

Table CT1. Energy consumption estimates for selected energy sources in physical units, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum							Nuclear electric power Million kilowatthours	Hydro-electric power ^g Million kilowatthours	Wind Million kilowatthours	Fuel ethanol ^h Thousand barrels	Biodiesel Thousand barrels
			Distillate fuel oil ^b Thousand barrels	HGL ^c Thousand barrels	Jet fuel ^d Thousand barrels	Motor gasoline ^e Thousand barrels	Residual fuel oil Thousand barrels	Other ^f Thousand barrels	Total Thousand barrels					
1960	60,646	522	46,257	2,334	1,036	80,104	42,958	24,318	197,008	230	1,826	0	NA	NA
1965	68,911	629	54,459	3,030	3,406	85,723	43,238	29,391	219,246	313	1,329	0	NA	NA
1970	68,574	772	63,489	4,754	9,083	101,718	60,436	29,116	268,595	465	1,366	0	NA	NA
1971	65,816	802	63,171	4,895	8,552	107,336	60,724	29,540	274,219	445	1,779	0	NA	NA
1972	67,167	829	69,280	5,577	8,669	116,142	60,152	31,373	291,193	288	1,533	0	NA	NA
1973	72,471	783	72,139	5,808	9,225	114,856	59,253	30,781	292,063	261	1,372	0	NA	NA
1974	67,601	716	72,016	5,687	8,954	108,823	56,643	30,455	282,578	361	1,393	0	NA	NA
1975	67,043	654	68,017	6,077	8,548	108,765	56,111	28,111	261,149	15,869	1,576	0	NA	NA
1976	67,651	714	75,108	6,399	8,436	117,709	50,302	29,815	287,768	16,425	1,416	0	NA	NA
1977	63,539	668	78,031	6,857	8,498	120,263	59,962	29,870	303,482	17,821	1,205	0	NA	NA
1978	63,179	674	75,378	7,345	8,958	121,978	58,363	31,426	303,447	22,329	760	0	NA	NA
1979	70,374	741	76,720	8,511	9,890	116,157	46,461	30,731	288,469	18,796	1,222	0	NA	NA
1980	65,911	776	68,602	7,255	10,148	107,925	35,099	27,507	256,535	12,091	734	0	NA	NA
1981	60,535	785	59,885	7,635	9,019	104,151	29,878	22,016	232,585	14,276	660	0	NA	NA
1982	52,472	695	52,945	7,170	8,625	102,134	20,869	22,964	214,706	16,472	1,829	0	NA	NA
1983	53,846	644	52,872	7,210	9,152	102,680	24,104	24,746	220,764	14,718	1,170	0	NA	NA
1984	58,648	677	58,961	8,778	10,465	102,159	22,962	26,715	230,040	21,564	1,447	0	NA	NA
1985	56,702	626	57,887	7,577	10,126	101,979	17,799	25,190	220,558	26,232	972	0	NA	NA
1986	53,103	610	57,627	8,430	9,915	104,103	23,616	26,705	230,397	39,820	1,453	0	NA	NA
1987	55,413	636	62,774	8,398	10,530	106,628	23,878	28,492	240,699	34,982	1,132	0	NA	NA
1988	58,799	669	63,581	6,105	11,705	110,729	22,033	30,022	244,174	37,862	705	0	NA	NA
1989	60,497	689	64,822	6,967	10,815	108,915	23,239	30,738	244,341	39,166	1,440	0	NA	NA
1990	61,019	656	59,661	6,313	12,042	107,467	18,762	31,040	235,286	57,787	2,869	0	NA	NA
1991	59,106	645	57,530	7,585	11,355	107,081	16,715	28,121	228,386	57,476	1,920	0	NA	NA
1992	61,879	692	59,492	9,176	10,932	107,406	15,617	29,579	232,202	60,133	2,578	0	NA	NA
1993	62,594	706	62,738	5,759	11,787	109,970	18,944	27,675	236,674	59,331	2,376	0	217	NA
1994	61,129	713	65,486	5,634	11,748	109,532	19,562	30,214	242,176	67,207	2,750	0	556	NA
1995	62,969	736	61,656	5,509	12,313	112,282	13,715	32,071	237,546	66,462	2,030	0	1,730	NA
1996	65,691	746	61,297	6,080	11,831	113,639	12,959	29,857	235,662	68,672	3,012	0	1,298	NA
1997	66,667	706	59,438	5,283	14,819	114,779	11,495	32,502	238,317	67,655	2,249	0	1,437	NA
1998	62,342	644	57,603	5,452	16,731	116,867	13,933	33,278	243,864	61,149	2,381	0	330	NA
1999	59,822	689	62,519	5,677	15,943	117,420	11,872	30,308	243,739	71,127	1,947	0	283	NA
2000	63,516	703	68,564	7,115	19,009	118,034	12,071	30,372	255,164	73,771	2,290	10	319	NA
2001	60,161	635	69,446	6,573	18,877	120,458	9,721	34,326	259,400	73,731	1,650	11	410	NA
2002	60,583	676	69,282	6,974	17,006	122,851	7,834	31,272	255,219	76,089	2,211	58	137	R 14
2003	61,992	690	68,326	11,231	17,473	122,575	11,456	32,814	263,875	74,361	3,346	112	163	R 12
2004	62,797	696	71,869	11,037	16,381	124,468	11,859	34,096	269,710	77,459	3,155	306	2,148	R 23
2005	65,044	692	71,764	12,209	16,826	123,808	14,200	34,745	273,552	76,289	2,232	284	1,367	R 77
2006	66,155	660	71,248	13,033	16,465	122,702	7,131	33,463	264,041	75,298	2,844	361	3,015	R 222
2007	65,693	752	70,216	13,307	15,503	123,970	6,623	31,760	261,379	77,376	2,236	470	4,047	R 301
2008	63,333	750	76,679	15,667	14,435	120,652	5,523	28,904	261,861	78,658	2,549	729	8,642	R 258
2009	55,063	810	58,339	15,461	12,476	122,112	4,168	28,254	240,810	77,328	2,683	1,075	10,726	R 274
2010	58,570	879	61,570	14,950	12,268	122,653	1,976	R 26,489	R 239,906	77,828	2,332	1,854	11,469	R 221
2011	54,790	966	62,870	15,444	12,085	119,726	1,415	R 23,897	R 235,438	76,147	3,217	1,794	11,362	R 751
2012	48,606	1,038	61,899	12,080	11,977	118,610	1,529	R 19,675	R 225,770	75,174	2,242	2,129	11,519	R 786
2013	50,019	1,122	63,647	12,897	12,349	119,409	1,251	R 21,745	R 231,299	78,714	2,525	3,352	11,770	R 1,272
2014	46,481	1,244	68,514	13,694	12,235	117,470	887	R 22,778	R 235,577	78,715	2,641	3,565	11,401	R 1,177
2015	39,033	1,256	65,441	13,077	12,217	117,027	428	R 23,624	R 231,814	80,517	2,604	3,353	11,297	R 1,112
2016	33,385	1,301	56,753	12,933	12,409	117,887	563	R 22,988	R 223,533	82,924	2,375	3,476	11,467	R 1,553
2017	30,420	1,350	57,758	12,890	12,811	118,831	292	23,482	226,065	83,200	3,123	3,591	11,754	R 1,422
2018	29,740	1,460	63,960	14,036	R 13,152	115,478	288	R 22,193	R 229,107	83,477	4,262	3,567	11,627	R 1,251
2019	25,494	1,618	60,277	14,570	R 13,723	115,994	369	R 18,634	R 223,567	83,230	3,503	3,250	11,708	R 1,088
2020	17,788	1,718	53,824	13,494	R 7,958	99,001	228	R 13,928	R 188,433	76,521	2,672	3,748	9,977	R 1,160
2021	22,036	1,801	59,861	13,875	R 9,294	107,361	323	R 15,223	R 205,937	75,903	3,135	3,455	10,928	R 952
2022	20,639	1,869	R 61,711	31,359	R 9,998	105,560	351	R 16,050	R 225,028	76,166	2,653	3,572	10,781	R 898
2023	15,304	1,876	59,249	47,471	11,067	105,257	278	15,008	238,330	75,305	2,783	3,258	10,709	1,215

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil. Excludes biofuels product supplied.
^c Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^d 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.
^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.
^f Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 4.
^g Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be

separately identified.
^h Includes 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.
 NA = Not available.
 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 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. <https://www.eia.gov/state/seds/>

Table CT2. Primary energy consumption estimates, selected years, 1960-2023, Pennsylvania
(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	1,530.5	540.1	269.4	8.9	5.7	420.8	270.1	145.9	1,120.9	3,191.5	540.1	269.4	420.8	
1965	1,751.3	652.9	317.2	11.6	19.2	450.3	271.8	175.8	1,245.9	3,650.1	652.9	317.2	450.3	
1970	1,699.0	797.9	369.8	17.8	51.4	534.3	380.0	175.7	1,528.9	4,025.8	797.9	369.8	534.3	
1971	1,619.6	828.6	368.0	18.3	48.4	563.8	381.8	177.9	1,558.2	4,006.4	828.6	368.0	563.8	
1972	1,662.3	856.3	403.6	20.7	49.0	610.1	378.2	188.9	1,650.5	4,169.1	856.3	403.6	610.1	
1973	1,798.6	811.5	420.2	21.5	52.2	603.3	372.5	185.8	1,655.5	4,265.6	811.5	420.2	603.3	
1974	1,661.4	732.7	419.5	21.0	50.7	571.6	356.1	183.8	1,602.6	3,996.7	732.7	419.5	571.6	
1975	1,646.7	670.1	396.2	22.3	48.4	571.3	261.7	169.4	1,469.3	3,786.1	670.1	396.2	571.3	
1976	1,682.8	731.4	437.5	23.4	47.7	618.3	316.3	180.0	1,623.3	4,037.4	731.4	437.5	618.3	
1977	1,578.0	682.4	454.5	24.9	48.1	631.7	377.0	180.8	1,717.0	3,977.3	682.4	454.5	631.7	
1978	1,572.5	688.3	439.1	26.4	50.7	640.7	366.9	189.8	1,713.6	3,974.4	688.3	439.1	640.7	
1979	1,756.3	756.1	446.9	30.6	56.0	610.2	292.1	185.6	1,621.4	4,133.7	756.1	446.9	610.2	
1980	1,636.1	789.6	399.6	26.2	57.4	566.9	220.7	165.6	1,436.4	3,862.0	789.6	399.6	566.9	
1981	1,495.9	791.2	348.8	27.4	51.0	547.1	187.8	135.5	1,297.7	3,584.8	802.0	348.8	547.1	
1982	1,291.5	708.3	308.4	25.6	48.8	536.5	131.2	141.1	1,191.6	3,191.4	714.1	308.4	536.5	
1983	1,337.5	658.7	308.0	25.8	51.8	539.4	151.5	150.7	1,227.1	3,223.3	662.6	308.0	539.4	
1984	1,462.3	699.6	343.4	31.3	59.2	536.6	144.4	161.1	1,276.0	3,438.0	699.7	343.4	536.6	
1985	1,409.1	646.7	337.2	27.2	57.3	535.7	111.9	153.9	1,223.1	3,278.9	646.9	337.2	535.7	
1986	1,318.4	631.7	335.7	30.2	56.1	546.9	148.5	164.2	1,281.5	3,231.6	631.9	335.7	546.9	
1987	1,381.1	658.8	365.7	30.4	59.6	560.1	150.1	174.6	1,340.5	3,380.4	659.1	365.7	560.1	
1988	1,466.2	692.5	370.4	22.4	66.2	581.7	138.5	182.4	1,361.5	3,520.2	692.7	370.4	581.7	
1989	1,490.9	714.7	377.6	25.6	54.6	572.1	146.1	187.1	1,363.2	3,568.8	715.0	377.6	572.1	
1990	1,469.7	680.5	347.5	23.0	68.2	564.5	118.0	189.9	1,311.1	3,461.3	680.7	347.5	564.5	
1991	1,425.2	666.9	335.1	27.5	64.3	562.5	105.1	172.2	1,266.7	3,358.9	667.2	335.1	562.5	
1992	1,473.2	717.2	346.5	33.2	61.9	564.2	98.2	179.8	1,283.8	3,474.1	717.3	346.5	564.2	
1993	1,487.0	731.7	365.5	21.2	66.7	573.0	119.1	168.9	1,314.3	3,533.0	731.8	365.5	573.0	
1994	1,439.6	738.9	381.1	21.0	66.5	569.2	123.0	185.1	1,345.8	3,524.4	739.1	381.1	571.1	
1995	1,484.1	761.4	358.8	20.5	69.8	578.3	86.2	196.3	1,310.0	3,555.6	761.5	358.8	584.3	
1996	1,543.7	770.9	356.7	22.6	67.1	587.7	81.5	182.4	1,297.9	3,612.5	771.2	356.7	592.2	
1997	1,569.6	730.6	345.9	19.8	84.0	592.4	72.3	198.0	1,312.5	3,612.8	730.8	345.9	597.4	
1998	1,466.0	667.2	335.2	20.5	94.9	606.9	87.6	203.2	1,348.3	3,481.5	667.2	335.2	608.1	
1999	1,415.0	713.4	363.8	21.3	90.4	609.8	74.6	183.3	1,343.3	3,471.7	713.6	363.8	610.8	
2000	1,508.1	727.2	399.0	26.6	107.8	612.8	75.9	185.6	1,407.6	3,642.9	727.5	399.0	613.9	
2001	1,392.2	669.0	404.1	24.3	107.0	625.1	61.1	209.8	1,431.4	3,492.5	669.1	404.1	626.5	
2002	1,457.3	700.5	403.1	25.9	96.4	638.2	49.3	190.6	1,403.6	3,561.4	700.6	403.1	638.7	
2003	1,462.0	717.5	397.6	41.1	99.1	636.5	72.0	200.7	1,446.9	3,626.4	717.6	397.6	637.0	
2004	1,474.3	723.2	418.1	40.4	92.9	639.3	74.6	210.0	1,475.2	3,672.7	723.3	418.1	646.7	
2005	1,490.8	719.1	417.5	44.2	95.4	638.1	89.3	214.1	1,498.5	3,708.5	719.3	417.5	642.8	
2006	1,499.3	684.7	413.5	47.0	93.4	625.8	44.8	205.9	1,430.3	3,614.3	684.8	413.5	636.2	
2007	1,491.9	780.1	406.1	48.0	87.9	623.4	41.6	195.7	1,402.8	3,674.7	780.2	406.1	637.5	
2008	1,421.1	778.3	443.2	56.2	81.8	586.1	34.7	178.3	1,380.3	3,579.7	778.4	443.2	616.1	
2009	1,223.9	839.5	R 334.7	55.2	70.7	584.4	26.2	174.7	R 1,246.0	R 3,309.4	839.7	337.0	621.5	
2010	1,310.7	909.3	R 353.9	57.4	69.6	581.7	12.4	R 163.9	R 1,239.0	R 3,458.9	909.3	R 355.5	621.5	
2011	1,213.0	1,000.5	R 358.7	59.3	68.5	566.8	8.9	R 147.5	R 1,209.7	R 3,423.2	1,000.5	R 362.7	606.2	
2012	1,093.2	1,079.5	R 352.8	46.4	67.9	560.5	9.6	R 122.1	R 1,159.3	R 3,332.0	1,079.5	R 356.9	600.4	
2013	1,126.1	1,175.5	R 360.1	49.5	70.0	563.4	7.9	R 133.4	R 1,184.2	R 3,485.8	1,175.5	R 366.9	604.2	
2014	1,039.2	1,304.1	R 388.6	52.6	69.4	554.7	5.6	R 140.3	R 1,211.2	R 3,554.4	1,304.1	R 394.9	594.3	
2015	878.8	1,313.4	R 371.3	50.2	69.3	552.8	2.7	R 146.0	R 1,192.2	R 3,384.4	1,313.4	R 377.2	591.8	
2016	734.8	1,354.3	R 318.6	49.6	70.4	556.1	3.5	R 144.5	R 1,142.7	R 3,231.8	1,354.3	R 326.9	595.9	
2017	669.5	1,404.2	R 325.1	49.5	72.6	559.6	1.8	147.5	R 1,156.1	R 3,229.9	1,404.3	R 332.7	600.5	
2018	644.1	1,515.9	R 361.8	53.9	74.6	543.1	1.8	139.5	R 1,174.7	R 3,334.6	1,516.0	R 368.5	583.6	
2019	568.8	1,679.5	R 341.5	55.9	77.8	545.2	2.3	R 117.1	R 1,139.8	R 3,388.1	1,679.5	R 347.3	586.0	
2020	374.3	1,783.8	R 303.8	51.8	45.1	465.5	1.4	R 87.3	R 955.0	R 3,113.0	1,783.8	R 310.0	500.2	
2021	485.2	1,868.1	R 343.0	53.3	52.7	504.2	2.0	R 95.4	R 1,047.7	R 3,401.0	1,868.1	R 345.2	542.2	
2022	435.5	R 1,937.0	R 353.9	101.9	56.7	495.4	2.2	R 100.8	R 1,108.1	R 3,480.6	R 1,938.3	R 355.9	533.0	
2023	307.6	1,937.0	339.2	145.2	62.8	494.2	1.7	94.0	1,133.0	3,377.6	1,943.1	341.6	531.4	

^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. <https://www.eia.gov/state/seds/>

Table CT2. Primary energy consumption estimates, selected years, 1960-2023, Pennsylvania (continued)
(trillion Btu)

Year	Nuclear electric power	Renewable energy											Net interstate flow of electricity ^l	Electricity net imports ^m	Total ^{fj}
		Hydro-electric power ^{e,f}	Biomass						Geo-thermal ^f	Solar ^{f,k}	Wind	Total ^{fj}			
			Wood and waste ^{f,g}	Fuel ethanol ^h	Biodiesel	Renewable diesel	Losses and co-products ⁱ	Total ^{fj}							
1960	2.7	6.2	46.5	NA	NA	NA	NA	46.5	0.0	NA	NA	52.7	-54.8	0.0	3,192.0
1965	3.7	4.5	47.4	NA	NA	NA	NA	47.4	0.0	NA	NA	51.9	-50.6	0.0	3,655.1
1970	5.1	4.7	53.2	NA	NA	NA	NA	53.2	0.0	NA	NA	57.9	-77.6	0.0	4,011.2
1975	174.8	5.4	57.5	NA	NA	NA	NA	57.5	0.0	NA	NA	62.8	-216.7	0.0	3,807.0
1976	181.4	4.8	66.5	NA	NA	NA	NA	66.5	0.0	NA	NA	71.3	-225.6	0.0	4,064.6
1977	191.9	4.1	71.7	NA	NA	NA	NA	71.7	0.0	NA	NA	75.9	-195.2	0.0	4,049.9
1978	244.3	2.6	82.7	NA	NA	NA	NA	82.7	0.0	NA	NA	85.3	-270.9	0.0	4,033.0
1979	204.5	4.2	94.2	NA	NA	NA	NA	94.2	0.0	NA	NA	98.4	-282.7	0.0	4,153.8
1980	131.9	2.5	129.2	NA	NA	NA	NA	129.2	0.0	NA	NA	131.7	-222.9	0.0	3,902.7
1981	157.5	2.3	140.8	NA	NA	NA	NA	140.8	0.0	NA	NA	143.0	-163.8	0.0	3,721.5
1982	182.4	6.2	130.5	NA	NA	NA	NA	130.5	0.0	NA	NA	136.7	-247.7	0.0	3,262.8
1983	160.5	4.0	154.8	NA	NA	NA	NA	154.8	0.0	NA	NA	158.8	-273.8	0.0	3,268.9
1984	233.8	4.9	136.9	NA	NA	NA	NA	136.9	0.0	NA	NA	141.8	-311.8	0.0	3,501.8
1985	278.6	3.3	138.1	0.0	NA	NA	0.0	138.1	0.0	NA	NA	141.4	-353.1	0.0	3,345.8
1986	421.3	5.0	102.0	0.0	NA	NA	0.0	102.0	0.0	NA	NA	107.0	-473.5	0.0	3,286.4
1987	365.3	3.9	96.2	0.0	NA	NA	0.0	96.2	0.0	NA	0.0	100.1	-373.4	0.0	3,472.3
1988	401.4	2.4	100.9	0.0	NA	NA	0.0	100.9	0.0	0.0	0.0	103.3	-381.6	0.0	3,643.3
1989	414.5	4.9	82.5	0.0	NA	NA	0.0	82.5	0.2	0.4	0.0	88.0	-419.0	0.0	3,652.3
1990	611.5	9.8	61.4	0.0	NA	NA	0.0	61.4	0.2	0.4	0.0	71.8	-511.7	0.0	3,632.9
1991	602.6	6.6	69.5	0.0	NA	NA	0.0	69.5	0.2	0.5	0.0	76.8	-463.4	0.0	3,574.8
1992	629.6	8.8	80.2	0.0	NA	NA	0.0	80.2	0.3	0.5	0.0	89.7	-521.3	0.0	3,672.2
1993	623.2	8.1	79.5	0.8	NA	NA	0.0	80.3	0.3	0.5	0.0	89.1	-501.6	0.0	3,743.7
1994	702.4	9.4	83.0	1.9	NA	NA	0.0	84.9	0.3	0.5	0.0	95.1	-506.5	0.5	3,815.8
1995	698.3	6.9	91.5	6.0	NA	NA	0.0	97.5	0.3	0.5	0.0	105.3	-481.2	0.1	3,878.0
1996	721.3	10.3	99.0	4.5	NA	NA	0.0	103.6	0.4	0.5	0.0	114.7	-540.7	0.7	3,908.5
1997	710.0	7.7	90.8	5.0	NA	NA	0.0	95.7	0.4	0.5	0.0	104.3	-548.9	0.4	3,878.6
1998	641.5	8.1	85.3	1.1	NA	NA	0.0	86.4	0.5	0.5	0.0	95.5	-499.0	-0.6	3,718.9
1999	743.3	6.6	88.4	1.0	NA	NA	0.0	89.3	0.5	0.5	0.0	97.0	-550.6	-0.1	3,761.3
2000	769.4	7.8	89.2	1.1	NA	NA	0.0	90.3	0.5	0.4	(s)	99.1	-580.6	0.0	3,930.8
2001	770.0	5.6	77.6	1.4	NA	NA	(s)	79.1	0.5	0.4	(s)	85.7	-507.1	0.0	3,841.1
2002	794.5	7.5	72.5	0.5	NA	NA	(s)	73.1	0.6	0.4	0.2	R 81.8	-537.7	-0.3	R 3,899.6
2003	775.0	11.4	73.8	0.6	NA	NA	(s)	74.4	0.8	0.4	0.4	R 87.4	-544.5	-0.3	R 3,943.9
2004	807.7	10.8	74.4	7.5	NA	NA	(s)	R 82.0	0.9	0.4	1.0	R 95.1	-583.3	-0.6	R 3,991.6
2005	796.2	7.6	77.6	4.7	R 0.4	NA	(s)	R 82.7	1.0	0.4	1.0	R 92.8	-573.6	-1.0	R 4,022.9
2006	785.7	9.7	73.8	10.5	R 1.2	NA	(s)	R 85.4	1.1	0.5	1.2	R 98.0	-604.7	-0.3	R 3,893.0
2007	811.6	7.6	76.6	14.0	R 1.6	NA	(s)	R 92.3	1.3	0.5	1.6	R 103.3	-640.4	0.2	R 3,949.4
2008	822.1	8.7	80.5	30.0	R 1.4	NA	(s)	R 111.9	1.5	0.6	2.5	R 125.2	-602.7	1.8	R 3,926.1
2009	808.8	9.2	87.1	37.1	R 1.5	NA	(s)	R 125.7	1.8	0.7	3.7	R 141.0	-651.6	0.6	R 3,608.1
2010	813.5	8.0	99.6	39.8	R 1.2	NA	5.4	R 145.9	2.0	0.9	6.3	R 163.1	-700.9	1.4	R 3,736.1
2011	796.8	11.0	111.3	39.4	R 4.0	NA	4.7	R 159.4	2.2	1.3	6.1	R 180.0	-673.8	1.5	R 3,727.7
2012	787.8	7.6	105.8	40.0	R 4.1	NA	4.7	R 154.5	2.2	1.5	7.3	R 173.1	-673.6	4.6	R 3,623.8
2013	822.5	8.6	120.0	40.8	6.8	NA	5.7	173.4	2.2	1.7	11.4	197.4	-677.3	3.8	R 3,832.1
2014	823.3	9.0	R 115.3	39.6	R 6.3	NA	5.3	R 166.5	2.2	1.8	12.2	R 191.6	-613.1	1.9	R 3,958.1
2015	842.0	8.9	R 122.3	39.0	R 6.0	0.0	5.1	R 172.5	2.2	1.8	11.4	R 196.8	-551.4	1.8	R 3,873.6
2016	867.3	8.1	R 117.0	39.8	R 8.3	0.0	5.6	R 170.7	2.2	2.0	11.9	R 194.8	-555.9	1.1	R 3,739.1
2017	870.2	10.7	R 116.8	40.9	R 7.6	0.0	5.2	R 170.5	2.2	2.2	12.3	R 197.8	-558.2	0.1	R 3,739.8
2018	872.7	14.5	R 120.4	40.5	R 6.7	0.0	5.0	R 172.7	2.2	2.4	12.2	R 203.9	-510.4	0.2	R 3,901.1
2019	869.1	12.0	R 112.8	40.8	R 5.8	0.0	5.7	R 165.2	2.2	2.7	11.1	R 193.1	-655.9	0.0	R 3,794.4
2020	799.3	9.1	R 104.3	34.7	R 6.2	0.0	5.1	R 150.3	2.2	3.2	12.8	R 177.6	-700.5	0.0	R 3,389.4
2021	791.6	10.7	R 101.7	38.0	R 5.1	0.0	6.3	R 151.2	2.2	3.8	11.8	R 179.6	-756.6	0.0	R 3,615.5
2022	R 795.8	9.1	R 105.7	37.5	R 4.8	0.0	6.3	R 154.3	2.2	4.3	12.2	R 182.1	R -719.5	0.0	R 3,738.9
2023	787.1	9.5	99.6	37.3	6.5	0.0	6.4	149.8	2.2	5.5	11.1	178.0	-735.2	0.0	3,607.5

^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. Beginning in 2006, includes small amount of other biomass liquids that are biodiesel.

^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 Beginning in 2006, adjusted for the double-counting of other biomass liquids that are biodiesel, which are included in both wood & waste and biodiesel, but should be counted only once in Total.

^k Solar thermal and photovoltaic energy.

^l 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.

^m 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. <https://www.eia.gov/state/seds/>

Table CT3. Total end-use sector energy consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum							Hydro-electric power ^{g,h} Million kilowatt-hours	Biomass		Geo-thermal ^h	Solar ^{h,k}	Electricity ^l Million kilowatt-hours	End use ^{h,m}	Electrical system losses ⁿ	Total ^{h,m}
			Distillate fuel oil ^b	HGL ^c	Jet fuel ^d	Motor gasoline ^e	Residual fuel oil	Other ^f	Total		Wood and waste ^{h,i}	Losses and co-products ^j						
1960	42,584	516	45,772	2,334	1,036	80,104	40,211	24,318	193,776	16	--	--	--	--	39,217	--	--	--
1970	39,433	763	59,530	4,754	9,083	101,718	37,934	29,116	242,135	12	--	--	--	--	75,620	--	--	--
1980	23,445	773	66,364	7,255	10,148	107,925	17,872	27,191	236,754	1	--	--	--	--	99,744	--	--	--
1990	15,854	641	57,522	6,313	12,042	107,467	12,112	30,035	225,492	0	--	--	--	--	114,751	--	--	--
2000	11,250	682	65,971	7,115	19,009	118,034	7,327	30,346	247,802	0	--	--	--	--	133,845	--	--	--
2005	10,580	611	70,491	12,209	16,826	123,808	7,141	34,211	264,687	0	--	--	--	--	148,273	--	--	--
2006	10,219	559	70,597	13,033	16,465	122,702	6,181	33,284	262,262	0	--	--	--	--	146,150	--	--	--
2007	9,981	608	69,379	13,307	15,503	123,970	5,108	31,760	259,026	0	--	--	--	--	151,573	--	--	--
2008	9,338	609	75,885	15,667	14,435	120,652	4,822	28,768	260,229	0	--	--	--	--	150,401	--	--	--
2009	6,211	599	57,747	15,461	12,476	122,112	3,392	28,114	239,302	0	--	--	--	--	143,747	--	--	--
2010	7,682	634	60,835	14,950	12,268	122,653	1,568	R 26,489	R 238,763	0	--	--	--	--	148,964	--	--	--
2011	7,388	659	62,199	15,444	12,085	119,726	1,184	R 23,897	R 234,536	0	--	--	--	--	148,757	--	--	--
2012	7,003	644	61,397	12,080	11,977	118,610	1,423	R 19,675	R 225,162	0	--	--	--	--	144,710	--	--	--
2013	8,027	759	63,076	12,897	12,349	119,409	1,154	R 21,745	R 230,630	0	--	--	--	--	146,254	--	--	--
2014	8,173	856	67,511	13,694	12,235	117,470	659	R 22,778	R 234,346	0	--	--	--	--	146,688	--	--	--
2015	7,642	818	64,399	13,077	12,217	117,027	428	R 23,624	R 230,772	0	--	--	--	--	146,344	--	--	--
2016	5,857	800	56,168	12,933	12,409	117,887	563	R 22,987	R 222,947	0	--	--	--	--	145,328	--	--	--
2017	6,036	824	57,240	12,890	12,811	118,831	292	R 23,482	R 225,546	0	--	--	--	--	142,991	--	--	--
2018	6,237	922	62,608	14,036	R 13,152	115,478	279	R 22,193	R 227,746	0	--	--	--	--	148,977	--	--	--
2019	6,014	946	59,899	14,570	R 13,723	115,994	362	R 18,634	R 223,182	0	--	--	--	--	145,580	--	--	--
2020	4,165	889	53,657	13,494	R 7,958	99,001	220	R 13,928	R 188,258	0	--	--	--	--	139,721	--	--	--
2021	5,767	949	59,621	13,875	R 9,294	107,361	319	R 15,223	R 205,693	0	--	--	--	--	143,340	--	--	--
2022	5,891	985	R 61,157	31,359	R 9,998	105,560	327	R 16,050	R 224,451	0	--	--	--	--	145,045	--	--	--
2023	5,457	926	59,130	47,471	11,067	105,257	272	15,008	238,204	0	--	--	--	--	138,711	--	--	--

Trillion Btu

1960	1,107.2	533.9	266.6	8.9	5.7	420.8	252.8	145.9	1,100.8	0.1	46.5	NA	NA	NA	133.8	2,922.2	269.8	3,192.0
1970	1,018.8	788.2	346.8	17.8	51.4	534.3	238.5	175.7	1,364.4	(s)	53.2	NA	NA	NA	258.0	3,482.6	528.5	4,011.2
1980	609.4	789.9	386.6	26.2	57.4	566.9	112.4	163.7	1,313.1	(s)	129.2	NA	NA	NA	340.3	3,178.7	724.0	3,902.7
1990	415.0	666.7	335.1	23.0	68.2	564.5	76.1	183.9	1,250.8	0.0	52.5	0.0	0.2	0.4	391.5	2,777.0	855.9	3,632.9
2000	297.5	706.2	383.9	26.6	107.8	613.9	46.1	185.5	1,363.7	0.0	57.7	0.0	0.5	0.4	456.7	2,882.4	1,048.5	3,930.8
2005	265.9	635.7	410.1	44.2	95.4	642.8	44.9	211.0	1,448.4	0.0	52.6	(s)	1.0	0.4	505.9	R 2,910.4	1,112.5	R 4,022.9
2006	256.2	580.4	409.7	47.0	93.4	636.2	38.9	204.9	1,430.0	0.0	48.3	(s)	1.1	0.5	498.7	R 2,816.3	1,076.7	R 3,893.0
2007	250.3	631.9	401.3	48.0	87.9	637.5	32.1	195.7	1,402.4	0.0	50.2	(s)	1.3	0.5	517.2	R 2,855.3	1,094.1	R 3,949.4
2008	232.5	632.6	438.6	56.2	81.8	616.1	30.3	177.5	1,400.5	0.0	51.9	(s)	1.5	0.6	513.2	R 2,834.1	1,091.9	R 3,926.1
2009	152.9	623.0	333.6	55.2	70.7	621.5	21.3	173.9	1,276.3	0.0	58.5	(s)	1.8	0.7	490.5	2,603.5	1,005.4	3,608.9
2010	190.9	657.1	351.3	57.4	69.6	621.5	9.9	R 163.9	R 1,273.5	0.0	69.5	5.4	2.0	0.9	508.3	R 2,707.5	1,029.0	R 3,736.5
2011	184.6	685.5	R 358.8	59.3	68.5	606.2	7.4	R 147.5	R 1,247.8	0.0	82.6	4.7	2.2	1.2	507.6	R 2,716.2	1,011.4	R 3,727.6
2012	188.9	672.5	R 354.0	46.4	67.9	600.4	8.9	R 122.1	R 1,199.8	0.0	78.2	4.7	2.2	1.4	493.7	R 2,641.5	982.3	R 3,623.8
2013	220.3	797.4	R 363.6	49.5	70.0	604.2	7.3	R 133.4	R 1,227.9	0.0	92.6	5.7	2.2	1.5	499.0	R 2,846.6	985.5	R 3,832.1
2014	224.9	899.8	R 389.2	52.6	69.4	594.3	4.1	R 140.3	R 1,249.8	0.0	R 88.3	5.3	2.2	1.6	500.5	2,972.4	985.7	R 3,958.1
2015	209.6	857.2	R 371.2	50.2	69.3	591.8	2.7	R 146.0	R 1,231.1	0.0	R 95.1	5.1	2.2	1.7	499.3	R 2,901.3	972.4	R 3,873.6
2016	160.8	834.2	R 323.5	49.6	70.4	595.9	3.5	144.4	R 1,187.4	0.0	R 89.6	5.6	2.2	1.8	495.9	R 2,777.4	961.6	R 3,739.0
2017	167.8	859.3	R 329.7	49.5	72.6	600.5	1.8	147.5	R 1,201.6	0.0	R 89.4	5.2	2.2	2.0	487.9	R 2,815.3	924.4	R 3,739.8
2018	176.1	958.2	R 360.8	53.9	74.6	583.6	1.8	139.5	R 1,214.1	0.0	R 93.7	5.0	2.2	2.2	508.3	R 2,959.7	941.4	R 3,901.1
2019	170.7	982.7	R 345.1	55.9	77.8	586.0	2.3	R 117.1	R 1,184.2	0.0	R 88.8	5.7	2.2	2.5	496.7	R 2,933.5	860.8	R 3,794.4
2020	118.2	924.6	R 309.0	51.8	45.1	500.2	1.4	R 87.3	R 994.8	0.0	R 82.1	5.1	2.2	2.8	476.7	R 2,606.6	782.8	R 3,389.4
2021	164.8	866.0	R 343.8	53.3	52.7	542.2	2.0	R 95.4	R 1,089.4	0.0	R 81.8	6.3	2.2	3.0	489.1	R 2,822.5	793.0	R 3,615.5
2022	167.8	R 1,022.9	R 352.7	101.9	56.7	533.0	2.1	R 100.8	R 1,147.1	0.0	R 89.2	6.3	2.2	3.6	494.9	R 2,933.3	R 805.6	R 3,738.9
2023	155.5	959.8	340.9	145.2	62.8	531.4	1.7	94.0	1,176.0	0.0	83.1	6.4	2.2	4.3	473.3	2,858.2	749.3	3,607.5

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil. Excludes biofuels product supplied.
^c Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^d 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."
^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.
^f Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 4.
^g Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.
^h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
ⁱ Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.
^j Losses and co-products from the production of biodiesel and fuel ethanol.
^k Solar thermal and photovoltaic energy.

^l Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^m 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 End use and Total. For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 2009, includes a small amount of wind energy consumed by the commercial and industrial sectors. Beginning in 2021, adjusted for the double-counting of biofuels product supplied.
ⁿ Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of technical notes for an explanation of changes in methodology. -- = Not applicable. NA = Not available.
Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.
Notes: Total end-use sector consumption estimates are the sum of the consumption estimates for the residential, commercial, industrial, and transportation sectors. 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. <https://www.eia.gov/state/seds/>

Table CT4. Residential sector energy consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal ^a Thousand short tons	Natural gas ^b Billion cubic feet	Petroleum				Biomass Wood ^f	Geothermal ^g	Solar ^{g,h}	Electricity ⁱ Million kilowatthours	End use ^{g,j}	Electrical system energy losses ^k	Total ^{e,g,j}
			Distillate fuel oil ^c	HGL ^d	Kerosene	Total ^e							
1960	5,236	232	25,101	959	2,763	28,824	--	--	11,094	--	--	--	
1965	3,185	256	28,391	1,151	2,753	32,294	--	--	14,807	--	--	--	
1970	2,028	297	31,242	1,612	3,368	36,222	--	--	23,007	--	--	--	
1975	561	273	31,587	1,799	2,023	35,409	--	--	27,678	--	--	--	
1980	329	288	27,838	1,355	2,362	31,556	--	--	31,767	--	--	--	
1985	280	245	24,185	1,961	2,853	28,999	--	--	32,686	--	--	--	
1990	262	240	20,207	2,160	1,377	23,744	--	--	38,164	--	--	--	
1995	154	262	20,307	2,635	2,064	25,006	--	--	42,802	--	--	--	
2000	82	263	20,910	3,829	2,790	27,530	--	--	45,008	--	--	--	
2005	50	245	19,896	3,937	1,822	25,654	--	--	53,661	--	--	--	
2006	56	206	16,902	3,897	1,420	22,219	--	--	51,790	--	--	--	
2007	72	231	17,139	4,509	945	22,593	--	--	54,587	--	--	--	
2008	0	229	26,532	5,181	492	32,205	--	--	54,060	--	--	--	
2009	0	228	13,305	5,617	686	19,608	--	--	52,906	--	--	--	
2010	0	224	14,793	5,418	743	20,954	--	--	55,253	--	--	--	
2011	0	219	13,963	5,085	454	19,502	--	--	54,796	--	--	--	
2012	0	197	12,273	4,334	190	16,797	--	--	52,876	--	--	--	
2013	0	232	13,759	4,865	203	18,828	--	--	54,252	--	--	--	
2014	0	255	15,798	5,196	358	21,352	--	--	54,195	--	--	--	
2015	0	236	15,062	4,746	238	20,047	--	--	54,419	--	--	--	
2016	0	216	12,689	4,402	267	17,358	--	--	53,877	--	--	--	
2017	0	219	12,376	4,600	162	17,139	--	--	51,724	--	--	--	
2018	0	253	14,948	5,407	164	20,519	--	--	55,896	--	--	--	
2019	0	237	11,576	6,184	186	17,946	--	--	54,396	--	--	--	
2020	0	221	10,302	4,849	176	15,328	--	--	55,307	--	--	--	
2021	0	226	13,009	4,898	187	18,094	--	--	55,945	--	--	--	
2022	0	237	13,574	4,886	173	18,633	--	--	56,413	--	--	--	
2023	0	207	12,751	4,475	298	17,524	--	--	52,328	--	--	--	

Trillion Btu

1960	129.5	240.2	146.2	3.7	15.7	165.6	26.1	NA	NA	37.9	599.2	76.3	675.5
1965	77.6	265.3	165.4	4.4	15.6	185.4	21.2	NA	NA	50.5	600.0	99.4	699.4
1970	47.8	306.8	182.0	6.2	19.1	207.3	20.5	NA	NA	78.5	660.8	160.8	821.6
1975	12.6	279.5	184.0	6.9	11.5	202.4	20.8	NA	NA	94.4	609.7	192.8	802.5
1980	7.6	294.7	162.2	5.2	13.4	180.8	53.3	NA	NA	108.4	643.5	230.6	874.1
1985	6.6	253.2	140.9	7.5	16.2	164.6	49.6	NA	NA	111.5	585.5	226.6	812.1
1990	6.6	249.5	117.7	8.3	7.8	133.8	26.0	0.2	0.4	130.2	546.6	284.7	831.3
1995	3.8	271.4	118.2	10.1	11.7	140.0	23.4	0.2	0.5	146.0	585.4	329.0	914.4
2000	2.2	272.0	121.7	14.7	15.8	152.2	13.6	0.3	0.4	153.6	594.1	352.6	946.7
2005	1.3	255.0	115.8	15.1	10.3	141.2	15.4	0.6	0.4	183.1	596.9	402.6	999.6
2006	1.4	213.8	98.1	15.0	8.0	121.1	13.7	0.6	0.5	176.7	527.8	381.5	909.3
2007	1.8	240.2	99.1	17.3	5.4	121.8	15.1	0.8	0.5	186.3	566.5	394.0	960.5
2008	0.0	238.2	153.4	19.9	2.8	176.0	16.9	0.9	0.6	184.5	617.1	392.5	1,009.6
2009	0.0	236.8	76.9	21.6	3.9	102.3	24.1	1.2	0.6	180.5	545.5	370.0	915.5
2010	0.0	231.9	85.4	20.8	4.2	110.5	25.9	1.3	0.7	188.5	558.7	381.7	940.4
2011	0.0	228.1	80.6	19.5	2.6	102.7	25.1	1.3	0.9	187.0	544.9	372.6	917.5
2012	0.0	206.0	70.8	16.6	1.1	88.5	21.0	1.3	0.9	180.4	498.1	358.9	857.1
2013	0.0	243.5	R 79.4	18.7	1.2	R 99.3	27.3	1.3	1.0	185.1	R 557.6	365.6	R 923.1
2014	0.0	267.7	R 91.2	20.0	2.0	R 113.2	27.7	1.3	1.0	184.9	R 595.9	364.2	R 960.0
2015	0.0	247.1	R 87.0	18.2	1.4	R 106.5	34.9	1.3	1.0	185.7	R 576.5	361.6	R 938.1
2016	0.0	224.8	R 73.3	16.9	1.5	R 91.7	28.3	1.3	1.1	183.8	R 531.1	356.5	R 887.6
2017	0.0	228.2	R 71.4	17.7	0.9	R 90.0	R 27.9	1.3	1.3	176.5	R 525.2	334.4	R 859.6
2018	0.0	262.7	R 86.3	20.8	0.9	R 108.0	R 35.4	1.3	1.5	190.7	R 599.6	353.2	R 952.8
2019	0.0	245.9	R 66.8	23.8	1.1	R 91.6	R 33.5	1.3	1.7	185.6	R 559.7	321.6	R 881.3
2020	0.0	230.1	R 59.4	18.6	1.0	R 79.1	R 25.8	1.3	1.9	188.7	R 526.9	309.9	R 836.8
2021	0.0	235.2	R 75.1	18.8	1.1	94.9	R 26.7	1.3	2.1	190.9	R 551.2	309.5	R 860.7
2022	0.0	246.5	R 78.3	18.8	1.0	R 98.1	R 33.7	1.3	2.5	192.5	R 574.3	R 313.3	R 887.7
2023	0.0	214.4	73.6	17.2	1.7	92.4	28.6	1.3	3.1	178.5	517.6	282.7	800.3

^a Beginning in 2008, data are no longer collected and are assumed to be zero.
^b Includes supplemental gaseous fuels that are commingled with natural gas.
^c Beginning in 2013, includes biodiesel blended into distillate fuel oil.
^d Hydrocarbon gas liquids, assumed to be propane only.
^e Wood and wood-derived fuels.
^f Beginning in 2021, includes small amounts of other petroleum products (biofuels product supplied) not shown separately.
^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
^h Solar thermal and photovoltaic energy. Includes solar thermal energy consumed as heat by the commercial and industrial sectors.
ⁱ Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^j 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 End use and Total.
^k Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of technical notes for an explanation of changes in methodology.
 -- = Not applicable. NA = Not available.
 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 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. <https://www.eia.gov/state/seds/>

P E N N S Y L V A N I A
Table CT5. Commercial sector energy consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum						Hydro-electric power ^{f,g} Million kilowatt-hours	Biomass Wood and waste ^{g,h}	Geothermal ^g	Solar ^{g,i} Million kilowatt-hours	Electricity ^j End use ^{g,k}	Electrical system energy losses ^l	Total ^{e,g,k}	
			Distillate fuel oil ^b	HGL ^c	Kerosene	Motor gasoline ^d	Residual fuel oil	Total ^e								
																Thousand barrels
1960	3,639	56	4,363	364	241	2,084	5,514	12,566	NA	---	---	NA	7,125	---	---	---
1965	2,403	68	4,935	436	240	2,585	5,899	14,096	NA	---	---	NA	9,417	---	---	---
1970	1,594	99	5,431	612	294	2,455	5,254	14,045	NA	---	---	NA	13,435	---	---	---
1975	1,308	99	5,491	682	177	1,310	3,630	11,290	NA	---	---	NA	18,608	---	---	---
1980	1,239	118	5,858	514	193	313	1,521	8,399	NA	---	---	NA	21,746	---	---	---
1985	993	115	5,508	744	359	448	1,414	8,472	NA	---	---	NA	24,580	---	---	---
1990	1,046	126	6,640	819	150	701	794	9,104	0	---	---	(s)	30,198	---	---	---
1995	1,034	144	6,334	999	528	88	1,221	9,170	0	---	---	(s)	35,542	---	---	---
2000	660	145	5,495	1,452	407	146	634	8,135	0	---	---	(s)	42,988	---	---	---
2005	573	145	6,124	1,427	460	90	626	8,727	0	---	---	(s)	45,782	---	---	---
2006	568	130	5,703	1,584	420	91	287	8,084	0	---	---	(s)	45,624	---	---	---
2007	645	146	4,920	1,736	186	91	389	7,322	0	---	---	(s)	47,531	---	---	---
2008	203	145	6,155	1,681	58	91	241	8,226	0	---	---	(s)	47,347	---	---	---
2009	194	144	4,160	1,784	90	91	245	6,369	0	---	---	3	46,411	---	---	---
2010	184	142	4,091	1,784	133	90	91	6,189	0	---	---	30	47,366	---	---	---
2011	170	141	3,647	2,089	35	90	40	5,900	0	---	---	74	43,536	---	---	---
2012	131	127	2,962	1,679	12	89	26	4,767	0	---	---	95	42,920	---	---	---
2013	119	149	3,214	1,980	10	92	11	5,306	0	---	---	102	43,145	---	---	---
2014	117	160	3,443	2,143	37	88	13	5,723	0	---	---	113	43,348	---	---	---
2015	75	152	3,257	2,038	25	2,765	9	8,094	0	---	---	113	43,745	---	---	---
2016	39	143	2,653	2,118	39	2,786	20	7,616	0	---	---	123	43,535	---	---	---
2017	25	146	3,110	1,881	25	2,831	1	7,848	0	---	---	144	42,623	---	---	---
2018	14	165	3,530	2,189	32	2,878	1	8,629	0	---	---	155	43,222	---	---	---
2019	12	162	3,463	2,088	38	2,897	0	8,486	0	---	---	169	40,143	---	---	---
2020	9	148	2,381	2,074	31	2,919	0	7,405	0	---	---	195	35,381	---	---	---
2021	7	154	3,157	2,178	29	2,953	(s)	8,318	0	---	---	214	36,988	---	---	---
2022	3	167	3,252	2,109	27	3,036	(s)	8,424	0	---	---	239	37,219	---	---	---
2023	2	158	3,053	1,894	47	3,042	(s)	8,036	0	---	---	269	35,802	---	---	---

Trillion Btu																
1960	90.0	58.1	25.4	1.4	1.4	10.9	34.7	73.8	NA	0.5	NA	NA	24.3	246.7	49.0	295.7
1965	58.5	70.1	28.7	1.7	1.4	13.6	37.1	82.4	NA	0.4	NA	NA	32.1	243.6	63.2	306.8
1970	37.5	102.6	31.6	2.3	1.7	12.9	33.0	81.6	NA	0.4	NA	NA	45.8	267.9	93.9	361.8
1975	29.4	101.5	32.0	2.6	1.0	6.9	22.8	65.3	NA	0.4	NA	NA	63.5	260.1	129.6	389.7
1980	28.7	121.1	34.1	2.0	1.1	1.6	9.6	48.4	NA	1.3	NA	NA	74.2	273.2	157.8	431.0
1985	23.6	119.3	32.1	2.9	2.0	2.4	8.9	48.2	NA	1.2	NA	NA	83.9	276.0	170.4	446.5
1990	26.3	130.6	38.7	3.1	0.9	3.7	5.0	51.3	0.0	2.8	(s)	(s)	103.0	314.1	225.2	528.3
1995	25.7	148.8	38.9	3.8	3.0	0.5	7.7	51.8	0.0	7.1	0.1	(s)	121.3	354.8	273.2	628.0
2000	17.4	150.4	32.0	5.6	2.3	0.8	4.0	44.6	0.0	6.1	0.2	(s)	146.7	365.3	336.7	702.1
2005	14.4	150.8	35.6	5.5	2.6	0.5	3.9	48.1	0.0	4.6	0.5	(s)	156.2	374.7	343.5	718.2
2006	14.3	135.4	33.1	6.1	2.4	0.5	1.8	43.8	0.0	4.4	0.5	(s)	155.7	354.0	336.1	690.1
2007	16.2	151.5	28.5	6.7	1.1	0.5	2.4	39.1	0.0	4.5	0.5	(s)	162.2	374.0	343.1	717.1
2008	5.2	150.2	35.6	6.5	0.3	0.5	1.5	44.3	0.0	4.7	0.6	(s)	161.5	366.5	343.7	710.3
2009	5.0	149.8	24.0	6.9	0.5	0.5	1.5	33.4	0.0	5.5	0.6	(s)	158.4	352.7	324.6	677.3
2010	4.7	146.9	23.6	6.9	0.8	0.5	0.6	32.3	0.0	5.5	0.7	0.1	161.6	351.8	327.2	679.0
2011	4.3	146.8	21.0	8.0	0.2	0.5	0.3	30.0	0.0	5.3	0.9	0.3	148.5	336.1	296.0	632.1
2012	3.3	132.5	17.1	6.4	0.1	0.5	0.2	24.2	0.0	5.0	0.8	0.3	146.4	312.6	291.3	604.0
2013	3.1	156.6	R 18.6	7.6	0.1	0.5	0.1	R 26.8	0.0	5.4	0.8	0.3	147.2	R 340.2	290.7	R 630.9
2014	3.1	167.7	R 19.9	8.2	0.2	0.4	0.1	28.8	0.0	R 5.8	0.8	0.4	147.9	R 354.5	291.3	R 645.8
2015	2.0	159.4	18.8	7.8	0.1	14.0	0.1	40.8	0.0	R 7.1	0.8	0.4	149.3	R 359.8	290.7	R 650.4
2016	1.0	148.9	15.3	8.1	0.2	14.1	0.1	R 37.9	0.0	R 6.7	0.8	0.4	148.5	R 344.2	288.1	R 632.3
2017	0.6	152.2	R 18.0	7.2	0.1	14.3	(s)	39.6	0.0	R 6.8	0.8	0.5	145.4	R 346.1	275.6	R 621.6
2018	0.4	171.6	R 20.4	8.4	0.2	14.5	(s)	43.5	0.0	R 6.8	0.8	0.5	147.5	R 371.1	273.1	R 644.2
2019	0.3	168.0	R 20.0	8.0	0.2	14.6	0.0	R 42.9	0.0	R 6.3	0.8	0.6	137.0	R 355.9	237.4	R 593.2
2020	0.2	154.0	13.7	8.0	0.2	14.7	0.0	36.6	0.0	R 7.3	0.8	0.7	120.7	R 320.4	198.2	R 518.7
2021	0.2	160.4	18.2	8.4	0.2	14.9	(s)	R 41.7	0.0	7.2	0.8	0.7	126.2	337.2	204.6	541.8
2022	0.1	173.2	R 18.8	8.1	0.2	15.3	(s)	42.3	0.0	R 9.0	0.8	0.8	127.0	R 353.1	R 206.7	R 559.8
2023	(s)	163.6	17.6	7.3	0.3	15.4	(s)	40.5	0.0	8.9	0.8	0.9	122.2	336.4	193.4	529.8

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Beginning in 2013, includes biodiesel blended into distillate fuel oil.
^c Hydrocarbon gas liquids, assumed to be propane only.
^d Beginning in 1993, includes fuel ethanol blended into motor gasoline. There is a discontinuity in this time series between 2014 and 2015 because of coverage. See technical notes, Section 4.
^e Includes small amounts of petroleum coke and, beginning in 2021 other petroleum products (biofuels product supplied), not shown separately.
^f Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.
^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
^h Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.
ⁱ Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.
^j Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^k 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 End use and Total. For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 2009, includes a small amount of wind energy consumed by commercial utility-scale facilities.
^l Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of technical notes for an explanation of changes in methodology.
 -- = Not applicable. NA = Not available.
 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 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. <https://www.eia.gov/state/seds/>

Table CT6. Industrial sector energy consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum						Hydro-electric power ^{e,f} Million kWh	Biomass		Geo-thermal ^f	Solar ^{f,i} Million kWh	Electricity ^j Million kWh	End use ^{f,k}	Electrical system energy losses ^l	Total ^{f,k}
			Distillate fuel oil	HGL ^b	Motor gasoline ^c	Residual fuel oil	Other ^d	Total		Wood and waste ^{f,g}	Losses and co-products ^h						
1960	33,140	213	8,645	992	1,456	29,692	17,976	58,762	16	---	---	---	NA	20,693	---	---	---
1965	40,010	285	11,641	1,383	1,480	29,434	23,354	67,291	15	---	---	---	NA	29,075	---	---	---
1970	35,753	340	10,196	2,396	1,181	27,132	23,465	64,370	12	---	---	---	NA	38,993	---	---	---
1975	28,510	263	11,033	3,439	1,098	21,941	24,391	61,902	1	---	---	---	NA	41,256	---	---	---
1980	21,877	337	11,128	5,238	586	11,555	22,987	51,494	1	---	---	---	NA	46,045	---	---	---
1985	13,716	231	6,434	4,624	1,276	2,624	19,794	34,753	1	---	---	---	NA	42,520	---	---	---
1990	14,546	241	7,489	3,177	1,180	5,734	27,019	44,600	0	---	---	---	(s)	45,992	---	---	---
1995	14,885	252	4,392	1,687	934	2,888	26,762	36,663	0	---	---	---	(s)	47,528	---	---	---
2000	10,508	235	5,576	1,766	703	1,994	25,625	35,664	0	---	---	---	(s)	45,449	---	---	---
2005	9,957	190	5,681	6,649	1,841	1,915	30,674	46,760	0	---	---	---	(s)	47,950	---	---	---
2006	9,595	195	7,293	7,372	2,112	1,709	30,102	48,588	0	---	---	---	(s)	47,920	---	---	---
2007	9,264	196	7,847	6,933	1,542	1,300	29,730	46,991	0	---	---	---	(s)	48,579	---	---	---
2008	9,135	198	8,775	8,517	837	1,045	27,039	46,212	0	---	---	---	(s)	48,131	---	---	---
2009	6,017	186	5,495	7,851	840	750	26,299	41,236	0	---	---	---	1	43,552	---	---	---
2010	7,498	221	5,903	7,722	2,048	679	24,603	40,955	0	---	---	---	10	45,458	---	---	---
2011	7,217	247	7,049	8,246	1,241	696	22,421	39,651	0	---	---	---	35	49,585	---	---	---
2012	6,872	282	7,877	6,042	2,073	205	18,529	34,726	0	---	---	---	50	48,039	---	---	---
2013	7,908	340	8,707	6,021	2,133	139	20,577	37,577	0	---	---	---	58	48,043	---	---	---
2014	8,056	399	9,924	6,319	1,716	78	21,419	39,457	0	---	---	---	63	48,318	---	---	---
2015	7,567	386	8,869	6,217	1,494	90	21,350	39,019	0	---	---	---	68	47,404	---	---	---
2016	5,818	401	6,389	6,329	1,485	123	21,777	36,102	0	---	---	---	68	47,128	---	---	---
2017	6,012	415	7,264	6,207	1,503	95	22,457	37,526	0	---	---	---	64	47,989	---	---	---
2018	6,223	457	7,522	6,313	1,523	76	21,194	36,628	0	---	---	---	66	49,155	---	---	---
2019	6,002	497	7,609	6,201	1,521	92	17,620	33,045	0	---	---	---	70	50,423	---	---	---
2020	4,157	472	5,579	6,525	1,534	112	13,040	26,790	0	---	---	---	75	48,607	---	---	---
2021	5,760	515	7,450	6,696	1,514	90	13,730	29,479	0	---	---	---	77	50,000	---	---	---
2022	5,888	523	7,530	24,200	1,589	92	14,550	47,961	0	---	---	---	85	50,883	---	---	---
2023	5,455	509	7,351	40,958	1,599	76	13,324	63,308	0	---	---	---	96	50,147	---	---	---

Trillion Btu																	
1960	873.1	220.0	50.4	3.8	7.6	186.7	110.7	359.1	0.1	19.8	NA	NA	NA	70.6	1,542.7	142.4	1,685.1
1965	1,053.3	296.1	67.8	5.2	7.8	185.0	142.3	408.2	0.1	25.8	NA	NA	NA	99.2	1,882.6	195.1	2,077.8
1970	932.1	351.2	59.4	8.7	6.2	170.6	143.5	388.4	(s)	32.3	NA	NA	NA	133.0	1,837.2	272.5	2,109.7
1975	743.1	269.8	64.3	12.2	5.8	137.9	148.1	368.3	(s)	36.3	NA	NA	NA	140.8	1,558.3	287.4	1,845.7
1980	573.1	344.0	64.8	18.5	3.1	72.6	139.5	298.5	(s)	74.6	NA	NA	NA	157.1	1,445.8	334.2	1,780.0
1985	359.2	238.7	37.5	15.8	6.7	16.5	122.7	199.2	(s)	87.4	0.0	NA	NA	145.1	1,029.5	294.8	1,324.3
1990	382.1	250.9	43.6	11.0	6.2	36.0	166.3	263.1	0.0	23.7	0.0	0.0	(s)	156.9	1,076.7	343.1	1,419.8
1995	392.2	261.4	25.6	5.8	4.9	18.2	165.3	219.8	0.0	33.2	0.0	0.0	(s)	162.2	1,068.7	365.3	1,434.1
2000	277.9	243.6	32.4	6.0	3.7	12.5	158.3	212.9	0.0	38.0	0.0	0.0	(s)	155.1	927.4	356.0	1,283.4
2005	250.3	197.5	33.1	22.8	9.6	12.0	190.6	268.1	0.0	32.6	(s)	0.0	(s)	163.6	912.0	359.8	1,271.8
2006	240.5	202.5	42.3	25.2	10.9	10.7	186.6	275.8	0.0	30.3	(s)	0.0	(s)	163.5	912.6	353.0	1,265.6
2007	232.3	203.7	45.4	23.5	7.9	8.2	181.7	266.7	0.0	30.5	(s)	0.0	(s)	165.8	898.9	350.7	1,249.6
2008	227.3	205.2	50.7	28.7	4.3	6.6	167.4	257.6	0.0	30.3	(s)	0.0	(s)	164.2	884.7	349.4	1,234.1
2009	147.9	193.1	31.7	26.0	4.3	4.7	163.2	230.0	0.0	28.9	(s)	0.0	(s)	148.6	748.4	304.6	1,053.1
2010	186.2	228.8	34.1	29.6	10.4	4.3	152.9	231.3	0.0	38.1	(s)	0.0	(s)	155.1	844.9	314.0	1,158.9
2011	180.3	257.1	40.7	31.6	6.3	4.4	138.9	221.8	0.0	52.2	4.7	0.0	0.1	169.2	885.5	337.1	1,222.6
2012	185.6	294.9	45.4	23.2	10.5	1.3	115.4	195.8	0.0	52.2	4.7	0.0	0.2	163.9	897.4	326.1	1,223.5
2013	217.2	357.3	50.2	23.1	10.8	0.9	126.5	211.4	0.0	59.8	5.7	0.0	0.2	163.9	1,015.6	323.7	1,339.3
2014	221.8	419.6	57.2	24.2	8.7	0.5	132.3	223.0	0.0	54.9	5.3	0.0	0.2	164.9	1,089.7	324.7	1,414.3
2015	207.6	405.0	51.1	23.8	7.6	0.6	138.4	221.5	0.0	53.1	5.1	0.0	0.2	161.7	1,054.3	315.0	1,369.3
2016	159.7	418.1	36.8	23.8	5.8	0.8	137.3	206.6	0.0	54.7	5.6	0.0	0.2	160.8	1,005.7	311.8	1,317.6
2017	167.1	432.7	41.8	23.8	7.6	0.6	141.4	215.2	0.0	54.6	5.2	0.0	0.2	163.4	1,038.6	309.6	1,348.2
2018	175.7	475.0	43.3	24.2	7.7	0.5	133.6	209.3	0.0	51.5	5.0	0.0	0.2	167.7	1,084.5	310.6	1,395.1
2019	170.4	516.1	43.8	23.8	7.7	0.6	111.1	187.0	0.0	49.0	5.7	0.0	0.2	172.0	1,100.4	298.2	1,398.6
2020	118.0	491.0	32.1	25.0	7.7	0.7	82.1	147.7	0.0	48.9	5.1	0.0	0.3	165.8	976.8	272.3	1,249.2
2021	164.6	535.0	42.9	25.7	7.6	0.6	86.9	163.8	0.0	47.8	6.3	0.0	0.3	170.6	1,088.3	276.6	1,365.0
2022	167.7	542.8	43.4	74.4	8.0	0.6	92.3	218.6	0.0	46.5	6.3	0.0	0.3	173.6	1,155.7	282.6	1,438.3
2023	155.4	527.9	42.4	120.2	8.1	0.5	84.5	255.6	0.0	45.6	6.4	0.0	0.3	171.1	1,161.4	270.9	1,432.3

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^c Beginning in 1993, includes fuel ethanol blended into motor gasoline. There is a discontinuity in this time series between 2014 and 2015 because of coverage. See technical notes, Section 4.
^d Includes asphalt and road oil, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 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 Losses and co-products from the production of biodiesel and fuel ethanol.
ⁱ Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.
^j Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^k 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 End use and Total. For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 2009, includes a small amount of wind energy consumed by industrial utility-scale facilities.
^l Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of technical notes for an explanation of changes in methodology.
kWh = Kilowatt-hours. -- = Not applicable. NA = Not available.
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 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. <https://www.eia.gov/state/seds/>

P E N N S Y L V A N I A Table CT7. Transportation sector energy consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum								Electricity ^g Million kilowatthours	End use ^{h,i}	Electrical system energy losses ^j	Total ^{f,h,i}
			Aviation gasoline	Distillate fuel oil ^b	HGL ^c	Jet fuel ^d	Lubricants	Motor gasoline ^e	Residual fuel oil	Total ^f				
			Thousand barrels											
1960	569	15	1,994	7,662	20	1,036	1,343	76,565	5,005	93,625	306	--	--	--
1965	130	19	1,922	8,900	60	3,406	1,121	81,658	4,554	101,622	232	--	--	--
1970	57	27	662	12,662	134	9,083	1,327	98,082	5,548	127,497	184	--	--	--
1975	5	18	426	16,566	157	8,469	1,094	106,357	5,788	138,857	194	--	--	--
1980	0	29	337	21,539	147	10,148	1,312	107,026	4,796	145,306	186	--	--	--
1985	0	33	208	20,337	249	10,126	1,194	100,255	2,139	134,508	365	--	--	--
1990	0	34	145	23,187	157	12,042	1,344	105,586	5,584	148,044	396	--	--	--
1995	0	38	125	29,224	188	12,313	1,282	111,261	4,769	159,162	379	--	--	--
2000	0	39	154	33,989	68	19,009	1,369	117,185	4,699	176,473	401	--	--	--
2005	0	31	100	38,790	197	16,826	1,155	121,878	4,600	183,546	880	--	--	--
2006	0	28	218	40,699	179	16,465	1,125	120,499	4,186	183,371	816	--	--	--
2007	0	35	97	39,473	130	15,503	1,162	122,337	3,419	182,120	876	--	--	--
2008	0	38	100	34,423	289	14,435	1,079	119,724	3,536	173,586	863	--	--	--
2009	0	42	69	34,787	210	12,476	970	121,181	2,397	172,089	879	--	--	--
2010	0	48	106	36,048	25	12,268	904	120,515	798	170,665	887	--	--	--
2011	0	52	116	37,540	25	12,085	872	118,396	448	169,482	840	--	--	--
2012	0	37	121	38,285	27	11,977	823	116,448	1,192	168,872	875	--	--	--
2013	0	38	106	37,395	31	12,349	849	117,184	1,005	168,920	814	--	--	--
2014	0	42	97	38,346	36	12,235	866	115,666	569	167,814	827	--	--	--
2015	0	44	102	37,211	75	12,217	908	112,768	330	163,612	776	--	--	--
2016	0	41	73	34,437	84	12,409	831	113,617	421	161,871	787	--	--	--
2017	0	44	73	34,489	203	R 12,811	765	114,497	196	R 163,034	755	--	--	--
2018	0	47	73	36,608	127	R 13,152	730	111,077	202	R 161,970	703	--	--	--
2019	0	51	84	37,250	96	R 13,723	705	111,575	269	R 163,704	619	--	--	--
2020	0	48	67	35,394	46	R 7,958	614	94,548	108	R 138,734	425	--	--	--
2021	0	53	77	36,004	104	R 9,294	653	102,894	229	R 149,802	407	--	--	--
2022	0	58	79	R 36,801	164	R 9,998	R 694	100,935	235	R 149,432	530	--	--	--
2023	0	52	75	35,976	144	11,067	499	100,615	195	149,336	434	--	--	--

Trillion Btu

1960	14.6	15.6	10.1	44.6	0.1	5.7	8.1	402.2	31.5	502.3	1.0	533.6	2.1	535.7
1965	3.3	20.1	9.7	51.8	0.2	19.2	6.8	429.0	28.6	545.3	0.8	569.5	1.6	571.1
1970	1.4	27.5	3.3	73.8	0.5	51.4	8.0	515.2	34.9	687.1	0.6	716.7	1.3	718.0
1975	0.1	18.1	2.1	96.5	0.6	47.9	6.6	558.7	36.4	748.9	0.7	767.8	1.3	769.1
1980	0.0	30.1	1.7	125.5	0.6	57.4	8.0	562.2	30.2	785.5	0.6	816.2	1.3	817.6
1985	0.0	34.1	1.0	118.5	1.0	57.3	7.2	526.6	13.4	725.1	1.2	760.4	2.5	763.0
1990	0.0	35.8	0.7	135.1	0.6	68.2	8.1	554.6	35.1	802.5	1.4	839.6	3.0	842.5
1995	0.0	39.3	0.6	170.1	0.7	69.8	7.8	579.0	30.0	858.0	1.3	898.6	2.9	901.5
2000	0.0	40.2	0.8	197.8	0.3	107.8	8.3	609.5	29.5	953.9	1.4	995.5	3.1	998.6
2005	0.0	32.3	0.5	225.7	0.8	95.4	7.0	632.8	28.9	991.1	3.0	R 1,026.8	6.6	R 1,033.4
2006	0.0	28.8	1.1	236.2	0.7	93.4	6.8	624.8	26.3	989.2	2.8	R 1,022.0	6.0	R 1,028.0
2007	0.0	36.5	0.5	228.3	0.5	87.9	7.0	629.1	21.5	974.8	3.0	R 1,015.9	6.3	R 1,022.2
2008	0.0	39.0	0.5	199.0	1.1	81.8	6.5	611.3	22.2	922.5	2.9	R 965.8	6.3	R 972.1
2009	0.0	43.3	0.4	R 200.9	0.8	70.7	5.9	616.8	15.1	910.6	3.0	R 956.9	6.1	963.1
2010	0.0	49.5	0.5	R 208.2	0.1	69.6	5.5	610.6	5.0	899.5	3.0	R 952.0	6.1	R 958.2
2011	0.0	53.6	0.6	R 216.5	0.1	68.5	5.3	599.4	2.8	R 893.3	2.9	R 949.7	5.7	R 955.4
2012	0.0	39.1	0.6	R 220.7	0.1	67.9	5.0	589.5	7.5	R 891.3	3.0	R 933.4	5.9	R 939.4
2013	0.0	40.0	0.5	R 215.4	0.1	70.0	5.1	593.0	6.3	R 890.5	2.8	R 933.3	5.5	R 938.8
2014	0.0	44.6	0.5	R 220.9	0.1	69.4	5.3	585.2	3.6	R 884.9	2.8	R 932.3	5.6	R 937.9
2015	0.0	45.7	0.5	R 214.4	0.3	69.3	5.5	570.3	2.1	R 862.3	2.6	R 910.6	5.2	915.8
2016	0.0	42.5	0.4	R 198.2	0.3	70.4	5.0	574.3	2.6	R 851.2	2.7	R 896.5	5.2	R 901.7
2017	0.0	46.2	0.4	R 198.5	0.8	72.6	4.6	578.6	1.2	R 856.7	2.6	R 905.5	4.9	910.4
2018	0.0	48.9	0.4	210.8	0.5	74.6	4.4	561.4	1.3	R 853.3	2.4	R 904.6	4.4	R 909.0
2019	0.0	52.7	0.4	214.5	0.4	77.8	4.3	563.7	1.7	862.8	2.1	R 917.6	3.7	921.2
2020	0.0	49.5	0.3	R 203.7	0.2	45.1	3.7	477.7	0.7	731.4	1.5	R 782.4	2.4	R 784.8
2021	0.0	55.4	0.4	R 207.6	0.4	52.7	4.0	519.6	1.4	R 789.0	1.4	R 845.8	2.3	R 848.1
2022	0.0	R 60.4	0.4	R 212.2	0.6	56.7	4.2	509.6	1.5	R 788.0	1.8	R 850.2	2.9	R 853.1
2023	0.0	53.9	0.4	207.4	0.6	62.8	3.0	508.0	1.2	787.4	1.5	842.8	2.3	845.2

^a Transportation use of natural gas to operate pipelines and, since 1990, also includes vehicle fuel.

^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil.

^c Hydrocarbon gas liquids, assumed to be propane only.

^d 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 "Industrial sector, Other petroleum." There is a discontinuity in this time series between 2009 and 2010 because of data source and methodology changes. See technical notes.

^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.

^f Beginning in 2021, includes other petroleum products (biofuels product supplied) not shown separately.

^g Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers. Sales to public railroads and railway systems only. Excludes electric vehicles.

^h There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of fuel ethanol beginning in 1981.

ⁱ For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column.

^j Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of technical notes for an explanation of changes in methodology.

-- = 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 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. <https://www.eia.gov/state/seds/>

Table CT8. Electric power sector consumption estimates, selected years, 1960-2023, Pennsylvania

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum				Nuclear electric power Million kilowatthours	Hydroelectric power ^d Million kilowatthours	Biomass Wood and waste ^{e,f} Million kilowatthours	Geothermal ^f Million kilowatthours	Solar ^g Million kilowatthours	Wind ^f Million kilowatthours	Electricity net imports ^h	Total ^{f,i}
			Distillate fuel oil ^b	Petroleum coke	Residual fuel oil ^c	Total								
			Thousand barrels											
1960	18,062	6	485	0	2,747	3,232	230	1,810	--	0	NA	NA	0	--
1965	23,182	1	591	0	3,351	3,943	313	1,313	--	0	NA	NA	0	--
1970	29,141	9	3,959	0	22,502	26,460	465	1,354	--	0	NA	NA	0	--
1975	36,659	1	3,419	0	10,273	13,691	15,869	1,575	--	0	NA	NA	0	--
1980	42,466	3	2,238	316	17,226	19,780	12,091	734	--	0	NA	NA	0	--
1985	41,713	2	1,423	782	11,622	13,827	26,232	971	--	0	0	0	0	--
1990	45,165	15	2,140	1,005	6,650	9,795	57,787	2,869	--	0	0	0	0	--
1995	46,895	39	1,398	1,310	4,836	7,545	66,462	2,030	--	0	0	0	16	--
2000	52,266	21	2,593	26	4,744	7,363	73,771	2,290	--	0	10	0	0	--
2005	54,464	81	1,273	534	7,058	8,865	76,289	2,232	--	0	284	0	-286	--
2006	55,936	101	651	179	949	1,779	75,298	2,844	--	0	361	0	-95	--
2007	55,712	144	838	0	1,516	2,353	77,376	2,236	--	0	470	0	62	--
2008	53,995	141	794	137	701	1,632	78,658	2,549	--	0	(s)	729	533	--
2009	48,853	211	592	140	776	1,508	77,328	2,683	--	0	4	1,075	170	--
2010	50,888	246	735	0	408	1,143	77,828	2,332	--	0	7	1,854	421	--
2011	47,403	306	671	0	230	902	76,147	3,217	--	0	18	1,794	435	--
2012	41,602	394	502	0	107	608	75,174	2,242	--	0	26	2,129	1,339	--
2013	41,992	362	571	0	97	668	78,714	2,525	--	0	55	3,352	1,109	--
2014	38,307	388	1,003	0	228	1,231	78,715	2,641	--	0	50	3,565	554	--
2015	31,391	438	1,043	0	0	1,043	80,517	2,604	--	0	52	3,353	536	--
2016	27,528	501	585	1	0	587	82,924	2,375	--	0	61	3,476	309	--
2017	24,384	527	519	0	0	519	83,200	3,123	--	0	56	3,591	32	--
2018	23,503	539	1,352	0	9	1,362	83,477	4,262	--	0	50	3,567	44	--
2019	19,480	673	378	0	7	385	83,230	3,503	--	0	70	3,250	0	--
2020	13,622	829	167	0	8	176	76,521	2,672	--	0	128	3,748	0	--
2021	16,270	852	241	0	3	244	75,903	3,135	--	0	212	3,455	0	--
2022	14,748	884	554	0	23	577	76,166	2,653	--	0	222	3,572	0	--
2023	9,847	950	120	0	6	126	75,305	2,783	--	0	347	3,258	0	--

Trillion Btu

1960	423.3	6.2	2.8	0.0	17.3	20.1	2.7	6.2	0.0	0.0	NA	NA	0.0	458.4
1965	558.6	1.3	3.4	0.0	21.1	24.5	3.7	4.5	0.0	0.0	NA	NA	0.0	592.5
1970	680.2	9.7	23.1	0.0	141.5	164.5	5.1	4.6	0.0	0.0	NA	NA	0.0	864.1
1975	861.4	1.2	19.9	0.0	64.6	84.5	174.8	5.4	0.0	0.0	NA	NA	0.0	1,127.3
1980	1,026.7	2.9	13.0	1.9	108.3	123.2	131.9	2.5	0.0	0.0	NA	NA	0.0	1,287.2
1985	1,019.7	1.6	8.3	4.7	73.1	86.1	278.6	3.3	0.0	0.0	0.0	0.0	0.0	1,389.3
1990	1,054.7	14.0	12.5	6.1	41.8	60.3	611.5	9.8	8.8	0.0	0.0	0.0	0.0	1,759.1
1995	1,062.4	40.6	8.1	7.9	30.4	46.4	698.3	6.9	27.7	0.0	0.0	0.0	0.1	1,882.4
2000	1,210.6	21.3	15.1	0.2	29.8	45.1	769.4	7.8	31.5	0.0	(s)	0.0	0.0	2,085.7
2005	1,224.9	83.5	7.4	3.1	44.4	54.8	796.2	7.6	25.0	0.0	0.0	1.0	-1.0	2,192.0
2006	1,243.1	104.4	3.8	1.0	6.0	10.8	785.7	9.7	25.5	0.0	0.0	1.2	-0.3	2,180.0
2007	1,241.6	148.3	4.8	0.0	9.5	14.4	811.6	7.6	26.4	0.0	0.0	1.6	0.2	2,251.7
2008	1,188.6	145.8	4.6	0.8	4.4	9.8	822.1	8.7	28.6	0.0	(s)	2.5	1.8	2,207.8
2009	1,071.1	216.6	3.4	0.8	4.9	9.1	808.8	9.2	28.5	0.0	(s)	3.7	0.6	2,147.5
2010	1,119.8	252.2	4.2	0.0	2.6	6.8	813.5	8.0	30.1	0.0	(s)	6.3	1.4	2,238.1
2011	1,028.4	315.0	3.9	0.0	1.4	5.3	796.8	11.0	28.7	0.0	0.1	6.1	1.5	2,192.8
2012	904.2	407.0	2.9	0.0	0.7	3.6	787.8	7.6	27.6	0.0	0.1	7.3	4.6	2,149.7
2013	905.8	378.1	3.3	0.0	0.6	3.9	822.5	8.6	27.5	0.0	0.2	11.4	3.8	2,161.8
2014	814.3	404.3	5.8	0.0	1.4	7.2	823.3	9.0	26.9	0.0	0.2	12.2	1.9	2,099.2
2015	669.2	456.2	6.0	0.0	0.0	6.0	842.0	8.9	27.2	0.0	0.2	11.4	1.8	2,023.1
2016	574.1	520.1	3.4	(s)	0.0	3.4	867.3	8.1	27.3	0.0	0.2	11.9	1.1	2,013.4
2017	501.8	544.9	3.0	0.0	0.0	3.0	870.2	10.7	27.5	0.0	0.2	12.3	0.1	1,970.5
2018	468.0	557.8	7.8	0.0	0.1	7.8	872.7	14.5	26.7	0.0	0.2	12.2	0.2	1,960.1
2019	398.1	696.8	2.2	0.0	(s)	2.2	869.1	12.0	24.0	0.0	0.2	11.1	0.0	2,013.5
2020	256.0	859.2	1.0	0.0	0.1	1.0	799.3	9.1	22.2	0.0	0.4	12.8	0.0	1,960.1
2021	320.4	882.1	1.4	0.0	(s)	1.4	791.6	10.7	19.9	0.0	0.7	11.8	0.0	2,038.7
2022	267.7	915.4	3.2	0.0	0.1	3.3	795.8	9.1	16.5	0.0	0.8	12.2	0.0	2,020.0
2023	152.1	983.2	0.7	0.0	(s)	0.7	787.1	9.5	16.5	0.0	1.2	11.1	0.0	1,957.8

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Excludes biodiesel. 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.
^c 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.
^d Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.
^e Wood, wood-derived fuels, and biomass waste. Beginning in 2006, includes small amount of other biomass liquids that are biodiesel. Prior to 2001, includes non-biomass waste.
^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 Solar thermal and photovoltaic energy.
^h Electricity traded with Canada and Mexico. Btu value calculated by converting net imports in kilowatthours by 3,412 Btu per kilowatthour.

ⁱ 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 the total.
 -- = Not applicable. NA = Not available.
 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 consists of 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 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. <https://www.eia.gov/state/seds/>