: EIA, Forms EIA-906, "Power Plant Report," and EIA-920, "Combined Heat and Power Plant Report," and predecessor forms.

### 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:

$$\begin{aligned}\text{WDTCBZZ} &= \text{WDRCBZZ} + \text{WDCCBZZ} + \text{WDICBZZ} + \text{WDEIBZZ} \\ \text{WDTCBUS} &= \Sigma \text{WDTCBZZ}\end{aligned}$$

$$\text{WSTCBZZ} = \text{WSCCBZZ} + \text{WSICBZZ} + \text{WSEIBZZ}$$

$$\text{WSTCBUS} = \Sigma \text{WSTCBZZ}$$

$$\begin{aligned}\text{WWTCBZZ} &= \text{WDTCBZZ} + \text{WSTCBZZ} \\ \text{WWTCBUS} &= \Sigma \text{WWTCBZZ}\end{aligned}$$

## 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, and solar thermal energy sources are combined to be shown in the tables titled "Energy Consumption Estimates by Source." The variables are calculated for each State and the United States in billion Btu as follows:

$$\begin{aligned}\text{G1TCBZZ} &= \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ} \\ \text{G1TCBUS} &= \Sigma \text{G1TCBZZ}\end{aligned}$$

## Renewable Energy Total

Renewable energy subtotals for each consuming sector in billion Btu are calculated for 1990 forward for each State and the U.S. totals.

In addition, the industrial sector includes energy losses and co-products from the production of fuel ethanol (ENLCB) for the U.S.

$$\begin{aligned}\text{REACB} &= \text{ENACB} \\ \text{RECCB} &= \text{GECCB} + \text{HYCCB} + \text{WWCCB} + \text{ENCCB} \\ \text{REEIB} &= \text{HYEGB} + \text{GEEGB} + \text{SOEGB} + \text{WWEIB} + \text{WYEGB} \\ \text{RERCB} &= \text{WDRCB} + \text{GERCB} + \text{SOHCB}\end{aligned}$$

For the industrial sector:

$$\begin{aligned}\text{REICBZZ} &= \text{GEICBZZ} + \text{HYICBZZ} + \text{WWICBZZ} + \text{ENICBZZ} \\ \text{REICBUS} &= \text{GEICBUS} + \text{HYICBUS} + \text{WWICBUS} + \text{ENICBUS} + \text{ENLCBUS}\end{aligned}$$

$$\text{RETCB} = \text{RERCB} + \text{RECCB} + \text{REICB} + \text{REACB} + \text{REEIB}$$

## 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.



Total energy consumed by the electric power sector is the sum of all primary energy used to generate electricity, including net imports of electricity across U.S. borders (ELNIBZZ, see page 99). To eliminate the double counting of supplemental gaseous fuels, which are accounted for in the fossil fuels from which they are derived, and in natural gas, they are removed from the total:

$$\begin{aligned} \text{TEEIBZZ} &= \text{PAEIBZZ} + \text{NGEIBZZ} + \text{CLEIBZZ} + \text{HYEGBZZ} + \\ &\quad \text{NUEGBZZ} + \text{GEEGBZZ} + \text{WWEIBZZ} + \text{WNEGBZZ} \\ &\quad + \text{ELNIBZZ} - \text{SFEIBZZ} \\ \text{TEEIBUS} &= \Sigma \text{TEEIBZZ} \end{aligned}$$

## 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:

$$\text{NUEGPZZ} = \text{electricity produced from nuclear power in the electric power sector, in million kilowatthours.}$$

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\\_tech\\_notes.html](http://www.eia.doe.gov/emeu/states/seds_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 =  $\Sigma$ ELIMPZZ  
 ELEXPUS =  $\Sigma$ ELEXPZZ

Net imports are derived by subtracting exports of electricity from imports:

ELNIPZZ = ELIMPZZ – ELEXPZZ  
 ELNIPUS =  $\Sigma$ 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 =  $\Sigma$ ELIMBZZ  
 ELEXBZZ = ELEXPZZ \* 3.412  
 ELEXBUS =  $\Sigma$ ELEXBZZ  
 ELNIBZZ = ELIMBZZ – ELEXBZZ

ELNIBUS =  $\Sigma$ 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, Office of Electricity Delivery and Energy Reliability, OE-781R, “Annual Report of International Electric 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, Office of Electricity Delivery and Energy Reliability, OE-781R, “Annual Report of International Electric 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. 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):

ESRCPZZ = electricity sold to the residential sector;  
 ESCMPZZ = a portion of the electricity sold to the commercial sector;  
 ESICPZZ = electricity sold to the industrial sector;  
 ESACPZZ = electricity sold to the transportation sector (2003 forward);  
 ESOTPZZ = electricity sold to “Other” users (i.e., public street and highway lighting, other public authorities, railroads and railways, and interdepartmental sales) (1960 through 2002); and  
 ESTRPZZ =

electricity consumed by transit systems (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

- 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 by the transportation sector in the EIA survey but data are available in the NTD System: Alabama, Arkansas (2004-2007), Iowa (2003-2005), Maine (2003-2006), Mississippi, Missouri (2003), Tennessee (2003), and Wisconsin. Transportation electricity used was under-reported in Ohio in 2003 and Oregon. The missing transit system data for these two States are obtained from the NTD System.
- 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.

- For 1960 through 1983, electricity sales data for the District of Columbia and Maryland are combined on the survey 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. 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](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.gov/ntdprogram/data.htm>, (click on “Data Tables”) are used for the following States: Alabama, Arkansas, Iowa, Maine, Mississippi, Missouri, 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](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](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](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 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](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.gov/ntdprogram>, (click on "Access NTD Data" 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:

$$\begin{aligned}\text{LOTGBAK} &= \text{TEEIBAK} - \text{ESTGBAK} \\ \text{LOTGBHI} &= \text{TEEIBHI} - \text{ESTGBHI}\end{aligned}$$

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 period covered in the State Energy Data System (SEDS), the ratio is fairly constant, with a slight downward trend. For 1960, the losses-to-sales ratio is 2.5; for 1961 through 1983 the ratio is around 2.4; for 1984 through the 1990s it fluctuates between 2.2 and 2.3; and for recent years the losses-to-sales ratio gradually move downward from 2.27 in 2000 to 2.16 in 2006.

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):

$$\begin{aligned}\text{LORCBZZ} &= \text{ESRCBZZ} * \text{ELLSS48} \\ \text{LOCCBZZ} &= \text{ESCCBZZ} * \text{ELLSS48} \\ \text{LOICBZZ} &= \text{ESICBZZ} * \text{ELLSS48} \\ \text{LOACBZZ} &= \text{ESACBZZ} * \text{ELLSS48} \\ \text{LOTBZZ} &= \text{ESTCBZZ} * \text{ELLSS48}\end{aligned}$$

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:

$$\begin{aligned}\text{LOTGBAK} &= \text{TEEIBAK} - \text{ESTGBAK} \\ \text{LOTGBHI} &= \text{TEEIBHI} - \text{ESTGBHI} \\ \text{LOTB48} &= \text{LOTBUS} - (\text{LOTGBAK} + \text{LOTGBHI})\end{aligned}$$

$$\text{LORCBK(HI)} = (\text{ESRCBK(HI)} / \text{ESTCBK(HI)}) * \text{LOTGBK(HI)}$$

$$\text{LOCCBK(HI)} = (\text{ESCCBK(HI)} / \text{ESTCBK(HI)}) * \text{LOTGBK(HI)}$$

$$\text{LOICBK(HI)} = (\text{ESICBK(HI)} / \text{ESTCBK(HI)}) * \text{LOTGBK(HI)}$$

$$\text{LOACBK(HI)} = (\text{ESACBK(HI)} / \text{ESTCBK(HI)}) * \text{LOTGBK(HI)}$$

Losses for the United States, including Alaska and Hawaii, are the sums of all the States' losses.

## 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:

$$\begin{aligned}\text{ELISBZZ} &= (\text{ESTCBZZ} + \text{LOTBZZ}) - \text{TEEIBZZ} \\ \text{ELISBUS} &= \sum \text{ELISBZZ}\end{aligned}$$

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

The preceding sections of this documentation describe how State end-use consumption estimates are made by individual energy source in the State Energy Data System (SEDS). This section describes how all energy sources are added in Btu to create end-use sector and total energy consumption estimates.

In general, total energy consumed by the four end-use sectors by State and the U.S. total include the following energy sources:

- coal (CL)
- natural gas (NG)
- all petroleum products (PA), which includes fuel ethanol blended into motor gasoline for 1993 forward
- fuel ethanol (EN) for 1960 through 1992
- electricity from conventional hydroelectric power (HY)
- wood (WD)
- waste (WS), which includes non-biomass waste prior to 2001
- geothermal direct use energy and geothermal heat pumps (GE)
- solar thermal direct use energy, and photovoltaic electricity net generation (SO)
- electricity sales (ES)

In addition, electrical system energy losses (LO) are included in the total energy consumption of the end-use sectors.

To prevent double counting of supplemental gaseous fuels (SF), which are accounted for in the fossil fuels from which they are derived, and in natural gas, they are removed from total energy for the residential, commercial, and industrial sectors.

Specific details for each of the end-use sectors are described below.

### Residential Sector

Solar thermal direct use energy, and photovoltaic electricity net generation for the residential and commercial sectors combined (SOHCB) is included in the residential sector only because the individual sector use cannot be identified:

$$\text{TERCB} = \text{CLRCB} + \text{NGRCB} + \text{PARCB} + \text{WDRCB} + \text{GERCB} + \text{SOHCB} + \text{ESRCB} + \text{LORCB} - \text{SFRCB}$$

### Commercial Sector

From 1960 through 1992:

$$\text{TECCB} = \text{CLCCB} + \text{NGCCB} + \text{PACCB} + \text{ENCCB} + \text{HYCCB} + \text{WDCCB} + \text{WSCCB} + \text{GECCB} + \text{ESCCB} + \text{LOCCB} - \text{SFCCB}$$

From 1993 forward:

$$\text{TECCB} = \text{CLCCB} + \text{NGCCB} + \text{PACCB} + \text{HYCCB} + \text{WDCCB} + \text{WSCCB} + \text{GECCB} + \text{ESCCB} + \text{LOCCB} - \text{SFCCB}$$

### Industrial Sector

For the industrial sector, the U.S. calculations in SEDS are slightly different from the State calculations. The industrial sector includes net imports of coal coke (CCNIBUS) in the U.S. total but not in the individual State estimates ("ZZ" in the variable name represents the two-letter State code that differs for each State) because no reliable means of allocating the U.S. amount to the States has been developed. In addition, the industrial sector

# TOTAL ENERGY

includes energy losses and co-products from the production of fuel ethanol (ENLCB) in the U.S. total. Individual State estimates are not available because reliable State allocators have not been identified.

From 1960 through 1992:

$$\text{TEICBUS} = \text{CLICBUS} + \text{CCNIBUS} + \text{NGICBUS} + \text{PAICBUS} + \text{ENICBUS} + \text{HYICBUS} + \text{WDICBUS} + \text{WSICBUS} + \text{GEICBUS} + \text{ESICBUS} + \text{LOICBUS} + \text{ENLCBUS} - \text{SFINBUS}$$

$$\text{TEICBZZ} = \text{CLICBZZ} + \text{NGICBZZ} + \text{PAICBZZ} + \text{ENICBZZ} + \text{HYICBZZ} + \text{WDICBZZ} + \text{WSICBZZ} + \text{GEICBZZ} + \text{ESICBZZ} + \text{LOICBZZ} - \text{SFINBZZ}$$

From 1993 forward:

$$\text{TEICBUS} = \text{CLICBUS} + \text{CCNIBUS} + \text{NGICBUS} + \text{PAICBUS} + \text{HYICBUS} + \text{WDICBUS} + \text{WSICBUS} + \text{GEICBUS} + \text{ESICBUS} + \text{LOICBUS} + \text{ENLCBUS} - \text{SFINBUS}$$

$$\text{TEICBZZ} = \text{CLICBZZ} + \text{NGICBZZ} + \text{PAICBZZ} + \text{HYICBZZ} + \text{WDICBZZ} + \text{WSICBZZ} + \text{GEICBZZ} + \text{ESICBZZ} + \text{LOICBZZ} - \text{SFINBZZ}$$

## Transportation Sector

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 Consumption

Total energy consumption by State is defined in SEDS as the sum of all energy sources consumed by the energy-use sectors. This includes all primary energy sources consumed by the four end-use sectors and the electric power sector, as well as net interstate sales of electricity (ELISBZZ) and net imports of electricity (ELNIBZZ).

The U.S. total energy calculations in SEDS are slightly different from the State calculations. They do not include net interstate flow of electricity (which is zero for the U.S. total), and include net imports of coal coke.

From 1960 through 1992:

$$\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{ENTCBUS} + \text{NUETBUS} + \text{HYTCBUS} + \text{WDTCBUS} + \text{WSTCBUS} + \text{GETCBUS} + \text{SOTCBUS} + \text{WYTCBUS} + \text{ELNIBUS} + \text{ENLCBUS} - \text{SFTCBUS}$$

$$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{ENTCBZZ} + \text{NUETBZZ} + \text{HYTCBZZ} + \text{WDTCBZZ} + \text{WSTCBZZ} + \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ} + \text{ELNIBZZ} + \text{ELISBZZ} - \text{SFTCBZZ}$$

From 1993 forward:

$$\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{NUETBUS} + \text{HYTCBUS} + \text{WDTCBUS} + \text{WSTCBUS} + \text{GETCBUS} + \text{SOTCBUS} + \text{WYTCBUS} + \text{ELNIBUS} + \text{ENLCBUS} - \text{SFTCBUS}$$

$$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{NUETBZZ} + \text{HYTCBZZ} + \text{WDTCBZZ} + \text{WSTCBZZ} + \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ} + \text{ELNIBZZ} + \text{ELISBZZ} - \text{SFTCBZZ}$$

As a cross-check that is not used in the report tables, total energy consumed is also calculated in SEDS as the sum of the consumption by the four end-use sectors for each State and U.S. total:

$$\text{TESSB} = \text{TERCB} + \text{TECCB} + \text{TEICB} + \text{TEACB}$$

The slight discrepancies between TESSB and TETCB are caused by independent rounding of the components.

## Additional Calculations

A few data series are combined for display in the "Other" column in tables titled "Energy Consumption Estimates by Source." They include net electricity imports, fuel ethanol estimates not covered in the motor gasoline data (before 1993), losses and co-products from the production of fuel ethanol (U.S. only), and an adjustment to remove double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in the total. The variables are calculated for each State and the United States in billion Btu as follows:

From 1960 through 1992:

$$\begin{aligned}\text{OTTCBUS} &= \text{ELNIBUS} + \text{ENTCBUS} + \text{ENLCBUS} - \text{SFTCBUS} \\ \text{OTTCBZZ} &= \text{ELNIBZZ} + \text{ENTCBZZ} - \text{SFTCBZZ}\end{aligned}$$

From 1993 forward:

$$\begin{aligned}\text{OTTCBUS} &= \text{ELNIBUS} + \text{ENLCBUS} - \text{SFTCBUS} \\ \text{OTTCBZZ} &= \text{ELNIBZZ} - \text{SFTCBZZ}\end{aligned}$$

## Total Net Energy

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:

$$\begin{aligned}\text{TNRCB} &= \text{TERCB} - \text{LORCB} \\ \text{TNICB} &= \text{TEICB} - \text{LOICB}\end{aligned}$$

$$\begin{aligned}\text{TNCCB} &= \text{TECCB} - \text{LOCCB} \\ \text{TNACB} &= \text{TEACB} - \text{LOACB}\end{aligned}$$

## 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 may be revised more frequently than the State population estimates, so the sum of the available States' population data may not equal the U.S. totals. Therefore, the U.S. total population is input into SEDS instead of being calculated as the sum of the States' values. The variable names for the series are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

TPOPPZZ = resident population of each State; and  
TPOPPUS = resident population of the United States.

Estimated energy consumption per capita for each State and the United States, in million Btu, is represented by "TETPB" 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. July 1 estimates for all years.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census <http://www.census.gov/popest/archives/1990s/popclockest.txt>.

- 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/](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. July 1 estimates for all years.

- 1960 and 1970: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1980*, Section 1 Population, "No. 10. Resident Population--States: 1950 to 1979".
- 1980: U.S. Department of Commerce, Bureau of the Census, <http://www.census.gov/popest/archives/1980s/s5yr8090.txt>.
- 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:
  - 1961 through 1969: Number 460, Table 1.
  - 1971 through 1979: Number 957, Table 4.
  - 1981 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/index.html](http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/index.html).
- 2000 forward: <http://www.census.gov/popest/states/NST-ann-est.html>.

## Total Energy Consumed per Real Dollar of Gross Domestic Product

Total energy consumed per chained (2000) dollar of output by State and the United States is estimated by dividing the total energy series ("TE") by real gross domestic product (GDP) as published by the U.S. Department of Commerce, Bureau of Economic Analysis, beginning in 1977. The U.S. real GDP is extracted from the same data source as the State data. This series does not match the national account GDP series. For details, see BEA Regional Economic Accounts: Methodologies, <http://www.bea.gov/regional/methods.cfm>.

For 1977 through 1989, BEA does not provide the real GDP by State estimates. However, BEA's quantity indexes for real GDP by State (2000=100.000) are used to calculate real GDP from 1977 to 1989. For 1990 through 1996, BEA reports real GDP by State based on the Standard Industrial Classification (SIC). For 1997 forward, BEA reports real GDP by State based on the North American Industry Classification System (NAICS). Given this discontinuity in the GDP by States series at 1997, users of these data are strongly cautioned against appending the two data series in an attempt to construct a single time series of GDP by State estimates.

The variable names for the series are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

GDPRXUS = real gross domestic product of the United States in million chained (2000) dollars.; and

GDPRXZZ = real gross domestic product by State in million chained (2000) dollars.

Estimated energy consumption per real chained (2000) dollar for each State and the United States, in thousand Btu per chained (2000) dollar, is represented by "TETGR" and is calculated:

$$\text{TETGR} = \text{TETCB} / \text{GDPRX}$$

### Data Sources

GDPRXUS — Real gross domestic product of the United States in million chained (2000) dollars.

- 1977 through 1996: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=SIC>.
- 1997 forward: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=NAICS>.

GDPRXZZ — Real gross domestic product by State in million chained (2000) dollars.

- 1977 through 1996: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=SIC>.
- 1997 forward: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=NAICS>.





## 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:

<b>Character Positions:</b>	<b>1 and 2</b>	<b>3 and 4</b>	<b>5</b>	<b>6 and 7</b>
<b>Identify:</b>	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 = $\Sigma$ 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 = $\Sigma$ AICAPZZ
ARICB	Asphalt and road oil consumed by the industrial sector.	Billion Btu	ARICBZZ = ARICPZZ * 6.636 ARICBUS = $\Sigma$ ARICBZZ
ARICP	Asphalt and road oil consumed by the industrial sector.	Thousand barrels	ARICPZZ = ASICPZZ + RDICPZZ ARICPUS = $\Sigma$ 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 = $\Sigma$ ARTCPZZ
ASICP	Asphalt consumed by the industrial sector.	Thousand barrels	ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS ASICPUS = $\Sigma$ ASICPZZ
ASINP	Asphalt sold to the industrial sector.	Short tons	ASINPZZ is independent. ASINPUS = $\Sigma$ 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 = $\Sigma$ AVACBZZ
AVACP	Aviation gasoline consumed by the transportation sector.	Thousand barrels	AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS AVACPUS = $\Sigma$ AVACPZZ
AVMIP	Aviation gasoline issued to the military.	Thousand barrels	AVMIPZZ is independent. AVMIPUS = $\Sigma$ AVMIPZZ

AVNMM	Aviation gasoline sold to nonmilitary users.	Thousand gallons	AVNMMZZ is independent. AVNMMUS = $\Sigma$ AVNMMZZ
AVNMP	Aviation gasoline sold to nonmilitary users.	Thousand barrels	AVNMPZZ = AVNMMZZ / 42 AVNMPUS = $\Sigma$ AVNMPZZ
AVTCB	Aviation gasoline total consumed.	Billion Btu	AVTCBZZ = AVACBZZ AVTCBUS = $\Sigma$ 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 = $\Sigma$ 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 = $\Sigma$ CGVAVZZ
CLACB	Coal consumed by the transportation sector.	Billion Btu	CLACBZZ = CLACPZZ * CLACKZZ CLACBUS = $\Sigma$ 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 = $\Sigma$ CLCCBZZ
CLCCP	Coal consumed by the commercial sector.	Thousand short tons	CLCCP = CLHCPZZ - CLRCPZZ CLCCPUS = $\Sigma$ CLCCPZZ

CLEIB	Coal consumed by the electric power sector.	Billion Btu	CLEIBZZ = CLEIPZZ * CLEIKZZ CLEIBUS = $\Sigma$ 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 = $\Sigma$ 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 = $\Sigma$ CLHDPZZ
CLICB	Coal consumed by the industrial sector.	Billion Btu	CLICBZZ = CLKCBZZ + CLOCBZZ CLICBUS = $\Sigma$ CLICBZZ
CLICP	Coal consumed by the industrial sector.	Thousand short tons	CLICPZZ = CLKCPZZ + CLOCPZZ CLICPUS = $\Sigma$ CLICPZZ
CLKCB	Coal consumed at coke plants (coking coal).	Billion Btu	CLKCBZZ = CLKCPZZ * CLKCKZZ CLKCBUS = $\Sigma$ 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 = $\Sigma$ CLKDPZZ
CLOCB	Coal consumed by other industrial users.	Billion Btu	CLOCBZZ = CLOCPZZ * CLOCKZZ CLOCBUS = $\Sigma$ 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 oil consumed by the transportation sector.	Billion Btu	$DFACBZZ = DFACPZZ * 5.825$ $DFACBUS = \Sigma DFACBZZ$
DFACP	Distillate fuel oil consumed by the transportation sector.	Thousand barrels	$DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ$ $DFACPUS = \Sigma DFACPZZ$



# APPENDIX

## A

DFBKP	Distillate fuel oil sales for vessel bunkering use, excluding that sold to the Armed Forces.	Thousand barrels	DFBKPZZ is independent. DFBKPUS = $\Sigma$ DFBKPZZ
DFCCB	Distillate fuel oil consumed by the commercial sector.	Billion Btu	DFCCBZZ = DFCCPZZ * 5.825 DFCCBUS = $\Sigma$ DFCCBZZ
DFCCP	Distillate fuel oil consumed by the commercial sector.	Thousand barrels	DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ DFCCPUS = $\Sigma$ DFCCPZZ
DFCMP	Distillate fuel oil sales to the commercial sector.	Thousand barrels	DFCMPZZ is independent. DFCMPUS = $\Sigma$ DFCMPZZ
DFEIB	Distillate fuel oil consumed by the electric power sector.	Billion Btu	DFEIBZZ = DFEIPZZ * 5.825 DFEIBUS = $\Sigma$ DFEIBZZ
DFEIP	Distillate fuel oil (excluding kerosene-type jet fuel) consumed by the electric power sector.	Thousand barrels	DFEIPZZ = DKEIPZZ - JKEUPZZ DFEIPUS = $\Sigma$ DFEIPZZ
DFIBP	Distillate fuel oil sales for industrial space heating and other industrial use, including farm use.	Thousand barrels	DFIBPZZ is independent. DFIBPUS = $\Sigma$ DFIBPZZ
DFICB	Distillate fuel oil consumed by the industrial sector.	Billion Btu	DFICBZZ = DFICPZZ * 5.825 DFICBUS = $\Sigma$ DFICBZZ
DFICP	Distillate fuel oil consumed by the industrial sector.	Thousand barrels	DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ DFICPUS = $\Sigma$ DFICPZZ
DFINP	Distillate fuel oil sales to the industrial sector.	Thousand barrels	DFINPZZ = DFIBPZZ + DFOCPZZ + DFOFPZZ + DFOTPZZ DFINPUS = $\Sigma$ DFINPZZ
DFMIP	Distillate fuel oil sales to the Armed Forces, regardless of use.	Thousand barrels	DFMIPZZ is independent. DFMIPUS = $\Sigma$ DFMIPZZ
DFNCP	Distillate fuel oil consumption by all sectors other than the electric power sector.	Thousand barrels	DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS DFNCPUS = DFTCPUS - DFEIPUS
DFNDP	Distillate fuel oil sales to all sectors other than the electric power sector.	Thousand barrels	DFNDPZZ = DFRSPZZ + DFCMPZZ + DFINPZZ + DFTRPZZ DFNDPUS = $\Sigma$ DFNDPZZ
DFOCP	Distillate fuel oil sales for use by oil companies.	Thousand barrels	DFOCPZZ is independent. DFOCPUS = $\Sigma$ DFOCPZZ

DFOFP	Distillate fuel oil sales as diesel fuel for off-highway use.	Thousand barrels	DFOFPZZ is independent. DFOFPUS = $\Sigma$ DFOFPZZ
DFONP	Distillate fuel oil sales as diesel fuel for on-highway use.	Thousand barrels	DFONPZZ is independent. DFONPUS = $\Sigma$ DFONPZZ
DFOTP	Distillate fuel oil sales for all other uses not identified in other sales categories.	Thousand barrels	DFOTPZZ is independent. DFOTPUS = $\Sigma$ DFOTPZZ
DFRCB	Distillate fuel oil consumed by the residential sector.	Billion Btu	DFRCBZZ = DFRCPZZ * 5.825 DFRCBUS = $\Sigma$ DFRCBZZ
DFRCP	Distillate fuel oil consumed by the residential sector.	Thousand barrels	DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ DFRCBUS = $\Sigma$ DFRCPZZ
DFRRP	Distillate fuel oil sales for use by railroads.	Thousand barrels	DFRRPZZ is independent. DFRRPUS = $\Sigma$ DFRRPZZ
DFRSP	Distillate fuel oil sales to the residential sector.	Thousand barrels	DFRSPZZ is independent. DFRSPUS = $\Sigma$ DFRSPZZ
DFTCB	Distillate fuel oil total consumed.	Billion Btu	DFTCBZZ = DFRCBZZ + DFCCBZZ + DFICBZZ + DFACBZZ + DFEIBZZ DFTCBUS = $\Sigma$ DFTCBZZ
DFTCP	Distillate fuel oil total consumed.	Thousand barrels	DFTCPZZ = DFNCPZZ + DFEIPZZ DFTCPUS is independent.
DFTRP	Distillate fuel oil sales to the transportation sector.	Thousand barrels	DFTRPZZ = DFBKPZZ + DFMIPZZ + DFRRPZZ + DFONPZZ DFTRPUS = $\Sigma$ DFTRPZZ
DKEIB	Distillate fuel oil and kerosene-type jet fuel consumed by the electric power sector.	Billion Btu	DKEIBZZ = DFEIBZZ + JKEUBZZ DKEIBUS = $\Sigma$ DKEIBZZ
DKEIP	Distillate fuel oil and kerosene-type jet fuel consumed by the electric power sector.	Thousand barrels	DKEIPZZ is independent. DKEIPUS = $\Sigma$ DKEIPZZ
ELEXB	Electricity exported from the United States.	Billion Btu	ELEXBZZ = ELEXPZZ * 3.412 ELEXBUS = $\Sigma$ ELEXBZZ
ELEXP	Electricity exported from the United States.	Million kilowatthours	ELEXPZZ is independent. ELEXPUS = $\Sigma$ ELEXPZZ

ELIMB	Electricity imported into the United States	Billion Btu	$ELIMBZZ = ELIMPZZ * 3.412$ $ELIMBUS = \Sigma ELIMBZZ$
ELIMP	Electricity imported into the United States	Million kilowatthours	ELIMPZZ is independent. $ELIMPUS = \Sigma ELIMPZZ$
ELISB	Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.)	Billion Btu	$ELISBZZ = (ESTCBZZ + LOTCBZZ) - TEEIBZZ$ $ELISBUS = \Sigma ELISBZZ$
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	$ELNIBZZ = ELIMBZZ - ELEXBZZ$ $ELNIBUS = \Sigma ELNIBZZ$
ELNIP	Net imports of electricity into the United States.	Million kilowatthours	$ELNIPZZ = ELIMPZZ - ELEXPZZ$ $ELNIPUS = \Sigma ELNIPZZ$
ENACB	Fuel ethanol consumed by the transportation sector.	Billion Btu	$ENACBZZ = ENACPZZ * 3.539$ $ENACBUS = \Sigma ENACBZZ$
ENACP	Fuel ethanol consumed by the transportation sector.	Thousand barrels	$ENACPZZ = (MGACPZZ / MGTCPPZZ) * ENTCPZZ$ $ENACPUS = \Sigma ENACPZZ$
ENCCB	Fuel ethanol consumed by the commercial sector.	Billion Btu	$ENCCBZZ = (ENCCPZZ * 3.539)$ $ENCCBUS = \Sigma ENCCBZZ$
ENCCP	Fuel ethanol consumed by the commercial sector.	Thousand barrels	$ENCCPZZ = (MGCCPZZ / MGTCPPZZ) * ENTCPZZ$ $ENCCPUS = \Sigma ENCCPZZ$
ENICB	Fuel ethanol consumed by the industrial sector.	Billion Btu	$ENICBZZ = (ENICPZZ * 3.539)$ $ENICBUS = \Sigma ENICBZZ$
ENICP	Fuel ethanol consumed by the industrial sector.	Thousand barrels	$ENICPZZ = (MGICPZZ / MGTCPPZZ) * ENTCPZZ$ $ENICPUS = \Sigma ENICPZZ$
ENLCB	Energy losses and co-products from the production of fuel ethanol.	Billion Btu	ENLCBUS is independent.
ENTCB	Fuel ethanol total consumed.	Billion Btu	$ENTCBZZ = ENACBZZ + ENCCBZZ + ENICBZZ$ $ENTCBUS = \Sigma ENTCBZZ$
ENTCP	Fuel ethanol total consumed.	Thousand gallons	$ENTCPZZ = (ENTRPZZ / ENTRPUS) * ENTCPUS$ ENTCPUS is independent.

ENTRP	Fuel ethanol blended into motor gasoline.	Thousand gallons	ENTRPZZ is independent. ENTRPUS = $\Sigma$ ENTRPZZ
ESACB	Electricity consumed by (i.e., sold to) the transportation sector.	Billion Btu	ESACBZZ = ESACPZZ * 3.412 ESACBUS = $\Sigma$ ESACBZZ
ESACP	Electricity consumed by (i.e., sold to) the transportation sector.	Million kilowatthours	ESACPZZ = ESTRPZZ ESACPUS = $\Sigma$ ESACPZZ
ESCCB	Electricity consumed by (i.e., sold to) the commercial sector.	Billion Btu	ESCCBZZ = ESCCPZZ * 3.412 ESCCBUS = $\Sigma$ ESCCBZZ
ESCCP	Electricity consumed by (i.e., sold to) the commercial sector.	Million kilowatthours	ESCCPZZ = ESCMPZZ + ESOTPZZ – ESACPZZ ESCCPUS = $\Sigma$ ESCCPZZ
ESCMP	Electricity sold to a portion of the commercial sector.	Million kilowatthours	ESCMPZZ is independent. ESCMPUS = $\Sigma$ ESCMPZZ
ESICB	Electricity consumed by (i.e., sold to) the industrial sector.	Billion Btu	ESICBZZ = ESICPZZ * 3.412 ESICBUS = $\Sigma$ ESICBZZ
ESICP	Electricity consumed by (i.e., sold to) the industrial sector.	Million kilowatthours	ESICPZZ is independent. ESICPUS = $\Sigma$ 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 = $\Sigma$ ESOTPZZ
ESRCB	Electricity consumed by (i.e., sold to) the residential sector.	Billion Btu	ESRCBZZ = ESRCPZZ * 3.412 ESRCBUS = $\Sigma$ ESRCBZZ
ESRCP	Electricity consumed by (i.e., sold to) the residential sector.	Million kilowatthours	ESRCPZZ is independent. ESRCPUS = $\Sigma$ ESRCPZZ
ESTCB	Electricity total consumed (i.e., sold).	Billion Btu	ESTCBZZ = ESTCPZZ * 3.412 ESTCBUS = $\Sigma$ ESTCBZZ ESTCB48 = ESTCBUS – (ESTCBAK + ESTCBHI)
ESTCP	Electricity total consumed (i.e., sold).	Million kilowatthours	ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ ESTCPUS = $\Sigma$ ESTCPZZ
ESTRP	Electricity consumed by transit systems.	Million kilowatthours	ESTRPZZ is independent. ESTRPUS = $\Sigma$ ESTRPZZ

ESTRSUS	The share of electricity sold to the “Other” sector (ESOTP) that is used for transportation.	Fraction	ESTRSUS = ESACPUS / ESOTPUS
FFETKUS	Fossil-fueled 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 = ΣFNTCBZZ
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 = ΣFOTCBZZ
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 = ΣFSTCBZZ
FSTCP	Petrochemical feedstocks, still gas, total consumed.	Thousand barrels	FSTCPZZ = (COCAPZZ / COCAPUS) * FSTCPUS FSTCPUS is independent.
G1TCB	Electricity produced from geothermal, solar thermal, photovoltaic, and wind energy sources.	Billion Btu	G1TCBZZ = GETCBZZ + SOTCBZZ + WYTCBZZ G1TCBUS = ΣG1TCBZZ

GDPRX	Real gross domestic product.	Billion chained (2000) dollars	GDPRXZZ is independent. GDPRXUS is independent.
GECCB	Direct use of geothermal energy and heat pumps in the commercial 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
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 = HYEGPZZ * FFETKUS HYEGBUS = $\Sigma$ HYEGBZZ
HYEGP	Electricity produced from all types of hydropower by the electric power sector.	Million kilowatthours	HYEGPZZ = HVEGPZZ HYEGPUS = $\Sigma$ HYEGPZZ



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HYICB	Electricity produced from conventional hydropower in the industrial sector.	Billion Btu	HYICBZZ = HYICPZZ * FFETKUS HYICBUS = ΣHYICBZZ
HYICP	Electricity produced from conventional hydropower in the industrial sector.	Million kilowatthours	HYICPZZ = HVI5PZZ HYICPUS = ΣHYICPZZ
HYTCB	Electricity produced from hydropower; total production.	Billion Btu	HYTCBZZ = HYCCBZZ + HYEGBZZ + HYICBZZ HYTCBUS = ΣHYTCBZZ
HYTCP	Electricity produced from hydropower; total production.	Million kilowatthours	HYTCPZZ = HYCCPZZ + HYEGPZZ + HYICPZZ HYTCPUS = ΣHYTCPZZ
JFACB	Jet fuel consumed by the transportation sector.	Billion Btu	JFACBZZ = JKACBZZ + JNACBZZ JFACBUS = ΣJFACBZZ
JFACP	Jet fuel consumed by the transportation sector.	Thousand barrels	JFACPZZ = JKACPZZ + JNACPZZ JFACPUS = ΣJFACPZZ
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 = ΣJFTCBZZ
JFTCP	Jet fuel total consumed.	Thousand barrels	JFTCPZZ = JFACPZZ + JFEUPZZ JFTCPUS = ΣJFTCPZZ
JKACB	Kerosene-type jet fuel consumed by the transportation sector.	Billion Btu	JKACBZZ = JKACPZZ * 5.670 JKACBUS = ΣJKACBZZ
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 = ΣJKEUBZZ
JKEUP	Kerosene-type jet fuel consumed by electric power sector.	Thousand barrels	JKEUPZZ is independent. JKEUPUS = ΣJKEUPZZ
JKTCB	Kerosene-type jet fuel total consumed.	Billion Btu	JKTCBZZ = JKTCPZZ * 5.670 JKTCBUS = ΣJKTCBZZ

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. JKTTPUS = $\Sigma$ 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 = $\Sigma$ JNMIPZZ
JNTCB	Naphtha-type jet fuel total consumed.	Billion Btu	JNTCBZZ = JNTCPZZ * 5.355 JNTCBUS = $\Sigma$ 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 = $\Sigma$ KSCCBZZ
KSCCP	Kerosene consumed by the commercial sector.	Thousand barrels	KSCCPZZ = (KSCMPZZ / KSTTPZZ) * KSTCPZZ KSCCPUS = $\Sigma$ KSCCPZZ
KSCMP	Kerosene sold to the commercial sector.	Thousand barrels	KSCMPZZ is independent. KSCMPUS = $\Sigma$ KSCMPZZ
KSICB	Kerosene consumed by the industrial sector.	Billion Btu	KSICBZZ = KSICPZZ * 5.670 KSICBUS = $\Sigma$ KSICBZZ
KSICP	Kerosene consumed by the industrial sector.	Thousand barrels	KSICPZZ = (KSINPZZ / KSTTPZZ) * KSTCPZZ KSICPUS = $\Sigma$ KSICPZZ
KSIHP	Kerosene sold for industrial heating.	Thousand barrels	KSIHPZZ is independent. KSIHPUS = $\Sigma$ KSIHPZZ
KSINP	Kerosene sold to the industrial sector.	Thousand barrels	KSINPZZ = KSOTPZZ + KSIHPZZ KSINPUS = $\Sigma$ KSINPZZ
KSOTP	Kerosene sold for all other uses, including farm use.	Thousand barrels	KSOTPZZ is independent. KSOTPUS = $\Sigma$ KSOTPZZ

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KSRCB	Kerosene consumed by the residential sector.	Billion Btu	$KSRCBZZ = KSRCPZZ * 5.670$ $KSRCBUS = \Sigma KSRCBZZ$
KSRCP	Kerosene consumed by the residential sector.	Thousand barrels	$KSRCPZZ = (KSRSPZZ / KSTTPZZ) * KSTCPZZ$ $KSRCBUS = \Sigma KSRCPZZ$
KSRSP	Kerosene sold to the residential sector.	Thousand barrels	KSRSPZZ is independent. $KSRSPUS = \Sigma KSRSPZZ$
KSTCB	Kerosene total consumed.	Billion Btu	$KSTCBZZ = KSRCBZZ + KSICBZZ + KSCCBZZ$ $KSTCBUS = \Sigma KSTCBZZ$
KSTCP	Kerosene total consumed.	Thousand barrels	$KSTCPZZ = (KSTTPZZ / KSTTPUS) * KSTCPUS$ KSTCPUS is independent.
KSTTP	Kerosene total sold.	Thousand barrels	$KSTTPZZ = KSRSPZZ + KSCMPZZ + KSINPZZ$ $KSTTPUS = \Sigma KSTTPZZ$
LGACB	LPG consumed by the transportation sector.	Billion Btu	$LGACBZZ = LGACPZZ * LGTCKUS$ $LGACBUS = \Sigma LGACBZZ$
LGACP	LPG consumed by the transportation sector.	Thousand barrels	$LGACPZZ = LGCBPZZ * LGTRSUS$ $LGACPUS = \Sigma LGACPZZ$
LGCBM	LPG sales for internal combustion engine use.	Thousand gallons	LGCBMZZ is independent. $LGCBMUS = \Sigma LGCBMZZ$
LGCBP	LPG consumed for internal combustion engine use.	Thousand barrels	$LGCBPZZ = LGCBMZZ / 42$ $LGCBPUS = \Sigma LGCBPZZ$
LGCCB	LPG consumed by the commercial sector.	Billion Btu	$LGCCBZZ = LGCCPZZ * LGTCKUS$ $LGCCBUS = \Sigma LGCCBZZ$
LGCCP	LPG consumed by the commercial sector.	Thousand barrels	$LGCCPZZ = LGHCPZZ * 0.15$ $LGCCPUS = \Sigma LGCCPZZ$
LGHCM	LPG sold for residential and commercial use.	Thousand gallons	LGHCMZZ is independent. $LGHCMUS = \Sigma LGHCMZZ$
LGHCP	LPG consumed by the residential and commercial sectors.	Thousand barrels	$LGHCPZZ = LGHCMZZ / 42$ $LGHCPUS = \Sigma LGHCPZZ$
LGICB	LPG consumed by the industrial sector.	Billion Btu	$LGICBZZ = LGICPZZ * LGTCKUS$ $LGICBUS = \Sigma LGICBZZ$

LGICP	LPG consumed by the industrial sector.	Thousand barrels	$\text{LGICPZZ} = \text{LGTCPPZZ} - (\text{LGRCPZZ} + \text{LGCCPZZ} + \text{LGACPZZ})$ $\text{LGICPUS} = \Sigma \text{LGICPZZ}$
LGRCB	LPG consumed by the residential sector.	Billion Btu	$\text{LGRCBZZ} = \text{LGRCPZZ} * \text{LGTCCKUS}$ $\text{LGRCBUS} = \Sigma \text{LGRCBZZ}$
LGRCP	LPG consumed by the residential sector.	Thousand barrels	$\text{LGRCPZZ} = \text{LGHCPZZ} * 0.85$ $\text{LGRCPUS} = \Sigma \text{LGRCPZZ}$
LGTCB	LPG total consumed.	Billion Btu	$\text{LGTCBZZ} = \text{LGRCBZZ} + \text{LGCCBZZ} + \text{LGICBZZ} + \text{LGACBZZ}$ $\text{LGTCBUS} = \Sigma \text{LGTCBZZ}$
LGTCCKUS	Factor for converting LPG from physical units to Btu.	Million Btu per barrel	LGTCCKUS is independent.
LGTCPP	LPG total consumed.	Thousand barrels	$\text{LGTCPPZZ} = (\text{LGTTTPZZ} / \text{LGTTTPUS}) * \text{LGTCPPUS}$ $\text{LGTCPPUS} \text{ is independent.}$
LGTRSUS	The transportation sector's share of LPG internal combustion engine sales.	Fraction	LGTRSUS is independent.
LGTTTP	LPG total sold.	Thousand gallons	$\text{LGTTTPZZ} \text{ is independent.}$ $\text{LGTTTPUS} = \Sigma \text{LGTTTPZZ}$
LOACB	The transportation sector's share of electrical system energy losses.	Billion Btu	$\text{LOACBZZ} = \text{ESACBZZ} * \text{ELLSS48}$ <p>Exceptions:</p> $\text{LOACBAK} = (\text{ESACBAK} / \text{ESTCBAK}) * \text{LOT CBAK}$ $\text{LOACBHI} = (\text{ESACBHI} / \text{ESTCBHI}) * \text{LOT CBHI}$ $\text{LOACBUS} = \Sigma \text{LOACBZZ}$
LOCCB	The commercial sector's share of electrical system energy losses.	Billion Btu	$\text{LOCCBZZ} = \text{ESCCBZZ} * \text{ELLSS48}$ <p>Exceptions:</p> $\text{LOCCBAK} = (\text{ESCCBAK} / \text{ESTCBAK}) * \text{LOT CBAK}$ $\text{LOCCBHI} = (\text{ESCCBHI} / \text{ESTCBHI}) * \text{LOT CBHI}$ $\text{LOCCBUS} = \Sigma \text{LOCCBZZ}$
LOICB	The industrial sector's share of electrical system energy losses.	Billion Btu	$\text{LOICBZZ} = \text{ESICBZZ} * \text{ELLSS48}$ <p>Exceptions:</p> $\text{LOICBAK} = (\text{ESICBAK} / \text{ESTCBAK}) * \text{LOT CBAK}$ $\text{LOICBHI} = (\text{ESICBHI} / \text{ESTCBHI}) * \text{LOT CBHI}$ $\text{LOICBUS} = \Sigma \text{LOICBZZ}$

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 = ΣLORCBZZ
LOTCB	Total electrical system energy losses.	Billion Btu	LOTBZZ = ESTCBZZ * ELLSS48 Exceptions: LOTBAK = TEEIBAK - ESTCBAK LOTBHI = TEEIBHI - ESTCBHI LOTBUS = TEEIBUS - ESTCBUS LOTB48 = LOTBUS - (LOTBAK + LOTBHI)
LUACB	Lubricants consumed by the transportation sector.	Billion Btu	LUACBZZ = LUACPZZ * 6.065 LUACBUS = ΣLUACBZZ
LUACP	Lubricants consumed by the transportation sector.	Thousand barrels	LUACPZZ = (LUTRPZZ / LUTTPZZ) * LUTCPZZ LUACPUS = ΣLUACPZZ
LUICB	Lubricants consumed by the industrial sector.	Billion Btu	LUICBZZ = LUICPZZ * 6.065 LUICBUS = ΣLUICBZZ
LUICP	Lubricants consumed by the industrial sector.	Thousand barrels	LUICPZZ = (LUINPZZ / LUTTPZZ) * LUTCPZZ LUICPUS = ΣLUICPZZ
LUINP	Lubricants sold to the industrial sector.	Thousand barrels	LUINPZZ is independent. LUINPUS = ΣLUINPZZ
LUTCB	Lubricants total consumed.	Billion Btu	LUTCBZZ = LUICBZZ + LUACBZZ LUTCBUS = ΣLUTCBZZ
LUTCP	Lubricants total consumed.	Thousand barrels	LUTCPZZ = (LUTTPZZ / LUTTPUS) * LUTCPUS LUTCPUS is independent.
LUTRP	Lubricants sold to the transportation sector.	Thousand barrels	LUTRPZZ is independent. LUTRPUS = ΣLUTRPZZ
LUTTP	Lubricants total sold.	Thousand barrels	LUTTPZZ = LUINPZZ + LUTRPZZ LUTTPUS = ΣLUTTPZZ
MBICB	Motor gasoline blending components consumed by the industrial sector.	Billion Btu	MBICBZZ = MBTCBZZ MBICBUS = MBTCBUS
MBICP	Motor gasoline blending components consumed by the industrial sector.	Thousand barrels	MBICPZZ = MBTCPZZ MBICPUS = MBTCPUS

MBTCB	Motor gasoline blending components total consumed.	Billion Btu	$MBTCBZZ = MBTCPZZ * 5.253$ $MBTCBUS = \Sigma MBTCBZZ$
MBTCP	Motor gasoline blending components total consumed.	Thousand barrels	$MBTCPZZ = (COCAPZZ / COCAPUS) * MBTCPUS$ MBTCPUS is independent.
MGACB	Motor gasoline consumed by the transportation sector.	Billion Btu	$MGACBZZ = MGACPZZ * MGTCKUS$ $MGACBUS = \Sigma MGACBZZ$
MGACP	Motor gasoline consumed by the transportation sector.	Thousand barrels	$MGACPZZ = (MGTRPZZ / MGTPPZZ) * MGTCPPZZ$ $MGACPUS = \Sigma MGACPZZ$
MGAGP	Motor gasoline sold for agricultural use.	Thousand gallons	MGAGPZZ is independent. $MGAGPUS = \Sigma MGAGPZZ$
MGCCB	Motor gasoline consumed by the commercial sector.	Billion Btu	$MGCCBZZ = MGCCPZZ * MGTCKUS$ $MGCCBUS = \Sigma MGCCBZZ$
MGCCP	Motor gasoline consumed by the commercial sector.	Thousand barrels	$MGCCPZZ = (MGCMPZZ / MGTPPZZ) * MGTCPPZZ$ $MGCCPUS = \Sigma MGCCPZZ$
MGCMP	Motor gasoline sold to the commercial sector.	Thousand gallons	$MGCMPZZ = MGMSPZZ + MGNPZZ$ $MGCMPUS = \Sigma MGCMPZZ$
MGCUP	Motor gasoline sold for construction use.	Thousand gallons	MGCUPZZ is independent. $MGCUPUS = \Sigma MGCUPZZ$
MGICB	Motor gasoline consumed by the industrial sector.	Billion Btu	$MGICBZZ = MGICPZZ * MGTCKUS$ $MGICBUS = \Sigma MGICBZZ$
MGICP	Motor gasoline consumed by the industrial sector.	Thousand barrels	$MGICPZZ = (MGINPZZ / MGTPPZZ) * MGTCPPZZ$ $MGICPUS = \Sigma MGICPZZ$
MGINP	Motor gasoline sold to the industrial sector.	Thousand gallons	$MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ$ $MGINPUS = \Sigma MGINPZZ$
MGIYP	Motor gasoline sold for industrial and commercial use (Federal Highway Administration terminology).	Thousand gallons	MGIYPZZ is independent $MGIYPUS = \Sigma MGIYPZZ$
MGMFP	Motor gasoline sold for highway use.	Thousand gallons	MGMFPZZ is independent. $MGMFPUS = \Sigma MGMFPZZ$
MGMRP	Motor gasoline sold for marine use.	Thousand gallons	MGMRPZZ is independent. $MGMRPUS = \Sigma MGMRPZZ$



MGMSPP	Motor gasoline sold for miscellaneous and unclassified uses.	Thousand gallons	MGMSPPZZ is independent. MGMSPPUS = $\Sigma$ MGMSPPZZ
MGPNNP	Motor gasoline sold for public nonhighway use.	Thousand gallons	MGPNNPZZ is independent. MGPNNPUS = $\Sigma$ MGPNNPZZ
MGSFP	Motor gasoline special fuels sold (primarily diesel fuel with small amounts of liquefied petroleum gases).	Thousand gallons	MGSFPZZ is independent. MGSFPUS = $\Sigma$ MGSFPZZ
MGTCB	Motor gasoline total consumed.	Billion Btu	MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ MGTCBUS = $\Sigma$ MGTCBZZ
MGTCP	Motor gasoline total consumed.	Thousand barrels	MGTCPZZ = (MGTPPZZ / MGTPPUS) * MGTCBUS MGTCPUS is independent.
MGTCKUS	Factor for converting motor gasoline from physical units to Btu.	Million Btu per barrel	MGTCKUS is independent.
MGTRP	Motor gasoline sold to the transportation sector.	Thousand gallons	MGTRPZZ = MGMFPZZ + MGMRPZZ – MGSFPZZ MGTRPUS = $\Sigma$ MGTRPZZ
MGTTP	Motor gasoline total sold.	Thousand gallons	MGTTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ MGTTPUS = $\Sigma$ 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 = $\Sigma$ 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 = $\Sigma$ 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	$NGACBZZ = NGACPZZ * NGTXKZZ$ $NGACBUS = \Sigma NGACBZZ$
NGACP	Natural gas consumed by the transportation sector.	Million cubic feet	$NGACPZZ = NGPZPZZ + NGVHPZZ$ $NGACPUS = \Sigma NGACPZZ$
NGCCB	Natural gas delivered to the commercial sector, used as consumption (including supplemental gaseous fuels).	Billion Btu	$NGCCBZZ = NGCCPZZ * NGTXKZZ$ $NGCCBUS = \Sigma NGCCBZZ$
NGCCP	Natural gas delivered to the commercial sector, used as consumption (including supplemental gaseous fuels).	Million cubic feet	NGCCPZZ is independent. $NGCCPUS = \Sigma NGCCPZZ$
NGEIB	Natural gas consumed by the electric power sector (including supplemental gaseous fuels).	Billion Btu	$NGEIBZZ = NGEIPZZ * NGEIKZZ$ $NGEIBUS = \Sigma NGEIBZZ$
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 (including supplemental gaseous fuels).	Million cubic feet	NGEIPZZ is independent. $NGEIPUS = \Sigma NGEIPZZ$
NGICB	Natural gas consumed by the industrial sector (including supplemental gaseous fuels).	Billion Btu	$NGICBZZ = NGICPZZ * NGTXKZZ$ $NGICBUS = \Sigma NGICBZZ$
NGICP	Natural gas consumed by the industrial sector (including supplemental gaseous fuels).	Million cubic feet	$NGICPZZ = NGINPZZ + NGLEPZZ + NGPLPZZ$ $NGICPUS = \Sigma NGICPZZ$
NGINP	A portion of the natural gas delivered to the industrial sector.	Million cubic feet	NGINPZZ is independent. $NGINPUS = \Sigma NGINPZZ$
NGLEP	Natural gas consumed as lease fuel.	Million cubic feet	NGLEPZZ is independent. $NGLEPUS = \Sigma NGLEPZZ$
NGLPB	Natural gas consumed as lease and plant fuel.	Billion Btu	$NGLPBZZ = NGLPPZZ * NGTXKZZ$ $NGLPBUS = \Sigma NGLPBZZ$
NGLPP	Natural gas consumed as lease and plant fuel.	Million cubic feet	$NGLPPZZ = NGLEPZZ + NGPLPZZ$ $NGLPPUS = \Sigma NGLPPZZ$
NGPLP	Natural gas consumed as plant fuel.	Million cubic feet	NGPLPZZ is independent. $NGPLPUS = \Sigma NGPLPZZ$

NGPZB	Natural gas consumed as pipeline fuel.	Billion Btu	NGPZBZZ = NGPZPZZ * NGTXKZZ NGPZBUS = $\Sigma$ NGPZBZZ
NGPZP	Natural gas consumed as pipeline fuel.	Million cubic feet	NGPZPZZ is independent. NGPZPUS = $\Sigma$ NGPZPZZ
NGRCB	Natural gas delivered to the residential sector, used as consumption (including supplemental gaseous fuels).	Billion Btu	NGRCBZZ = NGRCPZZ * NGTXKZZ NGRCBUS = $\Sigma$ NGRCBZZ
NGRCP	Natural gas delivered to the residential sector, used as consumption (including supplemental gaseous fuels).	Million cubic feet	NGRCPZZ is independent. NGRCPUS = $\Sigma$ NGRCPZZ
NGSFP	Supplemental gaseous fuels supplies.	Million cubic feet	NGSFPZZ is independent. NGSFPUS = $\Sigma$ NGSFPZZ
NGTCB	Natural gas total consumed (including supplemental gaseous fuels).	Billion Btu	NGTCBZZ = NGTCPZZ * NGTCKZZ NGTCBUS = $\Sigma$ NGTCBZZ
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 (including supplemental gaseous fuels).	Million cubic feet	NGTCPZZ = NGRCPZZ + NGCCPZZ + NGICPZZ + NGACPZZ + NGEIPZZ NGTCPUS = $\Sigma$ NGTCPZZ
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)
NGTZP	Natural gas consumed in sectors that have supplemental gaseous fuels commingled with natural gas.	Million cubic feet	NGTZPZZ = NGCCPZZ + NGRCPZZ + NGINPZZ + NGEIPZZ NGTZPUS = $\Sigma$ NGTZPZZ
NGVHB	Natural gas consumed as vehicle fuel.	Billion Btu	NGVHBZZ = NGVHPZZ * NGTXKZZ NGVHBUS = $\Sigma$ NGVHBZZ
NGVHP	Natural gas consumed as vehicle fuel.	Million cubic feet	NGVHPZZ is independent. NGVHPUS = $\Sigma$ NGVHPZZ
NNACB	Natural gas consumed by the transportation sector.	Billion Btu	NNACBZZ = NGACBZZ NNACBUS = $\Sigma$ NNACBZZ

NNCCB	Natural gas consumed by the commercial sector (excluding supplemental gaseous fuels).	Billion Btu	NNCCBZZ = NGCCBZZ – SFCCBZZ NNCCBUS = $\Sigma$ NNCCBZZ
NNEIB	Natural gas consumed by the electric power sector (excluding supplemental gaseous fuels).	Billion Btu	NNEIBZZ = NGEIBZZ – SFEIBZZ NNEIBUS = $\Sigma$ NNEIBZZ
NNICB	Natural gas consumed by the industrial sector (excluding supplemental gaseous fuels).	Billion Btu	NNICBZZ = NGICBZZ – SFINBZZ NNICBUS = $\Sigma$ NNICBZZ
NNRCB	Natural gas consumed by the residential sector (excluding supplemental gaseous fuels).	Billion Btu	NNRCBZZ = NGRCBZZ – SFRCBZZ NNRCBUS = $\Sigma$ NNRCBZZ
NNTCB	Natural gas total consumed (excluding supplemental gaseous fuels).	Billion Btu	NNTCBZZ = NGTCBZZ – SFTCBZZ NNTCBUS = $\Sigma$ NNTCBZZ
NUEGB	Electricity produced from nuclear power in the electric power sector.	Billion Btu	NUEGBZZ = NUEGPZZ * NUETKUS NUEGBUS = $\Sigma$ NUEGBZZ
NUEGP	Electricity produced from nuclear power in the electric power sector.	Million kilowatthours	NUEGPZZ is independent. NUEGPUS = $\Sigma$ NUEGPZZ
NUETB	Electricity total produced from nuclear power.	Billion Btu	NUETBZZ = NUEGBZZ NUETBUS = $\Sigma$ NUETBZZ
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 = $\Sigma$ NUETPZZ
OCVAV	Value added in manufacture of industrial organic chemicals.	Million dollars	OCVAVZZ is independent. OCVAVUS = $\Sigma$ OCVAVZZ
OTTCB	"Other" consumption for tables on Energy Consumption Estimates by Source	Billion Btu	OTTCBZZ = ELNIBZZ - SFTCBZZ OTTCBUS = ELNIBUS + ENLCBUS - SFTCBUS
PIICB	Asphalt and road oil, kerosene, lubricants, and "other petroleum products" consumed by the industrial sector.	Billion Btu	P1ICBZZ = ARICBZZ + KSICBZZ + LUICBZZ + POICBZZ P1ICBUS = $\Sigma$ P1ICBZZ
PIICP	Asphalt and road oil, kerosene, lubricants, and "other petroleum products" consumed by the industrial sector.	Thousand barrels	P1ICPZZ = ARICPZZ + KSICPZZ + LUICPZZ + POICPZZ P1ICPUS = $\Sigma$ P1ICPZZ

PITCB	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total consumed.	Billion Btu	$PITCBZZ = ARTCBZZ + AVTCBZZ + KSTCBZZ + LUTCBZZ + POTCBZZ$ $PITCBUS = \Sigma PITCBZZ$
PITCP	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total consumed.	Thousand barrels	$PITCPZZ = ARTCPZZ + AVTCPZZ + KSTCPZZ + LUTCPZZ + POTCPZZ$ $PITCPUS = \Sigma PITCPZZ$
PAACB	All petroleum products consumed by the transportation sector.	Billion Btu	$PAACBZZ = AVACBZZ + DFACBZZ + JKACBZZ + JNACBZZ + LGACBZZ + LUACBZZ + MGACBZZ + RFACBZZ$ $PAACBUS = \Sigma PAACBZZ$
PAACKUS	Factor for converting all petroleum products consumed by the transportation sector from physical units to Btu.	Million Btu per barrel	$PAACKUS = PAACBUS / PAACPUS$
PAACP	All petroleum products consumed by the transportation sector.	Thousand barrels	$PAACPZZ = AVACPZZ + DFACPZZ + JKACPZZ + JNACPZZ + LGACPZZ + LUACPZZ + MGACPZZ + RFACPZZ$ $PAACPUS = \Sigma PAACPZZ$
PACCB	All petroleum products consumed by the commercial sector.	Billion Btu	$PACCBZZ = DFCCBZZ + KSCCBZZ + LGCCBZZ + MGCCBZZ + PCCCBZZ + RFCCBZZ$ $PACCBUS = \Sigma PACCBZZ$
PACCKUS	Factor for converting all petroleum products consumed by the commercial sector from physical units to Btu.	Million Btu per barrel	$PACCKUS = PACCBUS / PACCPUS$
PACCP	All petroleum products consumed by the commercial sector.	Thousand barrels	$PACCPZZ = DFCCPZZ + KSCCPZZ + LGCCPZZ + MGCCPZZ + PCCCPZZ + RFCCPZZ$ $PACCPUS = \Sigma PACCPZZ$
PAEIB	All petroleum products consumed by the electric power sector.	Billion Btu	$PAEIBZZ = DFEIBZZ + JKEUBZZ + PCEIBZZ + RFEIBZZ$ $PAEIBUS = \Sigma PAEIBZZ$
PAEIKUS	Factor for converting all petroleum products consumed by the electric power sector from physical units to Btu.	Million Btu per barrel	$PAEIKUS = PAEIBUS / PAEIPUS$
PAEIP	All petroleum products consumed by the electric power sector.	Thousand barrels	$PAEIPZZ = DFEIPZZ + JKEUPZZ + PCEIPZZ + RFEIPZZ$ $PAEIPUS = \Sigma PAEIPZZ$

PAHCBUS	All petroleum products consumed by the residential and commercial sectors combined.	Billion Btu	$PAHCBUS = PARCBUS + PACCBUS$
PAHCKUS	Factor for converting all petroleum products consumed by the residential and commercial sectors combined from physical units to Btu.	Million Btu per barrel	$PAHCKUS = PAHCBUS / PAHCPUS$
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	$\text{PATCPZZ} = \text{ARTCPZZ} + \text{AVTCPZZ} + \text{DFTCPZZ} + \text{JKTCPZZ} + \text{JNTCPZZ} + \text{KSTCPZZ} + \text{LGTCPPZZ} + \text{LUTCPZZ} + \text{MGTCPPZZ} + \text{RFTCPZZ} + \text{POTCPZZ}$ $\text{PATCPUS} = \Sigma \text{PATCPZZ}$
PCC3M	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand tons	$\text{PCC3MZZ}$ is independent. $\text{PCC3MUS} = \Sigma \text{PCC3MZZ}$
PCCCB	Petroleum coke consumed for combined heat and power in the commercial sector.	Billion Btu	$\text{PCCCBZZ} = \text{PCCCPZZ} * 6.024$ $\text{PCCCBUS} = \Sigma \text{PCCCBZZ}$
PCCCP	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand barrels	$\text{PCCCPZZ} = \text{PCC3MZZ} * 5$ $\text{PCCCPUS} = \Sigma \text{PCCCPZZ}$
PCEIB	Petroleum coke consumed by the electric power sector.	Billion Btu	$\text{PCEIBZZ} = \text{PCEIPZZ} * 6.024$ $\text{PCEIBUS} = \Sigma \text{PCEIBZZ}$
PCEIM	Petroleum coke consumed by the electric power sector.	Thousand tons	$\text{PCEIMZZ}$ is independent. $\text{PCEIMUS} = \Sigma \text{PCEIMZZ}$
PCEIP	Petroleum coke consumed by the electric power sector.	Thousand barrels	$\text{PCEIPZZ} = \text{PCEIMZZ} * 5$ $\text{PCEIPUS} = \Sigma \text{PCEIPZZ}$
PCI3B	Petroleum coke consumed for combined heat and power in the industrial sector.	Billion Btu	$\text{PCI3BZZ} = \text{PCI3PZZ} * 6.024$ $\text{PCI3BUS} = \Sigma \text{PCI3BZZ}$
PCI3M	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand tons	$\text{PCI3MZZ}$ is independent. $\text{PCI3MUS} = \Sigma \text{PCI3MZZ}$
PCI3P	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand barrels	$\text{PCI3PZZ} = \text{PCI3MZZ} * 5$ $\text{PCI3PUS} = \Sigma \text{PCI3PZZ}$
PCICB	Petroleum coke consumed in the industrial sector.	Billion Btu	$\text{PCICBZZ} = \text{PCICPZZ} * 6.024$ $\text{PCICBUS} = \Sigma \text{PCICBZZ}$
PCICP	Petroleum coke consumed in the industrial sector.	Thousand barrels	$\text{PCICPZZ} = \text{PCI3PZZ} + \text{PCRFPZZ} + \text{PCOCPZZ}$ $\text{PCICPUS} = \text{PCTCPUS} - \text{PCEIPUS} - \text{PCCCPUS}$
PCOCB	Petroleum coke consumed in the industrial sector other than for refinery use and combined heat and power.	Billion Btu	$\text{PCOCBZZ} = \text{PCOCPZZ} * 6.024$ $\text{PCOCBUS} = \Sigma \text{PCOCBZZ}$
PCOCP	Petroleum coke consumed in the industrial sector other than for refinery use and combined heat and power.	Thousand barrels	$\text{PCOCPZZ} = (\text{AICAPZZ} / \text{AICAPUS}) * \text{PCOCPUS}$ $\text{PCOCPUS} = \text{PCICPUS} - \text{PCI3PUS} - \text{PCRFPUS}$

PCRFB	Petroleum coke used at refineries as both catalytic and marketable coke.	Billion Btu	PCRFBZZ = PCRFPZZ * 6.024 PCRFBUS = ΣPCRFBZZ
PCRFP	Petroleum coke used at refineries as both catalytic and marketable coke.	Thousand barrels	PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPGZ or (CTCAPZZ / CTCAPPZ) * PCRFPZ or is independent. PCRFPUS is independent.
PCTCB	Petroleum coke total consumed.	Billion Btu	PCTCBZZ = PCCCBZZ + PCICBZZ + PCEIBZZ PCTCBUS = ΣPCTCBZZ
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 = ΣPIVAVZZ
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 = ΣPLTCBZZ
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 = ΣPOICBZZ
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 = ΣPOICPZZ

POTCB	Other petroleum products total consumed.	Billion Btu	$\begin{aligned} \text{POTCBZZ} = & \text{ABTCBZZ} + \text{COTCBZZ} + \\ & \text{FNTCBZZ} + \text{FOTCBZZ} + \text{FSTCBZZ} + \\ & \text{MBTCBZZ} + \text{MSTCBZZ} + \text{NATCBZZ} + \\ & \text{PCTCBZZ} + \text{PLTCBZZ} + \text{PPTCBZZ} + \\ & \text{SGTCBZZ} + \text{SNTCBZZ} + \text{UOTCBZZ} + \\ & \text{USTCBZZ} + \text{WXTCBZZ} \end{aligned}$ $\text{POTCBUS} = \Sigma \text{POTCBZZ}$
POTCP	Other petroleum products total consumed.	Thousand barrels	$\begin{aligned} \text{POTCPZZ} = & \text{ABTCPZZ} + \text{COTCPZZ} + \\ & \text{FNTCPZZ} + \text{FOTCPZZ} + \text{FSTCPZZ} + \\ & \text{MBTCPZZ} + \text{MSTCPZZ} + \text{NATCPZZ} + \\ & \text{PCTCPZZ} + \text{PLTCPZZ} + \text{PPTCPZZ} + \\ & \text{SGTCPZZ} + \text{SNTCPZZ} + \text{UOTCPZZ} + \\ & \text{USTCPZZ} + \text{WXTCPZZ} \end{aligned}$ $\text{POTCPUS} = \Sigma \text{POTCPZZ}$
PPICB	Pentanes plus consumed by the industrial sector.	Billion Btu	$\begin{aligned} \text{PPICBZZ} &= \text{PPTCBZZ} \\ \text{PPICBUS} &= \text{PPTCBUS} \end{aligned}$
PPICP	Pentanes plus consumed by the industrial sector.	Thousand barrels	$\begin{aligned} \text{PPICPZZ} &= \text{PPTCPZZ} \\ \text{PPICPUS} &= \text{PPTCPUS} \end{aligned}$
PPTCB	Pentanes plus total consumed.	Billion Btu	$\begin{aligned} \text{PPTCBZZ} &= \text{PPTCPZZ} * 4.620 \\ \text{PPTCBUS} &= \Sigma \text{PPTCBZZ} \end{aligned}$
PPTCP	Pentanes plus total consumed.	Thousand barrels	$\begin{aligned} \text{PPTCPZZ} &= (\text{OCVAVZZ} / \text{OCVAVUS}) * \text{PPTCPUS} \\ \text{PPTCPUS} &\text{ is independent.} \end{aligned}$
RDICP	Road oil consumed by the industrial sector.	Thousand barrels	$\begin{aligned} \text{RDICPZZ} &= (\text{RDINPZZ} / \text{RDINPUS}) * \text{RDTCPUS} \\ \text{RDICPUS} &= \Sigma \text{RDICPZZ} \end{aligned}$
RDINP	Road oil sold to the industrial sector.	Short tons	$\begin{aligned} \text{RDINPZZ} &\text{ is independent.} \\ \text{RDINPUS} &= \Sigma \text{RDINPZZ} \end{aligned}$
RDTCP	Road oil total consumed.	Thousand barrels	$\begin{aligned} \text{RDTCPZZ} &= \text{RDICPZZ} \\ \text{RDTCPUS} &\text{ is independent.} \end{aligned}$
REACB	Renewable energy sources consumed by the transportation sector.	Billion Btu	$\begin{aligned} \text{REACBZZ} &= \text{ENACBZZ} \\ \text{REACBUS} &= \text{ENACBUS} \end{aligned}$
RECCB	Renewable energy sources consumed by the commercial sector.	Billion Btu	$\begin{aligned} \text{RECCBZZ} &= \text{GECCBZZ} + \text{HYCCBZZ} + \text{WWCCBZZ} \\ \text{RECCBUS} &= \text{GECCBUS} + \text{HYCCBUS} + \text{WWCCBUS} \end{aligned}$
REEIB	Renewable energy sources consumed by the electric power sector.	Billion Btu	$\begin{aligned} \text{REEIBZZ} &= \text{HVEGBZZ} + \text{GEEGBZZ} + \text{SOEGBZZ} + \\ & \text{WWEIBZZ} + \text{WYEGBZZ} \\ \text{REEIBUS} &= \text{HVENGBUS} + \text{GEEGBUS} + \text{SOEGBUS} + \\ & \text{WWEIBUS} + \text{WNEGBUS} \end{aligned}$

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 oil consumed by the transportation sector.	Billion Btu	RFACBZZ = RFACPZZ * 6.287 RFACBUS = ΣRFACBZZ
RFACP	Residual fuel oil consumed by the transportation sector.	Thousand barrels	RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ RFACPUS = ΣRFACPZZ
RFBKP	Residual fuel oil sold for vessel bunkering use, excluding deliveries to the Armed Forces.	Thousand barrels	RFBKPZZ is independent. RFBKPUS = ΣRFBKPZZ
RFCCB	Residual fuel oil consumed by the commercial sector.	Billion Btu	RFCCBZZ = RFCCPZZ * 6.287 RFCCBUS = ΣRFCCBZZ
RFCCP	Residual fuel oil consumed by the commercial sector.	Thousand barrels	RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ RFCCPUS = ΣRFCCPZZ
RFCMP	Residual fuel oil sold to the commercial sector.	Thousand barrels	RFCMPZZ is independent. RFCMPUS = ΣRFCMPZZ
RFEIB	Residual fuel oil consumed by the electric power sector.	Billion Btu	RFEIBZZ = RFEIPZZ * 6.287 RFEIBUS = ΣRFEIBZZ
RFEIP	Residual fuel oil consumed by the electric power sector.	Thousand barrels	RFEIPZZ is independent. RFEIPUS = ΣRFEIPZZ
RFIBP	A portion of residual fuel oil sold for industrial use, including industrial space heating.	Thousand barrels	RFIBPZZ is independent. RFIBPUS = ΣRFIBPZZ
RFICB	Residual fuel oil consumed by the industrial sector.	Billion Btu	RFICBZZ = RFICPZZ * 6.287 RFICBUS = ΣRFICBZZ
RFICP	Residual fuel oil consumed by the industrial sector.	Thousand barrels	RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ RFICPUS = ΣRFICPZZ
RFINP	Residual fuel oil sold to the industrial sector.	Thousand barrels	RFINPZZ = RFIBPZZ + RFOCPZZ + RFMSPZZ RFINPUS = ΣRFINPZZ

RFMIP	Residual fuel oil sold to the Armed Forces, regardless of use.	Thousand barrels	RFMIPZZ is independent. RFMIPUS = $\Sigma$ RFMIPZZ
RFMSP	Residual fuel oil sold for miscellaneous uses.	Thousand barrels	RFMSPZZ is independent. RFMSPUS = $\Sigma$ RFMSPZZ
RFNCP	Residual fuel oil consumption by all sectors other than the electric utility sector.	Thousand barrels	RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS RFNCPUS = RFTCPUS - RFEIPUS
RFNDP	Residual fuel oil sold to all sectors other than the electric utility sector.	Thousand barrels	RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ RFNDPUS = $\Sigma$ RFNDPZZ
RFOCP	Residual fuel oil sold for use by oil companies.	Thousand barrels	RFOCPZZ is independent. RFOCPUS = $\Sigma$ RFOCPZZ
RFRRP	Residual fuel oil sold for use by railroads.	Thousand barrels	RFRRPZZ is independent. RFRRPUS = $\Sigma$ RFRRPZZ
RFTCB	Residual fuel oil total consumed.	Billion Btu	RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEIBZZ RFTCBUS = $\Sigma$ RFTCBZZ
RFTCP	Residual fuel oil total consumed.	Thousand barrels	RFTCPZZ = RFNCPZZ + RFEIPZZ RFTCPUS is independent.
RFTRP	Residual fuel oil sold to the transportation sector.	Thousand barrels	RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ RFTRPUS = $\Sigma$ RFTRPZZ
SFCCB	Supplemental gaseous fuels consumed by the commercial sector.	Billion Btu	SFCCBZZ = SFCCPZZ * NGTXKZZ SFCCBUS = $\Sigma$ SFCCBZZ
SFCCP	Supplemental gaseous fuels consumed by the commercial sector.	Million cubic feet	SFCCPZZ = NGSFPZZ * (NGCCPZZ / NGTZPZZ) SFCCPUS = $\Sigma$ SFCCPZZ
SFEIB	Supplemental gaseous fuels consumed by the electric power sector.	Billion Btu	SFEIBZZ = SFEIPZZ * NGEIKZZ SFEIBUS = $\Sigma$ SFEIBZZ
SFEIP	Supplemental gaseous fuels consumed by the electric power sector.	Million cubic feet	SFEIPZZ = NGSFPZZ * (NGEIPZZ / NGTZPZZ) SFEIPUS = $\Sigma$ SFEIPZZ
SFINB	Supplemental gaseous fuels consumed by the industrial sector.	Billion Btu	SFINBZZ = SFINPZZ * NGTXKZZ SFINBUS = $\Sigma$ SFINBZZ
SFINP	Supplemental gaseous fuels consumed by the industrial sector.	Million cubic feet	SFINPZZ = NGSFPZZ * (NGINPZZ / NGTZPZZ) SFINPUS = $\Sigma$ SFINPZZ

SFRCB	Supplemental gaseous fuels consumed by the residential sector.	Billion Btu	$SFRCBZZ = SFRCPZZ * NGTXKZZ$ $SFRCBUS = \Sigma SFRCBZZ$
SFRCP	Supplemental gaseous fuels consumed by the residential sector.	Million cubic feet	$SFRCPZZ = NGSFPZZ * (NGRCPZZ / NGTZPZZ)$ $SFRCBUS = \Sigma SFRCPZZ$
SFTCB	Supplemental gaseous fuels total consumed.	Billion Btu	$SFTCBZZ = SFCCBZZ + SFINBZZ + SFRCBZZ + SFEIBZZ$ $SFTCBUS = \Sigma SFTCBZZ$
SFTCP	Supplemental gaseous fuels total consumed.	Million cubic feet	$SFTCPZZ = SFCCPZZ + SFINPZZ + SFRCPZZ + SFEIPZZ$ $SFTCPUS = \Sigma SFTCPZZ$
SGICB	Still gas consumed by the industrial sector.	Billion Btu	$SGICBZZ = SGTCBZZ$ $SGICBUS = SGTCBUS$
SGICP	Still gas consumed by the industrial sector.	Thousand barrels	$SGICPZZ = SGTCPZZ$ $SGICBUS = SGTCBUS$
SGTCB	Still gas total consumed.	Billion Btu	$SGTCBZZ = SGTCPZZ * 6.000$ $SGTCBUS = \Sigma SGTCBZZ$
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	$SNICPZZ = SNTCPZZ$ $SNICBUS = SNTCPUS$
SNTCB	Special naphthas total consumed.	Billion Btu	$SNTCBZZ = SNTCPZZ * 5.248$ $SNTCBUS = \Sigma SNTCBZZ$
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	$SOEGBZZ = SOEGPZZ * FFETKUS$ $SOEGBUS = \Sigma SOEGBZZ$
SOEGP	Electricity produced from photovoltaic and solar thermal energy by electric power sector.	Million kilowatthours	SOEGPZZ is independent. $SOEGBUS = \Sigma SOEGPZZ$
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	$SOTCBZZ = SOHCBZZ + SOEGBZZ$ $SOTCBUS = \Sigma SOTCBZZ$
SOTTP	Shipments of solar thermal collectors.	Square feet	$SOTTPZZ$ is independent. $SOTTPUS = \Sigma SOTTPZZ$
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	$TECCBZZ = CLCCBZZ + NGCCBZZ + PACCBZZ + HYCCBZZ + WWCCBZZ + GECCBZZ + ESCCBZZ + LOCCBZZ - SFCCBZZ$ $TECCBUS = CLCCBUS + NGCCBUS + PACCBUS + HYCCBUS + WWCCBUS + GECCBUS + ESCCBUS + LOCCBUS - SFCCBUS$
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	$TEEIBZZ = CLEIBZZ + NGEIBZZ + PAEIBZZ + HYEGBZZ + NUEGBZZ + GEEGBZZ + WVEIBZZ + WNEGBZZ + ELNIBZZ - SFEIBZZ$ $TEEIBUS = \Sigma TEEIBZZ$
TEICB	Total energy consumed by the industrial sector.	Billion Btu	$TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + HYICBZZ + WDICBZZ + WSICBZZ + GEICBZZ + ESICBZZ + LOICBZZ - SFINBZZ$ $TEICBUS = CLICBUS + CCNIBUS + NGICBUS + PAICBUS + HYICBUS + WDICBUS + WSICBUS + GEICBUS + ESICBUS + LOICBUS + ENLCBUS - SFINBUS$
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	$\begin{aligned} \text{TERCBZZ} &= \text{CLRCBZZ} + \text{NGRCBZZ} + \text{PARCBZZ} + \text{WDRCBZZ} + \text{GERCBZZ} + \text{SOHCBZZ} + \text{ESRCBZZ} + \text{LORCBZZ} - \text{SFRCBZZ} \\ \text{TERCBUS} &= \text{CLRCBUS} + \text{NGRCBUS} + \text{PARCBUS} + \text{WDRCBUS} + \text{GERCBUS} + \text{SOHCBUS} + \text{ESRCBUS} + \text{LORCBUS} - \text{SFRCBUS} \end{aligned}$
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). Cross-check not used in SEDS.	Billion Btu	$\begin{aligned} \text{TESSBZZ} &= \text{TERCBZZ} + \text{TECCBZZ} + \text{TEICBZZ} + \text{TEACBZZ} \\ \text{TESSBUS} &= \text{TERCBUS} + \text{TECCBUS} + \text{TEICBUS} + \text{TEACBUS} \end{aligned}$
TETCB	Total energy consumed (sum of all	Billion Btu	$\begin{aligned} \text{TETCBZZ} &= \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{NUETBZZ} + \text{HYTCBZZ} + \text{WDTCBZZ} + \text{WSTCBZZ} + \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ} + \text{ELNIBZZ} + \text{ELISBZZ} - \text{SFTCBZZ} \\ \text{TETCBUS} &= \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{NUETBUS} + \text{HYTCBUS} + \text{WDTCBUS} + \text{WSTCBUS} + \text{GETCBUS} + \text{SOTCBUS} + \text{WYTCBUS} + \text{ELNIBUS} + \text{ENLCBUS} - \text{SFTCBUS} \end{aligned}$
TETGR	Total energy consumed per dollar of real gross domestic product.	Thousand Btu per chained (2000) dollar	$\begin{aligned} \text{TETGRZZ} &= \text{TETCBZZ} / \text{GDPRXZZ} \\ \text{TETGRUS} &= \text{TETCBUS} / \text{GDPRXUS} \end{aligned}$
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	TNRCBZZ = TERCBZZ – LORCBZZ TNRCBUS = TERCBUS – LORCBUS
TPOPP	The resident population including the Armed Forces residing in each State.	Thousand	TPOPPZZ is independent. TPOPPUS is independent.
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 = $\Sigma$ 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 = $\Sigma$ 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 = $\Sigma$ 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 = $\Sigma$ WDEIBZZ
WDI3B	Wood consumed for combined heat and power in the industrial sector.	Billion Btu	WDI3BZZ is independent. WDI3BUS = $\Sigma$ WDI3BZZ

WDI4B	Wood energy consumed for other uses in the industrial sector.	Billion Btu	WDI4BZZ is independent. WDI4BUS = $\Sigma$ WDI4BZZ
WDICB	Wood energy consumed by the industrial sector, total.	Billion Btu	WDICBZZ = WDI3BZZ + WDI4BZZ WDICBUS = $\Sigma$ 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
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 = $\Sigma$ WXTCBZZ
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 = $\Sigma$ WYEGBZZ
WYEGP	Electricity produced from wind energy at electric power sector.	Million kilowatthours	WYEGPZZ is independent. WYEGPUS = $\Sigma$ WYEGPZZ
WYTCB	Electricity produced from wind energy total produced.	Billion Btu	WYTCBZZ = WYEGBZZ WYTCBUS = $\Sigma$ WYTCBZZ

## Appendix B

# Thermal Conversion Factors

Table B1. Approximate Heat Content of Petroleum and Heat Rates for Electricity, Selected Years, 1960-2007

Year	Petroleum Consumption			Electricity Net Generation		
	Liquefied Petroleum Gases (LGTKUS)	Motor Gasoline (MGTKUS)	Total Petroleum Products <sup>a</sup> (PATCKUS)	Fossil-Fueled Steam-Electric Plants <sup>b</sup> (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
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	<sup>c</sup> 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	10,435	21,017
2006	3.605	5.218	5.35306	9,919	10,434	21,017
2007	3.591	5.219	5.34661	9,884	10,488	21,017

<sup>a</sup> This factor is not actually applied in SEDS but is displayed here for information.

<sup>b</sup> 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. Through 2000, it is also used as the thermal conversion factor for wood and waste electricity net generation at electric utilities; beginning in 2001, Btu data for wood and waste consumed by the electric power sector are available

from surveys.

<sup>c</sup> 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.

Where shown, R = Revised data, NA = Not available, -- = Not applicable.

Sources: See source listing at the end of this appendix.



**Table B2. Approximate Heat Content of Natural Gas Consumed by the Electric Power Sector, Selected Years, 1960-1994**  
(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	R 1.03798	R 1.00492	R 1.03642	R 1.07952	R 1.09442
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	R 1.01880	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	R 1.03513	R 1.05115	R 1.03892	R 1.04450	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.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B3. Approximate Heat Content of Natural Gas Consumed by the Electric Power Sector, 1995-2007**

(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	1.02310	1.02760	1.02950	1.03302	1.02466	1.02720	1.03999	1.02482	1.02736	R 1.02472	1.02715	1.02886	1.03280
Alaska	1.00343	1.00233	1.00242	1.00268	1.00220	1.00287	1.00407	1.00932	1.00443	1.00662	1.00565	1.00657	1.00661
Arizona	1.02137	1.01496	1.01378	1.01415	1.01305	1.01636	1.02258	1.01840	1.00837	R 1.01956	1.02431	1.02054	1.02192
Arkansas	1.01913	1.02344	1.02498	1.01929	1.02477	1.01993	1.03734	1.01635	1.03201	R 1.02958	1.02893	1.02800	1.02554
California	1.02831	1.02584	1.02032	1.02304	1.02214	1.02000	1.02692	1.02158	1.02340	R 1.02909	1.02923	1.03244	1.03131
Colorado	1.06306	1.12266	1.04229	1.06423	1.05450	1.05607	1.04663	1.01720	1.03365	R 1.04051	1.03495	1.03880	1.03756
Connecticut	1.02148	1.02345	1.02248	1.02601	1.02436	1.01244	1.01368	1.02097	1.00752	R 1.01538	1.01130	1.00951	1.01186
Delaware	1.03205	1.03419	1.03450	0.97091	0.98134	1.01673	1.03674	1.01707	1.04245	R 1.03029	1.03715	1.03675	1.03567
District of Columbia	--	--	--	--	--	--	--	--	--	--	--	--	--
Florida	1.01396	1.01127	1.04256	1.04912	1.04135	1.03646	1.04178	1.02549	1.03436	R 1.03045	1.03436	1.02849	1.02777
Georgia	1.02690	1.02431	1.00946	1.02606	1.02673	1.01594	1.01916	1.02188	1.02438	R 1.03019	1.04566	1.04015	1.04010
Hawaii	--	--	--	--	--	--	--	--	--	--	--	--	--
Idaho	--	1.03307	1.03481	1.03002	1.05025	1.03984	1.02873	0.97878	1.00230	R 1.02786	1.02118	1.02677	1.02491
Illinois	1.01663	1.01965	1.01557	1.01928	1.02158	1.01971	1.02217	1.01163	1.01480	R 1.02463	1.02019	1.02249	1.02269
Indiana	1.02040	1.01995	1.02040	1.01648	1.01879	1.01671	1.01952	1.02556	1.02146	R 1.01509	1.01773	R 1.01513	1.01438
Iowa	1.00934	1.00500	1.00831	1.01268	1.00841	1.00859	1.01359	1.00659	1.01041	R 0.99871	1.00334	1.00438	1.00836
Kansas	0.98910	0.98351	0.98586	1.00521	1.01066	1.01145	1.01026	1.00056	1.00340	R 1.00452	1.00872	1.01478	1.01988
Kentucky	1.02032	1.01867	1.02012	1.02181	1.01939	1.01993	1.02461	1.02361	1.02331	R 1.02445	1.03241	1.02800	1.02683
Louisiana	1.04248	1.04232	1.03456	1.04232	1.03837	1.03444	1.04067	1.02701	1.03237	R 1.02811	1.02964	1.03741	1.03258
Maine	1.00503	R 1.00798	R 1.00656	R 1.03733	1.00100	1.02127	1.03355	1.03812	1.03671	R 1.03921	1.05201	1.05568	1.05798
Maryland	1.03470	1.02970	1.03684	1.03865	1.03691	1.04123	1.03292	1.04258	1.03769	R 1.04035	1.04852	1.04652	1.04467
Massachusetts	1.02632	1.02968	1.02836	1.04262	1.01500	1.03492	1.03677	1.01676	1.02782	R 1.03290	1.03287	1.03225	1.03655
Michigan	0.85452	0.87193	0.87129	0.88699	0.89247	0.93402	0.98983	1.00796	1.01273	R 1.01714	1.01550	1.01063	1.01474
Minnesota	1.01111	1.00989	1.01220	1.05067	1.01762	1.01789	1.02240	1.00546	1.00425	R 1.00624	1.00874	1.00680	1.00800
Mississippi	1.03375	1.03141	1.02934	1.03307	1.02502	1.02791	1.02876	1.02548	1.03318	1.03101	1.03170	1.03232	1.03099
Missouri	1.00814	1.01468	1.01471	1.01668	1.01323	1.01404	1.09900	1.00873	1.01641	R 1.02157	1.02147	1.02477	1.02310
Montana	1.03758	1.03955	1.02892	1.03493	1.03116	1.01796	1.01456	1.00955	0.95902	R 1.01564	1.01286	R 1.01072	1.04481
Nebraska	1.00724	1.01050	1.00967	1.00763	1.00966	1.01493	1.02174	0.97662	0.99673	R 0.98659	0.99775	1.00548	1.01590
Nevada	1.03278	1.03316	1.02715	1.03558	1.04377	1.02377	1.02606	1.01984	1.02357	R 1.03072	1.03657	1.02932	1.02989
New Hampshire	1.01833	R 1.02436	1.01786	1.02281	1.02137	1.06899	1.07385	1.04750	1.04564	1.04510	1.04446	1.04314	1.05527
New Jersey	1.03175	1.03056	1.03482	1.04144	1.03534	1.03151	1.03223	1.03139	1.03536	R 1.03755	1.03463	1.03521	1.03452
New Mexico	1.01865	0.99824	1.00067	0.99571	0.99600	0.99198	0.98219	1.00213	1.00031	R 1.02145	1.00549	1.00779	1.01786
New York	1.02207	1.02327	1.02371	1.02447	1.02417	1.01798	1.01882	1.01869	1.02450	R 1.02132	1.02147	1.01924	1.02114
North Carolina	1.02627	1.02727	1.02622	1.02605	1.02230	1.01722	1.02407	1.00973	1.00655	R 1.00928	1.01375	1.01299	1.01322
North Dakota	R 1.06620	R 1.05874	R 1.06653	--	--	--	R 1.02795	R 1.00955	R 1.02473	R 1.04392	R 1.11556	R 1.08016	1.08205
Ohio	1.02324	1.02085	1.02017	1.02219	1.02092	1.01937	1.01881	1.02439	1.03352	R 1.02727	1.02907	1.03092	1.03230
Oklahoma	1.03384	1.02824	1.03153	1.02999	1.02781	1.02916	1.03073	1.02546	1.02943	R 1.03036	1.03020	1.03032	1.02859
Oregon	1.01078	1.01909	1.01602	1.01970	1.01631	1.01753	1.02082	1.01680	1.02118	R 1.02007	1.02003	1.02464	1.03321
Pennsylvania	1.02997	1.03198	1.02662	1.02931	1.03645	1.03405	1.03347	1.02807	1.03903	R 1.03657	1.03585	1.03422	1.03028
Rhode Island	1.02106	1.02322	1.01327	1.02253	1.01450	1.03065	1.03204	1.01847	1.02214	R 1.02152	1.02128	1.01687	1.02556
South Carolina	1.02322	1.02027	1.01971	1.03096	1.06091	1.03751	1.03684	1.02817	1.02770	R 1.03388	1.03487	1.04906	1.03832
South Dakota	1.01701	1.01705	1.01916	1.02159	1.01887	1.01954	1.02653	0.98041	0.96009	R 0.98320	1.00858	1.00539	1.00981
Tennessee	1.01900	1.01661	1.01905	1.02160	1.02350	1.03286	1.03970	1.02290	1.03185	R 1.02572	1.02331	1.02767	1.02607
Texas	1.02517	1.02413	1.02310	1.02420	1.02190	1.02101	1.03022	1.01876	1.02061	R 1.02280	1.02805	1.02568	1.02324
Utah	1.04876	1.01896	1.02582	1.03583	1.03557	1.04434	1.04644	1.00539	1.00428	1.00032	1.04427	1.04983	1.04095
Vermont	0.99785	R 1.01462	R 1.01156	1.01633	1.01335	1.01229	1.00817	R 1.01936	R 1.01936	R 1.02000	0.88972	R 1.01596	1.01826
Virginia	1.03249	1.03700	1.04719	1.03817	1.03962	1.03747	1.02995	1.02430	1.02763	R 1.02684	1.03214	1.02936	1.02961
Washington	1.02840	1.02830	1.02308	1.03466	1.03892	1.02537	1.02829	1.02600	1.02062	R 1.02427	1.02332	1.02568	1.02351
West Virginia	1.02773	1.01379	1.03654	1.00391	1.00545	1.00560	1.02595	1.03635	1.05680	R 1.06199	1.03941	1.04647	1.04044
Wisconsin	1.01529	1.01525	1.01687	1.01313	1.01690	1.01176	1.01630	0.97482	0.98645	R 0.99724	1.01029	1.01153	1.01693
Wyoming	1.04307	R 1.03950	R 1.04120	1.04321	1.04270	1.02728	1.03073	0.92332	0.93429	R 0.94599	0.92542	0.99055	0.97678
U.S. Average	1.02126	1.01968	1.02011	1.02380	1.02158	1.02139	1.02874	1.02070	1.02414	R 1.02625	1.02840	1.02760	1.02732

-- = Not applicable.

Where shown, R = Revised data.

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, Selected Years, 1960-1994**  
(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	R 1.03200	R 1.04600	R 1.04500	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	R 1.05801	R 1.05601	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.

Where shown, R = Revised data.

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, 1995-2007**

(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	1.02917	1.03313	1.04144	1.03955	1.03584	1.04401	1.03244	1.06486	0.99110	R 1.04673	1.03262	1.02908	1.02112
Alaska	1.00619	0.98908	0.99979	0.99874	0.99983	0.76085	1.01051	1.01438	1.01487	1.01475	1.00164	R 1.00027	1.00480
Arizona	1.03798	1.01012	1.02278	1.01667	1.01596	1.01006	1.00624	1.03410	1.00208	R 0.98578	1.00791	1.01227	1.02568
Arkansas	1.08447	1.02637	1.01395	1.02485	1.01791	1.01885	1.01324	1.05351	1.05143	R 1.04485	1.00566	R 1.03518	0.99976
California	1.01096	1.03426	1.01711	1.05636	1.01470	0.95633	1.01548	0.98692	1.02137	R 1.01719	1.01880	R 1.00930	1.01242
Colorado	1.01419	1.01517	1.00918	1.00627	1.00036	0.99802	1.00535	1.00250	0.99877	R 0.98314	1.02630	1.03275	1.01694
Connecticut	1.02968	1.02869	1.02792	1.02600	1.02391	1.02845	1.02306	1.03522	1.00542	R 0.99598	1.03018	1.04433	1.02901
Delaware	1.03556	1.03562	1.03526	1.06180	1.06762	1.04124	1.03282	1.05002	1.04319	R 1.04225	1.03694	1.03579	1.03891
District of Columbia	1.00600	1.00900	1.02100	1.02700	1.02100	1.02700	1.02600	1.02400	1.02700	1.02700	1.05200	1.02500	1.02700
Florida	1.06972	1.11625	1.05806	1.05438	1.04611	1.10825	1.06501	1.01936	1.07730	R 1.02327	1.09565	1.02557	1.08009
Georgia	1.02597	1.02298	1.02784	1.02709	1.02703	1.01823	1.03452	1.02437	1.04473	1.04469	1.02910	1.02831	1.02477
Hawaii	1.04800	1.05700	1.03000	1.05600	1.05500	1.04700	1.03600	1.06000	1.04700	1.04800	1.03700	1.04700	1.03700
Idaho	1.03000	1.02999	1.03090	1.03821	1.03769	1.02464	1.01754	1.02059	1.02514	R 1.02446	1.05404	R 1.04651	1.02384
Illinois	1.02013	1.01898	1.02124	1.02217	1.02202	1.02211	1.01989	1.03155	0.99951	0.99918	1.01467	1.01567	1.01340
Indiana	1.01187	1.01093	1.01092	1.01701	1.01798	1.02522	1.02416	0.94474	1.02835	R 1.03068	1.01802	1.01711	1.02366
Iowa	1.00492	1.00601	1.00901	1.01096	1.01925	1.00493	1.00375	1.00803	1.00897	1.00835	1.00626	1.01486	1.01018
Kansas	1.00306	0.99685	1.00225	0.99370	0.99516	1.00759	1.00451	0.99781	1.04199	1.04151	1.01431	R 1.02049	1.01782
Kentucky	1.09629	1.04924	1.05029	1.03435	1.03234	1.04038	1.03727	1.03147	1.03215	1.02808	1.02873	1.02906	1.02702
Louisiana	1.03321	1.04431	1.13486	1.07709	1.04300	1.06383	1.02388	1.08262	1.04168	R 1.04265	1.04799	R 1.03811	1.03308
Maine	1.01621	R 1.01607	R 1.01405	R 1.01681	1.01945	1.15289	1.17664	1.26332	1.19899	R 1.13100	1.07713	1.15914	1.12898
Maryland	1.02506	1.02895	1.03378	1.03679	1.03362	1.03286	1.03744	1.02613	1.02955	1.02932	1.04794	1.03457	1.03601
Massachusetts	1.02584	1.02600	1.01939	1.01524	1.06021	1.04444	1.04537	1.05133	1.04878	R 1.04519	1.00963	R 1.00055	1.00837
Michigan	1.04042	1.03412	1.04030	1.04705	1.04155	1.03633	1.03105	0.99858	0.99840	R 0.99943	1.01608	R 1.01916	1.02445
Minnesota	1.01305	1.01812	1.01810	1.01875	1.01905	1.01492	1.01167	1.00913	1.01027	1.01014	1.01225	1.01778	1.02118
Mississippi	1.02111	1.02937	1.03587	1.05199	1.04182	1.04308	1.02193	1.07990	0.98122	1.04715	1.02861	1.01521	1.02900
Missouri	1.00695	1.01093	1.00987	1.01062	1.01298	1.01512	1.00628	1.00455	1.01705	1.01653	1.01980	1.02044	1.01827
Montana	1.02995	1.02993	1.03101	1.02592	1.02397	1.02402	1.02202	0.99097	0.98911	0.99795	1.04008	1.01705	1.01560
Nebraska	0.97938	1.00694	0.99776	1.00281	0.99858	1.00455	1.01683	1.00100	1.00013	0.99628	1.01089	R 1.01348	1.01817
Nevada	1.03329	1.03993	1.02680	1.04807	1.02043	1.02996	1.02332	1.06771	1.01939	R 1.00394	1.05496	R 1.05551	1.04862
New Hampshire	1.01007	R 1.01900	1.01081	1.01091	1.00864	1.05764	1.06173	1.06267	0.94880	1.07094	1.02018	1.02208	1.01423
New Jersey	1.03463	1.03722	1.03504	1.03715	1.03990	1.03601	1.03840	1.04315	1.04506	R 1.03942	1.04141	1.03756	1.03516
New Mexico	1.02024	1.03464	1.02240	0.97888	0.97522	0.96773	0.97338	1.01149	1.01200	1.03137	1.03440	R 1.02935	1.03023
New York	1.03108	1.02699	1.02704	1.02956	1.02845	1.03229	1.03347	0.98173	1.04481	R 1.01959	1.02777	R 1.02660	1.02549
North Carolina	1.03319	1.03615	1.03628	1.04095	1.03577	1.03075	1.04244	1.04474	1.04449	R 1.03771	1.04123	1.03821	1.03703
North Dakota	1.05000	R 1.05100	R 1.05000	1.03800	1.04500	1.03500	R 1.02900	0.97200	0.97000	R 1.00600	1.03600	1.04400	1.04700
Ohio	1.03812	1.03805	1.04510	1.04018	1.03722	1.04226	1.04231	1.02605	1.02788	1.02495	1.04452	1.03926	1.03723
Oklahoma	1.01462	1.02259	1.00586	1.00666	1.02064	1.00814	1.02651	1.03120	1.03662	1.03456	1.04526	R 1.09836	1.06474
Oregon	1.04450	1.04356	1.05050	1.04997	1.06029	1.03123	1.02891	1.03504	1.03629	R 1.04406	1.04411	1.03424	1.01946
Pennsylvania	1.03528	1.03407	1.03525	1.03633	1.03598	1.03503	1.05476	1.05392	1.05282	R 1.05390	1.04055	1.03986	1.04106
Rhode Island	1.02872	1.09977	1.03591	1.02711	1.03037	1.04690	1.02937	1.05098	1.03045	R 1.03238	1.05354	R 1.05557	1.04104
South Carolina	1.02717	1.03008	1.03120	1.03418	1.02895	1.02852	1.03810	0.99302	0.99720	R 0.99201	1.03911	1.03360	1.03646
South Dakota	1.01392	1.01394	1.01794	1.00890	1.00502	1.00347	0.99520	1.02124	1.02326	R 1.02154	1.00686	1.00279	1.00242
Tennessee	1.03110	1.03203	1.03107	1.03019	1.02708	1.03708	1.03697	1.08059	1.03507	1.03509	1.03529	1.03832	1.03944
Texas	1.04232	1.03666	1.03009	1.04975	1.03769	1.03343	1.02371	1.13132	R 1.15960	R 0.98748	1.02796	1.02623	1.03139
Utah	1.06384	1.04260	1.04241	1.04637	1.05582	1.05145	1.05258	1.06349	1.06357	1.06171	1.05480	1.05831	1.06255
Vermont	0.99596	R 1.01500	R 1.01200	1.01189	1.01196	1.01197	1.01206	R 1.00394	R 1.00595	R 1.00391	1.00444	1.00094	1.00095
Virginia	1.03071	1.03928	1.04374	1.04382	1.03772	1.03461	1.03814	1.03667	1.03614	R 1.02703	1.04484	R 1.03915	1.04410
Washington	1.04218	1.03856	1.04878	1.04667	1.05368	1.04243	1.03480	1.01757	1.02242	R 1.02257	1.03221	1.03253	1.02666
West Virginia	1.06116	1.06110	1.06811	1.06321	1.05518	1.06822	1.06778	1.00662	1.04887	1.17429	1.06959	1.13486	1.07413
Wisconsin	1.01089	1.01296	1.01076	1.01085	1.01171	1.00990	1.00852	1.00564	1.00834	R 1.00440	1.01345	1.01093	1.01354
Wyoming	1.06303	1.06102	R 1.06903	1.06706	1.05101	1.04635	1.05569	1.04816	1.05050	1.04248	1.04363	1.04240	1.03911
U.S. Average	1.02981	1.03076	1.03524	1.03740	1.02937	1.01978	1.02624	1.03933	1.04595	R 1.01932	1.02897	1.02807	1.02736

-- = Not applicable.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B6. Approximate Heat Content of Natural Gas Total Consumption, Selected Years, 1960-1994**  
(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.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B7. Approximate Heat Content of Natural Gas Total Consumption, 1995-2007**

(Thousand Btu per Cubic Foot)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama .....	1.02900	1.03300	1.04100	1.03900	1.03500	1.04200	1.03400	1.05300	1.00000	1.04000	1.03100	1.02900	1.02600
Alaska .....	1.00600	0.99000	1.00000	0.99900	1.00000	0.78100	1.01000	1.01400	1.01400	1.01400	1.00200	1.00100	1.00500
Arizona .....	1.03500	1.01100	1.02100	1.01600	1.01500	1.01300	1.01500	1.02500	1.00600	1.00900	1.01900	1.01800	1.02300
Arkansas .....	1.07600	1.02600	1.01500	1.02400	1.01900	1.01900	1.01600	1.04700	1.04700	1.04200	1.01100	1.03300	1.00700
California .....	1.01600	1.03200	1.01800	1.04700	1.01700	0.97900	1.02000	0.99800	1.02200	1.02100	1.02200	1.01700	1.01900
Colorado .....	1.01800	1.02400	1.01200	1.01200	1.00700	1.00800	1.01300	1.00500	1.00500	0.99400	1.02800	1.03400	1.02200
Connecticut .....	1.02800	1.02800	1.02700	1.02600	1.02400	1.02500	1.02100	1.03000	1.00600	1.00300	1.02300	1.02900	1.02200
Delaware .....	1.03400	1.03500	1.03500	1.03700	1.03700	1.03700	1.03400	1.03900	1.04300	1.03900	1.03700	1.03600	1.03800
District of Columbia .....	1.00600	1.00900	1.02100	1.02700	1.02100	1.02700	1.02600	1.02400	1.02700	1.02700	1.05200	1.02500	1.02700
Florida .....	1.03300	1.05000	1.04800	1.05100	1.04300	1.06000	1.04900	1.02400	1.04400	1.02900	1.04600	1.02800	1.03600
Georgia .....	1.02600	1.02300	1.02700	1.02700	1.02700	1.01800	1.03300	1.02400	1.04300	1.04300	1.03200	1.03100	1.02900
Hawaii .....	1.04800	1.05700	1.03000	1.05600	1.05500	1.04700	1.03600	1.06000	1.04700	1.04800	1.03700	1.04700	1.03700
Idaho .....	1.03000	1.03000	1.03100	1.03800	1.03800	1.02500	1.01900	1.01900	1.02200	1.02500	1.04900	1.04400	1.02400
Illinois .....	1.02000	1.01900	1.02100	1.02200	1.02200	1.02200	1.02000	1.03000	1.00000	1.00000	1.01500	1.01600	1.01400
Indiana .....	1.01200	1.01100	1.01100	1.01700	1.01800	1.02500	1.02400	0.95000	1.02800	1.03000	1.01800	1.01700	1.02300
Iowa .....	1.00500	1.00600	1.00900	1.01100	1.01900	1.00500	1.00400	1.00800	1.00900	1.00800	1.00600	1.01400	1.01000
Kansas .....	1.00200	0.99600	1.00100	0.99500	0.99700	1.00800	1.00500	0.99800	1.04000	1.04000	1.01400	1.02000	1.01800
Kentucky .....	1.09600	1.04900	1.05000	1.03400	1.03200	1.04000	1.03700	1.03100	1.03200	1.02800	1.02900	1.02900	1.02700
Louisiana .....	1.03500	1.04400	1.11800	1.07000	1.04200	1.05800	1.02700	1.07000	1.04000	1.04000	1.04400	1.03800	1.03300
Maine .....	1.01600	1.01600	1.01400	1.01700	1.01800	1.07300	1.05700	1.06200	1.06000	1.05100	1.05600	1.07500	1.07500
Maryland .....	1.02600	1.02900	1.03400	1.03700	1.03400	1.03400	1.03700	1.02800	1.03000	1.03000	1.04800	1.03600	1.03700
Massachusetts .....	1.02600	1.02700	1.02200	1.02300	1.04800	1.04200	1.04300	1.04000	1.04000	1.04000	1.01900	1.01500	1.02100
Michigan .....	1.01700	1.01200	1.01600	1.02000	1.01800	1.02200	1.02500	1.00000	1.00000	1.00200	1.01600	1.01800	1.02300
Minnesota .....	1.01300	1.01800	1.01800	1.02000	1.01900	1.01500	1.01200	1.00900	1.01000	1.01000	1.01200	1.01700	1.02000
Mississippi .....	1.02600	1.03000	1.03400	1.04600	1.03600	1.03800	1.02500	1.05400	1.00000	1.04100	1.03000	1.02300	1.03000
Missouri .....	1.00700	1.01100	1.01000	1.01100	1.01300	1.01500	1.01700	1.00500	1.01700	1.01700	1.02000	1.02100	1.01900
Montana .....	1.03000	1.03000	1.03100	1.02600	1.02400	1.02400	1.02200	0.99100	0.98900	0.99800	1.04000	1.01700	1.01600
Nebraska .....	0.98000	1.00700	0.99800	1.00300	0.99900	1.00500	1.01700	1.00000	1.00000	0.99600	1.01000	1.01300	1.01800
Nevada .....	1.03300	1.03600	1.02700	1.04100	1.03400	1.02600	1.02500	1.03800	1.02200	1.02100	1.04300	1.03800	1.03600
New Hampshire .....	1.01100	1.01900	1.01100	1.01100	1.00900	1.05800	1.06200	1.06200	1.00000	1.05500	1.03600	1.03600	1.04000
New Jersey .....	1.03400	1.03600	1.03500	1.03800	1.03900	1.03500	1.03700	1.04000	1.04300	1.03900	1.04000	1.03700	1.03500
New Mexico .....	1.02000	1.02900	1.01900	0.98200	0.97900	0.97200	0.97500	1.01000	1.01000	1.03000	1.02900	1.02400	1.02700
New York .....	1.02800	1.02600	1.02600	1.02800	1.02700	1.02800	1.02900	0.99300	1.04000	1.02000	1.02600	1.02400	1.02400
North Carolina .....	1.03300	1.03600	1.03600	1.04000	1.03500	1.03000	1.04100	1.04000	1.04200	1.03500	1.03800	1.03500	1.03300
North Dakota .....	1.05000	1.05100	1.05000	1.03800	1.04500	1.03500	1.02900	0.97200	0.97000	1.00600	1.03600	1.04400	1.04700
Ohio .....	1.03800	1.03800	1.04500	1.04000	1.03700	1.04200	1.04200	1.02600	1.02800	1.02500	1.04400	1.03900	1.03700
Oklahoma .....	1.02000	1.02400	1.01200	1.01400	1.02300	1.01500	1.02800	1.02900	1.03400	1.03300	1.03900	1.06800	1.04900
Oregon .....	1.04000	1.04000	1.04600	1.04300	1.05100	1.02700	1.02600	1.03000	1.03100	1.03500	1.03500	1.03100	1.02500
Pennsylvania .....	1.03500	1.03400	1.03500	1.03600	1.03600	1.03500	1.05400	1.05200	1.05200	1.05200	1.04000	1.03900	1.03900
Rhode Island .....	1.02600	1.06000	1.02400	1.02500	1.02300	1.03800	1.03100	1.03100	1.02600	1.02700	1.03600	1.03400	1.03200
South Carolina .....	1.02700	1.03000	1.03100	1.03400	1.03100	1.02900	1.03800	1.00000	1.00000	1.00000	1.03800	1.03800	1.03700
South Dakota .....	1.01400	1.01400	1.01800	1.01000	1.00600	1.00500	0.99900	1.02000	1.02000	1.02000	1.00700	1.00300	1.00300
Tennessee .....	1.03100	1.03200	1.03100	1.03000	1.02700	1.03700	1.03700	1.08000	1.03500	1.03500	1.03500	1.03800	1.03900
Texas .....	1.03700	1.03300	1.02800	1.04100	1.03200	1.02900	1.02600	1.09100	1.11000	1.00000	1.02800	1.02600	1.02800
Utah .....	1.06300	1.04200	1.04200	1.04600	1.05500	1.05100	1.05200	1.05800	1.05800	1.05800	1.05400	1.05700	1.05700
Vermont .....	0.99600	1.01500	1.01200	1.01200	1.01200	1.01200	1.01200	1.00400	1.00600	1.00400	1.00400	1.00100	1.00100
Virginia .....	1.03100	1.03900	1.04400	1.04300	1.03800	1.03500	1.03700	1.03500	1.03500	1.02700	1.04200	1.03700	1.04000
Washington .....	1.04000	1.03700	1.04600	1.04500	1.05200	1.03800	1.03300	1.01900	1.02200	1.02300	1.03000	1.03100	1.02600
West Virginia .....	1.06100	1.06100	1.06800	1.06300	1.05500	1.06800	1.06700	1.00700	1.04900	1.17300	1.06900	1.13200	1.07300
Wisconsin .....	1.01100	1.01300	1.01100	1.01100	1.01200	1.01000	1.00900	1.00400	1.00700	1.00400	1.01300	1.01100	1.01400
Wyoming .....	1.06300	1.06100	1.06900	1.06700	1.05100	1.04600	1.05500	1.04400	1.04800	1.04200	1.04300	1.04200	1.03800
U.S. Average .....	1.02818	1.02890	1.03254	1.03460	1.02770	1.02014	1.02684	1.03474	1.04092	1.02101	1.02881	1.02794	1.02735

-- = Not applicable.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.



**Table B8. Approximate Heat Content of Coal Consumed by the Residential and Commercial Sector, Selected Years, 1960-1994**  
(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	25.62000	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.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B9. Approximate Heat Content of Coal Consumed by the Residential and Commercial Sector, 1995-2007**  
(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	24.64589	24.63827	24.64215	25.47588	25.88280	25.45000	18.84468	24.23196	24.22414	24.22414	25.12953	24.29513	25.19517
Alaska	15.80000	15.80000	15.84800	15.71000	15.60000	15.60000	15.60000	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	18.95945	18.91365	19.70261
Arkansas	--	--	24.49708	25.08934	25.46394	--	--	25.20226	--	25.20226	--	25.20226	22.93197
California	23.29600	23.28200	23.10055	23.62691	23.74003	23.79000	23.54564	25.20226	24.57779	22.39951	22.69029	23.54564	--
Colorado	22.16939	22.10652	18.71008	22.43624	22.48006	21.70600	22.42877	22.40126	22.49956	22.46007	22.38331	22.32441	22.41875
Connecticut	23.80410	24.63800	24.49700	27.35000	27.53000	24.84184	25.19040	25.20226	25.17420	25.20226	25.20226	25.20226	25.20226
Delaware	24.69600	24.93390	25.05444	26.90254	26.15092	26.11800	25.20226	--	--	--	--	R 25.20226	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	24.69356	--	24.69356
Florida	24.64400	25.04400	--	26.04235	25.97502	25.75000	23.49457	24.35506	24.70354	--	25.20226	25.20226	25.20226
Georgia	24.98009	25.04400	25.69800	25.65432	25.84901	25.64200	25.71566	25.71566	--	25.71415	24.87197	--	24.33092
Hawaii	--	--	--	--	--	--	--	--	--	--	--	--	--
Idaho	21.71685	21.72486	22.68311	19.71901	21.04956	22.06000	22.34782	22.07382	21.64352	18.44441	21.28274	21.54563	23.00660
Illinois	22.51632	22.68127	22.80243	21.96000	21.96000	21.95496	23.09564	23.07288	22.94355	22.88660	22.90367	22.93419	22.91509
Indiana	22.29025	22.23182	22.19420	22.75000	25.00000	23.51901	22.30349	22.27207	22.38880	22.34328	22.45479	22.37152	22.35171
Iowa	24.36084	24.52912	23.56166	24.41000	25.97000	26.10085	23.86811	24.17926	24.05462	23.39265	23.53537	23.40740	23.40796
Kansas	23.94481	24.10800	22.52800	24.68789	24.70725	24.15600	24.17185	24.02541	23.54564	--	--	23.54564	--
Kentucky	24.92797	24.35637	23.26395	25.46950	26.23869	26.40800	24.90121	24.70391	24.37750	24.09277	24.06740	23.66777	23.69848
Louisiana	25.07800	--	24.53000	--	--	23.48200	--	--	--	--	--	--	24.35479
Maine	24.69600	24.63800	24.49700	26.34731	26.08147	25.92200	25.19811	25.19627	25.20226	25.20226	25.20226	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	24.70913	24.73325	24.74548
Massachusetts	24.83425	24.79549	24.70762	27.34861	27.53458	27.07000	25.39455	24.64837	24.99683	24.68555	24.96940	24.77280	24.63665
Michigan	24.66160	24.84902	24.59315	24.80000	25.10000	25.09987	24.08681	23.59538	23.70301	24.50332	24.35677	24.37527	24.46919
Minnesota	20.25825	17.54796	18.40880	19.25179	19.31135	19.29400	24.33092	17.38221	18.74383	20.36034	19.42854	17.78220	19.32423
Mississippi	--	--	24.49708	--	--	--	--	--	--	--	--	--	--
Missouri	22.63423	22.66103	22.82574	22.00000	22.43000	22.01372	22.98069	23.14705	23.25095	23.19464	23.21647	23.19520	23.07965
Montana	21.22785	18.18800	17.85986	23.37560	17.09403	16.01600	18.22272	18.51422	18.41265	18.11776	18.12135	18.11776	18.11776
Nebraska	20.32116	24.63800	17.33200	20.74919	--	--	22.34669	22.39411	22.43902	22.39620	22.37023	22.29536	22.34906
Nevada	23.44269	23.28200	23.09600	22.98804	23.10820	23.10820	19.61653	18.11776	18.11776	18.11776	18.11776	18.11776	22.34906
New Hampshire	24.86761	24.84196	24.55195	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	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	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	18.81298	18.92875	18.58149
New York	24.95806	24.82789	24.83757	25.45000	25.51000	25.31147	24.84639	25.09365	25.20226	24.99169	25.01044	24.85989	24.91799
North Carolina	25.16371	24.83876	24.99447	26.70000	27.00000	27.00000	25.07997	24.82548	25.32901	24.77161	25.37342	25.11335	25.31826
North Dakota	15.53547	14.92702	14.93796	14.27578	14.26426	14.22800	16.00252	16.22776	16.37937	16.98175	18.09798	17.84725	15.91616
Ohio	24.43882	23.79691	23.89197	25.25000	24.14000	24.01316	24.11117	24.20238	24.14877	21.33540	23.98104	24.19434	24.12152
Oklahoma	25.89400	26.12800	17.35345	19.93863	19.77893	--	24.21484	24.21484	24.21484	--	24.27606	24.55713	24.69356
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	25.13163	25.12478	25.12626
Rhode Island	24.69600	24.63800	24.49700	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	25.20226	25.20226	25.20226	25.20226
South Carolina	25.50314	24.71660	24.97200	26.21051	26.34668	--	--	25.20226	--	--	--	24.33114	25.20226
South Dakota	19.07166	21.61937	17.33200	19.76699	20.36609	20.86800	23.50629	17.38116	17.38116	17.38116	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	24.70386	24.38566	24.53965
Texas	--	--	25.51014	24.81832	16.25125	16.28000	25.62310	18.68536	19.22769	25.68290	25.71566	25.20226	25.20226
Utah	23.29600	23.28200	23.09345	23.54893	23.36625	23.21000	23.54375	23.54578	23.54700	23.54652	23.55080	23.54245	23.53943
Vermont	24.69600	24.63800	24.61419	27.35000	27.53000	25.92200	25.20226	25.20226	25.20226	25.20226	25.20226	25.20226	25.36313
Virginia	24.99689	25.10405	24.92831	26.40706	26.45535	26.17391	25.04189	25.04500	24.92450	25.00427	24.85854	24.74545	24.77679
Washington	22.63392	23.09783	22.87154	26.60000	25.98000	25.96100	23.48820	23.50574	23.51911	23.51009	--	R 17.38116	17.38116
West Virginia	24.82246	24.68019	24.73754	25.76982	25.70998	25.74200	24.76458	24.74624	24.76538	24.71213	24.69710	24.71636	24.70421
Wisconsin	25.07766	25.05235	24.92021	27.45000	26.79000	27.65942	24.44771	24.30858	24.71652	24.32607	18.94545	24.35425	24.33542
Wyoming	18.24057	18.19276	18.03000	20.31540	20.19004	20.11600	17.74573	17.83742	17.86023	17.87893	17.86891	17.89542	17.90731
U.S. Average	23.02709	22.71809	22.37879	23.27631	23.66758	23.36355	22.70619	22.44931	22.48756	22.31421	22.05262	R 21.91488	22.17880

-- = Not applicable.  
Where shown, R = Revised data.  
Sources: See source listing at the end of this appendix.

**Table B10. Approximate Heat Content of Coal Consumed by Other Industrial Users, Selected Years, 1960-1994**  
(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	25.02162
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	15.57653	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.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B11. Approximate Heat Content of Coal Consumed by Other Industrial Users, 1995-2007**

(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	24.84808	24.78508	24.67890	24.87433	24.87429	25.45000	25.56317	25.61134	25.60454	25.33626	24.56787	24.70862	24.93387
Alaska	--	15.80000	15.84800	15.71000	15.71000	15.71000	15.60000	15.60000	15.60000	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	22.16263	22.04758	21.48787
Arkansas	23.95685	23.98664	23.58123	24.43193	24.43179	25.15400	24.92946	24.79729	24.30495	24.40426	25.22954	24.90428	24.60889
California	23.29600	23.28200	23.05519	22.99659	22.99659	23.79000	24.12823	23.88255	24.16352	24.12961	23.65788	24.09150	23.72794
Colorado	21.70231	21.57372	21.57222	21.26260	21.25734	21.70600	21.76792	23.37126	23.21756	22.77619	23.14017	22.74847	22.94668
Connecticut	--	--	--	--	--	--	--	--	--	--	24.69356	--	--
Delaware	25.19175	25.14560	25.21542	25.16859	25.16618	26.15092	26.08942	25.91692	25.68903	26.08198	26.36905	26.40967	26.37436
District of Columbia	--	--	--	--	--	--	--	--	--	--	--	--	--
Florida	25.10701	25.11598	25.05234	25.00217	25.00308	25.75000	25.72868	25.61772	25.50327	25.85017	25.82357	25.40963	25.43144
Georgia	25.19814	25.13735	25.08994	25.07925	25.07909	25.64200	25.71929	25.89083	25.86071	25.66513	25.58213	25.67680	25.72364
Hawaii	21.50000	21.50000	22.49862	23.04000	23.04000	19.51800	18.13971	13.21369	26.40000	23.76000	23.87597	27.96538	24.96357
Idaho	19.03477	18.16585	17.33200	18.15972	18.15972	22.06000	20.56167	20.87305	20.27673	20.34949	20.57427	20.35847	20.11580
Illinois	22.83681	22.84938	23.17145	23.04887	23.05062	22.55200	22.27503	22.00140	21.63749	21.35039	21.60585	21.65652	21.59127
Indiana	23.05468	22.71535	23.18017	23.25752	23.26278	23.86600	24.72806	24.56617	24.09312	24.36426	23.44946	23.48307	23.72260
Iowa	20.97803	21.30743	20.93210	21.17668	21.17762	20.98000	20.98995	20.46674	20.79014	20.23722	20.18304	19.83169	20.21639
Kansas	24.24071	25.47579	24.52305	24.79541	24.79543	24.15600	23.38449	24.01263	24.28579	24.85503	24.51132	24.00164	23.95535
Kentucky	24.84676	24.74520	24.48063	24.69544	24.69546	26.40800	26.07951	26.73192	26.18923	26.29921	26.08980	26.10292	25.46282
Louisiana	18.13611	25.01815	24.85731	25.18061	25.18061	24.50200	24.79641	24.38702	24.23213	24.62068	24.26804	24.09402	24.34344
Maine	25.10225	25.02589	24.98213	24.50979	24.50979	25.92200	25.87095	25.85521	26.13598	25.57684	25.26999	25.43767	26.22635
Maryland	25.32368	25.13270	25.11468	25.02943	24.99151	25.07200	26.15043	25.73619	25.39493	25.12167	24.44112	24.17387	24.46496
Massachusetts	25.17556	24.90749	25.03547	24.47621	24.47621	27.07000	26.97528	27.05517	27.05441	27.23207	27.44733	26.26734	26.11529
Michigan	24.02603	24.34533	24.35386	23.73938	23.73938	24.91200	25.09757	25.51789	25.63669	25.18729	25.02474	24.87818	25.23345
Minnesota	19.07827	19.14046	18.86921	18.61519	18.61053	19.29400	19.46505	19.33533	18.93818	18.99910	18.99020	18.93201	19.04910
Mississippi	24.07263	23.90664	23.67600	24.07408	24.07408	23.92200	24.17841	24.36851	24.14262	23.32565	23.65026	24.16007	23.87344
Missouri	23.17545	23.13412	22.82012	22.90858	22.91315	23.12800	22.97924	23.15466	23.06086	23.00128	22.79619	22.73549	22.46448
Montana	18.09956	18.21032	18.24449	17.91315	18.02330	16.01600	16.45749	14.69448	14.62430	14.87796	14.69438	14.46974	14.78685
Nebraska	19.35912	18.82313	19.13176	19.07469	19.04352	20.50800	19.55943	20.50057	20.26782	20.10598	19.89831	19.42767	18.91903
Nevada	22.66808	22.61981	22.98074	23.13890	23.13890	23.28000	23.37973	23.05508	23.27639	23.02476	22.61537	22.65562	22.86834
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	25.20163	25.06377	--
New Mexico	22.00800	21.97600	21.78800	21.98800	21.98800	25.21200	25.06600	24.75071	25.19525	24.67538	24.58808	24.56943	24.64852
New York	25.11701	25.02823	25.16298	25.04125	25.04584	26.29400	25.53551	25.97046	26.07853	26.15033	26.37665	25.92775	26.25368
North Carolina	25.26890	25.14978	25.06093	25.06861	25.06878	26.49200	26.75042	26.39726	26.46086	26.32947	26.21123	26.25415	26.22276
North Dakota	13.35266	13.38232	13.28668	13.34170	13.34170	14.22800	14.17729	13.98412	14.31013	14.34435	14.27845	14.29338	14.28961
Ohio	24.51161	24.46949	24.43845	24.36431	24.36436	24.81600	25.03997	25.14220	25.08606	25.23022	25.10471	25.03739	25.19506
Oklahoma	22.67545	22.23193	20.88353	23.32931	23.32931	19.88200	19.97336	20.14169	20.43344	21.17481	21.15552	20.51318	20.64326
Oregon	19.02589	21.29915	20.52349	20.16974	--	--	--	22.26898	23.08909	21.85459	23.53227	24.54067	24.53553
Pennsylvania	25.13491	25.06116	25.16267	24.90182	24.90660	24.47600	24.31768	24.11592	24.04275	23.71597	23.08512	22.68587	22.34064
Rhode Island	--	--	--	--	--	--	--	--	--	--	--	--	--
South Carolina	25.19274	25.06364	25.08769	25.03090	25.03144	26.27000	26.07798	26.33401	26.19595	25.98648	25.82668	25.74241	25.91484
South Dakota	17.25800	17.30000	17.41854	17.51564	17.51564	20.86800	16.86083	16.85455	16.76268	16.61502	16.63025	16.64773	16.91576
Tennessee	25.13542	25.02032	25.00384	25.02139	25.02261	26.08800	25.74152	26.03713	26.00196	25.99079	25.90898	25.92540	25.93565
Texas	14.96538	15.34020	15.55204	14.23099	14.22843	16.28000	17.00044	17.70065	17.54537	17.09972	17.16594	17.29000	21.64758
Utah	23.00279	23.28200	23.48885	23.05627	23.05627	23.21000	23.45310	23.01697	23.15785	21.02872	23.05499	23.16044	22.79889
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	26.11264	26.05355	26.07739
Washington	19.00628	19.65817	20.64702	23.00664	23.00664	22.33200	22.65849	22.06989	23.17996	21.86739	20.75241	21.28815	23.38872
West Virginia	24.97467	24.93964	24.96660	24.78222	24.78182	25.74200	25.53245	25.44492	25.17669	24.56337	24.80656	24.95200	24.97023
Wisconsin	24.21942	23.89132	24.13111	24.27928	24.27942	23.69800	23.54541	23.45084	23.18524	23.15207	23.09987	22.71690	22.77891
Wyoming	21.94055	21.89685	21.58115	21.93124	21.93124	20.11600	19.98672	20.14835	19.84803	19.91358	19.75331	19.82848	19.84741
U.S. Average	22.11162	22.15728	22.18651	21.96645	21.88346	22.47646	22.65178	22.57467	22.51083	22.46391	22.17371	R 22.03646	22.37084

-- = Not applicable.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.

**Table B12. Approximate Heat Content of Coal Consumed by the Electric Power Sector, Selected Years, 1960-1994**  
(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	17.77717	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.

Where shown, R = Revised data.

Sources: See source listing at the end of this appendix.



**Table B13. Approximate Heat Content of Coal Consumed by the Electric Power Sector, 1995-2007**  
(Million Btu per Short Ton)

State	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alabama .....	23.71814	23.62530	23.23960	23.11732	22.19134	22.06190	21.89221	22.45197	21.79318	R 21.47523	21.61294	21.54145	21.67367
Alaska .....	15.80000	15.80000	15.80000	16.90141	16.65753	16.57100	16.53408	16.13460	16.26433	R 16.04137	15.27687	R 15.30578	15.08520
Arizona .....	20.57766	20.44148	20.34739	20.38344	20.50387	20.42598	20.30467	20.30611	20.19154	R 20.39898	20.28681	20.26956	19.97240
Arkansas .....	17.36965	17.39802	17.41297	17.34710	17.30255	17.35216	17.41107	17.28087	17.01818	R 16.97861	16.95471	16.95785	16.97025
California .....	22.06625	23.45821	21.85178	22.24980	23.45239	23.50623	23.53335	23.59704	24.40935	R 24.37754	23.71536	R 24.38820	24.31097
Colorado .....	19.77843	19.90650	19.73791	19.76528	19.55575	19.68516	19.56638	19.57370	19.46454	R 19.66264	19.81655	19.60565	19.60517
Connecticut .....	25.61179	25.61007	25.78092	25.60594	24.57017	24.54238	24.57295	22.61785	20.35817	R 20.58489	20.22853	20.32643	20.58579
Delaware .....	26.17331	26.03587	26.13235	25.90669	25.85637	25.89995	22.85394	24.64016	24.86200	R 24.57168	24.28918	24.63733	24.81605
District of Columbia .....	--	--	--	--	--	--	--	--	--	--	--	--	--
Florida .....	24.30112	24.38155	24.32881	24.27066	24.36377	24.39667	24.19654	24.47833	24.54170	R 24.31041	24.23466	24.05163	24.03623
Georgia .....	22.99264	23.07567	23.26596	23.34800	23.25969	23.17564	23.32263	23.27634	23.19329	R 21.86980	21.87928	21.90760	21.95509
Hawaii .....	22.46192	21.99277	21.86457	21.98890	21.92900	21.96268	21.95915	22.85558	22.78043	R 22.38158	22.18415	R 22.07703	22.12487
Idaho .....	--	--	--	--	--	--	--	--	--	--	--	--	--
Illinois .....	20.23176	20.09605	19.81497	19.95586	19.88917	19.00766	18.96250	17.98552	18.05192	R 17.94055	17.68141	17.55926	17.49529
Indiana .....	20.72512	20.75962	20.84809	20.99836	21.17079	21.18776	21.07405	20.63657	20.77922	R 20.93030	21.19063	21.07852	20.92302
Iowa .....	17.46392	17.36788	17.35340	17.75846	17.74086	17.74159	17.75174	17.45934	17.40657	R 17.36765	17.28278	17.29399	17.23753
Kansas .....	17.46468	17.63768	17.53745	17.39772	17.28344	17.35757	17.40822	17.09551	17.07787	R 17.18522	17.00119	17.17619	17.14540
Kentucky .....	23.29869	23.07877	23.16404	23.09505	23.10287	23.21985	22.85597	23.02596	22.91007	R 22.74220	22.82043	22.85545	23.22461
Louisiana .....	16.16720	16.32941	16.25260	16.19171	16.29411	16.06360	16.02309	15.78423	15.83440	R 15.94059	15.95451	16.12599	16.05320
Maine .....	25.50000	25.50000	26.00000	25.50000	25.50065	25.50206	25.50913	25.67508	26.34278	R 25.70556	25.85265	25.64576	26.24601
Maryland .....	25.92837	25.77953	25.82604	25.83073	25.87305	25.58099	25.39357	25.94153	25.26517	R 25.16647	25.23948	25.19092	25.00874
Massachusetts .....	25.40011	25.28340	25.12795	25.11719	25.17950	25.13633	24.58141	24.98333	24.27228	R 23.58180	23.16258	23.10606	22.92145
Michigan .....	21.37664	21.04777	21.18818	21.17513	21.03606	20.87626	20.35290	19.80311	19.72285	R 19.57401	19.80124	19.85214	19.72277
Minnesota .....	17.69994	17.86324	17.81417	17.80430	17.81200	17.88333	17.84650	17.52943	17.68778	R 17.63046	17.64381	17.63271	17.68637
Mississippi .....	22.43229	21.98747	20.96791	21.25237	22.11560	23.07236	23.34428	19.15204	18.37832	R 18.21681	17.76711	17.96529	18.34497
Missouri .....	18.50887	18.16688	17.97357	17.86978	17.90978	17.83803	17.83536	17.58855	17.52202	R 17.54298	17.62647	17.53874	17.55256
Montana .....	16.99483	16.87895	16.81662	16.83133	16.84815	16.76161	16.76781	16.92120	17.00369	R 16.98414	16.87603	16.85404	16.83440
Nebraska .....	17.19095	17.19019	17.19342	17.16400	17.00357	17.26387	17.16865	17.18567	17.23930	R 17.08372	17.13192	17.01431	17.01089
Nevada .....	22.12016	22.27863	22.36387	22.40233	22.49028	22.46450	22.42843	20.35415	22.53116	R 22.19888	22.40665	22.71904	22.68834
New Hampshire .....	26.26872	26.25812	26.12156	26.28170	26.33989	26.26371	26.10294	26.03410	26.06670	R 26.14847	25.58350	27.36274	27.57257
New Jersey .....	26.51285	26.07115	26.01541	26.14646	26.14399	26.10622	26.00633	25.70562	25.49757	R 25.38477	25.04601	25.00918	23.93050
New Mexico .....	18.06103	18.22953	18.14272	18.16905	18.26593	18.38786	18.50342	18.57152	18.35153	R 18.44824	18.54649	18.52520	18.42953
New York .....	25.91197	25.83610	26.01414	26.04338	26.10032	26.09609	26.03933	25.59208	25.09965	R 24.07395	23.48868	22.91565	22.94660
North Carolina .....	25.05575	24.94896	24.80074	24.85444	24.94669	24.96554	24.69647	24.61092	24.69934	R 24.59170	24.63823	24.38898	24.58092
North Dakota .....	13.16609	13.18832	13.09621	13.12410	13.09452	13.05680	13.08158	13.00238	12.83980	R 12.93326	13.19614	13.07231	13.17149
Ohio .....	24.24279	24.07984	23.78736	23.81224	23.85473	23.54852	23.09420	23.27825	23.48272	R 23.41907	23.03406	22.81731	22.70491
Oklahoma .....	17.46308	17.48181	17.58891	17.67738	17.56985	17.71738	17.64096	17.63499	17.58214	R 17.58994	17.40067	17.43083	17.41296
Oregon .....	17.76504	17.56340	17.51550	17.37069	17.92307	17.27270	17.41227	17.00023	17.12684	R 16.87994	16.83949	16.72021	16.73586
Pennsylvania .....	22.65412	22.62252	22.70900	22.84248	23.02907	23.16297	22.44516	23.56468	22.98280	R 22.89989	22.49018	22.22317	22.28607
Rhode Island .....	--	--	--	--	--	--	--	--	--	--	--	--	--
South Carolina .....	25.70586	25.52136	25.70091	25.55763	25.56171	25.40681	25.12150	24.67291	24.99159	R 24.89171	24.83801	24.93642	24.88119
South Dakota .....	14.27626	18.32551	17.62504	17.75382	17.46863	17.18875	17.08216	16.95465	16.94182	R 16.95634	17.19573	16.94489	16.93546
Tennessee .....	24.29681	24.22004	23.99457	24.23173	24.26070	24.20313	24.17211	23.03553	22.89925	R 22.64532	22.02668	21.96961	21.69786
Texas .....	14.72568	14.98921	15.01066	15.05700	15.01573	15.19314	15.33008	15.44303	15.24670	R 15.27875	15.38507	15.44616	15.24276
Utah .....	22.78871	22.76216	22.40057	22.31132	22.90924	22.92554	22.74758	22.51816	22.30324	R 22.08183	21.70165	22.04669	22.30438
Vermont .....	--	--	--	--	--	--	--	--	--	--	--	--	--
Virginia .....	25.53894	25.25975	25.15090	25.22663	25.45736	25.67355	25.37158	25.42008	24.39707	R 24.46977	24.70347	24.82489	25.05643
Washington .....	16.53810	15.86645	16.08781	16.43364	16.46003	16.19347	16.00174	15.99992	15.79913	R 16.01380	15.83882	16.27828	16.28884
West Virginia .....	24.48178	24.50303	24.54181	24.37571	24.47831	24.33315	24.14704	24.20576	24.18395	R 24.05641	23.71011	23.83154	24.06430
Wisconsin .....	18.56316	18.47512	18.67642	18.65018	18.59654	18.88566	18.70978	19.23048	18.27612	R 18.34803	19.31630	17.80872	17.81311
Wyoming .....	17.54191	17.47664	17.65017	17.63874	17.61607	17.63312	17.72695	17.43899	17.79030	R 17.64503	17.56342	17.38634	17.28076
U.S. Average .....	20.54157	20.54538	20.51618	20.51614	20.48955	20.51062	20.33690	20.23817	20.08181	R 19.98002	19.98765	19.93054	19.90845

-- = Not applicable.  
Where shown, R = Revised data.  
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.** (LGTCUS) • 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 through 2004: EIA, *Petroleum Supply Annual*, Table 2. 2005 forward: EIA, *Petroleum Supply Annual*, Table 1.

**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 (see Table B1). 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 forward: EIA, *Natural Gas Annual*, Table 16, [http://www.eia.doe.gov/oil\\_gas/natural\\_gas/data\\_publications/natural\\_gas\\_annual/nga\\_historical.html](http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga_historical.html) and unpublished 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](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](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](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

**Fuel Ethanol.** Fuel ethanol, which is derived from agricultural feedstocks (primarily corn) and blended into motor gasoline, is computed separately in SEDS to display the use of renewable energy in the commercial, industrial, and transportation sector. EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

**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, resident population estimates by State. The reference date for the estimates is July 1 of each year.

The sum of the State estimates may not match the U.S. estimates. More recent revisions to the U.S. estimates have been incorporated into the U.S. tables available on the Census Bureau website that are not included in the State estimates.

**Data Sources**

TPOPPUS — Resident population of the United States.

- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census <http://www.census.gov/popest/archives/1990s/popclockest.txt>
- 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/](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.

- 1960 and 1970: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1980*, Section 1 Population, "No. 10. Resident Population--States: 1950 to 1979".
- 1980: U.S. Department of Commerce, Bureau of the Census, <http://www.census.gov/popest/archives/1980s/s5yr8090.txt>
- 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:
  - 1961 through 1969: Number 460, Table 1.
  - 1971 through 1979: Number 957, Table 4.
  - 1981 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/index.html](http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/index.html)
- 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 .....	3,274	3,316	3,323	3,358	3,395	3,443	3,464	3,458	3,446	3,440
Alaska .....	229	238	246	256	263	271	271	278	285	296
Arizona .....	1,321	1,407	1,471	1,521	1,556	1,584	1,614	1,646	1,682	1,737
Arkansas .....	1,789	1,806	1,853	1,875	1,897	1,894	1,899	1,901	1,902	1,913
California .....	15,870	16,497	17,072	17,668	18,151	18,585	18,858	19,176	19,394	19,711
Colorado .....	1,769	1,844	1,899	1,936	1,970	1,985	2,007	2,053	2,120	2,166
Connecticut .....	2,544	2,586	2,647	2,727	2,798	2,857	2,903	2,935	2,964	3,000
Delaware .....	449	461	469	483	497	507	516	525	534	540
District of Columbia .....	765	778	788	798	798	797	791	791	778	762
Florida .....	5,004	5,243	5,458	5,628	5,781	5,954	6,104	6,242	6,433	6,641
Georgia .....	3,956	4,015	4,086	4,172	4,258	4,332	4,379	4,408	4,482	4,551
Hawaii .....	642	659	684	682	700	704	710	723	734	750
Idaho .....	671	684	692	683	680	686	689	688	695	707
Illinois .....	10,086	10,130	10,280	10,402	10,580	10,693	10,836	10,947	10,995	11,039
Indiana .....	4,674	4,730	4,736	4,799	4,856	4,922	4,999	5,053	5,093	5,143
Iowa .....	2,756	2,756	2,750	2,747	2,746	2,742	2,762	2,793	2,803	2,805
Kansas .....	2,183	2,215	2,231	2,217	2,209	2,206	2,200	2,197	2,216	2,236
Kentucky .....	3,041	3,054	3,079	3,096	3,129	3,140	3,147	3,172	3,195	3,198
Louisiana .....	3,260	3,287	3,345	3,377	3,446	3,496	3,550	3,581	3,603	3,619
Maine .....	975	995	994	993	993	997	999	1,004	994	992
Maryland .....	3,113	3,176	3,263	3,386	3,492	3,600	3,695	3,757	3,815	3,868
Massachusetts .....	5,160	5,219	5,263	5,344	5,448	5,502	5,535	5,594	5,618	5,650
Michigan .....	7,834	7,893	7,933	8,058	8,187	8,357	8,512	8,630	8,696	8,781
Minnesota .....	3,425	3,470	3,513	3,531	3,558	3,592	3,617	3,659	3,703	3,758
Mississippi .....	2,182	2,206	2,243	2,244	2,241	2,246	2,245	2,228	2,219	2,220
Missouri .....	4,326	4,349	4,357	4,392	4,442	4,467	4,523	4,539	4,568	4,640
Montana .....	679	696	698	703	706	706	707	701	700	694
Nebraska .....	1,417	1,446	1,464	1,476	1,482	1,471	1,456	1,457	1,467	1,474
Nevada .....	291	315	352	397	426	444	446	449	464	480
New Hampshire .....	609	618	632	649	663	676	681	697	709	724
New Jersey .....	6,103	6,265	6,376	6,531	6,660	6,767	6,851	6,928	7,005	7,095
New Mexico .....	954	965	979	989	1,006	1,012	1,007	1,000	994	1,011
New York .....	16,838	17,061	17,301	17,461	17,589	17,734	17,843	17,935	18,051	18,105
North Carolina .....	4,573	4,663	4,707	4,742	4,802	4,863	4,896	4,952	5,004	5,031
North Dakota .....	634	641	637	644	649	649	647	626	621	621
Ohio .....	9,734	9,854	9,929	9,986	10,080	10,201	10,330	10,414	10,516	10,563
Oklahoma .....	2,336	2,380	2,427	2,439	2,446	2,440	2,454	2,489	2,503	2,535
Oregon .....	1,772	1,787	1,818	1,853	1,888	1,937	1,969	1,979	2,004	2,062
Pennsylvania .....	11,329	11,392	11,355	11,424	11,519	11,620	11,664	11,681	11,741	11,741
Rhode Island .....	855	858	871	876	885	893	899	909	922	932
South Carolina .....	2,392	2,409	2,423	2,460	2,475	2,494	2,520	2,533	2,559	2,570
South Dakota .....	683	693	705	708	701	692	683	671	669	668
Tennessee .....	3,575	3,622	3,673	3,718	3,771	3,798	3,822	3,859	3,878	3,897
Texas .....	9,624	9,820	10,053	10,159	10,270	10,378	10,492	10,599	10,819	11,045
Utah .....	900	936	958	974	978	991	1,009	1,019	1,029	1,047
Vermont .....	389	390	393	397	399	404	413	423	430	437
Virginia .....	3,986	4,095	4,180	4,276	4,357	4,411	4,456	4,508	4,558	4,614
Washington .....	2,855	2,882	2,942	2,955	2,961	2,967	3,057	3,174	3,270	3,343
West Virginia .....	1,853	1,828	1,809	1,796	1,797	1,786	1,775	1,769	1,763	1,746
Wisconsin .....	3,962	4,009	4,049	4,112	4,165	4,232	4,274	4,303	4,345	4,378
Wyoming .....	331	337	333	336	339	332	323	322	324	329
U.S. Total .....	180,671	183,691	186,538	189,242	191,889	194,303	196,560	198,712	200,706	202,677

Where shown, R = Revised data.  
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 .....	3,451	3,497	3,539	3,580	3,626	3,679	3,735	3,780	3,832	3,866
Alaska .....	304	316	324	331	341	376	401	403	405	403
Arizona .....	1,792	1,896	2,008	2,124	2,223	2,285	2,346	2,425	2,515	2,636
Arkansas .....	1,932	1,972	2,019	2,059	2,160	2,209	2,170	2,201	2,243	2,271
California .....	20,007	20,346	20,585	20,869	21,174	21,538	21,936	22,352	22,836	23,257
Colorado .....	2,223	2,304	2,405	2,496	2,541	2,586	2,632	2,696	2,767	2,849
Connecticut .....	3,041	3,061	3,069	3,068	3,074	3,082	3,083	3,086	3,092	3,096
Delaware .....	551	565	573	578	581	587	590	592	595	595
District of Columbia .....	756	750	742	731	718	707	692	677	665	650
Florida .....	6,848	7,158	7,511	7,914	8,299	8,518	8,667	8,856	9,102	9,426
Georgia .....	4,607	4,712	4,809	4,910	4,999	5,064	5,133	5,220	5,296	5,401
Hawaii .....	774	802	828	852	868	886	904	918	932	953
Idaho .....	718	739	763	782	808	832	857	883	911	933
Illinois .....	11,128	11,202	11,252	11,251	11,262	11,292	11,343	11,386	11,413	11,397
Indiana .....	5,202	5,253	5,302	5,338	5,362	5,366	5,389	5,426	5,470	5,501
Iowa .....	2,832	2,852	2,860	2,864	2,868	2,881	2,903	2,918	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 .....	3,231	3,298	3,336	3,371	3,416	3,468	3,529	3,574	3,610	3,642
Louisiana .....	3,652	3,710	3,762	3,788	3,820	3,886	3,951	4,014	4,069	4,138
Maine .....	997	1,015	1,034	1,046	1,059	1,072	1,088	1,104	1,114	1,123
Maryland .....	3,938	4,018	4,073	4,098	4,119	4,139	4,151	4,170	4,184	4,191
Massachusetts .....	5,706	5,738	5,760	5,781	5,774	5,758	5,744	5,738	5,736	5,738
Michigan .....	8,890	8,974	9,029	9,078	9,118	9,118	9,129	9,171	9,218	9,266
Minnesota .....	3,815	3,853	3,870	3,889	3,904	3,933	3,965	3,989	4,015	4,050
Mississippi .....	2,220	2,265	2,307	2,350	2,378	2,399	2,430	2,459	2,488	2,507
Missouri .....	4,688	4,726	4,759	4,783	4,796	4,808	4,839	4,863	4,889	4,912
Montana .....	698	711	719	727	736	748	757	770	782	787
Nebraska .....	1,488	1,505	1,519	1,530	1,539	1,543	1,551	1,557	1,564	1,567
Nevada .....	493	520	547	569	597	620	647	678	719	765
New Hampshire .....	742	762	781	801	816	829	845	870	892	909
New Jersey .....	7,193	7,281	7,335	7,333	7,332	7,338	7,340	7,337	7,351	7,367
New Mexico .....	1,023	1,054	1,079	1,106	1,131	1,160	1,189	1,216	1,238	1,285
New York .....	18,268	18,358	18,339	18,177	18,050	18,003	17,941	17,813	17,681	17,584
North Carolina .....	5,098	5,204	5,301	5,390	5,471	5,547	5,608	5,686	5,759	5,823
North Dakota .....	620	627	631	633	635	639	646	650	651	653
Ohio .....	10,664	10,735	10,747	10,767	10,766	10,770	10,753	10,771	10,796	10,798
Oklahoma .....	2,567	2,619	2,659	2,696	2,735	2,775	2,827	2,870	2,917	2,975
Oregon .....	2,101	2,151	2,197	2,242	2,285	2,330	2,378	2,447	2,518	2,588
Pennsylvania .....	11,813	11,886	11,908	11,891	11,871	11,906	11,897	11,894	11,879	11,888
Rhode Island .....	951	963	975	976	951	943	946	950	952	950
South Carolina .....	2,597	2,662	2,719	2,777	2,845	2,902	2,944	2,992	3,044	3,090
South Dakota .....	668	671	677	679	680	681	686	688	689	688
Tennessee .....	3,937	4,014	4,095	4,147	4,214	4,276	4,347	4,423	4,486	4,560
Texas .....	11,236	11,510	11,759	12,020	12,269	12,569	12,904	13,193	13,500	13,888
Utah .....	1,066	1,101	1,135	1,170	1,200	1,236	1,275	1,320	1,368	1,420
Vermont .....	446	454	463	468	473	480	485	492	498	505
Virginia .....	4,659	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 .....	1,751	1,771	1,798	1,806	1,815	1,842	1,880	1,908	1,923	1,942
Wisconsin .....	4,429	4,462	4,502	4,524	4,546	4,579	4,596	4,627	4,646	4,683
Wyoming .....	334	340	347	354	366	382	397	413	433	454
U.S. Total .....	205,052	207,661	209,896	211,909	213,854	215,973	218,035	220,239	222,585	225,055

Where shown, R = Revised data.  
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 .....	3,900	3,919	3,925	3,934	3,952	3,973	3,992	4,015	4,024	4,030
Alaska .....	405	418	450	488	514	532	544	539	542	547
Arizona .....	2,738	2,810	2,890	2,969	3,067	3,184	3,308	3,437	3,535	3,622
Arkansas .....	2,289	2,293	2,294	2,306	2,320	2,327	2,332	2,342	2,343	2,346
California .....	23,801	24,286	24,820	25,360	25,844	26,441	27,102	27,777	28,464	29,218
Colorado .....	2,909	2,978	3,062	3,134	3,170	3,209	3,237	3,260	3,262	3,276
Connecticut .....	3,113	3,129	3,139	3,162	3,180	3,201	3,224	3,247	3,272	3,283
Delaware .....	595	596	599	605	612	618	628	637	648	658
District of Columbia .....	638	637	634	632	633	635	638	637	630	624
Florida .....	9,840	10,193	10,471	10,750	11,040	11,351	11,668	11,997	12,306	12,638
Georgia .....	5,486	5,568	5,650	5,728	5,835	5,963	6,085	6,208	6,316	6,411
Hawaii .....	968	978	994	1,013	1,028	1,040	1,052	1,068	1,080	1,095
Idaho .....	948	962	974	982	991	994	990	985	986	994
Illinois .....	11,435	11,443	11,423	11,409	11,412	11,400	11,387	11,391	11,390	11,410
Indiana .....	5,491	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 .....	2,369	2,385	2,401	2,416	2,424	2,427	2,433	2,445	2,462	2,473
Kentucky .....	3,664	3,670	3,683	3,694	3,695	3,695	3,688	3,683	3,680	3,677
Louisiana .....	4,223	4,283	4,353	4,395	4,400	4,408	4,407	4,344	4,289	4,253
Maine .....	1,127	1,133	1,137	1,145	1,156	1,163	1,170	1,185	1,204	1,220
Maryland .....	4,228	4,262	4,283	4,313	4,365	4,413	4,487	4,566	4,658	4,727
Massachusetts .....	5,746	5,769	5,771	5,799	5,841	5,881	5,903	5,935	5,980	6,015
Michigan .....	9,256	9,209	9,115	9,048	9,049	9,076	9,128	9,187	9,218	9,253
Minnesota .....	4,085	4,112	4,131	4,141	4,158	4,184	4,205	4,235	4,296	4,338
Mississippi .....	2,525	2,539	2,557	2,568	2,578	2,588	2,594	2,589	2,580	2,574
Missouri .....	4,922	4,932	4,929	4,944	4,975	5,000	5,023	5,057	5,082	5,096
Montana .....	789	795	804	814	821	822	814	805	800	800
Nebraska .....	1,572	1,579	1,582	1,584	1,589	1,585	1,574	1,567	1,571	1,575
Nevada .....	810	848	882	902	925	951	981	1,023	1,075	1,137
New Hampshire .....	924	937	948	958	977	997	1,025	1,054	1,083	1,105
New Jersey .....	7,376	7,407	7,431	7,468	7,515	7,566	7,622	7,671	7,712	7,726
New Mexico .....	1,309	1,333	1,364	1,394	1,417	1,438	1,463	1,479	1,490	1,504
New York .....	17,567	17,568	17,590	17,687	17,746	17,792	17,833	17,869	17,941	17,983
North Carolina .....	5,899	5,957	6,019	6,077	6,164	6,254	6,322	6,404	6,481	6,565
North Dakota .....	654	660	669	677	680	677	670	661	655	646
Ohio .....	10,801	10,788	10,757	10,738	10,738	10,735	10,730	10,760	10,799	10,829
Oklahoma .....	3,041	3,096	3,206	3,290	3,286	3,271	3,253	3,210	3,167	3,150
Oregon .....	2,641	2,668	2,665	2,653	2,667	2,673	2,684	2,701	2,741	2,791
Pennsylvania .....	11,868	11,859	11,845	11,838	11,815	11,771	11,783	11,811	11,846	11,866
Rhode Island .....	949	953	954	956	962	969	977	990	996	1,001
South Carolina .....	3,135	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 .....	4,600	4,628	4,646	4,660	4,687	4,715	4,739	4,783	4,822	4,854
Texas .....	14,338	14,746	15,331	15,752	16,007	16,273	16,561	16,622	16,667	16,807
Utah .....	1,473	1,515	1,558	1,595	1,622	1,643	1,663	1,678	1,689	1,706
Vermont .....	513	516	519	523	527	530	534	540	550	558
Virginia .....	5,368	5,444	5,493	5,565	5,644	5,715	5,812	5,932	6,037	6,120
Washington .....	4,155	4,236	4,277	4,300	4,344	4,400	4,453	4,532	4,640	4,746
West Virginia .....	1,951	1,954	1,950	1,945	1,928	1,907	1,882	1,858	1,830	1,807
Wisconsin .....	4,712	4,726	4,729	4,721	4,736	4,748	4,756	4,778	4,822	4,857
Wyoming .....	474	492	506	510	505	500	496	477	465	458
U.S. Total .....	227,225	229,466	231,664	233,792	235,825	237,924	240,133	242,289	244,499	246,819

Where shown, R = Revised data.  
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 .....	4,050	4,099	4,154	4,214	4,260	4,297	4,331	4,368	4,405	4,430
Alaska .....	553	570	589	599	603	604	609	613	620	625
Arizona .....	3,684	3,789	3,916	4,065	4,245	4,432	4,587	4,737	4,883	5,024
Arkansas .....	2,357	2,383	2,416	2,456	2,494	2,535	2,572	2,601	2,626	2,652
California .....	29,960	30,471	30,975	31,275	31,484	31,697	32,019	32,486	32,988	33,499
Colorado .....	3,308	3,387	3,496	3,614	3,724	3,827	3,920	4,018	4,117	4,226
Connecticut .....	3,292	3,303	3,301	3,309	3,316	3,324	3,337	3,349	3,365	3,386
Delaware .....	670	683	695	706	718	730	741	751	763	775
District of Columbia .....	605	601	598	595	589	581	572	568	565	570
Florida .....	13,033	13,370	13,651	13,927	14,239	14,538	14,853	15,186	15,487	15,759
Georgia .....	6,513	6,653	6,817	6,978	7,157	7,328	7,501	7,685	7,864	8,046
Hawaii .....	1,113	1,137	1,159	1,173	1,188	1,197	1,204	1,212	1,215	1,210
Idaho .....	1,012	1,041	1,072	1,109	1,145	1,177	1,203	1,229	1,252	1,276
Illinois .....	11,453	11,569	11,694	11,810	11,913	12,008	12,102	12,186	12,272	12,359
Indiana .....	5,558	5,616	5,675	5,739	5,794	5,851	5,906	5,955	5,999	6,045
Iowa .....	2,781	2,798	2,818	2,837	2,851	2,867	2,880	2,891	2,903	2,918
Kansas .....	2,481	2,499	2,532	2,557	2,581	2,601	2,615	2,635	2,661	2,678
Kentucky .....	3,694	3,722	3,765	3,812	3,849	3,887	3,920	3,953	3,985	4,018
Louisiana .....	4,222	4,253	4,293	4,316	4,347	4,379	4,399	4,421	4,440	4,461
Maine .....	1,232	1,237	1,239	1,242	1,243	1,243	1,249	1,255	1,259	1,267
Maryland .....	4,800	4,868	4,923	4,972	5,023	5,070	5,112	5,157	5,204	5,255
Massachusetts .....	6,023	6,018	6,029	6,061	6,095	6,141	6,180	6,226	6,272	6,317
Michigan .....	9,311	9,400	9,479	9,540	9,598	9,676	9,759	9,809	9,848	9,897
Minnesota .....	4,390	4,441	4,496	4,556	4,610	4,660	4,713	4,763	4,813	4,873
Mississippi .....	2,579	2,599	2,624	2,655	2,689	2,723	2,748	2,777	2,805	2,828
Missouri .....	5,129	5,171	5,217	5,271	5,324	5,378	5,432	5,481	5,522	5,562
Montana .....	800	810	826	845	861	877	886	890	892	898
Nebraska .....	1,582	1,596	1,612	1,626	1,639	1,657	1,674	1,686	1,696	1,705
Nevada .....	1,221	1,296	1,351	1,411	1,499	1,582	1,666	1,764	1,853	1,935
New Hampshire .....	1,112	1,110	1,118	1,129	1,143	1,158	1,175	1,189	1,206	1,222
New Jersey .....	7,763	7,815	7,881	7,949	8,014	8,083	8,150	8,219	8,287	8,360
New Mexico .....	1,522	1,555	1,595	1,636	1,682	1,720	1,752	1,775	1,793	1,808
New York .....	18,021	18,123	18,247	18,375	18,459	18,524	18,588	18,657	18,756	18,883
North Carolina .....	6,664	6,784	6,897	7,043	7,187	7,345	7,501	7,657	7,809	7,949
North Dakota .....	638	636	638	641	645	648	650	650	648	644
Ohio .....	10,864	10,946	11,029	11,101	11,152	11,203	11,243	11,277	11,312	11,335
Oklahoma .....	3,149	3,175	3,221	3,252	3,281	3,308	3,340	3,373	3,405	3,437
Oregon .....	2,860	2,929	2,992	3,060	3,121	3,184	3,247	3,304	3,352	3,394
Pennsylvania .....	11,903	11,982	12,049	12,120	12,166	12,198	12,220	12,228	12,246	12,264
Rhode Island .....	1,006	1,011	1,013	1,015	1,016	1,017	1,021	1,025	1,031	1,040
South Carolina .....	3,501	3,570	3,620	3,663	3,705	3,749	3,796	3,860	3,919	3,975
South Dakota .....	697	704	713	722	731	738	742	744	746	750
Tennessee .....	4,894	4,967	5,050	5,138	5,231	5,327	5,417	5,499	5,570	5,639
Texas .....	17,057	17,398	17,760	18,162	18,564	18,959	19,340	19,740	20,158	20,558
Utah .....	1,731	1,780	1,837	1,898	1,960	2,014	2,068	2,120	2,166	2,203
Vermont .....	565	569	573	578	584	589	594	597	600	605
Virginia .....	6,217	6,301	6,414	6,510	6,593	6,671	6,751	6,829	6,901	7,000
Washington .....	4,903	5,026	5,161	5,279	5,375	5,481	5,570	5,675	5,770	5,843
West Virginia .....	1,793	1,799	1,806	1,818	1,820	1,824	1,823	1,819	1,816	1,812
Wisconsin .....	4,905	4,964	5,025	5,085	5,134	5,185	5,230	5,266	5,298	5,333
Wyoming .....	454	459	466	473	480	485	488	489	491	492
U.S. Total .....	249,623	252,981	256,514	259,919	263,126	266,278	269,394	272,647	275,854	279,040

Where shown, R = Revised data.  
Source: See first page of this appendix.



**Table C5. Resident Population by State, 2000-2007**  
(Thousand People)

State	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	R 4,452	R 4,463	R 4,470	R 4,487	R 4,507	R 4,537	R 4,588	4,627
Alaska	R 627	R 633	R 642	R 650	R 661	R 669	R 676	681
Arizona	R 5,167	R 5,304	R 5,449	R 5,586	R 5,750	R 5,961	R 6,178	6,353
Arkansas	R 2,678	R 2,690	R 2,702	R 2,718	R 2,740	R 2,769	R 2,804	2,831
California	R 33,999	R 34,507	R 34,916	R 35,307	R 35,630	R 35,885	R 36,121	36,378
Colorado	R 4,328	R 4,432	R 4,503	R 4,548	R 4,600	R 4,663	R 4,751	4,843
Connecticut	R 3,412	R 3,428	R 3,448	R 3,468	R 3,475	R 3,479	R 3,488	3,490
Delaware	R 786	R 794	R 804	R 814	R 826	R 839	R 850	862
District of Columbia	R 572	R 578	R 579	R 577	R 580	582	R 585	588
Florida	R 16,047	R 16,341	R 16,653	R 16,937	R 17,314	R 17,702	R 18,019	18,200
Georgia	R 8,230	R 8,419	R 8,584	R 8,733	R 8,911	R 9,094	R 9,319	9,523
Hawaii	R 1,211	R 1,218	R 1,227	R 1,238	R 1,252	R 1,264	R 1,275	1,277
Idaho	R 1,299	R 1,321	R 1,341	R 1,363	R 1,390	R 1,424	R 1,461	1,496
Illinois	R 12,438	R 12,511	R 12,565	R 12,611	R 12,666	R 12,704	R 12,760	12,826
Indiana	R 6,091	R 6,124	R 6,147	R 6,179	R 6,211	R 6,249	R 6,294	6,336
Iowa	R 2,928	R 2,929	R 2,929	R 2,933	R 2,943	R 2,952	R 2,967	2,983
Kansas	R 2,693	R 2,701	R 2,713	R 2,722	R 2,731	R 2,742	R 2,756	2,777
Kentucky	R 4,049	R 4,066	R 4,087	R 4,111	R 4,136	R 4,166	R 4,199	4,236
Louisiana	R 4,469	R 4,460	R 4,465	R 4,474	R 4,488	R 4,488	R 4,244	4,373
Maine	R 1,277	R 1,285	R 1,294	R 1,303	R 1,308	R 1,311	R 1,313	1,315
Maryland	R 5,310	R 5,376	R 5,439	R 5,495	R 5,539	R 5,576	R 5,602	5,619
Massachusetts	R 6,363	R 6,407	R 6,433	R 6,441	R 6,437	R 6,434	R 6,443	6,468
Michigan	R 9,955	R 10,004	R 10,037	R 10,066	R 10,090	R 10,093	R 10,084	10,050
Minnesota	R 4,934	R 4,982	R 5,017	R 5,047	R 5,078	R 5,105	R 5,143	5,182
Mississippi	R 2,848	R 2,853	R 2,858	R 2,867	R 2,885	R 2,898	R 2,897	2,921
Missouri	R 5,606	R 5,642	R 5,676	R 5,705	R 5,743	R 5,785	R 5,833	5,878
Montana	R 903	R 906	R 910	R 917	R 926	R 935	R 945	957
Nebraska	R 1,713	R 1,718	R 1,724	R 1,733	R 1,741	R 1,751	R 1,760	1,769
Nevada	R 2,018	R 2,094	R 2,165	R 2,234	R 2,324	R 2,402	R 2,484	2,554
New Hampshire	R 1,240	R 1,257	R 1,271	R 1,281	R 1,292	R 1,301	R 1,309	1,312
New Jersey	R 8,431	R 8,491	R 8,547	R 8,590	R 8,621	R 8,635	R 8,640	8,653
New Mexico	R 1,821	R 1,828	R 1,849	R 1,868	R 1,889	R 1,913	R 1,938	1,964
New York	R 18,998	R 19,088	R 19,162	R 19,231	R 19,301	R 19,336	R 19,367	19,429
North Carolina	R 8,079	R 8,200	R 8,311	R 8,410	R 8,523	R 8,661	R 8,845	9,042
North Dakota	R 641	R 636	R 634	R 633	R 636	R 635	R 636	638
Ohio	R 11,364	R 11,391	R 11,411	R 11,430	R 11,445	R 11,451	R 11,458	11,478
Oklahoma	R 3,454	R 3,463	R 3,483	R 3,496	R 3,512	R 3,530	R 3,568	3,608
Oregon	R 3,431	R 3,471	R 3,518	R 3,552	R 3,576	R 3,622	R 3,681	3,736
Pennsylvania	R 12,285	R 12,285	R 12,299	R 12,318	R 12,336	R 12,352	R 12,388	12,420
Rhode Island	R 1,051	R 1,058	R 1,066	R 1,071	R 1,071	R 1,064	R 1,059	1,053
South Carolina	R 4,023	R 4,062	R 4,102	R 4,143	R 4,197	R 4,249	R 4,325	4,405
South Dakota	R 756	R 759	R 762	R 766	R 774	R 779	R 787	796
Tennessee	R 5,703	R 5,753	R 5,799	R 5,850	R 5,907	R 5,983	R 6,068	6,149
Texas	R 20,946	R 21,334	R 21,713	R 22,062	R 22,425	R 22,811	R 23,368	23,843
Utah	R 2,244	R 2,291	R 2,334	R 2,380	R 2,440	R 2,501	R 2,585	2,669
Vermont	R 610	R 612	R 615	R 617	R 618	R 619	R 620	621
Virginia	R 7,104	R 7,188	R 7,277	R 7,363	R 7,455	R 7,547	R 7,628	7,699
Washington	R 5,911	R 5,987	R 6,056	R 6,110	R 6,180	R 6,255	R 6,361	6,450
West Virginia	R 1,807	R 1,799	R 1,799	R 1,802	R 1,803	R 1,804	R 1,807	1,810
Wisconsin	R 5,374	R 5,408	R 5,445	R 5,474	R 5,509	R 5,539	R 5,569	5,599
Wyoming	R 494	R 493	R 497	R 499	R 503	R 506	R 513	523
U.S. Total	R 282,172	R 285,040	R 287,727	R 290,211	R 292,892	R 295,561	R 298,363	301,290

Where shown, R = Revised data.  
Source: See first page of this appendix.

## Appendix D

## Real Gross Domestic Product by State

The real gross domestic product (GDP) data used in the Energy Information Administration State Energy Data System to calculate total energy consumed per chained (2000) dollar of output are shown in Tables F1 through F4. The data are the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), real GDP estimates by State, beginning in 1977. The estimates are released June of each year.

For 1977 through 1989, BEA does not provide the real GDP by State estimates. However, BEA's quantity indexes for real GDP by State (2000=100.000) are used to calculate real GDP from 1977 to 1989. For 1990 through 1996, BEA reports real GDP by State based on the Standard Industrial Classification (SIC). For 1997 forward, BEA reports real GDP by State based on the North American Industry Classification System (NAICS). Given this discontinuity in the GDP by States series at 1997, users of these data are strongly cautioned against appending the two data series in an attempt to construct a single time series of GDP by State estimates.

The U.S real GDP is extracted from the same data source as the State data. This series does not match the national account GDP series. For details, see BEA Regional Economic Accounts: Methodologies, <http://www.bea.gov/regional/methods.cfm>.

### Data Sources

GDPRXUS — Real gross domestic product of the United States in million chained (2000) dollars.

- 1977 through 1996: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=SIC>.
- 1997 forward: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=NAICS>.

GDPRXZZ — Real gross domestic product by State in million chained (2000) dollars.

- 1977 through 1996: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=SIC>.
- 1997 forward: U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/regional/gsp/default.cfm?series=NAICS>.

**Table D1. Gross Domestic Product by State, 1977-1979**  
(Billion Chained (2000) Dollars)

State	1977	1978	1979
Alabama .....	61.4	65.4	67.1
Alaska .....	18.9	20.6	21.7
Arizona .....	44.6	49.3	54.1
Arkansas .....	32.9	35.3	35.8
California .....	539.8	576.8	598.7
Colorado .....	61.2	66.2	70.7
Connecticut .....	72.3	76.1	79.0
Delaware .....	16.8	17.6	17.7
District of Columbia .....	46.2	47.5	48.1
Florida .....	165.1	179.4	191.6
Georgia .....	96.5	102.4	107.2
Hawaii .....	25.5	26.5	28.0
Idaho .....	14.3	15.5	15.8
Illinois .....	264.8	276.1	280.1
Indiana .....	105.1	110.2	110.6
Iowa .....	53.4	56.5	57.6
Kansas .....	47.9	49.2	52.2
Kentucky .....	62.6	65.4	67.0
Louisiana .....	104.3	109.4	108.1
Maine .....	18.6	19.1	19.6
Maryland .....	91.0	94.7	97.1
Massachusetts .....	117.8	124.1	128.6
Michigan .....	207.6	215.5	213.1
Minnesota .....	81.3	85.5	89.5
Mississippi .....	35.9	37.1	38.5
Missouri .....	98.0	102.8	105.4
Montana .....	14.6	15.7	15.7
Nebraska .....	29.5	31.3	32.2
Nevada .....	19.9	22.3	24.0
New Hampshire .....	13.9	15.3	16.2
New Jersey .....	161.8	168.6	175.2
New Mexico .....	22.6	23.9	24.1
New York .....	441.4	459.2	467.9
North Carolina .....	107.7	114.6	118.0
North Dakota .....	11.5	12.8	13.2
Ohio .....	219.2	227.3	230.8
Oklahoma .....	56.8	59.3	62.2
Oregon .....	47.6	50.7	52.8
Pennsylvania .....	237.2	246.2	250.9
Rhode Island .....	18.2	18.7	19.3
South Carolina .....	45.5	48.8	51.0
South Dakota .....	11.0	11.7	12.3
Tennessee .....	77.6	82.9	85.6
Texas .....	317.2	335.2	346.8
Utah .....	24.8	26.7	28.1
Vermont .....	7.5	8.3	8.6
Virginia .....	115.1	120.6	124.6
Washington .....	90.4	97.7	104.0
West Virginia .....	30.4	31.0	31.3
Wisconsin .....	88.9	93.1	96.2
Wyoming .....	12.0	13.1	13.7
U.S. Total .....	4,711.5	4,965.4	5,113.0

Where shown, R = Revised data.

Source: See first page of this appendix.

**Table D2. Gross Domestic Product by State, 1980-1989**  
(Billion Chained (2000) Dollars)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Alabama .....	66.8	68.0	66.2	69.3	73.0	76.6	77.5	81.8	85.2	85.2
Alaska .....	24.9	28.6	29.5	28.8	30.1	33.4	27.4	32.0	31.0	32.1
Arizona .....	55.6	56.8	55.3	58.4	65.0	69.7	73.9	76.7	79.8	80.3
Arkansas .....	35.3	36.5	35.5	36.6	39.6	40.1	40.8	42.1	43.7	44.7
California .....	613.5	633.6	634.0	659.2	719.0	760.3	790.7	838.6	887.9	925.9
Colorado .....	73.1	76.3	77.9	78.9	83.6	85.7	84.5	86.0	87.9	89.0
Connecticut .....	80.6	82.4	84.2	88.2	96.0	101.0	106.0	114.6	122.1	123.9
Delaware .....	17.4	17.7	18.0	19.4	20.9	22.3	22.9	24.5	25.6	27.4
District of Columbia .....	47.9	47.2	46.1	46.5	47.7	48.6	49.0	50.6	52.7	53.9
Florida .....	201.8	211.3	214.7	227.4	246.6	259.6	270.0	287.2	303.7	314.5
Georgia .....	108.4	112.6	114.1	121.5	134.1	144.6	152.8	159.9	166.5	169.6
Hawaii .....	28.8	28.2	28.2	29.2	30.2	31.0	32.0	33.5	35.5	37.9
Idaho .....	15.9	16.0	15.4	16.0	16.4	16.9	16.5	16.9	17.8	18.9
Illinois .....	271.0	274.2	264.8	266.8	286.8	294.8	300.8	310.7	327.1	333.0
Indiana .....	104.6	105.9	99.9	102.1	111.7	114.1	115.9	120.2	125.9	130.6
Iowa .....	56.5	58.5	54.7	52.1	55.6	57.1	56.3	57.5	60.5	62.8
Kansas .....	51.5	53.1	52.7	52.8	55.3	57.6	57.6	59.4	60.7	61.1
Kentucky .....	65.2	67.1	64.8	64.5	69.9	72.4	72.2	75.1	78.2	80.4
Louisiana .....	111.4	114.9	110.6	109.3	115.8	117.8	115.0	114.5	120.3	119.6
Maine .....	20.0	20.2	20.5	21.4	23.0	24.2	25.3	27.0	29.1	29.6
Maryland .....	97.5	99.7	98.9	103.7	111.7	118.8	124.8	131.5	140.4	143.8
Massachusetts .....	131.2	134.9	136.0	144.1	158.4	168.7	177.7	190.0	201.0	201.9
Michigan .....	193.8	194.3	182.0	194.0	210.7	220.5	224.5	226.7	235.0	238.2
Minnesota .....	89.2	91.9	90.5	92.9	102.8	107.2	108.0	113.2	117.1	120.6
Mississippi .....	37.8	39.2	37.9	38.7	41.4	42.7	42.6	45.1	46.3	46.6
Missouri .....	101.4	102.4	101.1	104.2	113.6	115.4	118.5	122.4	127.3	129.7
Montana .....	15.8	16.4	15.8	15.7	15.9	15.6	15.4	15.5	15.3	15.9
Nebraska .....	31.8	33.7	33.0	32.1	34.7	36.2	35.5	35.5	37.5	38.7
Nevada .....	24.7	25.6	25.3	26.0	27.4	28.6	30.0	31.8	34.6	37.5
New Hampshire .....	16.7	17.3	17.6	18.7	21.1	23.2	24.8	27.7	29.1	28.9
New Jersey .....	175.7	179.7	179.8	192.0	207.9	219.1	229.4	244.2	262.6	265.8
New Mexico .....	25.0	25.4	25.0	25.4	26.8	27.9	27.4	27.3	27.6	28.2
New York .....	468.5	477.0	482.5	493.6	528.0	542.4	558.5	585.8	619.2	620.4
North Carolina .....	118.6	122.5	119.8	126.1	137.6	146.6	152.2	158.5	167.5	172.8
North Dakota .....	12.7	14.6	14.1	13.7	14.1	14.2	13.2	13.5	12.4	13.1
Ohio .....	221.5	223.4	212.0	220.2	240.0	249.0	251.2	257.6	266.7	271.9
Oklahoma .....	65.2	69.1	71.2	67.8	71.2	72.4	67.8	66.2	69.6	69.5
Oregon .....	52.3	50.6	47.8	48.2	51.4	52.8	53.8	55.3	58.9	60.7
Pennsylvania .....	246.0	247.0	237.9	243.9	258.1	264.7	269.6	283.6	296.1	301.3
Rhode Island .....	19.4	19.8	19.7	20.2	21.8	23.1	24.2	25.2	26.9	27.5
South Carolina .....	51.3	53.1	52.1	55.4	61.0	63.3	66.2	70.6	74.3	76.7
South Dakota .....	11.8	12.4	12.1	11.9	12.9	13.4	13.6	13.9	14.0	14.2
Tennessee .....	84.7	86.8	84.9	89.4	96.3	100.2	103.4	110.2	114.7	116.0
Texas .....	359.6	381.6	383.5	383.4	407.8	425.8	412.8	409.7	436.6	447.8
Utah .....	28.7	29.8	29.6	30.6	33.1	35.1	34.6	34.7	36.3	36.9
Vermont .....	8.9	9.2	9.1	9.5	10.0	10.6	11.1	12.0	13.1	13.6
Virginia .....	126.6	130.4	130.7	136.6	146.7	154.2	162.1	171.5	179.6	185.8
Washington .....	104.4	107.1	106.9	109.2	113.0	114.2	118.9	123.3	130.5	137.2
West Virginia .....	31.3	30.9	30.1	28.9	30.6	30.9	31.0	31.4	32.4	32.7
Wisconsin .....	94.8	95.0	93.0	94.6	100.6	104.3	105.9	108.4	114.9	117.0
Wyoming .....	15.0	15.6	14.8	13.9	14.7	14.9	14.2	13.9	14.4	14.5
U.S. Total .....	5,116.1	5,252.3	5,185.7	5,331.7	5,739.4	5,981.2	6,104.0	6,357.9	6,684.4	6,837.5

Where shown, R = Revised data.

Source: See first page of this appendix.

**Table D3. Gross Domestic Product by State, 1990-1999**  
(Billion Chained (2000) Dollars)

State	1990	1991	1992	1993	1994	1995	1996 <sup>a</sup>	1997 <sup>a</sup>	1998	1999
Alabama .....	86.6	88.8	92.6	93.7	97.1	100.2	103.2	107.6	110.7	114.4
Alaska .....	31.9	28.6	28.9	28.6	28.5	29.9	29.5	28.1	26.8	27.1
Arizona .....	81.1	81.8	88.1	91.7	100.2	107.5	116.1	127.4	138.7	149.7
Arkansas .....	45.1	47.1	49.8	51.1	53.9	56.1	58.4	62.5	64.3	67.1
California .....	955.9	937.4	936.3	927.1	937.9	971.3	1,007.4	1,043.5	1,108.7	1,196.6
Colorado .....	91.3	93.6	98.9	104.7	111.2	117.2	123.4	137.9	147.9	159.4
Connecticut .....	124.6	121.4	122.7	121.6	124.0	131.3	135.1	144.9	150.8	153.3
Delaware .....	28.1	29.0	29.2	29.1	30.1	31.7	32.3	38.3	38.8	40.8
District of Columbia .....	55.1	54.0	54.6	55.2	54.9	53.2	52.2	54.7	55.1	58.4
Florida .....	320.5	321.6	332.2	343.5	357.4	369.6	387.7	414.7	435.6	453.3
Georgia .....	172.1	174.0	183.6	191.1	204.1	215.5	229.7	250.8	266.0	282.8
Hawaii .....	41.0	41.4	42.3	41.9	41.3	40.8	40.4	40.4	39.6	39.7
Idaho .....	19.6	20.0	21.3	23.1	24.8	26.9	27.7	28.8	30.0	32.8
Illinois .....	336.3	335.6	347.5	353.3	373.6	384.2	397.3	425.0	440.0	452.9
Indiana .....	131.0	131.0	139.1	143.3	151.2	155.8	161.9	176.9	185.2	189.3
Iowa .....	64.5	64.8	67.6	67.6	73.0	74.8	78.8	85.7	86.4	87.6
Kansas .....	62.4	63.0	64.6	64.9	67.8	68.5	71.4	76.1	79.4	80.8
Kentucky .....	81.3	81.8	86.6	88.9	94.3	97.6	101.1	111.6	113.2	115.7
Louisiana .....	121.7	121.4	113.1	115.0	124.4	130.7	131.8	128.9	134.7	137.0
Maine .....	29.3	28.3	28.6	28.6	29.2	29.8	30.6	33.4	33.4	34.3
Maryland .....	145.2	142.4	142.4	144.4	148.8	150.8	154.0	162.7	168.9	175.4
Massachusetts .....	195.7	189.9	192.1	194.5	203.3	209.8	220.4	227.1	240.6	255.2
Michigan .....	234.2	230.1	238.8	247.5	267.9	268.3	277.6	317.3	323.1	333.0
Minnesota .....	121.5	121.7	128.3	128.3	135.8	139.6	148.4	163.1	170.6	176.3
Mississippi .....	46.7	47.7	49.9	51.8	54.9	57.5	59.0	61.6	63.3	64.7
Missouri .....	128.0	129.7	133.0	132.9	140.7	147.7	153.2	168.2	171.7	172.9
Montana .....	16.2	16.6	17.3	18.0	18.6	18.6	18.9	20.1	20.6	20.9
Nebraska .....	40.3	41.5	43.2	43.4	46.5	47.3	50.0	52.8	53.7	54.4
Nevada .....	40.5	41.3	43.9	47.1	51.3	54.5	59.4	64.5	66.9	70.7
New Hampshire .....	27.7	27.9	29.2	29.6	30.9	33.2	35.7	36.6	39.6	40.6
New Jersey .....	266.6	265.0	272.3	276.2	281.7	288.4	300.9	316.1	325.8	334.1
New Mexico .....	28.7	31.8	33.5	36.8	41.1	41.7	43.4	45.8	46.3	50.1
New York .....	624.3	606.0	614.3	616.9	627.1	640.1	665.7	671.0	698.9	736.5
North Carolina .....	173.6	173.3	182.6	187.7	200.8	210.7	218.4	239.7	251.0	267.0
North Dakota .....	13.5	13.5	14.5	14.3	15.2	15.5	16.6	17.0	17.5	17.2
Ohio .....	274.9	272.7	283.8	285.6	300.5	310.4	319.4	350.6	362.7	368.5
Oklahoma .....	70.0	70.2	71.8	73.3	74.5	75.9	79.6	82.9	84.5	86.9
Oregon .....	63.2	64.2	66.3	69.6	73.1	77.5	88.1	95.6	100.9	104.3
Pennsylvania .....	305.2	305.7	316.0	320.4	327.1	337.5	345.2	362.9	376.2	384.4
Rhode Island .....	27.2	26.3	26.7	27.1	27.3	28.1	28.7	30.4	30.9	31.6
South Carolina .....	79.0	79.4	81.3	83.9	88.2	91.3	93.8	103.3	107.1	110.9
South Dakota .....	14.9	15.7	16.4	17.3	18.0	18.4	19.3	20.2	21.1	21.8
Tennessee .....	115.5	119.2	127.9	133.1	140.9	145.2	149.4	163.0	168.2	173.6
Texas .....	462.0	469.4	488.3	505.8	530.4	554.8	585.8	627.5	666.6	699.1
Utah .....	38.8	40.3	41.7	43.7	46.9	50.2	55.0	60.1	63.0	65.6
Vermont .....	13.8	13.3	14.0	14.2	14.6	14.6	15.2	15.5	16.2	17.0
Virginia .....	187.9	186.5	190.1	194.8	201.6	206.6	215.1	226.0	237.6	248.6
Washington .....	145.6	148.9	154.8	159.0	163.8	164.8	173.1	188.5	204.3	219.6
West Virginia .....	33.2	33.5	34.7	35.6	37.6	38.5	39.3	40.6	40.8	42.0
Wisconsin .....	119.1	120.7	127.0	131.7	138.1	140.8	147.2	160.2	166.9	172.4
Wyoming .....	15.2	15.5	15.5	15.9	16.2	16.6	17.1	16.0	16.1	17.0
U.S. Total .....	6,939.7	6,917.7	7,114.7	7,240.8	7,538.5	7,784.2	8,106.7	8,621.0	9,004.7	9,404.3

<sup>a</sup> There is a discontinuity in the gross domestic product (GDP) by State time series at 1997, where the data changes from Standard Industrial Classification (SIC) industry definitions to North American Industry Classification System (NAICS) industry definitions. Users of the GDP by State estimates are strongly cautioned against appending the two data series in an attempt to construct a single time series of GDP by State estimates.

Where shown, R = Revised data.

Source: See first page of this appendix.

**Table D4. Gross Domestic Product by State, 2000-2007**  
(Billion Chained (2000) Dollars)

State	2000	2001	2002	2003	2004	2005	2006	2007
Alabama .....	114.6	115.6	118.2	121.6	127.8	R 132.3	R 134.9	136.1
Alaska .....	27.0	25.8	28.0	27.4	28.9	29.3	R 30.6	30.6
Arizona .....	158.5	163.4	166.9	174.2	180.5	R 196.2	R 208.6	211.6
Arkansas .....	66.8	67.0	68.9	70.8	74.2	R 76.5	R 77.5	78.7
California .....	1,287.1	1,281.7	1,298.8	1,337.8	1,406.8	R 1,467.9	R 1,512.9	1,539.4
Colorado .....	171.9	174.8	175.5	176.5	180.6	R 188.4	R 193.4	197.3
Connecticut .....	160.4	161.2	158.6	159.5	165.8	R 169.1	R 174.3	178.5
Delaware .....	41.5	43.0	42.9	44.9	46.7	R 49.9	R 49.6	50.1
District of Columbia .....	58.7	61.6	62.8	64.7	67.5	R 70.0	R 71.4	72.6
Florida .....	471.3	484.9	497.3	520.4	548.6	R 589.3	R 613.6	613.4
Georgia .....	290.9	292.8	294.1	299.7	310.7	R 322.6	R 326.5	331.3
Hawaii .....	40.2	40.6	41.1	42.6	44.6	46.9	R 48.7	49.4
Idaho .....	35.0	35.2	35.7	36.5	39.6	R 42.9	R 43.8	45.5
Illinois .....	464.2	464.9	466.2	479.3	487.6	R 490.3	R 505.3	514.8
Indiana .....	194.4	190.3	196.8	203.5	209.5	R 208.1	R 208.3	211.1
Iowa .....	90.2	89.4	92.8	95.3	100.9	R 102.6	R 104.5	108.1
Kansas .....	82.8	83.9	85.3	86.7	88.3	R 90.0	R 93.1	96.0
Kentucky .....	111.9	112.2	115.5	117.2	119.9	R 122.9	R 125.8	127.0
Louisiana .....	131.5	129.2	129.7	131.9	139.3	R 140.3	R 143.1	144.4
Maine .....	35.5	36.2	36.7	37.3	38.9	R 39.0	39.4	39.8
Maryland .....	180.4	187.5	193.5	198.0	205.5	R 211.4	R 214.2	217.9
Massachusetts .....	274.9	276.6	275.0	280.9	286.5	R 289.9	R 297.6	306.5
Michigan .....	337.2	326.9	336.9	341.1	337.9	R 339.9	R 334.8	331.0
Minnesota .....	185.1	186.3	191.1	196.7	205.1	R 208.4	R 209.4	212.8
Mississippi .....	64.3	64.0	64.6	66.6	67.9	R 68.4	R 69.6	70.5
Missouri .....	176.7	177.8	179.9	183.2	186.4	R 189.1	R 188.8	191.2
Montana .....	21.4	21.7	22.2	23.3	24.0	R 25.2	R 25.8	26.8
Nebraska .....	55.5	55.8	56.9	59.9	60.9	R 62.2	R 63.8	65.7
Nevada .....	73.7	75.1	77.1	81.6	89.9	R 97.2	R 101.1	103.9
New Hampshire .....	43.5	43.6	44.6	45.9	47.7	R 48.5	R 49.3	49.6
New Jersey .....	344.8	355.1	357.9	366.6	375.8	R 379.1	R 384.6	388.0
New Mexico .....	50.7	50.9	51.6	53.7	56.9	R 57.6	R 59.0	60.2
New York .....	777.2	794.4	791.7	808.4	829.9	R 865.7	R 912.9	949.5
North Carolina .....	273.7	278.3	282.4	286.4	295.6	309.7	R 326.9	329.1
North Dakota .....	17.8	17.9	18.8	19.9	20.0	R 20.9	R 21.1	22.6
Ohio .....	372.0	365.7	373.5	378.7	387.4	R 390.6	R 387.3	388.3
Oklahoma .....	89.8	91.8	92.9	94.3	97.3	99.2	R 102.2	104.1
Oregon .....	112.4	110.5	115.0	117.9	125.9	R 129.4	R 139.6	144.8
Pennsylvania .....	389.6	395.6	403.0	411.6	416.2	R 422.5	R 431.0	438.9
Rhode Island .....	33.6	34.2	34.9	36.5	37.8	R 37.8	R 38.5	38.5
South Carolina .....	112.5	114.1	115.7	119.6	119.9	R 122.8	R 125.2	126.3
South Dakota .....	23.1	23.4	25.3	25.7	26.6	R 27.4	R 27.1	29.3
Tennessee .....	174.9	176.3	183.2	188.5	197.2	200.9	R 206.4	209.1
Texas .....	727.2	745.3	760.6	771.0	806.0	R 828.4	R 869.4	907.4
Utah .....	67.6	68.3	69.1	70.2	73.0	R 77.8	R 82.7	86.5
Vermont .....	17.8	18.5	18.9	19.6	20.3	20.7	R 21.0	21.3
Virginia .....	260.7	269.6	271.2	281.5	294.2	R 309.3	R 314.5	320.3
Washington .....	222.0	220.2	221.1	225.0	230.0	241.8	R 248.5	259.4
West Virginia .....	41.5	41.9	42.5	42.6	43.8	44.7	R 44.9	45.2
Wisconsin .....	175.7	177.4	180.3	184.1	188.0	R 191.7	R 195.0	197.0
Wyoming .....	17.3	18.1	18.4	18.8	19.0	R 19.3	20.7	20.8
U.S. Total .....	9,749.1	9,836.6	9,981.8	10,225.7	10,580.2	R 10,912.2	R 11,218.8	11,439.2

Where shown, R = Revised data.  
Source: See first page of this appendix.





## Appendix E

**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 E1. 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
<b>Mass</b>					<b>Volume</b>				
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 <sup>3</sup> )
long tons	x	1.016 047	=	metric tons (t)	cubic yards (yd <sup>3</sup> )	x	0.764 555	=	cubic meters (cm <sup>3</sup> )
pounds (lb)	x	0.453 592 37 <sup>a</sup>	=	kilograms (kg)	cubic feet (ft <sup>3</sup> )	x	0.028 316 85	=	cubic meters (cm <sup>3</sup> )
pounds uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	x	0.384 647 <sup>b</sup>	=	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 <sup>3</sup> )	x	16.387 06	=	milliliters (mL)
<b>Length</b>					<b>Area</b>				
miles (mi)	x	1.609 344 <sup>a</sup>	=	kilometers (km)	acres	x	0.404 69	=	hectares (ha)
yard (yd)	x	0.914 4 <sup>a</sup>	=	meters (m)	square miles (mi <sup>2</sup> )	x	2.589 988	=	square kilometers (km <sup>2</sup> )
feet (ft)	x	0.304 8 <sup>a</sup>	=	meters (m)	square yards (yd <sup>2</sup> )	x	0.836 127 4	=	square meters (m <sup>2</sup> )
inches (in)	x	2.54 <sup>a</sup>	=	centimeters (cm)	square feet (ft <sup>2</sup> )	x	0.092 903 04 <sup>a</sup>	=	square meters (m <sup>2</sup> )
					square inches (in <sup>2</sup> )	x	6.451 6 <sup>a</sup>	=	square centimeters (cm <sup>2</sup> )
<b>Energy</b>					<b>Temperature</b>				
British Thermal Units (Btu)	x	1,055.055 852 62 <sup>a,c</sup>	=	joules (J)	degrees Fahrenheit (°F)	x	5/9 (after subtracting 32) <sup>a,d</sup>	=	degrees Celsius (°C)
calories (cal)	x	4.186 8 <sup>a</sup>	=	joules (J)					
kilowatthours (kWh)	x	3.6 <sup>a</sup>	=	megajoules (MJ)					

<sup>a</sup>Exact conversion.

<sup>b</sup>Calculated by the Energy Information Administration.

<sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.

<sup>d</sup>To 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 E2. Metric Prefixes**

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 <sup>1</sup>	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	c
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	T	10 <sup>-12</sup>	pico	p
10 <sup>15</sup>	peta	P	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	10 <sup>-18</sup>	atto	a
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	z
10 <sup>24</sup>	yotta	Y	10 <sup>-24</sup>	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 E3. Other Physical Conversion Factors**

Energy Source	Original Unit		Conversion Factor		Final Unit
<b>Petroleum</b>	barrels (bbl)	x	42 <sup>a</sup>	=	U.S. gallons (gal)
<b>Coal</b>	short tons	x	2,000 <sup>a</sup>	=	pounds (lb)
	long tons	x	2,240 <sup>a</sup>	=	pounds (lb)
	metric tons (t)	x	1,000 <sup>a</sup>	=	kilograms (kg)
<b>Wood</b>	cords (cd)	x	1.25 <sup>b</sup>	=	short tons
	cords (cd)	x	128 <sup>a</sup>	=	cubic feet (ft <sup>3</sup> )

<sup>a</sup>Exact conversion.

<sup>b</sup>Calculated 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 F

## What's New in the State Energy Data System

Tables and data files in the State Energy Data System (SEDS) supply a new year of data each production cycle. The latest data may be preliminary and, therefore, revised the following cycle. Changes made to consumption and price source data for historical years are also regularly incorporated into SEDS.

Listed below are changes in SEDS contents beyond the standard updates.

### Total Energy

Beginning in 1980, supplemental gaseous fuels, which are accounted for both in the fossil fuels from which they are derived and in natural gas, are removed once from total energy consumption for the residential, commercial, industrial, and electric power sectors to prevent double-counting. In addition, beginning in 1981, the industrial sector consumption includes energy losses and co-products from the production of fuel ethanol in the U.S. total. Individual State estimates are not available because reliable State allocators have not been identified.

### Natural Gas

Natural gas consumption estimates in Btu are revised to include the small amount of supplemental gaseous fuels that are commingled with natural gas.

### Petroleum and Ethanol

#### *Fuel Ethanol*

The method for estimating fuel ethanol not blended into motor gasoline by State is revised beginning in 2005. The State estimates are now based on several data series: (1) prime supplier sales of conventional and reformulated gasoline; (2) production of conventional and reformulated gasoline with and without alcohol; (3) a standard ethanol-to-motor-gasoline "blend ration" of 10 percent for all States except California and Minnesota; and (4) estimated fuel ethanol "product supplied." See page 79 for detailed information.





## 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 reformate). 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.

**Biomass Waste:** Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other biomass solids, liquids, and gases; but excludes wood and wood-derived fuels (including black liquor), biofuels feedstock, biodiesel, and fuel ethanol. *Note:* EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste.

**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:** See **Fuel Ethanol**.

**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.

**Fuel Ethanol:** An anhydrous, denatured aliphatic alcohol ( $C_2H_5OH$ ) intended for motor gasoline blending.

**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.

**Gross Domestic Product (GDP):** The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

**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.

**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.

**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<sub>3</sub>OH) 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.

**Non-Biomass Waste:** Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources, such as plastics, and tire-derived fuels.

**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:** See **Biomass Waste** and **Non-Biomass Waste**.

**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.