

CALIFORNIA
Table CT2. Primary energy consumption estimates, selected years, 1960-2022, California
(trillion Btu)

Year	Fossil fuels										Fossil fuels (as commingled)			
	Coal	Natural gas excluding supplemental gaseous fuels ^a	Petroleum							Total	Total	Natural gas including supplemental gaseous fuels ^a	Distillate fuel oil including biofuels ^a	Motor gasoline including fuel ethanol ^a
			Distillate fuel oil excluding biofuels ^a	HGL ^b	Jet fuel ^c	Motor gasoline excluding fuel ethanol ^a	Residual fuel oil	Other ^d						
1960	35.9	1,301.8	155.4	33.9	140.7	719.8	506.6	280.6	1,836.9	3,174.6	1,301.8	155.4	719.8	
1965	63.7	1,813.2	204.5	42.1	222.2	892.5	438.5	290.1	2,089.8	3,966.7	1,813.2	204.5	892.5	
1970	61.8	2,241.3	228.5	57.9	332.9	1,124.5	442.1	316.6	2,502.5	4,805.6	2,241.3	228.5	1,124.5	
1971	51.0	2,265.3	276.0	60.1	350.3	1,151.6	503.4	314.0	2,655.4	4,971.7	2,265.3	276.0	1,151.6	
1972	47.5	2,303.6	268.5	64.6	355.9	1,222.7	490.9	331.9	2,734.5	5,085.5	2,303.6	268.5	1,222.7	
1973	67.0	2,154.0	302.1	69.3	352.5	1,264.9	708.6	351.0	3,048.4	5,269.4	2,154.0	302.1	1,264.9	
1974	60.7	1,937.1	255.0	73.9	337.6	1,236.9	622.4	346.6	2,872.4	4,870.3	1,937.1	255.0	1,236.9	
1975	56.4	1,937.3	246.6	69.2	350.7	1,268.6	698.4	343.0	2,976.5	4,970.2	1,937.3	246.6	1,268.6	
1976	66.6	1,849.7	266.8	68.4	342.1	1,327.1	868.3	371.8	3,244.8	5,161.1	1,849.7	266.8	1,327.1	
1977	75.1	1,864.2	301.5	61.1	354.3	1,398.8	1,083.9	411.7	3,611.3	5,550.6	1,864.2	301.5	1,398.8	
1978	67.9	1,646.3	350.7	69.6	362.6	1,461.3	978.5	431.8	3,654.4	5,368.6	1,646.3	350.7	1,461.3	
1979	68.6	1,900.4	389.5	83.9	369.6	1,415.3	986.9	488.6	3,734.0	5,702.9	1,900.4	389.5	1,415.3	
1980	66.2	1,890.9	362.8	69.7	354.2	1,332.1	934.9	423.6	3,477.3	5,434.3	1,890.9	362.8	1,332.1	
1981	78.4	1,947.4	393.3	61.8	331.3	1,328.6	821.5	274.4	3,210.9	5,236.7	1,947.4	393.3	1,328.6	
1982	69.4	1,765.2	391.8	58.5	316.7	1,312.8	513.4	281.0	2,874.2	4,708.7	1,765.2	391.8	1,312.8	
1983	32.0	1,601.0	396.6	58.7	321.5	1,345.5	430.8	425.9	2,979.0	4,612.1	1,601.0	396.6	1,345.5	
1984	37.2	1,739.8	439.3	73.5	373.5	1,393.0	481.2	452.4	3,213.0	4,990.1	1,739.8	439.3	1,393.0	
1985	45.3	1,925.5	416.7	73.3	375.8	1,404.5	419.5	435.6	3,125.4	5,096.1	1,925.5	416.7	1,404.5	
1986	42.5	1,591.0	434.9	72.1	422.1	1,468.6	364.9	423.9	3,186.6	4,820.1	1,591.0	434.9	1,468.6	
1987	45.0	1,993.0	398.4	80.7	448.8	1,538.6	419.0	434.3	3,319.8	5,357.7	1,993.0	398.4	1,538.6	
1988	50.8	1,860.4	477.4	82.4	464.2	1,594.9	433.3	463.3	3,515.5	5,426.7	1,860.4	477.4	1,594.9	
1989	66.4	2,047.8	469.0	90.0	507.8	1,633.3	422.6	445.2	3,567.7	5,682.0	2,047.8	469.0	1,633.3	
1990	84.2	2,101.6	449.9	72.0	534.7	1,607.3	403.0	438.8	3,505.6	5,691.3	2,101.6	449.9	1,607.3	
1991	89.5	2,208.3	436.0	67.5	508.1	1,569.1	284.9	389.2	3,254.8	5,552.6	2,208.3	436.0	1,569.1	
1992	91.5	2,294.1	403.0	75.3	489.5	1,658.1	215.7	404.1	3,245.8	5,631.5	2,294.1	403.0	1,658.1	
1993	84.7	2,213.1	378.5	59.8	504.7	1,608.6	233.7	370.3	3,155.6	5,453.4	2,213.1	378.5	1,608.6	
1994	84.6	2,334.8	421.3	65.4	560.1	1,601.3	263.6	393.0	3,304.8	5,724.2	2,334.8	421.3	1,601.3	
1995	84.3	2,110.0	425.2	53.6	540.4	1,622.5	290.8	380.7	3,313.1	5,507.4	2,110.0	425.2	1,631.3	
1996	80.3	2,017.7	428.8	39.6	588.4	1,651.1	253.3	419.1	3,380.2	5,478.2	2,017.7	428.8	1,658.4	
1997	82.7	2,185.0	463.4	32.4	585.1	1,673.1	134.7	403.5	3,292.2	5,559.9	2,185.0	463.4	1,680.5	
1998	66.2	2,418.7	456.9	40.8	598.1	1,711.1	108.1	400.3	3,315.4	5,800.2	2,418.7	456.9	1,716.7	
1999	69.5	2,379.6	481.5	44.7	559.5	1,752.3	149.6	436.1	3,423.8	5,872.9	2,379.6	481.5	1,752.2	
2000	70.0	2,456.4	543.8	45.7	584.0	1,777.9	212.1	407.9	3,571.5	6,097.9	2,456.4	543.8	1,783.4	
2001	67.8	2,513.9	566.6	39.8	551.2	1,823.0	160.1	444.9	3,585.7	6,167.4	2,513.9	566.6	1,830.7	
2002	70.0	2,318.7	521.3	52.7	582.6	1,912.4	193.4	442.0	3,704.4	6,093.0	2,318.7	521.3	1,921.4	
2003	69.5	2,317.1	480.3	53.8	565.4	1,860.8	147.2	412.5	3,520.1	5,906.6	2,317.1	480.3	1,910.8	
2004	68.9	2,462.2	547.0	55.0	597.7	1,881.9	174.7	414.5	3,670.8	6,201.9	2,462.2	547.0	1,954.1	
2005	67.4	2,304.5	563.8	46.8	593.1	1,900.2	213.4	423.8	3,741.1	6,113.0	2,304.5	563.8	1,979.7	
2006	67.0	2,375.9	576.3	45.2	603.3	1,908.2	237.2	416.4	3,786.5	6,229.5	2,375.9	576.3	1,986.8	
2007	66.5	2,467.5	572.8	43.3	628.2	1,875.5	249.5	425.9	3,795.1	6,329.1	2,467.5	572.8	1,958.0	
2008	63.1	2,472.6	522.5	60.9	571.7	1,776.9	255.3	366.3	3,553.5	6,089.2	2,472.6	522.5	1,861.0	
2009	52.4	2,391.4	502.0	61.0	555.6	1,732.8	242.3	311.7	3,405.4	5,849.2	2,391.4	506.8	1,815.7	
2010	55.0	2,325.4	525.2	63.4	435.2	1,672.3	251.0	301.1	3,248.2	5,628.6	2,325.4	528.5	1,799.7	
2011	55.3	2,196.3	532.0	63.4	433.2	1,626.3	186.9	332.5	3,174.3	5,425.9	2,196.3	540.2	1,750.2	
2012	43.8	2,456.4	509.5	55.5	435.3	1,611.6	167.1	300.4	3,079.3	5,579.5	2,456.4	518.0	1,731.6	
2013	38.2	2,480.8	516.8	54.9	446.2	1,629.4	124.2	324.7	3,096.2	5,615.2	2,480.8	532.7	1,753.2	
2014	39.5	2,409.6	544.2	53.6	456.0	1,632.7	84.5	312.5	3,083.5	5,532.6	2,409.6	559.9	1,758.0	
2015	31.0	2,384.1	549.4	53.6	491.6	1,681.4	116.7	308.5	3,201.1	5,616.1	2,384.1	566.1	1,811.0	
2016	32.1	2,248.9	537.0	57.8	532.3	1,713.0	145.8	R 329.3	R 3,315.2	R 5,596.3	2,248.9	559.4	1,844.2	
2017	33.7	2,191.0	555.6	55.7	565.7	1,720.8	165.0	R 332.4	R 3,395.3	R 5,619.9	2,191.0	577.3	1,853.5	
2018	33.3	2,209.8	556.2	58.4	576.4	1,716.3	168.9	R 336.5	R 3,412.7	R 5,655.7	2,209.8	575.7	1,847.8	
2019	30.9	2,218.7	548.5	61.5	588.4	1,688.1	184.4	R 327.6	R 3,398.5	R 5,648.1	2,218.7	566.7	1,819.9	
2020	28.0	R 2,153.3	509.3	58.2	337.6	1,357.8	126.1	R 302.0	R 2,691.0	R 4,872.3	R 2,153.3	528.0	1,464.7	
2021	28.2	2,172.8	R 559.3	60.6	400.1	1,494.9	177.7	R 453.5	R 2,989.3	R 5,190.3	2,172.8	R 567.8	1,613.5	
2022	30.0	2,130.9	555.5	60.0	470.0	1,479.7	182.1	511.8	3,044.7	5,205.7	2,130.9	563.8	1,597.6	

^a Supplemental gaseous fuels (SGF) and biofuels are consumed with natural gas and petroleum products. In this table, SGF and biofuels are removed from natural gas and petroleum so that a fossil fuel total can be calculated without double-counting. Biofuels are included in "Renewable energy."

^b Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^c Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other petroleum." There is a discontinuity in this time series between 2009 and 2010 because of data source and methodology changes, see technical notes.

^d Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum

products" category. See Technical Notes, Section 4.

Where shown, R = Revised data and (s) = Value less than +0.05 and greater than -0.05 trillion Btu.

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 are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.

Data Source: U.S. Energy Information Administration, State Energy Data System. See Technical Notes. <http://www.eia.gov/state/seds/>

Table CT2. Primary energy consumption estimates, selected years, 1960-2022, California (continued)
(trillion Btu)

Year	Nuclear electric power	Renewable energy											Net interstate flow of electricity ^k	Electricity net imports ^l	Total ^f
		Hydro-electric power ^{e,f}	Biomass						Geo-thermal ^f	Solar ^{fj}	Wind	Total ^f			
			Wood and waste ^{f,g}	Fuel ethanol ^h	Biodiesel	Renewable diesel	Losses and co-products ⁱ	Total ^f							
1960	(s)	R 59.5	82.1	NA	NA	NA	NA	82.1	R 0.1	NA	NA	R 141.7	R 45.7	-1.4	R 3,360.7
1965	3.2	R 104.1	97.5	NA	NA	NA	NA	97.5	R 0.6	NA	NA	R 202.3	R 94.9	(s)	R 4,267.1
1970	34.4	R 129.9	116.8	NA	NA	NA	NA	116.8	R 1.8	NA	NA	R 248.6	R 260.5	(s)	R 5,349.0
1971	38.1	R 133.1	119.2	NA	NA	NA	NA	119.2	R 1.9	NA	NA	R 254.2	R 321.8	(s)	R 5,585.8
1972	34.3	R 108.3	127.6	NA	NA	NA	NA	127.6	R 5.0	NA	NA	R 241.0	R 349.0	0.0	R 5,709.7
1973	28.7	R 132.2	130.1	NA	NA	NA	NA	130.1	R 6.7	NA	NA	R 269.1	R 323.2	(s)	R 5,890.3
1974	41.3	R 158.4	134.7	NA	NA	NA	NA	134.7	R 8.4	NA	NA	R 301.5	R 438.5	0.0	R 5,651.5
1975	66.9	R 136.8	127.5	NA	NA	NA	NA	127.5	R 11.1	NA	NA	R 275.4	R 539.6	0.0	R 5,852.1
1976	53.1	R 79.1	144.8	NA	NA	NA	NA	144.8	R 12.3	NA	NA	R 236.2	R 567.2	0.0	R 6,017.6
1977	87.4	R 48.6	152.0	NA	NA	NA	NA	152.0	R 12.2	NA	NA	R 212.8	R 382.1	0.0	R 6,233.0
1978	83.8	R 126.9	160.3	NA	NA	NA	NA	160.3	R 10.2	NA	NA	R 297.4	R 563.8	0.0	R 6,313.6
1979	95.3	R 115.7	168.4	NA	NA	NA	NA	168.4	R 13.3	NA	NA	R 297.4	R 470.4	0.0	R 6,566.0
1980	53.7	R 139.1	115.6	NA	NA	NA	NA	115.6	R 17.3	NA	NA	R 272.1	R 622.9	0.3	R 6,383.2
1981	35.4	R 101.6	131.7	1.4	NA	NA	0.0	133.1	R 19.4	NA	NA	R 254.0	R 656.9	(s)	R 6,183.0
1982	41.4	R 171.4	123.3	3.8	NA	NA	0.0	127.1	R 16.5	NA	NA	R 315.0	R 834.6	(s)	R 5,899.8
1983	61.2	R 194.1	144.8	3.9	NA	NA	0.0	148.6	R 20.7	NA	(s)	R 363.5	R 870.3	0.1	R 5,907.2
1984	153.4	R 147.3	162.7	3.1	NA	NA	0.0	165.9	R 26.2	0.1	(s)	R 339.4	R 868.3	0.2	R 6,351.3
1985	209.6	R 108.2	165.3	1.5	NA	NA	0.3	167.1	R 31.4	0.1	(s)	R 306.8	R 812.9	13.8	R 6,439.2
1986	277.3	R 141.5	127.4	1.4	NA	NA	0.3	129.1	R 34.5	0.1	(s)	R 305.3	R 919.5	12.9	R 6,335.1
1987	317.3	R 83.8	155.5	2.1	NA	NA	0.3	157.9	R 36.2	0.1	(s)	R 278.0	R 815.7	26.4	R 6,795.2
1988	327.2	R 80.1	164.6	4.1	NA	NA	0.3	169.0	R 34.5	0.1	(s)	R 283.7	R 955.8	24.9	R 7,018.3
1989	344.1	R 105.1	231.9	3.7	NA	NA	0.3	235.9	R 47.6	R 17.8	R 7.1	R 413.5	R 810.9	14.4	R 7,265.0
1990	346.0	R 81.2	218.4	3.9	NA	NA	0.2	222.6	R 50.6	R 19.3	R 9.4	R 393.5	R 383.1	15.8	R 7,120.8
1991	330.7	R 74.9	214.0	4.9	NA	NA	0.3	219.2	R 51.7	R 20.3	R 9.9	R 376.0	R 741.7	10.2	R 7,011.2
1992	369.0	R 68.8	225.7	0.5	NA	NA	0.3	226.6	R 51.8	R 20.6	R 9.8	R 377.5	R 635.5	7.1	R 7,020.6
1993	331.7	R 138.2	191.7	2.0	NA	NA	0.3	194.0	R 52.5	R 21.2	R 10.2	R 416.0	R 507.8	6.7	R 6,715.7
1994	352.8	R 78.5	192.7	2.8	NA	NA	0.3	195.9	R 48.3	R 21.5	R 11.6	R 355.8	R 535.1	7.0	R 6,974.9
1995	317.8	R 163.9	172.9	8.8	NA	NA	0.3	182.0	R 41.0	R 21.6	R 10.5	R 419.0	R 587.1	5.9	R 6,837.2
1996	358.1	R 152.7	167.6	7.4	NA	NA	0.1	175.1	R 44.2	R 21.6	R 10.5	R 404.1	R 681.7	4.2	R 6,926.3
1997	320.2	R 140.1	151.2	7.4	NA	NA	0.2	158.9	R 45.7	R 21.1	R 10.7	R 376.5	R 802.1	4.5	R 7,063.2
1998	362.9	R 169.1	141.1	5.6	NA	NA	0.3	146.9	R 46.3	R 20.6	R 9.4	R 392.3	R 777.7	-2.1	R 7,331.1
1999	348.7	R 139.0	150.6	4.8	NA	NA	0.2	155.7	R 46.4	R 20.0	R 11.0	R 372.1	R 771.3	0.6	R 7,365.7
2000	366.8	R 130.8	158.3	5.5	NA	NA	0.3	164.1	R 44.0	R 19.1	R 12.0	R 370.1	R 658.2	11.5	R 7,504.6
2001	346.9	R 87.1	156.1	7.6	(s)	NA	0.3	164.1	R 43.8	R 18.5	R 11.9	R 325.5	R 759.9	10.4	R 7,610.1
2002	358.7	R 106.3	162.1	9.0	(s)	NA	0.4	171.5	R 46.8	R 17.8	R 13.0	R 355.4	R 781.5	6.4	R 7,595.0
2003	371.0	R 124.1	155.3	50.0	(s)	NA	0.5	205.8	R 46.2	R 17.3	R 13.3	R 406.7	R 755.8	14.1	R 7,454.1
2004	315.6	R 116.5	155.8	72.2	(s)	NA	0.5	228.4	R 46.7	R 17.2	R 14.7	R 423.6	R 890.3	4.2	R 7,835.7
2005	377.3	R 135.2	145.6	79.5	0.2	NA	0.9	226.2	R 46.6	R 16.8	R 14.5	R 439.3	R 793.5	18.9	R 7,742.0
2006	333.5	R 163.9	138.8	78.6	0.5	NA	2.3	220.1	R 45.9	R 17.5	R 16.7	R 464.1	R 750.6	8.1	R 7,785.8
2007	375.4	R 93.2	137.8	82.5	0.6	NA	5.1	226.0	R 46.5	R 18.7	R 19.1	R 403.5	R 796.4	18.8	R 7,923.3
2008	339.5	R 82.3	140.8	84.1	0.5	NA	5.3	230.8	R 46.2	R 20.3	R 18.4	R 397.9	R 906.0	16.0	R 7,748.6
2009	332.2	R 95.2	152.0	82.8	0.6	NA	2.7	238.2	R 45.9	R 20.7	R 19.9	R 419.9	R 815.5	8.6	R 7,425.4
2010	336.6	R 114.1	159.4	127.3	0.5	NA	3.3	290.5	R 45.0	R 22.6	R 20.7	R 493.0	R 796.9	10.5	R 7,265.5
2011	383.6	R 145.2	157.8	123.9	1.6	8.1	8.4	299.7	R 45.0	R 24.9	R 26.4	R 541.2	R 807.7	20.1	R 7,178.5
2012	193.9	R 91.6	156.1	120.0	2.5	9.7	8.1	296.4	R 44.9	R 29.6	R 33.3	R 495.6	R 766.9	29.4	R 7,065.3
2013	187.2	R 81.1	165.6	123.8	7.6	38.6	8.0	343.7	R 44.1	R 41.4	R 43.7	R 554.0	R 768.9	37.4	R 7,162.6
2014	177.7	R 56.4	166.8	125.3	8.5	38.5	10.2	349.3	R 43.4	R 67.4	R 44.3	R 560.8	R 760.5	42.0	R 7,073.5
2015	193.5	R 47.1	139.6	129.6	16.1	48.4	10.5	344.1	R 42.7	R 88.8	R 41.7	R 564.5	R 749.2	46.5	R 7,169.9
2016	197.8	R 98.8	129.6	131.3	20.8	57.0	10.6	349.3	R 41.2	R 110.2	R 46.1	R 645.6	R 676.1	52.5	R 7,168.2
2017	187.2	R 144.5	R 130.6	132.7	21.7	61.6	11.3	357.9	R 41.6	R 137.6	R 43.8	R 725.4	R 595.7	48.6	R 7,176.8
2018	190.4	R 89.8	133.4	131.5	23.5	R 56.9	11.6	R 357.0	R 42.0	R 154.5	R 47.8	R 691.2	R 777.6	2.5	R 7,317.3
2019	168.8	R 130.9	R 139.4	131.8	27.0	96.9	10.3	R 405.4	R 39.4	R 166.7	R 46.9	R 789.2	R 636.5	16.1	R 7,258.7
2020	169.8	R 72.9	R 144.4	106.9	34.0	104.4	6.0	R 395.7	R 40.9	R 181.1	R 46.3	R 737.0	R 672.6	11.0	R 6,462.8
2021	R 171.8	R 50.1	R 145.0	118.7	37.0	156.5	5.1	R 462.3	R 40.1	R 205.2	R 51.8	R 809.5	R 624.0	12.5	R 6,808.1
2022	183.5	60.2	123.1	117.9	35.9	217.3	4.4	498.6	40.3	232.9	49.9	882.0	600.4	10.9	6,882.4

^e Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.

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

^g Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.

^h Excludes denaturant. Because of differences in data sources and estimation methods, the ratio of fuel ethanol consumption and motor gasoline consumption should not be interpreted as the average ethanol blend rate. Pre-2005 estimates are not comparable to those for later years. See Section 5 of Technical Notes.

ⁱ Losses and co-products from the production of biodiesel and fuel ethanol.

^j Solar thermal and photovoltaic energy.

^k Includes the energy losses associated with the generation, transmission, and distribution of the electricity flowing across state lines. A positive number indicates that more electricity came into the state than went out of the state during the year.

Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.

^l Electricity traded with Canada and Mexico. Calculated by converting net imports in kilowatt-hours by 3,412 Btu per kilowatt-hour.

NA = Not available.

Where shown, R = Revised data and (s) = Value less than +0.05 and greater than -0.05 trillion Btu.

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 are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.

Data Source: U.S. Energy Information Administration, State Energy Data System. See Technical Notes. <http://www.eia.gov/state/seds/>