

Data release date: June 2023

CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	Number of housing units (million)	Average site energy consumption ^a (million Btu per household using the end use)					
		Total U.S. ^b	Total	Space heating ^c	Water heating	Air conditioning	Refrigerators
All homes	123.53	36.1	8.5	9.2	7.9	2.9	17.4
Alabama	1.90	47.1	9.8	9.7	10.5	3.1	19.6
Alaska	0.26	25.4	8.3	10.9	0.8	2.6	16.9
Arizona	2.68	46.4	4.4	8.1	17.6	3.2	19.5
Arkansas	1.14	45.7	12.8	11.0	9.8	2.8	19.3
California	13.18	22.1	2.1	5.8	5.6	2.8	13.3
Colorado	2.26	27.8	5.8	8.2	4.5	2.9	17.0
Connecticut	1.38	26.6	6.9	7.1	4.1	2.4	15.0
Delaware	0.38	38.0	9.9	10.4	6.1	2.7	17.6
District of Columbia	0.32	24.0	4.5	6.8	5.0	2.1	10.8
Florida	8.06	47.7	5.2	8.0	14.9	3.2	19.7
Georgia	3.88	45.3	7.6	11.1	10.3	3.2	20.6
Hawaii	0.47	27.2	1.4	7.4	9.7	3.1	13.5
Idaho	0.66	37.8	11.9	12.9	4.5	3.0	19.3
Illinois	4.90	28.8	8.1	7.2	5.1	2.8	15.9
Indiana	2.60	39.7	14.9	11.3	6.0	3.0	18.6
Iowa	1.28	35.0	11.7	9.0	5.0	3.0	19.1
Kansas	1.13	36.9	9.8	9.6	8.8	3.0	18.8
Kentucky	1.74	45.5	14.2	10.2	7.8	2.9	19.4
Louisiana	1.73	50.4	6.8	10.2	15.4	3.1	21.9
Maine	0.56	24.0	5.0	7.7	2.6	2.3	15.3
Maryland	2.28	39.3	11.1	9.7	6.5	2.9	17.7
Massachusetts	2.71	24.7	6.2	6.9	4.2	2.4	14.0
Michigan	3.92	28.6	6.8	8.9	4.2	2.7	17.3
Minnesota	2.23	31.8	10.4	10.3	3.5	2.7	17.6
Mississippi	1.08	48.0	10.3	9.3	12.6	3.2	19.7
Missouri	2.43	40.9	12.2	9.9	7.8	3.1	18.6
Montana	0.43	31.8	13.0	10.0	2.8	2.6	16.4
Nebraska	0.77	36.5	12.5	8.3	5.7	3.2	18.6
Nevada	1.14	37.9	4.6	7.6	12.6	3.1	19.4
New Hampshire	0.54	24.8	4.1	7.9	3.4	2.6	15.4

CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	Number of housing units (million)	Average site energy consumption ^a (million Btu per household using the end use)					
		Total U.S. ^b	Total	Space heating ^c	Water heating	Air conditioning	Refrigerators
All homes	123.53	36.1	8.5	9.2	7.9	2.9	17.4
New Jersey	3.39	28.3	5.1	7.5	6.0	2.8	15.9
New Mexico	0.79	28.1	5.7	7.6	6.2	2.8	16.3
New York	7.52	23.6	5.8	7.2	4.4	2.3	13.0
North Carolina	4.01	42.6	9.8	9.9	8.4	2.9	17.7
North Dakota	0.32	40.4	18.1	10.8	2.9	2.9	18.5
Ohio	4.74	35.1	11.7	9.7	5.2	2.8	18.2
Oklahoma	1.49	46.3	13.9	9.8	10.8	3.0	20.9
Oregon	1.65	38.0	12.2	12.5	3.5	2.8	17.0
Pennsylvania	5.13	35.0	11.5	10.4	5.3	2.8	17.0
Rhode Island	0.42	23.6	4.3	6.8	3.9	2.5	14.2
South Carolina	1.97	46.1	9.6	10.0	10.4	2.9	18.6
South Dakota	0.35	36.8	14.2	10.3	4.5	2.9	18.5
Tennessee	2.66	48.5	12.7	10.6	8.9	2.9	20.4
Texas	10.26	45.9	7.6	9.1	13.6	3.1	20.1
Utah	1.04	31.1	5.2	8.8	6.3	3.0	19.0
Vermont	0.26	23.0	4.9	9.0	2.4	2.5	14.2
Virginia	3.24	44.1	9.3	10.8	7.6	3.0	20.7
Washington	2.94	37.5	14.5	11.1	3.0	2.6	16.4
West Virginia	0.70	45.9	18.8	11.8	5.9	2.7	17.9
Wisconsin	2.39	28.8	7.3	8.4	3.3	2.8	17.0
Wyoming	0.23	31.3	14.8	10.0	3.4	2.8	16.7

Data source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-457A, D, E, F, G of the 2020 Residential Energy Consumption Survey

Notes: Because of rounding, data may not sum to totals. Percentages are calculated on unrounded numbers. See RECS Terminology for the definitions of terms used in these tables. Differences in estimates between states may not be statistically significant.

Btu = British thermal units

^a Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded. Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included.

^b Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

^c Includes main (primary) and secondary space heating.

^d Includes end uses not shown in this table. A more detailed breakout of end uses is shown in the CE5 tables.

Q = Data withheld because either the relative standard error (RSE) was greater than 50% or fewer than 10 households in reporting sample.

N = No households in reporting sample.

Data release date: June 2023

CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	Number of housing units (million)	Average site energy consumption ^a (kWh per household using the end use)					
		Total U.S. ^b	Total	Space heating ^c	Water heating	Air conditioning	Refrigerators
All homes	123.53	10,566	2,484	2,706	2,318	839	5,108
Alabama	1.90	13,810	2,868	2,840	3,078	914	5,758
Alaska	0.26	7,452	2,435	3,187	242	762	4,953
Arizona	2.68	13,603	1,299	2,375	5,165	925	5,705
Arkansas	1.14	13,395	3,742	3,220	2,883	825	5,659
California	13.18	6,482	605	1,694	1,645	831	3,893
Colorado	2.26	8,144	1,710	2,397	1,311	856	4,991
Connecticut	1.38	7,794	2,017	2,077	1,192	707	4,391
Delaware	0.38	11,135	2,909	3,060	1,793	799	5,145
District of Columbia	0.32	7,020	1,308	1,979	1,480	610	3,170
Florida	8.06	13,990	1,532	2,354	4,379	923	5,763
Georgia	3.88	13,270	2,236	3,263	3,019	928	6,046
Hawaii	0.47	7,976	423	2,179	2,837	910	3,969
Idaho	0.66	11,086	3,496	3,791	1,332	882	5,654
Illinois	4.90	8,451	2,370	2,123	1,506	810	4,672
Indiana	2.60	11,638	4,378	3,318	1,771	892	5,455
Iowa	1.28	10,262	3,436	2,633	1,464	887	5,603
Kansas	1.13	10,829	2,867	2,808	2,568	889	5,508
Kentucky	1.74	13,330	4,172	2,984	2,296	837	5,699
Louisiana	1.73	14,779	2,000	2,998	4,520	895	6,407
Maine	0.56	7,048	1,470	2,257	753	678	4,498
Maryland	2.28	11,526	3,249	2,830	1,915	855	5,188
Massachusetts	2.71	7,237	1,810	2,026	1,224	701	4,113
Michigan	3.92	8,370	1,997	2,595	1,223	798	5,072
Minnesota	2.23	9,331	3,050	3,021	1,039	798	5,170
Mississippi	1.08	14,062	3,018	2,720	3,693	925	5,778
Missouri	2.43	11,983	3,589	2,899	2,300	894	5,463
Montana	0.43	9,308	3,817	2,943	817	768	4,820
Nebraska	0.77	10,712	3,664	2,419	1,683	924	5,463
Nevada	1.14	11,094	1,335	2,224	3,686	898	5,683
New Hampshire	0.54	7,273	1,207	2,323	1,009	754	4,500

CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	Number of housing units (million)	Average site energy consumption ^a (kWh per household using the end use)					
		Total U.S. ^b	Total	Space heating ^c	Water heating	Air conditioning	Refrigerators
All homes	123.53	10,566	2,484	2,706	2,318	839	5,108
New Jersey	3.39	8,305	1,509	2,192	1,748	821	4,651
New Mexico	0.79	8,234	1,663	2,238	1,810	809	4,783
New York	7.52	6,916	1,698	2,116	1,302	685	3,822
North Carolina	4.01	12,498	2,861	2,895	2,470	847	5,174
North Dakota	0.32	11,841	5,315	3,153	838	839	5,409
Ohio	4.74	10,278	3,437	2,849	1,532	821	5,330
Oklahoma	1.49	13,579	4,076	2,870	3,168	883	6,126
Oregon	1.65	11,132	3,585	3,656	1,020	816	4,987
Pennsylvania	5.13	10,248	3,362	3,034	1,553	815	4,972
Rhode Island	0.42	6,913	1,269	2,002	1,140	746	4,168
South Carolina	1.97	13,526	2,806	2,918	3,054	861	5,457
South Dakota	0.35	10,779	4,171	3,026	1,321	851	5,432
Tennessee	2.66	14,220	3,722	3,111	2,607	839	5,976
Texas	10.26	13,440	2,237	2,655	3,979	901	5,886
Utah	1.04	9,116	1,530	2,585	1,833	887	5,556
Vermont	0.26	6,746	1,445	2,632	711	726	4,176
Virginia	3.24	12,937	2,738	3,156	2,236	881	6,059
Washington	2.94	10,990	4,254	3,261	892	772	4,812
West Virginia	0.70	13,462	5,505	3,448	1,725	790	5,244
Wisconsin	2.39	8,432	2,154	2,464	963	817	4,977
Wyoming	0.23	9,180	4,329	2,921	999	825	4,895

Data source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-457A, D, E, F, G of the 2020 Residential Energy Consumption Survey

Notes: Because of rounding, data may not sum to totals. Percentages are calculated on unrounded numbers. See RECS Terminology for the definitions of terms used in these tables. Differences in estimates between states may not be statistically significant.

kWh = kilowatthours

^a Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded. Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included.

^b Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

^c Includes main (primary) and secondary space heating.

^d Includes end uses not shown in this table. A more detailed breakout of end uses is shown in the CE5 tables.

Q = Data withheld because either the relative standard error (RSE) was greater than 50% or fewer than 10 households in reporting sample.

N = No households in reporting sample.

Data release date: June 2023

Relative standard errors (RSEs) for CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	RSEs for number of housing units	RSEs for average site electricity consumption ^a					
	Total U.S. ^b	Total	Space heating ^c	Water heating	Air condi- tioning	Refrig- erators	Other ^d
All homes	0.00	0.38	1.36	0.94	0.67	0.33	0.51
Alabama	0.00	3.68	7.40	5.53	4.72	4.18	4.22
Alaska	0.00	3.42	8.50	10.13	20.82	3.15	3.71
Arizona	0.00	2.70	8.11	5.17	2.84	2.52	3.83
Arkansas	0.00	4.18	6.77	6.70	5.58	3.16	6.07
California	0.00	1.47	7.85	5.30	2.77	1.45	1.56
Colorado	0.00	2.82	10.49	10.80	4.84	2.80	3.23
Connecticut	0.00	3.73	12.91	11.56	5.04	3.46	4.46
Delaware	0.00	4.33	12.82	6.75	6.63	3.66	5.33
District of Columbia	0.00	4.33	10.09	6.81	6.05	3.41	5.17
Florida	0.00	2.26	6.04	2.90	2.84	2.19	3.15
Georgia	0.00	2.95	6.65	5.53	4.31	2.89	3.07
Hawaii	0.00	4.13	44.03	5.55	6.10	3.23	5.07
Idaho	0.00	3.66	9.66	7.94	6.10	2.65	4.97
Illinois	0.00	2.79	9.92	6.69	3.44	2.33	2.83
Indiana	0.00	2.67	7.75	5.72	2.98	3.30	2.89
Iowa	0.00	3.51	12.05	8.95	4.15	2.71	3.30
Kansas	0.00	3.62	14.55	9.62	5.47	4.94	4.68
Kentucky	0.00	2.48	6.16	3.90	2.97	2.86	3.00
Louisiana	0.00	2.52	6.07	5.18	4.36	3.47	3.83
Maine	0.00	3.70	14.53	8.32	7.54	3.05	4.94
Maryland	0.00	3.51	7.84	4.53	4.12	2.47	4.34
Massachusetts	0.00	1.80	9.22	5.57	3.65	2.17	2.68
Michigan	0.00	3.19	15.14	9.70	5.44	2.86	3.72
Minnesota	0.00	3.72	14.35	6.80	4.56	2.93	3.82
Mississippi	0.00	4.00	10.13	5.83	5.89	4.71	5.14
Missouri	0.00	3.22	9.01	6.87	3.49	3.19	3.58
Montana	0.00	5.95	12.11	12.52	7.92	4.91	6.30
Nebraska	0.00	5.37	13.01	8.81	5.81	4.36	4.79
Nevada	0.00	4.13	14.25	11.04	5.72	3.88	4.98
New Hampshire	0.00	4.51	16.05	7.87	7.39	3.70	5.32

Relative standard errors (RSEs) for CE4.6.EL.ST Annual household site end-use electricity consumption in the United States by state—averages, 2020

	RSEs for number of housing units	RSEs for average site electricity consumption ^a					
	Total U.S. ^b	Total	Space heating ^c	Water heating	Air condi- tioning	Refrig- erators	Other ^d
All homes	0.00	0.38	1.36	0.94	0.67	0.33	0.51
New Jersey	0.00	2.96	11.09	7.24	3.47	2.64	3.53
New Mexico	0.00	5.46	16.72	12.24	7.57	4.65	6.61
New York	0.00	2.11	10.84	5.77	3.04	1.58	2.98
North Carolina	0.00	2.13	5.15	3.23	3.25	2.42	2.65
North Dakota	0.00	3.67	8.35	6.54	5.32	2.86	4.45
Ohio	0.00	3.30	10.57	7.32	4.20	2.63	3.55
Oklahoma	0.00	3.98	9.62	9.76	4.84	4.34	4.54
Oregon	0.00	3.57	7.28	5.16	5.68	3.45	3.89
Pennsylvania	0.00	2.92	9.37	4.76	3.05	2.48	2.88
Rhode Island	0.00	4.60	19.46	11.39	6.76	5.10	5.18
South Carolina	0.00	2.95	5.20	4.35	3.77	3.44	3.97
South Dakota	0.00	4.61	14.47	9.42	6.96	4.61	5.02
Tennessee	0.00	3.07	4.41	3.22	3.76	2.99	5.38
Texas	0.00	1.52	4.89	2.90	2.09	1.86	1.91
Utah	0.00	4.25	15.62	20.71	5.70	4.48	4.41
Vermont	0.00	3.78	14.89	7.17	4.79	2.98	4.01
Virginia	0.00	2.39	6.40	4.29	4.42	2.24	3.32
Washington	0.00	2.91	5.90	4.19	6.06	2.70	3.74
West Virginia	0.00	4.55	8.07	6.12	7.33	3.18	5.04
Wisconsin	0.00	3.14	13.82	7.58	4.07	2.89	3.30
Wyoming	0.00	5.40	15.24	14.61	6.86	3.85	5.15

Data source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-457A, D, E, F, G of the 2020 Residential Energy Consumption Survey

Notes: See RECS Terminology for definition of terms used in these tables.

^a Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded. Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included.

^b Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

^c Includes main (primary) and secondary space heating.

^d Includes end uses not shown in this table. A more detailed breakout of end uses is shown in the CE5 tables.