

Table CT2. Primary energy consumption estimates, selected years, 1960-2022, Virginia
(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	Total					
1960	316.4	68.4	82.4	4.4	24.0	163.2	112.1	56.1	442.3	827.1	68.4	82.4	163.2	
1965	386.3	98.6	108.4	6.4	35.8	189.7	105.5	67.9	513.6	998.5	98.6	108.4	189.7	
1970	275.3	140.1	143.5	9.1	61.9	255.7	209.8	65.6	745.7	1,161.1	140.1	143.5	255.7	
1971	230.2	147.8	142.0	9.3	65.9	271.4	254.8	68.6	812.0	1,190.0	147.8	142.0	271.4	
1972	198.9	159.7	146.1	10.8	65.1	289.4	281.5	67.9	860.8	1,219.4	159.7	146.1	289.4	
1973	195.9	156.7	157.9	10.3	68.9	306.9	281.7	58.5	884.3	1,236.9	156.7	157.9	306.9	
1974	177.0	146.8	147.7	10.0	63.8	304.4	276.0	51.5	853.4	1,177.2	146.8	147.7	304.4	
1975	169.2	123.6	133.9	11.5	64.9	311.5	257.5	45.1	824.4	1,117.2	123.6	133.9	311.5	
1976	202.2	125.9	146.2	12.0	67.0	327.9	248.2	55.4	856.6	1,184.7	125.9	146.2	327.9	
1977	187.0	120.7	164.2	12.4	70.3	338.4	259.7	56.0	900.9	1,208.6	120.7	164.2	338.4	
1978	170.6	136.9	153.2	11.5	69.1	349.9	237.0	57.5	878.4	1,185.9	136.9	153.2	349.9	
1979	213.7	137.0	192.6	13.3	67.6	330.4	222.0	60.5	886.4	1,237.1	137.0	192.6	330.4	
1980	231.8	160.9	143.3	11.6	68.8	310.1	155.0	49.2	737.9	1,130.7	160.9	143.3	310.1	
1981	264.3	154.9	137.5	10.9	62.9	311.2	85.4	40.4	648.4	1,067.6	154.9	137.5	311.2	
1982	259.7	154.6	127.6	10.8	61.9	306.5	59.0	38.2	604.0	1,018.3	155.0	127.6	306.5	
1983	275.5	146.8	145.0	11.0	60.8	313.5	51.1	46.5	627.9	1,050.2	147.2	145.0	313.5	
1984	306.9	148.5	154.3	13.6	58.4	325.2	56.0	64.6	672.1	1,127.5	148.8	154.3	325.2	
1985	297.1	144.5	154.5	14.4	61.7	330.8	53.9	68.1	683.4	1,125.0	144.9	154.5	330.8	
1986	303.3	146.6	172.9	12.4	74.1	342.4	78.0	61.7	741.4	1,191.3	146.7	172.9	342.4	
1987	337.9	165.1	182.5	15.2	80.9	367.2	68.2	60.9	774.9	1,277.9	165.3	182.5	367.2	
1988	342.9	169.6	203.6	15.6	87.9	373.5	63.4	59.0	803.1	1,315.5	170.2	203.6	373.5	
1989	384.2	180.4	175.2	16.6	88.3	372.6	74.7	61.0	788.4	1,352.9	180.8	175.2	372.6	
1990	355.1	192.0	173.7	15.1	88.5	369.5	49.1	56.7	752.5	1,299.6	192.1	173.7	369.5	
1991	379.9	188.5	169.1	17.1	66.7	370.5	57.6	50.3	731.3	1,299.7	188.7	169.1	370.5	
1992	379.5	221.0	164.9	17.5	65.9	375.8	50.4	50.4	724.9	1,325.4	221.2	164.9	375.8	
1993	397.3	248.4	167.3	17.8	67.3	385.0	53.5	51.1	741.8	1,387.5	249.0	167.3	385.2	
1994	371.7	260.4	176.4	18.3	68.0	390.3	49.7	51.3	754.0	1,386.1	261.6	176.4	391.3	
1995	385.1	283.9	178.0	17.9	68.0	410.2	34.5	50.2	750.7	1,419.7	284.3	178.0	410.2	
1996	428.7	269.8	208.5	19.3	52.2	409.2	25.7	52.6	767.5	1,466.0	270.6	208.5	412.5	
1997	432.8	259.6	219.5	19.6	53.3	421.3	32.7	53.2	799.7	1,492.1	259.9	219.5	423.9	
1998	438.5	271.4	208.6	15.0	57.8	424.5	46.1	59.6	811.6	1,521.5	271.5	208.6	427.7	
1999	444.5	287.1	209.2	17.2	52.8	438.5	47.1	62.7	827.4	1,559.1	287.3	209.2	441.2	
2000	507.0	277.7	230.8	22.6	56.4	442.3	62.2	55.2	869.4	1,654.1	278.2	230.8	445.4	
2001	487.6	246.4	228.6	18.1	56.6	469.3	57.2	58.8	888.6	1,622.6	246.7	228.6	472.2	
2002	482.8	266.9	217.5	19.8	56.4	470.8	42.3	48.2	855.1	1,604.7	267.0	217.5	476.0	
2003	464.4	272.1	251.5	21.4	65.0	476.7	67.0	52.7	934.4	1,670.8	272.4	251.5	483.4	
2004	452.6	285.6	265.5	20.6	95.0	485.6	72.5	56.6	995.8	1,733.9	285.8	265.5	492.7	
2005	458.5	311.5	263.6	21.6	106.9	489.3	62.1	55.3	998.8	1,768.8	311.7	263.6	494.9	
2006	433.6	283.5	266.6	19.2	106.6	488.9	23.3	54.0	958.8	1,675.8	283.5	266.6	503.3	
2007	458.2	331.0	257.9	19.6	107.9	490.4	32.3	50.6	958.8	1,748.0	331.1	257.9	509.2	
2008	415.1	310.6	226.6	20.2	93.7	464.2	26.7	39.1	870.3	1,296.1	310.7	226.6	487.4	
2009	334.6	330.4	191.8	21.2	89.0	450.0	18.8	39.8	810.6	1,475.6	330.6	191.8	479.8	
2010	346.2	385.8	192.9	21.8	112.7	455.5	22.2	39.3	844.4	1,576.3	385.9	192.9	488.5	
2011	288.3	383.4	184.1	21.4	109.4	426.9	15.7	38.1	795.6	1,467.4	383.5	186.9	457.7	
2012	222.3	424.0	185.6	18.3	107.3	437.2	13.7	34.1	796.1	1,442.4	424.0	185.6	469.0	
2013	290.5	433.4	183.5	22.4	111.6	437.4	8.7	30.1	793.8	1,517.7	433.6	188.8	469.6	
2014	278.2	438.7	196.3	23.0	124.2	447.1	8.8	30.7	830.1	1,547.0	439.0	201.4	479.8	
2015	232.4	526.3	186.3	23.2	130.1	450.0	9.3	35.7	834.7	1,593.4	526.5	191.7	482.7	
2016	222.9	572.1	177.6	21.4	147.5	456.2	7.5	34.8	844.9	R 1,640.0	572.1	184.7	489.6	
2017	159.8	596.6	175.5	20.8	151.0	457.9	6.9	R 36.1	R 848.1	R 1,604.6	596.7	182.1	492.0	
2018	149.3	667.0	199.5	22.9	151.4	458.1	4.5	R 33.7	R 870.0	R 1,686.4	667.1	206.0	492.6	
2019	85.1	717.7	203.8	22.4	154.4	454.2	3.8	R 34.5	R 873.1	R 1,675.9	717.9	210.4	488.7	
2020	75.4	748.4	189.1	22.2	88.5	406.0	3.3	R 30.7	R 739.8	R 1,563.7	748.4	195.9	436.8	
2021	68.6	699.9	R 195.2	23.6	97.8	440.6	3.8	R 34.0	R 794.0	R 1,562.5	700.0	R 198.1	474.4	
2022	67.7	665.9	190.7	24.5	122.6	420.5	3.8	35.8	797.0	1,530.7	666.0	193.4	453.2	

^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, Virginia (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 ^{fg}	Fuel ethanol ^h	Biodiesel	Renewable diesel	Losses and co-products ⁱ	Total ^f							
1960	0.0	R 4.3	56.1	NA	NA	NA	NA	56.1	0.0	NA	NA	R 60.4	R -54.8	0.0	R 832.7
1965	0.0	R 3.0	54.2	NA	NA	NA	NA	54.2	0.0	NA	NA	R 57.2	R -36.9	0.0	R 1,018.8
1970	0.0	R 2.4	55.5	NA	NA	NA	NA	55.5	0.0	NA	NA	R 57.8	R 22.1	0.0	R 1,241.0
1971	0.0	R 3.8	54.6	NA	NA	NA	NA	54.6	0.0	NA	NA	R 58.4	R 33.2	0.0	R 1,281.6
1972	4.8	R 4.8	55.9	NA	NA	NA	NA	55.9	0.0	NA	NA	R 60.7	R 49.4	0.0	R 1,334.4
1973	74.8	R 4.5	55.5	NA	NA	NA	NA	55.5	0.0	NA	NA	R 60.0	R 21.0	0.0	R 1,392.7
1974	66.4	R 3.7	54.8	NA	NA	NA	NA	54.8	0.0	NA	NA	R 58.5	R 32.8	0.0	R 1,334.9
1975	98.8	R 4.5	53.2	NA	NA	NA	NA	53.2	0.0	NA	NA	R 57.7	R 37.2	0.0	R 1,310.8
1976	85.5	R 3.0	66.8	NA	NA	NA	NA	66.8	0.0	NA	NA	R 69.9	R 57.3	0.0	R 1,397.4
1977	102.1	R 2.4	66.4	NA	NA	NA	NA	66.4	0.0	NA	NA	R 68.8	R 70.5	0.0	R 1,450.0
1978	154.2	R 4.4	73.1	NA	NA	NA	NA	73.1	0.0	NA	NA	R 77.5	R 52.5	0.0	R 1,470.1
1979	76.8	R 5.3	79.2	NA	NA	NA	NA	79.2	0.0	NA	NA	R 84.5	R 125.3	0.0	R 1,523.6
1980	125.1	R 3.0	76.3	NA	NA	NA	NA	76.3	0.0	NA	NA	R 79.3	R 150.2	0.0	R 1,485.3
1981	196.5	R 1.2	75.4	(s)	NA	NA	(s)	75.5	0.0	NA	NA	R 76.7	R 128.8	0.0	R 1,469.6
1982	192.9	R 3.2	83.4	0.3	NA	NA	0.1	83.8	0.0	NA	NA	R 87.0	R 148.3	0.0	R 1,446.5
1983	203.6	R 4.1	82.7	0.4	NA	NA	0.2	83.3	0.0	NA	NA	R 87.4	R 157.7	0.0	R 1,498.9
1984	184.8	R 4.0	90.0	1.0	NA	NA	0.3	91.3	0.0	0.0	0.0	R 95.3	R 172.6	0.0	R 1,580.3
1985	236.9	R 2.9	90.5	2.3	NA	NA	0.3	93.1	0.0	0.0	0.0	R 96.0	R 161.7	0.0	R 1,619.5
1986	224.4	R 0.3	82.2	3.2	NA	NA	0.3	85.7	0.0	0.0	0.0	R 85.9	R 198.4	0.0	R 1,700.1
1987	189.5	R 2.8	76.4	2.6	NA	NA	0.3	79.4	0.0	0.0	0.0	R 82.2	R 247.8	0.0	R 1,797.3
1988	223.0	R -0.7	79.7	2.4	NA	NA	0.3	82.4	0.0	(s)	0.0	R 81.8	R 257.6	0.0	R 1,877.9
1989	151.0	R 1.4	91.3	2.5	NA	NA	0.3	94.1	0.1	0.1	0.0	R 95.7	R 309.6	0.0	R 1,909.3
1990	252.1	R 4.5	90.4	1.3	NA	NA	0.2	92.0	0.1	0.1	0.0	R 96.7	R 299.2	0.0	R 1,947.5
1991	250.4	R 3.7	94.5	1.3	NA	NA	0.3	96.1	0.2	0.1	0.0	R 100.0	R 303.9	0.0	R 1,954.0
1992	244.3	R 3.7	98.1	1.0	NA	NA	0.2	99.3	0.2	0.1	0.0	R 103.3	R 309.3	0.0	R 1,982.3
1993	238.3	R 4.5	104.8	0.2	NA	NA	0.3	105.2	0.2	0.1	0.0	R 110.1	R 320.6	0.0	R 2,056.5
1994	265.8	R 3.9	109.9	1.0	NA	NA	0.2	111.1	0.2	0.1	0.0	R 115.4	R 313.8	0.0	R 2,081.1
1995	264.1	R 3.4	115.4	(s)	NA	NA	0.2	115.6	0.2	0.1	0.0	R 119.3	R 343.8	0.0	R 2,147.0
1996	276.1	R 4.9	121.0	3.3	NA	NA	0.1	124.4	0.3	0.1	0.0	R 129.7	R 313.4	0.0	R 2,185.2
1997	284.2	R 3.5	112.5	2.6	NA	NA	0.1	115.1	0.3	0.1	0.0	R 119.1	R 290.7	0.0	R 2,186.1
1998	285.7	R 4.4	109.2	3.2	NA	NA	0.1	112.5	0.4	0.1	0.0	R 117.4	R 300.4	0.0	R 2,225.0
1999	295.7	R 2.3	112.5	2.7	NA	NA	0.1	115.3	0.4	0.1	0.0	R 118.2	R 313.5	0.0	R 2,286.5
2000	295.4	R 2.4	106.1	3.1	NA	NA	0.1	109.3	0.4	0.1	0.0	R 112.2	R 330.8	0.0	R 2,392.5
2001	269.0	R 3.5	81.6	2.9	(s)	NA	0.1	84.6	0.4	0.1	0.0	R 88.6	R 341.9	0.0	R 2,322.1
2002	285.5	R 3.0	67.4	5.1	(s)	NA	0.1	72.6	0.5	0.2	0.0	R 76.3	R 379.2	(s)	R 2,345.7
2003	258.6	R 6.1	85.3	6.8	(s)	NA	(s)	92.1	0.6	0.2	0.0	R 99.0	R 385.7	(s)	R 2,414.1
2004	295.3	R 5.4	94.0	7.1	(s)	NA	(s)	101.2	0.7	0.2	0.0	R 107.5	R 404.1	0.0	R 2,540.8
2005	291.4	R 5.1	110.9	5.6	0.1	NA	(s)	116.5	0.8	0.3	0.0	R 122.7	R 433.5	0.0	R 2,616.3
2006	287.9	R 4.6	104.1	14.4	0.2	NA	(s)	118.7	0.9	0.3	0.0	R 124.6	R 466.9	0.0	R 2,555.2
2007	286.0	R 4.3	103.0	18.8	0.2	NA	(s)	122.0	1.0	0.4	0.0	R 127.7	R 454.5	0.0	R 2,616.2
2008	291.9	R 3.4	105.8	23.3	0.2	NA	(s)	129.3	1.2	R 0.4	0.0	R 134.3	R 491.6	0.0	R 2,514.0
2009	295.1	R 5.0	98.6	29.8	0.2	NA	(s)	128.6	1.4	0.5	0.0	R 135.5	R 489.2	0.0	R 2,395.3
2010	277.7	R 5.1	93.8	33.1	0.2	NA	(s)	127.1	1.6	0.5	0.0	R 134.2	R 508.9	0.0	R 2,497.1
2011	267.3	R 4.1	90.6	30.8	0.5	0.0	(s)	122.0	1.8	0.5	0.0	R 128.4	R 513.1	0.0	R 2,376.2
2012	301.0	R 3.6	89.9	31.8	0.5	0.0	(s)	122.1	1.7	R 0.5	0.0	R 127.9	R 445.1	0.0	R 2,316.4
2013	306.4	R 4.3	103.6	32.2	2.4	0.0	(s)	138.2	1.7	R 0.6	0.0	R 144.7	R 417.8	0.0	R 2,386.7
2014	316.1	R 3.3	118.9	32.7	2.3	0.0	2.0	155.9	1.7	R 0.6	0.0	R 161.5	R 418.1	0.0	R 2,442.6
2015	293.5	R 4.0	118.3	32.7	2.5	0.0	2.3	155.8	1.7	R 0.6	0.0	R 162.1	R 355.3	0.0	R 2,404.2
2016	311.0	R 5.0	112.0	33.5	4.3	0.0	1.3	151.0	1.7	R 0.7	0.0	R 158.5	R 273.4	0.0	R 2,382.8
2017	319.6	R 3.8	109.6	34.1	4.5	0.0	2.8	151.0	1.7	R 1.8	0.0	R 158.4	R 278.6	0.1	R 2,361.2
2018	305.8	R 6.0	118.3	34.5	2.6	0.0	2.4	R 157.9	1.7	R 3.4	0.0	R 169.0	R 289.4	0.1	R 2,450.7
2019	308.0	R 5.2	107.7	34.5	2.2	0.0	0.2	144.5	1.7	R 4.2	0.0	R 155.7	R 278.7	0.0	R 2,418.3
2020	314.8	R 6.9	R 101.0	30.8	2.3	0.0	0.1	R 134.2	1.7	R 6.0	0.0	R 148.8	R 196.0	0.0	R 2,223.3
2021	R 298.0	R 4.5	R 105.4	33.8	1.8	0.0	0.0	R 141.0	1.7	R 12.8	R 0.2	R 160.1	R 352.6	0.0	R 2,373.2
2022	294.1	3.9	107.9	32.7	1.4	0.0	(s)	142.1	1.7	17.7	0.2	165.5	437.6	0.0	2,427.8

^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/>