

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

Year			Petroleum							Nuclear electric power	Hydro-electric power <sup>g</sup>	Wind	Fuel ethanol <sup>h</sup>	Biodiesel
	Coal	Natural gas <sup>a</sup>	Distillate fuel oil <sup>b</sup>	HGL <sup>c</sup>	Jet fuel <sup>d</sup>	Motor gasoline <sup>e</sup>	Residual fuel oil	Other <sup>f</sup>	Total					
	Thousand short tons	Billion cubic feet	Thousand barrels											
1960	0	0	886	112	4,321	3,429	4,766	3,331	16,844	0	27	0	NA	NA
1965	0	0	1,612	219	7,618	4,082	7,230	1,717	22,478	0	105	0	NA	NA
1970	0	0	1,695	938	14,273	5,691	10,154	1,354	34,105	0	108	0	NA	NA
1971	0	0	1,709	963	16,302	5,872	10,701	1,186	36,734	0	89	0	NA	NA
1972	0	0	1,776	945	16,244	6,202	11,338	1,248	37,753	0	91	0	NA	NA
1973	0	0	1,837	942	16,511	6,608	11,575	1,354	38,826	0	95	0	NA	NA
1974	0	0	1,951	966	14,887	6,543	11,122	1,270	36,739	0	92	0	NA	NA
1975	0	0	1,948	872	14,849	6,766	11,255	1,408	37,097	0	89	0	NA	NA
1976	0	0	2,337	1,036	14,202	7,029	11,871	1,570	38,047	0	93	0	NA	NA
1977	0	0	2,865	877	14,875	7,406	12,695	1,608	40,326	0	86	0	NA	NA
1978	0	0	3,567	702	14,861	7,639	12,556	1,620	40,945	0	84	0	NA	NA
1979	0	0	6,567	1,583	15,276	7,506	12,167	1,560	44,660	0	90	0	NA	NA
1980	0	3	5,987	1,573	14,116	7,231	13,196	1,459	43,562	0	86	0	NA	NA
1981	0	3	6,021	1,337	10,028	7,185	13,160	1,080	38,811	0	80	0	4	NA
1982	47	3	4,545	2,104	7,472	7,261	13,292	1,032	35,706	0	90	0	1	NA
1983	42	3	2,326	2,102	11,271	7,240	12,148	1,204	36,291	0	84	0	0	NA
1984	38	2	2,735	121	12,946	7,528	12,796	1,172	37,297	0	82	0	0	NA
1985	46	2	4,526	133	13,260	7,594	13,185	1,308	40,006	0	86	0	0	NA
1986	16	2	4,627	126	10,176	7,878	14,326	1,910	39,044	0	78	0	0	NA
1987	63	3	3,685	157	11,481	8,186	13,595	2,287	39,389	0	82	0	0	NA
1988	50	3	5,631	178	11,972	8,476	16,935	2,709	45,902	0	81	0	0	NA
1989	32	3	5,745	186	13,239	8,754	17,355	2,742	48,021	0	56	33	0	NA
1990	29	3	6,489	178	12,646	8,670	19,067	2,965	50,015	0	80	29	0	NA
1991	45	3	7,210	214	11,123	8,970	15,599	2,641	45,758	0	71	36	0	NA
1992	303	3	6,219	651	9,993	8,870	17,856	3,067	46,655	0	61	23	0	NA
1993	691	3	5,929	884	8,891	9,060	13,845	2,782	41,392	0	56	22	0	NA
1994	704	3	6,321	1,619	9,472	9,343	15,120	2,967	44,843	0	139	20	0	NA
1995	895	3	5,787	1,316	9,940	9,416	14,473	2,909	43,842	0	98	20	0	NA
1996	930	3	4,950	1,319	10,087	9,374	12,667	3,233	41,631	0	104	23	0	NA
1997	933	3	4,640	241	10,221	9,358	12,218	3,152	39,829	0	115	16	0	NA
1998	822	3	4,451	844	9,999	9,342	13,243	2,613	40,493	0	121	19	0	NA
1999	801	3	5,314	376	9,474	8,953	12,945	2,601	39,662	0	115	16	0	NA
2000	816	3	5,094	562	9,438	9,289	13,520	2,688	40,591	0	103	17	0	NA
2001	829	3	6,040	582	8,895	9,710	13,284	2,969	41,479	0	101	2	0	1
2002	748	3	8,086	770	10,189	10,419	12,738	2,569	44,772	0	95	2	0	R 1
2003	784	3	8,206	492	12,708	10,597	12,079	2,779	46,861	0	91	2	0	R 2
2004	797	3	8,634	462	13,379	10,741	13,110	2,772	49,098	0	94	7	0	R 2
2005	740	3	7,307	432	16,372	10,978	13,210	2,968	51,267	0	96	7	344	R 7
2006	714	3	6,691	471	15,334	11,533	14,687	2,848	51,564	0	120	80	392	R 19
2007	764	3	9,294	419	12,756	11,348	16,318	2,770	52,905	0	92	238	501	R 26
2008	840	3	5,501	674	10,702	10,675	12,421	2,423	42,397	0	84	240	930	R 22
2009	791	3	6,053	819	9,303	10,834	12,384	3,080	42,472	0	113	251	1,065	R 32
2010	803	3	6,856	826	13,435	9,993	11,889	R 3,369	R 46,367	0	70	261	804	R 27
2011	783	3	6,314	900	13,932	11,145	11,710	R 3,375	R 47,377	0	93	341	933	R 172
2012	803	3	6,099	884	14,717	10,586	10,726	R 3,170	R 46,183	0	115	378	847	R 139
2013	753	3	5,719	824	15,455	10,746	10,378	R 3,358	R 46,479	0	78	503	874	R 202
2014	831	3	4,362	881	15,732	10,831	9,871	R 3,119	R 44,796	0	94	579	948	R 164
2015	747	3	4,730	747	16,270	11,053	9,744	R 3,106	R 45,649	0	121	613	1,147	R 223
2016	787	3	4,536	799	16,135	11,220	9,679	R 2,923	R 45,293	0	91	639	1,152	229
2017	759	3	4,758	995	R 17,195	11,162	10,056	2,939	R 47,105	0	66	532	1,162	R 278
2018	734	3	5,263	965	R 17,456	10,956	9,866	2,494	R 47,000	0	97	602	1,131	R 253
2019	717	3	5,096	959	R 17,838	11,022	10,094	2,497	R 47,507	0	95	529	1,158	R 206
2020	670	2	4,878	876	R 9,068	8,605	8,523	1,879	R 33,830	0	99	592	913	R 182
2021	634	3	4,719	1,088	R 13,483	9,757	9,365	R 1,905	R 40,317	0	115	658	1,042	R 225
2022	380	3	R 5,086	1,023	R 15,580	9,838	10,174	R 1,857	R 43,557	0	110	625	1,053	R 215
2023	0	3	5,016	960	16,804	9,986	10,581	1,932	45,279	0	93	634	1,069	273

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

separately identified.

<sup>h</sup> 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, Hawaii**  
(trillion Btu)

Year	Fossil fuels										Fossil fuels (as commingled)		
	Coal	Natural gas excluding supplemental gaseous fuels <sup>a</sup>	Petroleum							Total	Natural gas including supplemental gaseous fuels <sup>a</sup>	Distillate fuel oil including biofuels <sup>a</sup>	Motor gasoline including fuel ethanol <sup>a</sup>
			Distillate fuel oil excluding biofuels <sup>a</sup>	HGL <sup>b</sup>	Jet fuel <sup>c</sup>	Motor gasoline excluding fuel ethanol <sup>a</sup>	Residual fuel oil	Other <sup>d</sup>	Total				
1960	0.0	0.0	5.2	0.4	23.5	18.0	30.0	17.5	94.5	94.5	0.0	5.2	18.0
1965	0.0	0.0	9.4	0.8	42.3	21.4	45.5	9.9	129.3	129.3	0.0	9.4	21.4
1970	0.0	0.0	9.9	3.5	80.1	29.9	63.8	8.2	195.4	195.4	0.0	9.9	29.9
1971	0.0	0.0	10.0	3.6	91.5	30.8	67.3	7.1	210.4	210.4	0.0	10.0	30.8
1972	0.0	0.0	10.3	3.5	91.3	32.6	71.3	7.6	216.6	216.6	0.0	10.3	32.6
1973	0.0	0.0	10.7	3.5	92.9	34.7	72.8	8.2	222.8	222.8	0.0	10.7	34.7
1974	0.0	0.0	11.4	3.6	83.6	34.4	69.9	7.6	210.6	210.6	0.0	11.4	34.4
1975	0.0	0.0	11.3	3.2	83.5	35.5	70.8	8.6	212.9	212.9	0.0	11.3	35.5
1976	0.0	0.0	13.6	3.8	79.8	36.9	74.6	9.5	218.4	218.4	0.0	13.6	36.9
1977	0.0	0.0	16.7	3.3	83.6	38.9	79.8	9.7	232.0	232.0	0.0	16.7	38.9
1978	0.0	0.0	20.8	2.7	83.6	40.1	78.9	9.7	235.8	235.8	0.0	20.8	40.1
1979	0.0	0.0	38.3	5.9	85.9	39.4	76.5	9.4	255.3	255.3	0.0	38.3	39.4
1980	0.0	0.0	34.9	5.7	79.2	38.0	83.0	8.8	249.5	249.5	3.0	34.9	38.0
1981	0.0	0.0	35.1	4.8	56.2	37.7	82.7	6.6	223.1	223.1	2.8	35.1	37.7
1982	1.1	0.0	26.5	7.4	41.6	38.1	83.6	6.3	203.6	204.7	2.8	26.5	38.1
1983	1.0	0.0	13.6	7.4	62.5	38.0	76.4	7.3	205.2	206.2	2.7	13.6	38.0
1984	0.9	0.0	15.9	0.5	72.6	39.5	80.4	7.1	216.1	217.1	2.4	15.9	39.5
1985	1.1	0.0	26.4	0.5	74.4	39.9	82.9	8.0	232.1	233.2	2.7	26.4	39.9
1986	0.4	0.0	27.0	0.5	57.0	41.4	90.1	11.8	227.6	228.0	2.7	27.0	41.4
1987	1.6	0.2	21.5	0.6	64.4	43.0	85.5	14.0	228.9	230.6	2.8	21.5	43.0
1988	1.2	0.0	32.8	0.7	67.2	44.5	106.5	16.4	268.0	269.3	2.8	32.8	44.5
1989	0.8	0.0	33.5	0.7	74.4	46.0	109.1	16.4	280.1	280.9	2.9	33.5	46.0
1990	0.7	0.0	37.8	0.7	71.1	45.5	119.9	17.8	292.8	293.5	3.0	37.8	45.5
1991	1.1	0.0	42.0	0.8	62.6	47.1	98.1	16.0	266.6	267.6	2.9	42.0	47.1
1992	6.8	0.0	36.2	2.5	56.5	46.6	112.3	18.5	272.5	279.2	2.9	36.2	46.6
1993	15.6	0.0	34.5	3.1	50.4	47.3	87.0	16.9	239.2	254.8	2.8	34.5	47.3
1994	15.7	0.0	36.8	5.7	53.7	48.7	95.1	17.9	257.9	273.6	2.9	36.8	48.7
1995	19.9	0.0	33.7	4.6	56.4	49.0	91.0	17.6	252.3	272.2	2.9	33.7	49.0
1996	20.4	0.0	28.8	4.6	57.2	48.8	79.6	19.5	238.6	259.0	2.8	28.8	48.8
1997	20.5	0.0	27.0	0.9	58.0	48.7	76.8	19.1	230.5	251.0	2.7	27.0	48.7
1998	18.2	0.0	25.9	3.2	56.7	48.6	83.3	15.9	233.5	251.7	2.8	25.9	48.6
1999	17.7	0.0	30.9	1.4	53.7	46.6	81.4	15.9	229.9	247.6	2.9	30.9	46.6
2000	17.7	0.1	29.6	2.1	53.5	48.3	85.0	16.6	235.2	252.9	3.0	29.6	48.3
2001	17.8	0.1	35.1	2.2	50.4	50.5	83.5	18.0	239.8	257.7	2.9	35.1	50.5
2002	16.6	0.1	47.1	2.9	57.8	54.2	80.1	15.5	257.4	274.2	2.9	47.1	54.2
2003	18.0	0.1	47.7	1.9	72.1	55.1	75.9	16.7	269.4	287.6	2.9	47.7	55.1
2004	17.9	0.2	50.2	1.7	75.9	55.8	82.4	16.8	282.9	300.9	2.9	50.2	55.8
2005	16.5	0.2	42.5	1.7	92.8	55.8	83.0	18.0	293.8	310.5	2.9	42.5	57.0
2006	16.1	0.2	38.8	1.8	86.9	58.4	92.3	17.1	295.5	311.8	2.9	38.8	59.8
2007	17.1	0.2	53.8	1.6	72.3	56.6	102.6	16.7	303.5	320.8	3.0	53.8	58.3
2008	18.1	0.1	31.8	2.6	60.7	51.3	78.1	14.6	239.1	257.3	2.8	31.8	54.5
2009	17.1	0.2	34.8	3.1	52.7	51.5	77.9	19.0	239.0	256.2	2.7	35.0	55.1
2010	17.1	0.2	R 39.5	3.2	76.2	47.8	74.7	20.7	R 262.1	R 279.4	2.7	39.6	50.6
2011	16.1	0.2	36.1	3.5	79.0	53.2	73.6	20.7	R 266.1	R 282.3	2.7	36.4	56.4
2012	16.6	0.2	R 34.4	3.4	83.4	50.7	67.4	19.3	R 258.7	R 275.4	2.8	R 34.7	53.6
2013	15.3	0.2	R 31.8	3.2	87.6	51.3	65.2	R 20.7	R 259.9	R 275.4	2.9	R 32.4	54.4
2014	17.2	0.2	R 24.2	3.4	89.2	51.5	62.1	19.2	R 249.6	R 267.0	2.8	R 24.5	54.8
2015	15.6	0.2	R 26.0	2.9	92.2	51.9	61.3	19.1	R 253.4	R 269.3	2.9	R 26.3	55.9
2016	16.4	0.2	R 24.8	3.1	91.5	52.7	60.9	R 18.5	R 251.4	R 268.0	3.0	R 25.4	56.7
2017	14.9	0.2	R 25.8	3.8	97.5	52.4	63.2	18.5	R 261.3	R 276.4	3.0	R 26.4	56.4
2018	14.4	0.2	R 28.9	3.7	R 99.0	51.4	62.0	15.7	R 260.8	R 275.3	3.2	R 29.6	55.4
2019	14.2	0.2	R 28.2	3.7	R 101.1	51.7	63.5	15.6	R 263.8	R 278.2	3.1	R 28.7	55.7
2020	13.3	0.2	R 27.1	3.4	R 51.4	40.3	53.6	11.8	R 187.5	R 201.0	2.3	R 27.6	43.5
2021	12.6	0.1	27.0	4.2	R 76.5	45.7	58.9	R 11.8	223.0	235.7	2.6	27.2	49.3
2022	7.7	0.2	R 29.1	3.9	88.3	46.0	64.0	R 11.6	R 242.0	R 249.8	2.7	R 29.3	49.7
2023	0.0	0.2	28.7	3.7	95.3	46.7	66.5	12.0	251.7	251.8	2.7	28.9	50.4

<sup>a</sup> 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."

<sup>b</sup> Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.

<sup>c</sup> 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.

<sup>d</sup> 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, Hawaii (continued)**  
(trillion Btu)

Year	Nuclear electric power	Renewable energy											Net interstate flow of electricity <sup>l</sup>	Electricity net imports <sup>m</sup>	Total <sup>f,j</sup>
		Hydro- electric power <sup>e,f</sup>	Biomass						Geo- thermal <sup>f</sup>	Solar <sup>f,k</sup>	Wind	Total <sup>f,j</sup>			
			Wood and waste <sup>f,g</sup>	Fuel ethanol <sup>h</sup>	Biodiesel	Renewable diesel	Losses and co- products <sup>i</sup>	Total <sup>f,j</sup>							
1960	0.0	0.1	0.0	NA	NA	NA	NA	0.0	0.0	NA	NA	0.1	0.0	0.0	94.6
1965	0.0	0.4	0.2	NA	NA	NA	NA	0.2	0.0	NA	NA	0.5	0.0	0.0	129.8
1970	0.0	0.4	0.4	NA	NA	NA	NA	0.4	0.0	NA	NA	0.8	0.0	0.0	196.2
1975	0.0	0.3	0.6	NA	NA	NA	NA	0.6	0.0	NA	NA	0.9	0.0	0.0	213.8
1976	0.0	0.3	0.7	NA	NA	NA	NA	0.7	0.0	NA	NA	1.0	0.0	0.0	219.4
1977	0.0	0.3	0.5	NA	NA	NA	NA	0.5	0.0	NA	NA	0.8	0.0	0.0	232.7
1978	0.0	0.3	0.3	NA	NA	NA	NA	0.3	0.0	NA	NA	0.6	0.0	0.0	236.4
1979	0.0	0.3	0.3	NA	NA	NA	NA	0.3	0.0	NA	NA	0.6	0.0	0.0	256.0
1980	0.0	0.3	11.9	NA	NA	NA	NA	11.9	0.0	NA	NA	12.2	0.0	0.0	261.7
1981	0.0	0.3	12.7	NA	NA	NA	NA	12.7	0.0	NA	NA	13.0	0.0	0.0	236.2
1982	0.0	0.3	12.4	NA	NA	NA	NA	12.4	0.0	NA	NA	12.7	0.0	0.0	217.5
1983	0.0	0.3	14.0	NA	NA	NA	NA	14.0	0.0	NA	NA	14.3	0.0	0.0	220.6
1984	0.0	0.3	14.3	NA	NA	NA	NA	14.3	0.1	NA	NA	14.7	0.0	0.0	231.7
1985	0.0	0.3	14.2	0.0	NA	NA	0.0	14.2	0.1	NA	NA	14.6	0.0	0.0	247.8
1986	0.0	0.3	16.3	0.0	NA	NA	0.0	16.3	0.1	NA	NA	16.6	0.0	0.0	244.7
1987	0.0	0.3	17.8	0.0	NA	NA	0.0	17.8	(s)	NA	0.0	18.2	0.0	0.0	248.8
1988	0.0	0.3	19.4	0.0	NA	NA	0.0	19.4	0.1	0.0	0.0	19.8	0.0	0.0	289.0
1989	0.0	0.2	27.0	0.0	NA	NA	0.0	27.0	(s)	0.8	0.1	28.2	0.0	0.0	309.0
1990	0.0	0.3	25.9	0.0	NA	NA	0.0	25.9	(s)	0.9	0.1	27.2	0.0	0.0	320.7
1991	0.0	0.2	25.4	0.0	NA	NA	0.0	25.4	(s)	1.0	0.1	26.8	0.0	0.0	294.4
1992	0.0	0.2	24.9	0.0	NA	NA	0.0	24.9	(s)	1.0	0.1	26.2	0.0	0.0	305.4
1993	0.0	0.2	24.4	0.0	NA	NA	0.0	24.4	0.5	1.1	0.1	26.2	0.0	0.0	281.1
1994	0.0	0.5	20.7	0.0	NA	NA	0.0	20.7	0.6	1.1	0.1	23.0	0.0	0.0	296.6
1995	0.0	0.3	19.8	0.0	NA	NA	0.0	19.8	0.8	1.2	0.1	22.2	0.0	0.0	294.3
1996	0.0	0.4	19.1	0.0	NA	NA	0.0	19.1	0.8	1.2	0.1	21.5	0.0	0.0	280.5
1997	0.0	0.4	17.4	0.0	NA	NA	0.0	17.4	0.8	1.2	0.1	19.9	0.0	0.0	270.9
1998	0.0	0.4	16.5	0.0	NA	NA	0.0	16.5	0.8	1.3	0.1	19.1	0.0	0.0	270.8
1999	0.0	0.4	17.0	0.0	NA	NA	0.0	17.0	0.7	1.3	0.1	19.4	0.0	0.0	267.0
2000	0.0	0.4	15.2	0.0	NA	NA	0.0	15.2	0.9	1.3	0.1	17.8	0.0	0.0	270.7
2001	0.0	0.3	7.9	0.0	NA	NA	0.0	8.0	0.7	1.2	(s)	10.2	0.0	0.0	268.0
2002	0.0	0.3	7.5	0.0	NA	NA	0.0	7.5	0.3	1.2	(s)	9.3	0.0	0.0	283.5
2003	0.0	0.3	9.3	0.0	NA	NA	0.0	9.3	0.6	1.3	(s)	11.5	0.0	0.0	299.1
2004	0.0	0.3	9.3	0.0	NA	NA	0.0	9.3	0.7	1.3	(s)	11.7	0.0	0.0	312.6
2005	0.0	0.3	8.4	1.2	R (s)	NA	0.0	9.6	0.8	1.3	(s)	12.0	0.0	0.0	322.6
2006	0.0	0.4	8.5	1.4	R 0.1	NA	0.0	R 10.0	0.7	1.4	0.3	12.8	0.0	0.0	R 324.5
2007	0.0	0.3	8.0	1.7	R 0.1	NA	0.0	R 9.8	0.8	1.5	0.8	R 13.2	0.0	0.0	R 334.0
2008	0.0	0.3	8.6	3.2	R 0.1	NA	0.0	12.0	0.8	1.7	0.8	R 15.5	0.0	0.0	R 272.8
2009	0.0	0.4	8.6	3.7	0.2	NA	0.0	R 12.4	0.6	1.8	0.9	R 16.0	0.0	0.0	R 272.2
2010	0.0	0.2	7.7	2.8	R 0.1	NA	0.0	R 10.6	0.7	1.9	0.9	R 14.4	0.0	0.0	293.8
2011	0.0	0.3	7.4	3.2	R 0.9	NA	0.0	R 11.0	0.8	2.2	1.2	R 15.4	0.0	0.0	R 297.7
2012	0.0	0.4	6.7	2.9	R 0.8	NA	0.0	10.0	0.9	2.7	1.3	15.3	0.0	0.0	R 290.7
2013	0.0	0.3	8.2	3.0	R 1.1	NA	(s)	R 11.8	0.9	3.4	1.7	R 18.1	0.0	0.0	R 293.5
2014	0.0	0.3	7.7	3.3	R 0.9	NA	(s)	R 11.3	0.9	4.0	2.0	R 18.4	0.0	0.0	R 285.4
2015	0.0	0.4	7.2	4.0	R 1.2	0.0	(s)	R 11.5	0.8	4.3	2.1	R 19.1	0.0	0.0	R 288.4
2016	0.0	0.3	8.2	4.0	1.2	0.0	(s)	R 12.8	0.9	4.9	2.2	R 21.0	0.0	0.0	R 289.1
2017	0.0	0.2	5.4	4.0	1.5	0.0	(s)	R 10.0	1.1	5.9	1.8	R 19.1	0.0	0.0	R 295.5
2018	0.0	0.3	5.4	3.9	R 1.3	0.0	(s)	R 10.0	0.4	6.2	2.1	R 18.9	0.0	0.0	R 294.2
2019	0.0	0.3	4.9	4.0	R 1.1	0.0	(s)	R 9.5	(s)	6.7	1.8	R 18.4	0.0	0.0	R 296.6
2020	0.0	0.3	4.4	3.2	R 1.0	0.0	(s)	R 8.2	(s)	7.8	2.0	R 18.4	0.0	0.0	R 219.4
2021	0.0	0.4	4.6	3.6	R 1.2	0.0	(s)	R 8.8	0.6	8.0	2.2	R 20.1	0.0	0.0	R 255.8
2022	0.0	0.4	R 4.5	3.7	R 1.1	0.0	(s)	R 8.8	0.7	8.4	2.1	R 20.5	0.0	0.0	270.3
2023	0.0	0.3	4.6	3.7	1.4	0.0	(s)	8.9	0.7	9.0	2.2	21.0	0.0	0.0	272.9

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

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

<sup>g</sup> Wood, wood-derived fuels, and biomass waste. Beginning in 2006, includes small amount of other biomass liquids that are biodiesel.

<sup>h</sup> 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.

<sup>i</sup> Losses and co-products from the production of biodiesel and fuel ethanol.

<sup>j</sup> 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.

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

<sup>l</sup> 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.

<sup>m</sup> 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, Hawaii

Year	Coal	Natural gas <sup>a</sup>	Petroleum							Hydro-electric power <sup>g,h</sup>	Biomass		Geo-thermal <sup>h</sup>	Solar <sup>h,k</sup>	Electricity <sup>l</sup>	End use <sup>h,m</sup>	Electrical system energy losses <sup>n</sup>	Total <sup>h,m</sup>
			Distillate fuel oil <sup>b</sup>	HGL <sup>c</sup>	Jet fuel <sup>d</sup>	Motor gasoline <sup>e</sup>	Residual fuel oil	Other <sup>f</sup>	Total		Wood and waste <sup>h,i</sup>	Losses and co-products <sup>j</sup>			Electricity <sup>l</sup>			
															Million kilowatt-hours			
Thousand barrels																		
1960	0	0	849	112	4,321	3,429	2,047	3,331	14,088	0	--	--	--	--	1,285	--	--	--
1970	0	0	1,599	938	14,273	5,691	3,452	1,354	27,307	86	--	--	--	--	3,776	--	--	--
1980	0	3	5,099	1,573	14,116	7,231	2,957	1,459	32,436	67	--	--	--	--	6,331	--	--	--
1990	28	3	4,675	178	12,646	8,670	5,222	2,965	34,357	57	--	--	--	--	8,311	--	--	--
2000	110	3	2,319	562	9,438	9,289	2,672	2,688	26,968	60	--	--	--	--	9,691	--	--	--
2005	59	3	4,723	432	16,372	10,978	1,905	2,968	37,379	34	--	--	--	--	10,539	--	--	--
2006	59	3	4,238	471	15,334	11,533	3,188	2,848	37,611	38	--	--	--	--	10,568	--	--	--
2007	72	3	6,981	419	12,756	11,348	4,893	2,770	39,167	38	--	--	--	--	10,585	--	--	--
2008	99	3	3,301	674	10,702	10,675	1,412	2,423	29,188	39	--	--	--	--	10,390	--	--	--
2009	88	3	3,802	819	9,303	10,834	1,680	3,080	29,518	35	--	--	--	--	10,126	--	--	--
2010	61	3	4,610	826	13,435	9,993	1,525	R 3,369	R 33,758	42	--	--	--	--	10,017	--	--	--
2011	58	3	4,050	900	13,932	11,145	1,456	R 3,375	R 34,858	49	--	--	--	--	9,962	--	--	--
2012	50	3	3,916	884	14,717	10,586	1,233	R 3,170	R 34,505	59	--	--	--	--	9,639	--	--	--
2013	61	3	3,640	824	15,455	10,746	1,163	R 3,358	R 35,185	44	--	--	--	--	9,503	--	--	--
2014	61	3	2,307	881	15,732	10,831	1,105	R 3,119	R 33,974	52	--	--	--	--	9,475	--	--	--
2015	50	3	2,596	747	16,270	11,053	997	R 3,106	R 34,769	59	--	--	--	--	9,511	--	--	--
2016	12	3	2,499	799	16,135	11,220	1,218	R 2,923	R 34,794	38	--	--	--	--	9,445	--	--	--
2017	0	3	2,664	995	R 17,195	11,162	1,662	2,939	36,617	37	--	--	--	--	9,324	--	--	--
2018	0	3	3,108	965	R 17,456	10,956	1,470	2,494	R 36,449	34	--	--	--	--	9,337	--	--	--
2019	0	3	2,779	959	R 17,838	11,022	1,716	2,497	R 36,811	59	--	--	--	--	9,453	--	--	--
2020	0	2	2,683	876	R 9,068	8,605	763	1,879	R 23,875	70	--	--	--	--	8,797	--	--	--
2021	0	3	2,542	1,088	R 13,483	9,757	1,656	R 1,781	R 30,307	72	--	--	--	--	8,936	--	--	--
2022	0	3	R 2,701	1,023	R 15,580	9,838	1,697	R 1,751	R 32,590	61	--	--	--	--	9,039	--	--	--
2023	0	3	2,636	960	16,804	9,986	1,409	1,765	33,561	67	--	--	--	--	8,927	--	--	--
Trillion Btu																		
1960	0.0	0.0	4.9	0.4	23.5	18.0	12.9	17.5	77.2	0.0	0.0	NA	NA	NA	4.4	81.6	13.0	94.6
1970	0.0	0.0	9.3	3.5	80.1	29.9	21.7	8.2	152.7	0.3	0.2	NA	NA	NA	12.9	166.0	30.1	196.2
1980	0.0	3.0	29.7	5.7	79.2	38.0	18.6	8.8	180.0	0.2	11.9	NA	NA	NA	21.6	213.7	48.0	261.7
1990	0.7	3.0	27.2	0.7	71.1	45.5	32.8	17.8	195.2	0.2	18.2	0.0	(s)	0.9	28.4	243.4	77.2	320.7
2000	2.1	3.0	13.5	2.1	53.5	48.3	16.8	16.6	150.8	0.2	9.9	0.0	(s)	1.3	33.1	197.5	73.2	270.7
2005	1.4	2.9	27.5	1.7	92.8	57.0	12.0	18.0	208.9	0.1	8.4	0.0	(s)	1.3	36.0	R 256.3	66.2	322.6
2006	1.6	2.9	24.6	1.8	86.9	59.8	20.0	17.1	210.3	0.1	8.5	0.0	(s)	1.4	36.1	R 258.3	66.2	R 324.5
2007	1.8	3.0	40.4	1.6	72.3	58.3	30.8	16.7	220.1	0.1	8.0	0.0	(s)	1.5	36.1	267.9	66.2	R 334.0
2008	2.3	2.8	19.1	2.6	60.7	54.5	8.9	14.6	160.4	0.1	8.6	0.0	(s)	1.7	35.5	R 208.8	64.0	R 272.8
2009	2.0	2.7	22.0	3.1	52.7	55.1	10.6	19.0	162.5	0.1	8.5	0.0	(s)	1.8	34.6	209.8	62.5	272.3
2010	1.4	2.7	26.6	3.2	76.2	50.6	9.6	20.7	186.9	0.1	7.7	0.0	(s)	1.9	34.2	R 232.5	61.4	293.8
2011	1.3	2.7	23.4	3.5	79.0	56.4	9.2	20.7	192.1	0.2	6.8	0.0	(s)	2.1	34.0	R 236.7	61.0	R 297.7
2012	1.1	2.8	R 22.2	3.4	83.4	53.6	7.8	19.3	R 189.7	0.2	6.3	0.0	(s)	2.7	32.9	R 233.1	57.6	R 290.7
2013	1.4	2.9	R 20.4	3.2	87.6	54.4	7.3	R 20.7	R 193.6	0.2	7.6	(s)	(s)	3.3	32.4	R 238.7	54.8	R 293.5
2014	1.4	2.8	R 12.6	3.4	89.2	54.8	6.9	19.2	R 186.2	0.2	7.1	(s)	(s)	3.8	32.3	R 231.2	54.2	R 285.4
2015	1.1	2.9	R 14.0	2.9	92.2	55.9	6.3	19.1	R 190.5	0.2	6.4	(s)	(s)	4.1	32.5	R 234.9	53.5	R 288.4
2016	0.3	3.0	R 13.7	3.1	91.5	56.7	7.7	R 18.5	R 191.1	0.1	7.1	(s)	(s)	4.6	32.2	R 235.6	53.5	R 289.1
2017	0.0	3.0	R 14.3	3.8	97.5	56.4	10.4	18.5	R 201.0	0.1	3.7	(s)	(s)	5.3	31.8	R 242.1	53.3	R 295.5
2018	0.0	3.2	R 17.2	3.7	R 99.0	55.4	9.2	15.7	R 200.2	0.1	3.9	(s)	(s)	5.5	31.9	R 241.8	52.4	R 294.2
2019	0.0	3.1	R 15.4	3.7	R 101.1	55.7	10.8	15.6	R 202.3	0.2	3.6	(s)	(s)	5.8	32.3	R 244.5	52.1	R 296.6
2020	0.0	2.3	R 15.0	3.4	R 51.4	43.5	4.8	11.8	R 129.8	0.2	3.4	(s)	(s)	6.2	30.0	R 169.8	49.6	R 219.4
2021	0.0	2.6	14.6	4.2	R 76.5	49.3	10.4	R 11.2	R 166.2	0.2	3.3	(s)	(s)	6.3	30.5	R 206.6	R 49.9	R 256.5
2022	0.0	2.7	R 15.6	3.9	88.3	49.7	10.7	R 11.0	R 179.2	0.2	3.3	(s)	(s)	6.6	30.8	R 220.3	R 50.6	R 270.9
2023	0.0	2.7	15.2	3.7	95.3	50.4	8.9	11.1	184.6	0.2	3.0	(s)	(s)	6.8	30.5	225.2	48.6	273.7

<sup>a</sup> Includes supplemental gaseous fuels that are commingled with natural gas.<sup>b</sup> 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.<sup>c</sup> Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.<sup>d</sup> 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."<sup>e</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.<sup>f</sup> Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 4.<sup>g</sup> Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.<sup>h</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>i</sup> Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.<sup>j</sup> Losses and co-products from the production of biodiesel and fuel ethanol.<sup>k</sup> Solar thermal and photovoltaic energy.<sup>l</sup> Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.<sup>m</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in 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.<sup>n</sup> 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, Hawaii

Year	Coal <sup>a</sup>	Natural gas <sup>b</sup>	Petroleum				Biomass	Geothermal <sup>g</sup>	Solar <sup>g,h</sup>	Electricity <sup>i</sup>	End use <sup>g,j</sup>	Electrical system energy losses <sup>k</sup>	Total <sup>e,g,j</sup>
			Distillate fuel oil <sup>c</sup>	HGL <sup>d</sup>	Kerosene	Total <sup>e</sup>							
	Thousand short tons	Billion cubic feet	Thousand barrels				Wood <sup>f</sup>			Million kilowatthours			
1960	0	0	(s)	25	0	26	--	--	--	514	--	--	--
1965	0	0	1	50	0	51	--	--	--	861	--	--	--
1970	0	0	1	198	0	200	--	--	--	1,285	--	--	--
1975	0	0	1	142	0	143	--	--	--	1,663	--	--	--
1980	0	1	1	191	0	192	--	--	--	1,841	--	--	--
1985	0	1	(s)	45	0	45	--	--	--	1,879	--	--	--
1990	0	1	(s)	57	0	57	--	--	--	2,324	--	--	--
1995	0	1	2	38	(s)	40	--	--	--	2,606	--	--	--
2000	0	1	(s)	194	(s)	194	--	--	--	2,765	--	--	--
2005	0	1	(s)	152	(s)	152	--	--	--	3,164	--	--	--
2006	0	1	3	156	(s)	159	--	--	--	3,182	--	--	--
2007	0	1	3	125	(s)	128	--	--	--	3,201	--	--	--
2008	0	(s)	5	262	(s)	267	--	--	--	3,085	--	--	--
2009	0	1	3	239	(s)	242	--	--	--	3,055	--	--	--
2010	0	1	(s)	239	(s)	239	--	--	--	2,989	--	--	--
2011	0	(s)	(s)	222	(s)	222	--	--	--	2,929	--	--	--
2012	0	(s)	(s)	326	(s)	326	--	--	--	2,739	--	--	--
2013	0	1	(s)	218	(s)	218	--	--	--	2,609	--	--	--
2014	0	1	(s)	220	(s)	220	--	--	--	2,584	--	--	--
2015	0	1	(s)	131	0	132	--	--	--	2,641	--	--	--
2016	0	1	(s)	180	0	180	--	--	--	2,612	--	--	--
2017	0	1	(s)	151	0	151	--	--	--	2,630	--	--	--
2018	0	1	0	119	0	119	--	--	--	2,711	--	--	--
2019	0	1	0	129	0	129	--	--	--	2,760	--	--	--
2020	0	1	(s)	123	0	123	--	--	--	2,849	--	--	--
2021	0	1	(s)	154	0	154	--	--	--	2,825	--	--	--
2022	0	1	(s)	148	0	149	--	--	--	2,748	--	--	--
2023	0	1	(s)	126	0	127	--	--	--	2,693	--	--	--
Trillion Btu													
1960	0.0	0.0	(s)	0.1	0.0	0.1	0.0	NA	NA	1.8	1.9	5.2	7.1
1965	0.0	0.0	(s)	0.2	0.0	0.2	0.0	NA	NA	2.9	3.1	6.7	9.8
1970	0.0	0.0	(s)	0.8	0.0	0.8	0.0	NA	NA	4.4	5.2	10.3	15.4
1975	0.0	0.0	(s)	0.5	0.0	0.5	0.0	NA	NA	5.7	6.2	12.7	18.9
1980	0.0	1.4	(s)	0.7	0.0	0.7	0.0	NA	NA	6.3	7.0	14.0	21.0
1985	0.0	0.7	(s)	0.2	0.0	0.2	0.0	NA	NA	6.4	6.6	13.3	19.9
1990	0.0	0.6	(s)	0.2	0.0	0.2	0.0	0.0	0.9	7.9	9.0	21.6	30.6
1995	0.0	0.6	(s)	0.1	(s)	0.2	0.0	0.0	1.2	8.9	10.2	20.5	30.7
2000	0.0	0.6	(s)	0.7	(s)	0.7	0.0	0.0	1.3	9.4	11.5	20.9	32.4
2005	0.0	0.5	(s)	0.6	(s)	0.6	0.2	0.0	1.3	10.8	12.9	19.9	32.8
2006	0.0	0.5	(s)	0.6	(s)	0.6	0.2	0.0	1.3	10.9	13.0	19.9	32.9
2007	0.0	0.5	(s)	0.5	(s)	0.5	0.2	0.0	1.4	10.9	13.1	20.0	33.1
2008	0.0	0.5	(s)	1.0	(s)	1.0	0.2	0.0	1.6	10.5	13.4	19.0	32.4
2009	0.0	0.5	(s)	0.9	(s)	0.9	0.3	0.0	1.7	10.4	13.4	18.9	32.3
2010	0.0	0.5	(s)	0.9	(s)	0.9	0.4	0.0	1.8	10.2	13.3	18.3	31.6
2011	0.0	0.5	(s)	0.9	(s)	0.9	0.4	0.0	1.9	10.0	13.2	17.9	31.1
2012	0.0	0.5	(s)	1.3	(s)	1.3	0.3	0.0	2.3	9.3	13.2	16.4	29.6
2013	0.0	0.6	(s)	0.8	(s)	0.8	0.4	0.0	2.7	8.9	12.9	15.0	27.9
2014	0.0	0.6	(s)	0.8	(s)	0.8	0.4	0.0	3.0	8.8	13.1	14.8	27.9
2015	0.0	0.6	(s)	0.5	0.0	0.5	(s)	0.0	3.3	9.0	12.9	14.8	27.7
2016	0.0	0.6	(s)	0.7	0.0	0.7	(s)	0.0	3.6	8.9	13.3	14.8	28.0
2017	0.0	0.6	(s)	0.6	0.0	0.6	(s)	0.0	4.1	9.0	13.7	15.0	28.8
2018	0.0	0.6	0.0	0.5	0.0	0.5	(s)	0.0	4.1	9.2	13.9	15.2	29.1
2019	0.0	0.5	0.0	0.5	0.0	0.5	(s)	0.0	4.3	9.4	14.3	15.2	29.5
2020	0.0	0.6	(s)	0.5	0.0	0.5	(s)	0.0	4.6	9.7	14.8	16.0	30.9
2021	0.0	0.6	(s)	0.6	0.0	0.6	(s)	0.0	4.7	9.6	15.0	R 15.8	R 30.7
2022	0.0	0.5	(s)	0.6	0.0	0.6	(s)	0.0	4.9	9.4	14.9	R 15.4	R 30.2
2023	0.0	0.5	(s)	0.5	0.0	0.5	(s)	0.0	5.1	9.2	14.8	14.6	29.4

<sup>a</sup> Beginning in 2008, data are no longer collected and are assumed to be zero.

<sup>b</sup> Includes supplemental gaseous fuels that are commingled with natural gas.

<sup>c</sup> Beginning in 2013, includes biodiesel blended into distillate fuel oil.

<sup>d</sup> Hydrocarbon gas liquids, assumed to be propane only.

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

<sup>f</sup> Beginning in 2021, includes small amounts of other petroleum products (biofuels product supplied) not shown separately.

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

<sup>h</sup> Solar thermal and photovoltaic energy. Includes solar thermal energy consumed as heat by the commercial and industrial sectors.

<sup>i</sup> Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

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

the other fossil fuels from which they are mostly derived, but should be counted only once in End use and Total.

<sup>k</sup> 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/>

**HAWAII** Table CT5. Commercial sector energy consumption estimates, selected years, 1960-2023, Hawaii

Year		Natural gas <sup>a</sup>	Petroleum						Hydro-electric power <sup>f,g</sup>	Biomass		Geothermal <sup>g</sup>	Solar <sup>g,i</sup>	Electricity <sup>j</sup>	End use <sup>g,k</sup>	Electrical system energy losses <sup>l</sup>	Total <sup>e,g,k</sup>
	Coal	Distillate fuel oil <sup>b</sup>	HGL <sup>c</sup>	Kerosene	Motor gasoline <sup>d</sup>	Residual fuel oil	Total <sup>e</sup>	Wood and waste <sup>g,h</sup>									
	Thousand short tons	Billion cubic feet	Thousand barrels							Million kilowatthours	Million kilowatthours						
1960	0	0	48	42	23	55	41	209	NA	--	--	NA	306	--	--	--	
1965	0	0	71	83	39	59	31	283	NA	--	--	NA	495	--	--	--	
1970	0	0	174	328	87	133	38	760	NA	--	--	NA	771	--	--	--	
1975	0	0	84	235	45	98	15	477	NA	--	--	NA	1,109	--	--	--	
1980	0	2	398	315	0	54	25	792	NA	--	--	NA	1,462	--	--	--	
1985	0	2	132	74	1	47	21	275	NA	--	--	NA	1,612	--	--	--	
1990	0	2	453	93	(s)	59	825	1,430	0	--	--	(s)	2,253	--	--	--	
1995	0	2	343	63	(s)	11	62	480	0	--	--	(s)	2,779	--	--	--	
2000	0	2	218	320	(s)	11	8	558	0	--	--	(s)	3,092	--	--	--	
2005	0	2	384	251	(s)	12	3	651	0	--	--	1	3,463	--	--	--	
2006	0	2	392	257	(s)	12	1	662	0	--	--	4	3,490	--	--	--	
2007	0	2	282	223	(s)	12	(s)	517	0	--	--	7	3,520	--	--	--	
2008	0	2	221	403	(s)	12	0	636	0	--	--	15	3,501	--	--	--	
2009	0	2	272	540	(s)	12	0	825	0	--	--	25	3,388	--	--	--	
2010	0	2	265	531	(s)	12	0	808	0	--	--	35	3,355	--	--	--	
2011	0	2	299	631	(s)	12	0	943	0	--	--	59	3,368	--	--	--	
2012	0	2	266	554	(s)	12	0	833	0	--	--	123	3,238	--	--	--	
2013	0	2	255	599	(s)	13	0	867	0	--	--	175	3,271	--	--	--	
2014	0	2	323	652	(s)	12	0	987	0	--	--	228	3,202	--	--	--	
2015	0	2	225	604	0	309	0	1,138	0	--	--	243	3,174	--	--	--	
2016	0	2	157	606	0	314	0	1,076	0	--	--	279	3,111	--	--	--	
2017	0	2	205	787	0	319	0	1,311	0	--	--	360	3,082	--	--	--	
2018	0	3	236	740	0	324	0	1,301	0	--	--	406	3,033	--	--	--	
2019	0	3	317	803	0	326	0	1,446	0	--	--	435	3,058	--	--	--	
2020	0	2	226	730	0	328	0	1,283	0	--	--	464	2,684	--	--	--	
2021	0	2	233	897	0	331	0	1,460	0	--	--	476	2,785	--	--	--	
2022	0	2	222	836	0	341	0	1,399	0	--	--	493	2,838	--	--	--	
2023	0	2	235	796	0	342	0	1,373	0	--	--	501	2,799	--	--	--	

Trillion Btu																
1960	0.0	0.0	0.3	0.2	0.1	0.3	0.3	1.1	NA	0.0	NA	NA	1.0	2.2	3.1	5.3
1965	0.0	0.0	0.4	0.3	0.2	0.3	0.2	1.5	NA	0.0	NA	NA	1.7	3.1	3.8	7.0
1970	0.0	0.0	1.0	1.3	0.5	0.7	0.2	3.7	NA	0.0	NA	NA	2.6	6.3	6.2	12.5
1975	0.0	0.0	0.5	0.9	0.3	0.5	0.1	2.3	NA	0.0	NA	NA	3.8	6.0	8.5	14.5
1980	0.0	1.7	2.3	1.2	0.0	0.3	0.2	4.0	NA	0.0	NA	NA	5.0	6.9	11.1	20.0
1985	0.0	2.0	0.8	0.3	(s)	0.2	0.1	1.4	NA	0.0	NA	NA	5.5	6.9	11.4	18.3
1990	0.0	2.4	2.6	0.4	(s)	0.3	5.2	8.5	0.0	0.0	0.0	(s)	7.7	16.2	20.9	37.1
1995	0.0	2.3	2.0	0.2	(s)	0.1	0.4	2.7	0.0	0.0	0.0	(s)	9.5	12.2	21.8	34.0
2000	0.0	1.9	1.3	1.2	(s)	0.1	0.1	2.6	0.0	0.0	(s)	(s)	10.6	13.2	23.4	36.6
2005	0.0	1.9	2.2	1.0	(s)	0.1	(s)	3.3	0.0	2.3	(s)	(s)	11.8	17.5	21.8	39.3
2006	0.0	1.9	2.3	1.0	(s)	0.1	(s)	3.3	0.0	2.6	(s)	(s)	11.9	18.0	21.9	39.9
2007	0.0	1.9	1.6	0.9	(s)	0.1	(s)	2.6	0.0	2.4	(s)	(s)	12.0	17.1	22.0	39.1
2008	0.0	1.8	1.3	1.5	(s)	0.1	0.0	2.9	0.0	3.1	(s)	0.1	11.9	18.1	21.6	39.6
2009	0.0	1.8	1.6	2.1	(s)	0.1	0.0	3.7	0.0	3.0	(s)	0.1	11.6	18.5	20.9	39.4
2010	0.0	1.8	1.5	2.0	(s)	0.1	0.0	3.6	0.0	2.9	(s)	0.1	11.4	18.3	20.6	38.8
2011	0.0	1.9	1.7	2.4	(s)	0.1	0.0	4.2	0.0	2.8	(s)	0.2	11.5	18.8	20.6	39.4
2012	0.0	1.9	1.5	2.1	(s)	0.1	0.0	3.7	0.0	2.2	(s)	0.4	11.0	17.5	19.4	36.9
2013	0.0	1.9	1.5	2.3	(s)	0.1	0.0	3.8	0.0	3.2	(s)	0.6	11.2	18.9	18.9	37.8
2014	0.0	1.9	1.9	2.5	(s)	0.1	0.0	4.4	0.0	3.3	(s)	0.8	10.9	19.5	18.3	37.9
2015	0.0	1.9	1.3	2.3	0.0	1.6	0.0	5.2	0.0	3.2	(s)	0.8	10.8	20.2	17.8	38.0
2016	0.0	2.3	0.9	2.3	0.0	1.6	0.0	4.8	0.0	3.7	(s)	1.0	10.6	R 20.3	17.6	37.9
2017	0.0	2.4	1.2	3.0	0.0	1.6	0.0	5.8	0.0	3.6	(s)	1.2	10.5	21.2	17.6	38.9
2018	0.0	2.5	1.4	2.8	0.0	1.6	0.0	5.8	0.0	3.8	(s)	1.4	10.3	21.5	17.0	38.6
2019	0.0	2.5	1.8	3.1	0.0	1.6	0.0	6.6	0.0	3.5	(s)	1.5	10.4	22.2	16.8	39.0
2020	0.0	1.6	1.3	2.8	0.0	1.7	0.0	5.8	0.0	3.3	(s)	1.6	9.2	19.9	15.1	35.0
2021	0.0	1.9	1.3	3.4	0.0	1.7	0.0	6.5	0.0	3.2	(s)	1.6	9.5	20.9	R 15.5	R 36.4
2022	0.0	2.1	1.3	3.2	0.0	1.7	0.0	6.2	0.0	3.2	(s)	1.7	9.7	20.9	R 15.9	R 36.8
2023	0.0	2.1	1.4	3.1	0.0	1.7	0.0	6.1	0.0	2.9	(s)	1.7	9.6	20.4	15.2	35.7

<sup>a</sup> Includes supplemental gaseous fuels that are commingled with natural gas.  
<sup>b</sup> Beginning in 2013, includes biodiesel blended into distillate fuel oil.  
<sup>c</sup> Hydrocarbon gas liquids, assumed to be propane only.  
<sup>d</sup> 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.  
<sup>e</sup> Includes small amounts of petroleum coke and, beginning in 2021 other petroleum products (biofuels product supplied), not shown separately.  
<sup>f</sup> Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.  
<sup>g</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.  
<sup>h</sup> Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.  
<sup>i</sup> Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.  
<sup>j</sup> Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

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

Year	Coal	Natural gas <sup>a</sup>	Petroleum						Hydro-electric power <sup>e,f</sup>	Biomass		Geo-thermal <sup>f</sup>	Solar <sup>f,i</sup>	Electricity <sup>j</sup>	End use <sup>f,k</sup>	Electrical system energy losses <sup>l</sup>	Total <sup>f,k</sup>
			Distillate fuel oil	HGL <sup>b</sup>	Motor gasoline <sup>c</sup>	Residual fuel oil	Other <sup>d</sup>	Total		Wood and waste <sup>f,g</sup>	Losses and co-products <sup>h</sup>		Million kWh	Electricity <sup>j</sup>			
	Thousand short tons	Billion cubic feet	Thousand barrels						Million kWh	Wood and waste <sup>f,g</sup>	Losses and co-products <sup>h</sup>	Million kWh	End use <sup>f,k</sup>	Electrical system energy losses <sup>l</sup>	Total <sup>f,k</sup>		
1960	0	0	554	43	83	1,038	649	2,367	0	--	--	--	NA	465	--	--	--
1965	0	0	635	82	76	1,712	992	3,497	83	--	--	--	NA	1,096	--	--	--
1970	0	0	701	386	49	1,671	1,066	3,874	86	--	--	--	NA	1,720	--	--	--
1975	0	0	603	472	53	1,346	1,174	3,648	71	--	--	--	NA	2,538	--	--	--
1980	0	0	1,369	1,041	49	1,491	1,186	5,135	67	--	--	--	NA	3,028	--	--	--
1985	46	0	458	9	104	1,344	1,083	2,997	67	--	--	--	NA	3,143	--	--	--
1990	28	0	725	15	133	1,740	2,617	5,231	57	--	--	--	(s)	3,734	--	--	--
1995	192	0	548	1,207	245	1,024	2,618	5,643	64	--	--	--	(s)	3,803	--	--	--
2000	110	1	473	49	160	438	2,566	3,685	60	--	--	--	(s)	3,834	--	--	--
2005	59	(s)	512	14	133	781	2,859	4,298	34	--	--	--	(s)	3,912	--	--	--
2006	59	(s)	456	41	141	811	2,743	4,194	38	--	--	--	0	3,896	--	--	--
2007	72	1	451	58	244	428	2,663	3,844	38	--	--	--	0	3,864	--	--	--
2008	99	(s)	347	5	247	434	2,335	3,367	39	--	--	--	0	3,804	--	--	--
2009	88	(s)	404	32	234	466	2,995	4,131	35	--	--	--	0	3,683	--	--	--
2010	61	(s)	326	52	143	451	R 3,255	R 4,227	42	--	--	--	0	3,672	--	--	--
2011	58	(s)	342	44	147	454	R 3,256	R 4,243	49	--	--	--	0	3,665	--	--	--
2012	50	(s)	376	0	140	326	R 3,064	R 3,906	59	--	--	--	0	3,662	--	--	--
2013	61	(s)	325	2	138	283	R 3,253	R 4,001	44	--	--	--	0	3,623	--	--	--
2014	61	(s)	392	5	171	257	R 3,021	R 3,846	52	--	--	--	0	3,690	--	--	--
2015	50	(s)	321	7	284	298	R 3,022	R 3,933	59	--	--	--	(s)	3,696	--	--	--
2016	12	(s)	163	8	281	408	R 2,850	R 3,711	38	--	--	--	2	3,722	--	--	--
2017	0	(s)	311	56	283	514	2,867	4,032	37	--	--	--	3	3,613	--	--	--
2018	0	(s)	263	106	292	445	2,413	3,519	34	--	--	--	3	3,593	--	--	--
2019	0	(s)	380	27	293	396	2,404	3,501	59	--	--	--	4	3,635	--	--	--
2020	0	(s)	345	23	296	0	1,809	2,474	70	--	--	--	4	3,263	--	--	--
2021	0	(s)	285	38	267	463	R 1,659	2,711	72	--	--	--	4	3,327	--	--	--
2022	0	(s)	288	38	289	474	R 1,620	2,710	61	--	--	--	4	3,453	--	--	--
2023	0	(s)	281	38	294	394	1,646	2,653	67	--	--	--	4	3,435	--	--	--

## Trillion Btu

1960	0.0	0.0	3.2	0.2	0.4	6.5	3.9	14.2	0.0	0.0	NA	NA	NA	1.6	15.8	4.7	20.5
1965	0.0	0.0	3.7	0.3	0.4	10.8	6.1	21.3	0.3	0.2	NA	NA	NA	3.7	25.5	8.5	34.0
1970	0.0	0.0	4.1	1.4	0.3	10.5	6.6	22.9	0.3	0.2	NA	NA	NA	5.9	29.2	13.7	42.9
1975	0.0	0.0	3.5	1.7	0.3	8.5	7.3	21.2	0.2	0.3	NA	NA	NA	8.7	30.4	19.4	49.8
1980	0.0	0.0	8.0	3.7	0.3	9.4	7.3	28.6	0.2	11.9	NA	NA	NA	10.3	51.0	23.0	74.0
1985	1.1	0.0	2.7	(s)	0.5	8.4	6.8	18.5	0.2	14.0	0.0	NA	NA	10.7	44.6	22.2	66.8
1990	0.7	0.0	4.2	0.1	0.7	10.9	16.0	31.9	0.2	18.2	0.0	(s)	(s)	12.7	63.7	34.7	98.4
1995	4.1	0.0	3.2	4.2	1.3	6.4	16.1	31.2	0.2	13.3	0.0	(s)	(s)	13.0	61.7	29.9	91.6
2000	2.1	0.6	2.8	0.2	0.8	2.8	15.9	22.4	0.2	9.9	0.0	(s)	(s)	13.1	47.7	29.0	76.7
2005	1.4	0.5	3.0	(s)	0.7	4.9	17.4	26.0	0.1	5.9	0.0	(s)	(s)	13.3	46.8	24.6	71.4
2006	1.6	0.5	2.6	0.1	0.7	5.1	16.5	25.2	0.1	5.8	0.0	(s)	0.0	13.3	46.0	24.4	70.4
2007	1.8	0.5	2.6	0.2	1.3	2.7	16.1	22.8	0.1	5.4	0.0	(s)	0.0	13.2	43.4	24.2	67.6
2008	2.3	0.4	2.0	(s)	1.3	2.7	14.1	20.1	0.1	5.4	0.0	(s)	0.0	13.0	40.9	23.4	64.4
2009	2.0	0.4	2.3	0.1	1.2	2.9	18.5	25.1	0.1	5.2	0.0	(s)	0.0	12.6	45.0	22.7	67.7
2010	1.4	0.4	1.9	0.2	0.7	2.8	R 20.1	25.7	0.1	4.4	0.0	(s)	0.0	12.5	44.2	22.5	66.7
2011	1.3	0.4	2.0	0.2	0.7	2.9	R 20.1	25.8	0.2	3.7	0.0	(s)	0.0	12.5	R 43.4	22.4	R 65.9
2012	1.1	0.4	2.2	0.0	0.7	2.1	R 18.7	R 23.7	0.2	3.8	0.0	(s)	0.0	12.5	R 41.3	21.9	R 63.2
2013	1.4	0.4	1.9	(s)	0.7	1.8	R 18.7	24.4	0.2	4.0	(s)	(s)	0.0	12.4	R 42.4	20.9	R 63.3
2014	1.4	0.4	2.3	(s)	0.9	1.6	R 18.7	23.4	0.2	3.4	(s)	(s)	0.0	12.6	R 41.0	21.1	62.1
2015	1.1	0.4	1.9	(s)	1.4	1.9	R 23.8	18.6	0.2	3.2	(s)	(s)	0.0	12.6	R 41.0	20.8	R 61.8
2016	0.3	0.1	0.9	(s)	1.4	2.6	18.0	R 23.0	0.1	3.4	(s)	(s)	0.0	12.7	R 39.5	21.1	R 60.6
2017	0.0	0.1	1.8	0.2	1.4	3.2	18.1	24.8	0.1	0.1	(s)	(s)	0.0	12.3	37.3	20.7	58.0
2018	0.0	0.1	1.5	0.4	1.5	2.8	15.3	21.5	0.1	0.1	(s)	(s)	0.0	12.3	33.9	20.2	54.1
2019	0.0	0.1	2.2	0.1	1.5	2.5	15.1	21.4	0.2	0.1	(s)	(s)	0.0	12.4	34.1	20.0	54.1
2020	0.0	0.1	2.0	0.1	1.5	0.0	11.4	14.9	0.2	0.1	(s)	(s)	0.0	11.1	26.4	18.4	44.8
2021	0.0	0.1	1.6	0.1	1.3	2.9	10.5	16.6	0.2	0.1	(s)	(s)	0.0	11.4	28.3	R 18.6	R 46.8
2022	0.0	0.1	1.7	0.1	1.5	3.0	10.3	16.5	0.2	R (s)	(s)	(s)	0.0	11.8	28.6	R 19.3	R 47.9
2023	0.0	0.1	1.6	0.1	1.5	2.5	10.5	16.2	0.2	(s)	(s)	(s)	0.0	11.7	28.2	18.7	46.9

<sup>a</sup> Includes supplemental gaseous fuels that are commingled with natural gas.

<sup>b</sup> Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.

<sup>c</sup> 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.

<sup>d</sup> Includes asphalt and road oil, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See technical notes, Section 4.

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

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

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

<sup>h</sup> Losses and co-products from the production of biodiesel and fuel ethanol.

<sup>i</sup> Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.

<sup>j</sup> Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

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

the other fossil fuels from which they are mostly derived, but should be counted only once in 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.

<sup>l</sup> 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 = Kilowatthours. -- = 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/>

**HAWAII** Table CT7. Transportation sector energy consumption estimates, selected years, 1960-2023, Hawaii

Year	Coal	Natural gas <sup>a</sup>	Petroleum								Electricity <sup>g</sup>	End use <sup>h,i</sup>	Electrical system energy losses <sup>j</sup>	Total <sup>f,h,i</sup>
			Aviation gasoline	Distillate fuel oil <sup>b</sup>	HGL <sup>c</sup>	Jet fuel <sup>d</sup>	Lubricants	Motor gasoline <sup>e</sup>	Residual fuel oil	Total <sup>f</sup>				
	Thousand short tons	Billion cubic feet	Thousand barrels								Million kilowatthours			
1960	0	0	2,640	247	2	4,321	19	3,290	968	11,487	0	--	--	--
1965	0	0	613	844	4	7,618	73	3,947	1,195	14,294	0	--	--	--
1970	0	0	133	722	26	14,273	68	5,508	1,744	22,473	0	--	--	--
1975	0	0	116	831	22	14,849	74	6,615	1,013	23,520	0	--	--	--
1980	0	0	199	3,331	26	14,116	74	7,129	1,441	26,317	0	--	--	--
1985	0	0	155	3,184	6	13,260	68	7,443	1,526	25,641	0	--	--	--
1990	0	0	272	3,498	13	12,646	76	8,477	2,657	27,639	0	--	--	--
1995	0	0	218	2,683	8	9,940	73	9,160	2,677	24,759	0	--	--	--
2000	0	0	45	1,627	0	9,438	78	9,118	2,226	22,532	0	--	--	--
2005	0	(s)	44	3,827	15	16,372	65	10,833	1,121	32,278	0	--	--	--
2006	0	(s)	41	3,387	17	15,334	64	11,379	2,375	32,597	0	--	--	--
2007	0	(s)	41	6,246	12	12,756	66	11,092	4,465	34,678	0	--	--	--
2008	0	(s)	28	2,729	4	10,702	61	10,416	978	24,917	0	--	--	--
2009	0	(s)	30	3,124	6	9,303	55	10,588	1,214	24,320	0	--	--	--
2010	0	(s)	37	4,019	3	13,435	76	9,838	1,075	28,483	0	--	--	--
2011	0	(s)	35	3,409	3	13,932	84	10,985	1,002	29,451	0	--	--	--
2012	0	(s)	31	3,274	3	14,717	75	10,434	906	29,440	0	--	--	--
2013	0	(s)	27	3,060	4	15,455	79	10,595	880	30,098	0	--	--	--
2014	0	(s)	28	1,591	4	15,732	70	10,648	848	28,920	0	--	--	--
2015	0	(s)	9	2,049	5	16,270	75	10,460	699	29,566	0	--	--	--
2016	0	(s)	7	2,179	4	16,135	66	10,626	810	29,827	0	--	--	--
2017	0	(s)	10	2,148	(s)	17,195	62	10,560	1,148	31,123	0	--	--	--
2018	0	(s)	22	2,609	(s)	17,456	60	10,339	1,025	31,510	0	--	--	--
2019	0	0	31	2,082	(s)	17,838	61	10,403	1,320	31,735	0	--	--	--
2020	0	(s)	24	2,112	(s)	9,068	46	7,982	763	19,996	0	--	--	--
2021	0	(s)	11	2,024	0	13,483	53	9,160	1,194	25,983	0	--	--	--
2022	0	0	11	2,191	0	15,580	55	9,207	1,223	28,333	0	--	--	--
2023	0	0	11	2,120	0	16,804	41	9,350	1,015	29,409	0	--	--	--

  

Trillion Btu														
1960	0.0	0.0	13.3	1.4	(s)	23.5	0.1	17.3	6.1	61.8	0.0	61.8	0.0	61.8
1965	0.0	0.0	3.1	4.9	(s)	42.3	0.4	20.7	7.5	79.0	0.0	79.0	0.0	79.0
1970	0.0	0.0	0.7	4.2	0.1	80.1	0.4	28.9	11.0	125.3	0.0	125.3	0.0	125.3
1975	0.0	0.0	0.6	4.8	0.1	83.5	0.5	34.7	6.4	130.5	0.0	130.5	0.0	130.5
1980	0.0	0.0	1.0	19.4	0.1	79.2	0.5	37.4	9.1	146.7	0.0	146.7	0.0	146.7
1985	0.0	0.0	0.8	18.5	(s)	74.4	0.4	39.1	9.6	142.9	0.0	142.9	0.0	142.9
1990	0.0	0.0	1.4	20.4	(s)	71.1	0.5	44.5	16.7	154.5	0.0	154.5	0.0	154.5
1995	0.0	0.0	1.1	15.6	(s)	56.4	0.4	47.7	16.8	138.0	0.0	138.0	0.0	138.0
2000	0.0	0.0	0.2	9.5	0.0	53.5	0.5	47.4	14.0	125.1	0.0	125.1	0.0	125.1
2005	0.0	(s)	0.2	22.3	0.1	92.8	0.4	56.2	7.0	179.1	0.0	179.1	0.0	179.1
2006	0.0	(s)	0.2	19.7	0.1	86.9	0.4	59.0	14.9	181.2	0.0	R 181.3	0.0	R 181.3
2007	0.0	(s)	0.2	36.1	(s)	72.3	0.4	57.0	28.1	194.2	0.0	R 194.4	0.0	R 194.4
2008	0.0	(s)	0.1	15.8	(s)	60.7	0.4	53.2	6.1	136.3	0.0	R 136.4	0.0	R 136.4
2009	0.0	(s)	0.1	18.0	(s)	52.7	0.3	53.9	7.6	132.8	0.0	132.8	0.0	132.8
2010	0.0	(s)	0.2	23.2	(s)	76.2	0.5	49.8	6.8	156.7	0.0	156.7	0.0	156.7
2011	0.0	(s)	0.2	19.7	(s)	79.0	0.5	55.6	6.3	161.3	0.0	161.3	0.0	161.3
2012	0.0	(s)	0.2	R 18.4	(s)	83.4	0.5	52.8	5.7	R 161.0	0.0	R 161.0	0.0	R 161.0
2013	0.0	(s)	0.1	R 17.1	(s)	87.6	0.5	53.6	5.5	R 164.5	0.0	R 164.5	0.0	R 164.5
2014	0.0	(s)	0.1	R 8.5	(s)	89.2	0.4	53.9	5.3	R 157.5	0.0	R 157.5	0.0	R 157.5
2015	0.0	(s)	(s)	R 10.9	(s)	92.2	0.5	52.9	4.4	R 160.9	0.0	R 160.9	0.0	R 160.9
2016	0.0	(s)	(s)	R 11.8	(s)	91.5	0.4	53.7	5.1	R 162.6	0.0	R 162.6	0.0	R 162.6
2017	0.0	(s)	0.1	R 11.4	(s)	97.5	0.4	53.4	7.2	R 169.9	0.0	R 169.9	0.0	R 169.9
2018	0.0	(s)	0.1	R 14.3	(s)	R 99.0	0.4	52.3	6.4	R 172.4	0.0	R 172.4	0.0	R 172.4
2019	0.0	0.0	0.2	R 11.4	(s)	R 101.1	0.4	52.6	8.3	R 173.9	0.0	R 173.9	0.0	R 173.9
2020	0.0	(s)	0.1	R 11.7	(s)	R 51.4	0.3	40.3	4.8	R 108.6	0.0	R 108.6	0.0	R 108.6
2021	0.0	(s)	0.1	11.7	0.0	R 76.5	0.3	46.3	7.5	142.6	0.0	142.6	0.0	142.6
2022	0.0	0.0	0.1	12.6	0.0	88.3	0.3	46.5	7.7	R 155.9	0.0	R 155.9	0.0	R 155.9
2023	0.0	0.0	0.1	12.2	0.0	95.3	0.3	47.2	6.4	161.8	0.0	161.8	0.0	161.8

<sup>a</sup> Transportation use of natural gas to operate pipelines and, since 1990, also includes vehicle fuel.  
<sup>b</sup> Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil.  
<sup>c</sup> Hydrocarbon gas liquids, assumed to be propane only.  
<sup>d</sup> 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.  
<sup>e</sup> Beginning in 1993, includes fuel ethanol blended into motor gasoline.  
<sup>f</sup> Beginning in 2021, includes other petroleum products (biofuels product supplied) not shown separately.  
<sup>g</sup> 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.  
<sup>h</sup> There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of fuel ethanol beginning in 1981.

<sup>i</sup> For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column.  
<sup>j</sup> 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, Hawaii

Year	Coal	Natural gas <sup>a</sup>	Petroleum				Nuclear electric power	Hydroelectric power <sup>d</sup>	Biomass	Geothermal <sup>f</sup>	Solar <sup>f,g</sup>	Wind <sup>f</sup>	Electricity net imports <sup>h</sup>	Total <sup>f,i</sup>
			Distillate fuel oil <sup>b</sup>	Petroleum coke	Residual fuel oil <sup>c</sup>	Total			Wood and waste <sup>e,f</sup>					
	Thousand short tons	Billion cubic feet	Thousand barrels				Million kilowatthours			Million kilowatthours				
1960	0	0	37	0	2,719	2,756	0	27	--		0	NA	NA	0
1965	0	0	61	0	4,292	4,353	0	22	--	0	NA	NA	0	--
1970	0	0	96	0	6,702	6,798	0	22	--	0	NA	NA	0	--
1975	0	0	429	0	8,880	9,309	0	18	--	0	NA	NA	0	--
1980	0	0	888	0	10,239	11,127	0	20	--	0	NA	NA	0	--
1985	0	0	752	0	10,295	11,047	0	19	--	19	0	0	0	--
1990	1	0	1,813	0	13,844	15,657	0	23	--	0	0	29	0	--
1995	703	0	2,211	0	10,709	12,921	0	34	--	235	0	20	0	--
2000	706	0	2,775	0	10,848	13,623	0	43	--	262	0	17	0	--
2005	680	0	2,584	0	11,304	13,888	0	62	--	222	0	7	0	--
2006	655	0	2,453	0	11,499	13,952	0	82	--	212	0	80	0	--
2007	692	0	2,313	0	11,426	13,738	0	55	--	230	0	238	0	--
2008	741	0	2,199	0	11,009	13,209	0	45	--	234	(s)	240	0	--
2009	703	0	2,250	0	10,704	12,954	0	77	--	168	1	251	0	--
2010	742	0	2,246	0	10,364	12,610	0	29	--	201	2	261	0	--
2011	724	0	2,264	0	10,255	12,518	0	45	--	224	4	341	0	--
2012	753	0	2,183	0	9,494	11,677	0	56	--	261	5	378	0	--
2013	692	0	2,079	0	9,216	11,295	0	34	--	275	19	503	0	--
2014	769	0	2,055	0	8,767	10,822	0	42	--	254	39	579	0	--
2015	697	0	2,134	0	8,746	10,880	0	63	--	230	54	613	0	--
2016	775	0	2,037	0	8,461	10,498	0	53	--	260	89	639	0	--
2017	759	0	2,094	0	8,395	10,488	0	29	--	323	175	532	0	--
2018	734	0	2,154	0	8,397	10,551	0	62	--	110	185	602	0	--
2019	717	0	2,317	0	8,379	10,696	0	35	--	0	268	529	0	--
2020	670	0	2,195	0	7,760	9,955	0	29	--	10	484	592	0	--
2021	634	0	2,178	0	7,708	10,010	0	43	--	184	507	658	0	--
2022	380	0	2,385	0	8,477	10,967	0	50	--	208	551	625	0	--
2023	0	0	2,380	0	9,172	11,718	0	26	--	193	647	634	0	--

## Trillion Btu

1960	0.0	0.0	0.2	0.0	17.1	17.3	0.0	0.1	0.0	0.0	NA	NA	0.0	17.4
1965	0.0	0.0	0.4	0.0	27.0	27.3	0.0	0.1	0.0	0.0	NA	NA	0.0	27.4
1970	0.0	0.0	0.6	0.0	42.1	42.7	0.0	0.1	0.3	0.0	NA	NA	0.0	43.0
1975	0.0	0.0	2.5	0.0	55.8	58.3	0.0	0.1	0.3	0.0	NA	NA	0.0	58.6
1980	0.0	0.0	5.2	0.0	64.4	69.5	0.0	0.1	0.0	0.0	NA	NA	0.0	69.6
1985	0.0	0.0	4.4	0.0	64.7	69.1	0.0	0.1	0.3	0.1	0.0	0.0	0.0	69.5
1990	(s)	0.0	10.6	0.0	87.0	97.6	0.0	0.1	7.8	0.0	0.0	0.1	0.0	105.6
1995	15.6	0.0	12.9	0.0	67.3	80.2	0.0	0.1	6.5	0.8	0.0	0.1	0.0	103.5
2000	15.5	0.0	16.1	0.0	68.2	84.4	0.0	0.1	5.3	0.9	0.0	0.1	0.0	106.3
2005	15.1	0.0	15.0	0.0	71.1	86.1	0.0	0.2	0.0	0.8	0.0	(s)	0.0	102.2
2006	14.5	0.0	14.2	0.0	72.3	86.5	0.0	0.3	(s)	0.7	0.0	0.3	0.0	102.3
2007	15.3	0.0	13.4	0.0	71.8	85.2	0.0	0.2	0.0	0.8	0.0	0.8	0.0	102.3
2008	15.8	0.0	12.7	0.0	69.2	81.9	0.0	0.2	0.0	0.8	(s)	0.8	0.0	99.5
2009	15.0	0.0	13.0	0.0	67.3	80.3	0.0	0.3	(s)	0.6	(s)	0.9	0.0	97.1
2010	15.7	0.0	13.0	0.0	65.2	78.1	0.0	0.1	(s)	0.7	(s)	0.9	0.0	95.5
2011	14.8	0.0	13.1	0.0	64.5	77.5	0.0	0.2	0.6	0.8	(s)	1.2	0.0	95.0
2012	15.4	0.0	12.6	0.0	59.7	72.3	0.0	0.2	0.4	0.9	(s)	1.3	0.0	90.5
2013	13.9	0.0	12.0	0.0	57.9	69.9	0.0	0.1	0.5	0.9	0.1	1.7	0.0	87.2
2014	15.9	0.0	11.8	0.0	55.1	67.0	0.0	0.1	0.6	0.9	0.1	2.0	0.0	86.6
2015	14.5	0.0	12.3	0.0	55.0	67.3	0.0	0.2	0.9	0.8	0.2	2.1	0.0	85.9
2016	16.2	0.0	11.7	0.0	53.2	64.9	0.0	0.2	1.1	0.9	0.3	2.2	0.0	85.7
2017	14.9	0.0	12.1	0.0	52.8	64.8	0.0	0.1	1.8	1.1	0.6	1.8	0.0	85.2
2018	14.4	0.0	12.4	0.0	52.8	65.2	0.0	0.2	1.5	0.4	0.6	2.1	0.0	84.3
2019	14.2	0.0	13.3	0.0	52.7	66.0	0.0	0.1	1.3	0.0	0.9	1.8	0.0	84.3
2020	13.3	0.0	12.6	0.0	48.8	61.4	0.0	0.1	1.1	(s)	1.7	2.0	0.0	79.6
2021	12.6	0.0	12.6	0.0	48.5	61.7	0.0	0.1	1.4	0.6	1.7	2.2	0.0	80.3
2022	7.7	0.0	13.7	0.0	53.3	67.6	0.0	0.2	1.3	0.7	1.9	2.1	0.0	81.4
2023	0.0	0.0	13.7	0.0	57.7	72.3	0.0	0.1	1.6	0.7	2.2	2.2	0.0	79.0

<sup>a</sup> Includes supplemental gaseous fuels that are commingled with natural gas.<sup>b</sup> 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.<sup>c</sup> Prior to 1980, based on oil used in steam plants. For 1980 through 2000, residual fuel oil includes fuel oil Nos. 4, 5, and 6.<sup>d</sup> Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.<sup>e</sup> Wood, wood-derived fuels, and biomass waste. Beginning in 2006, includes small amount of other biomass liquids that are biodiesel. Prior to 2001, includes non-biomass waste.<sup>f</sup> There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.<sup>g</sup> Solar thermal and photovoltaic energy.<sup>h</sup> Electricity traded with Canada and Mexico. Btu value calculated by converting net imports in kilowatthours by 3,412 Btu per kilowatthour.<sup>i</sup> Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in 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/>