

Data release date: June 2023

Revised data release date: March 2024

**Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

Average site electricity consumption <sup>a</sup> (million Btu per household using the end use)												
	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	8.48	0.79	7.91	1.56	0.77	3.41	0.47	9.23	0.23	2.32	2.23	8.06
<b>Census region and division</b>												
Northeast	7.34	0.85	4.76	1.10	0.41	3.15	0.43	8.26	0.22	2.16	1.96	7.45
New England	5.96	0.97	3.88	0.98	0.35	2.58	0.41	7.25	0.22	2.19	1.75	8.89
Middle Atlantic	7.80	0.81	5.06	1.13	0.43	3.39	0.44	8.63	0.22	2.14	2.04	6.79
Midwest	10.61	1.48	5.19	1.02	0.54	3.28	0.52	9.35	0.24	2.39	2.17	8.85
East North Central	9.96	1.52	4.86	0.96	0.52	3.49	0.53	9.12	0.23	2.32	2.09	5.99
West North Central	11.85	1.39	5.90	1.14	0.59	2.78	0.49	9.79	0.25	2.53	2.35	Q
South	8.88	0.43	11.27	2.01	1.11	4.10	0.47	9.55	0.25	2.39	2.49	11.74
South Atlantic	8.19	0.41	10.62	1.89	1.04	4.13	0.53	9.44	0.23	2.24	2.30	8.85
East South Central	11.86	0.52	9.59	1.72	1.05	3.86	0.42	10.09	0.26	2.58	2.55	Q
West South Central	8.47	0.43	13.22	2.37	1.25	4.22	0.38	9.44	0.26	2.56	2.79	Q
West	6.28	0.60	7.02	1.37	0.56	2.91	0.43	8.79	0.22	2.19	2.06	6.54
Mountain	6.13	0.80	9.96	1.87	0.69	3.41	0.54	8.70	0.23	2.36	2.24	10.26
Mountain North	7.98	1.20	4.76	1.02	0.51	3.41	0.59	9.83	0.24	2.42	2.32	12.24
Mountain South	4.63	0.37	14.59	2.52	0.84	3.42	0.46	7.98	0.22	2.28	2.16	9.21
Pacific	6.36	0.46	5.17	1.01	0.47	2.75	0.32	8.83	0.22	2.06	1.98	5.62
<b>Census urban/rural classification<sup>d</sup></b>												
Urban	6.95	0.74	7.91	1.56	0.75	3.32	0.47	8.61	0.23	2.23	2.19	7.51
Urbanized area	6.42	0.71	8.02	1.59	0.75	3.30	0.48	8.51	0.22	2.21	2.21	7.41
Urban cluster	10.78	0.94	7.00	1.35	0.75	3.46	0.41	9.27	0.24	2.37	2.03	9.95
Rural	14.09	1.03	7.93	1.54	0.87	3.66	0.49	11.01	0.26	2.60	2.43	11.14
<b>Climate region<sup>e</sup></b>												
Very cold and Cold	9.81	1.35	4.47	0.92	0.49	3.18	0.50	9.11	0.23	2.31	2.07	8.72
Mixed-humid	10.15	0.62	7.82	1.54	0.84	3.67	0.47	9.99	0.24	2.42	2.41	12.43
Mixed-dry and Hot-dry	3.25	0.34	9.18	1.70	0.65	2.64	0.37	7.05	0.22	2.11	1.95	6.45
Hot-humid	6.53	0.23	14.24	2.46	1.25	4.67	0.48	8.73	0.24	2.33	2.43	8.82
Marine	9.20	0.57	3.08	0.67	0.38	2.95	0.30	10.49	0.21	2.07	2.23	5.28

**Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

Average site electricity consumption<sup>a</sup>  
(million Btu per household using the end use)

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	8.48	0.79	7.91	1.56	0.77	3.41	0.47	9.23	0.23	2.32	2.23	8.06
<b>Housing unit type</b>												
Single-family detached	10.22	1.04	9.47	1.87	0.85	3.49	0.52	10.28	0.24	2.47	2.60	8.48
Single-family attached	7.49	0.60	6.14	1.08	0.57	2.96	0.42	7.83	0.20	1.89	2.00	4.15
Apartments in buildings with 2–4 units	5.90	0.24	4.94	0.91	0.49	2.71	0.34	7.84	0.20	1.89	1.48	N
Apartments in buildings with 5 or more units	4.23	0.13	4.01	0.67	0.54	2.88	0.34	6.65	0.19	1.70	1.50	N
Mobile homes	11.29	0.40	8.20	1.00	0.77	3.41	0.37	11.45	0.26	2.50	1.86	Q
<b>Ownership of housing unit</b>												
Owned	9.97	0.97	8.93	1.75	0.82	3.46	0.51	9.95	0.24	2.40	2.49	8.13
Single-family	10.09	1.04	9.22	1.83	0.84	3.48	0.52	10.01	0.24	2.43	2.60	8.22
Apartments	5.31	0.24	4.86	0.85	0.50	2.87	0.36	6.21	0.17	1.57	1.58	N
Mobile homes	11.41	0.42	8.17	1.02	0.75	3.41	0.37	11.32	0.26	2.48	1.83	Q
Rented <sup>f</sup>	6.03	0.33	5.65	1.00	0.63	3.04	0.35	8.11	0.22	2.07	1.70	6.71
Single-family	9.29	0.70	8.92	1.62	0.78	3.27	0.40	10.37	0.25	2.41	2.20	7.72
Apartments	4.59	0.15	4.17	0.70	0.53	2.78	0.33	7.03	0.20	1.78	1.48	N
Mobile homes	10.84	0.32	8.28	0.94	0.83	Q	0.38	11.89	0.27	2.59	2.01	Q
<b>Year of construction</b>												
Before 1950	8.19	1.07	6.72	1.53	0.56	3.44	0.48	8.48	0.22	2.23	2.04	5.79
1950 to 1959	7.39	1.11	7.69	1.51	0.60	3.14	0.46	8.93	0.22	2.17	1.91	3.77
1960 to 1969	7.56	0.88	7.54	1.48	0.68	2.91	0.42	8.64	0.23	2.13	2.09	6.17
1970 to 1979	10.42	0.88	8.09	1.53	0.68	3.24	0.44	8.82	0.24	2.25	2.05	6.82
1980 to 1989	9.38	0.65	8.31	1.58	0.79	3.17	0.42	8.81	0.23	2.26	2.14	6.42
1990 to 1999	8.41	0.64	8.48	1.60	0.87	3.86	0.53	10.38	0.25	2.50	2.49	10.73
2000 to 2009	7.97	0.56	8.94	1.69	1.02	3.88	0.55	9.96	0.24	2.47	2.71	9.56
2010 to 2015	7.49	0.49	7.55	1.57	1.02	3.91	0.44	10.01	0.25	2.53	2.65	8.54
2016 to 2020	6.33	0.39	6.92	1.28	0.95	4.05	0.49	9.09	0.23	2.29	2.29	16.00
<b>Total square footage<sup>g</sup></b>												
Less than 1,000	5.17	0.22	4.57	0.71	0.53	2.53	0.35	7.27	0.20	1.87	1.52	Q

**Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

Average site electricity consumption<sup>a</sup>  
(million Btu per household using the end use)

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	8.48	0.79	7.91	1.56	0.77	3.41	0.47	9.23	0.23	2.32	2.23	8.06
1,000 to 1,499	7.59	0.46	6.97	1.12	0.75	3.26	0.41	9.13	0.22	2.10	1.87	6.73
1,500 to 1,999	9.07	0.76	8.63	1.52	0.83	3.16	0.42	9.80	0.24	2.32	2.19	7.63
2,000 to 2,499	10.16	0.98	9.27	1.76	0.84	3.37	0.50	10.35	0.25	2.52	2.53	6.57
2,500 to 2,999	11.30	1.23	9.78	1.96	0.88	3.55	0.51	10.90	0.25	2.65	2.73	7.06
3,000 or more	14.07	1.56	11.34	2.58	0.89	3.86	0.63	11.63	0.26	2.75	3.55	10.58
<b>Number of household members</b>												
1 member	7.20	0.63	5.63	1.06	0.57	3.10	0.43	4.87	0.16	1.33	1.48	5.88
2 members	8.91	0.86	7.80	1.53	0.76	3.36	0.48	8.43	0.22	2.12	2.23	8.86
3 members	8.83	0.82	8.96	1.77	0.88	3.42	0.50	11.88	0.26	2.76	2.53	7.03
4 members	8.81	0.81	9.71	1.92	0.92	3.49	0.48	14.72	0.30	3.22	2.84	7.48
5 members	9.36	0.90	10.80	2.14	1.00	4.08	0.46	15.53	0.33	3.62	3.07	13.28
6 or more members	10.12	0.92	10.78	2.11	0.93	4.32	0.51	18.13	0.38	4.20	3.32	Q
<b>2020 annual household income</b>												
Less than \$5,000	8.54	0.43	6.49	1.08	0.66	3.44	0.41	9.39	0.22	2.03	1.83	Q
\$5,000 to \$9,999	6.80	0.41	5.97	0.98	0.60	2.82	0.37	8.78	0.23	2.26	1.66	Q
\$10,000 to \$19,999	8.14	0.56	6.18	1.08	0.56	3.52	0.38	7.43	0.19	1.76	1.63	Q
\$20,000 to \$39,999	8.20	0.70	6.99	1.23	0.67	3.28	0.43	8.92	0.22	2.04	1.77	Q
\$40,000 to \$59,999	8.14	0.75	7.54	1.39	0.71	2.90	0.42	9.17	0.23	2.21	1.96	10.11
\$60,000 to \$99,999	8.48	0.84	7.86	1.50	0.81	3.51	0.46	9.53	0.24	2.33	2.25	7.20
\$100,000 to \$149,999	9.27	0.92	8.72	1.74	0.87	3.32	0.50	10.00	0.25	2.65	2.54	9.21
\$150,000 or more	9.34	1.04	10.49	2.34	0.98	3.81	0.59	10.32	0.25	2.82	3.50	7.67
<b>Payment method for energy bills</b>												
All paid by household	8.79	0.84	8.25	1.60	0.79	3.43	0.48	9.44	0.24	2.34	2.30	8.13
Some paid by household, some included in rent or condo fee	4.79	0.26	3.84	0.71	0.38	2.87	0.40	6.26	0.19	1.74	1.56	Q
All included in rent or condo fee	5.56	0.26	4.38	0.64	0.47	1.82	0.34	7.08	0.21	2.00	1.60	Q
Some other method	4.07	0.50	4.42	0.77	0.68	Q	Q	Q	0.21	1.16	1.60	N

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Average site electricity consumption<sup>a</sup>  
(million Btu per household using the end use)

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	8.48	0.79	7.91	1.56	0.77	3.41	0.47	9.23	0.23	2.32	2.23	8.06

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

Btu = British thermal units

<sup>a</sup> Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included. Small amounts of standby power for devices that some households have but do not use (for example, dishwashers) are not included.

<sup>b</sup> Includes main (primary) and secondary space heating.

<sup>c</sup> Includes electricity used by evaporative coolers.

<sup>d</sup> Housing units are classified using criteria created by the U.S. Census Bureau based on 2010 Census data. Urbanized areas are densely settled groupings of blocks or tracts with 50,000 or more people. Urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

<sup>e</sup> The Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), created these climate regions. We combined climate regions for this publication. The Subarctic region is included with data for *Very-cold and Cold*.

<sup>f</sup> *Rented* includes households that occupy their primary housing units without paying rent.

<sup>g</sup> *Total square footage* includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See *2020 RECS Square Footage Methodology* for full details about data collection and processing.

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.

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	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	2,484	233	2,318	457	226	999	139	2,706	69	680	654	2,363
<b>Census region and division</b>												
Northeast	2,151	249	1,395	323	119	924	126	2,421	64	632	574	2,184
New England	1,748	284	1,136	288	103	757	120	2,124	63	641	511	2,605
Middle Atlantic	2,287	236	1,483	332	125	993	129	2,528	64	628	597	1,990
Midwest	3,109	432	1,522	299	159	960	152	2,741	70	702	637	2,594
East North Central	2,919	444	1,425	281	152	1,023	157	2,673	68	679	613	1,755
West North Central	3,472	406	1,728	335	172	814	143	2,870	73	740	690	Q
South	2,603	127	3,304	588	325	1,203	139	2,798	72	700	730	3,440
South Atlantic	2,401	119	3,112	553	305	1,211	156	2,767	68	657	674	2,594
East South Central	3,477	152	2,812	505	307	1,132	123	2,958	77	756	748	Q
West South Central	2,482	126	3,873	693	366	1,238	112	2,766	75	749	817	Q
West	1,840	175	2,059	402	163	852	125	2,575	65	641	605	1,916
Mountain	1,795	235	2,918	547	202	1,000	158	2,550	68	691	657	3,008
Mountain North	2,339	353	1,396	298	151	999	173	2,881	70	710	681	3,588
Mountain South	1,356	110	4,276	739	246	1,001	135	2,340	66	670	633	2,700
Pacific	1,864	136	1,514	297	139	806	94	2,588	63	603	579	1,646
<b>Census urban/rural classification<sup>d</sup></b>												
Urban	2,038	217	2,317	458	219	972	137	2,522	66	655	641	2,202
Urbanized area	1,881	209	2,350	465	219	966	140	2,493	66	649	647	2,172
Urban cluster	3,158	274	2,050	394	221	1,015	119	2,717	72	693	594	2,917
Rural	4,129	301	2,323	453	255	1,073	143	3,227	76	761	712	3,265
<b>Climate region<sup>e</sup></b>												
Very cold and Cold	2,876	395	1,310	271	143	932	146	2,669	68	678	608	2,554
Mixed-humid	2,975	183	2,293	452	246	1,075	139	2,927	71	708	706	3,644
Mixed-dry and Hot-dry	951	99	2,691	498	191	773	110	2,065	66	619	571	1,889
Hot-humid	1,914	68	4,173	720	366	1,368	140	2,559	70	682	713	2,584
Marine	2,696	166	902	195	111	865	87	3,073	61	608	653	1,548

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<b>All homes</b>	2,484	233	2,318	457	226	999	139	2,706	69	680	654	2,363
<b>Housing unit type</b>												
Single-family detached	2,994	304	2,775	548	250	1,024	153	3,014	71	725	761	2,486
Single-family attached	2,195	175	1,799	317	167	868	122	2,296	59	555	585	1,215
Apartments in buildings with 2–4 units	1,729	69	1,448	266	145	794	100	2,298	57	554	435	N
Apartments in buildings with 5 or more units	1,240	39	1,175	195	157	843	99	1,949	55	497	439	N
Mobile homes	3,308	117	2,402	293	224	998	108	3,356	76	732	546	Q
<b>Ownership of housing unit</b>												
Owned	2,923	284	2,616	512	240	1,014	150	2,915	70	704	731	2,382
Single-family	2,958	306	2,702	535	245	1,019	154	2,933	70	712	761	2,408
Apartments	1,556	71	1,425	249	146	840	107	1,820	49	460	463	N
Mobile homes	3,345	122	2,395	298	220	1,000	107	3,318	75	725	535	Q
Rented <sup>f</sup>	1,767	98	1,655	294	185	890	104	2,378	65	606	498	1,967
Single-family	2,721	204	2,615	474	228	957	117	3,039	73	705	645	2,262
Apartments	1,346	44	1,221	206	155	815	98	2,060	57	521	434	N
Mobile homes	3,176	95	2,427	274	244	Q	110	3,485	79	758	588	Q
<b>Year of construction</b>												
Before 1950	2,400	314	1,968	447	163	1,009	140	2,485	65	653	597	1,697
1950 to 1959	2,167	326	2,254	443	176	921	136	2,617	64	636	559	1,103
1960 to 1969	2,215	258	2,211	435	199	853	124	2,531	66	625	612	1,808
1970 to 1979	3,053	257	2,369	448	198	951	128	2,584	69	659	600	2,000
1980 to 1989	2,749	189	2,437	463	232	930	122	2,581	67	663	626	1,882
1990 to 1999	2,465	187	2,484	470	254	1,130	155	3,042	74	732	731	3,144
2000 to 2009	2,335	165	2,619	494	299	1,136	162	2,919	71	725	793	2,801
2010 to 2015	2,195	143	2,213	460	299	1,146	128	2,935	73	741	777	2,503
2016 to 2020	1,856	115	2,027	375	279	1,187	143	2,665	68	670	670	4,688
<b>Total square footage<sup>g</sup></b>												
Less than 1,000	1,515	64	1,340	209	155	742	102	2,130	59	548	445	Q

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	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	2,484	233	2,318	457	226	999	139	2,706	69	680	654	2,363
1,000 to 1,499	2,225	135	2,042	329	219	957	119	2,677	65	614	547	1,972
1,500 to 1,999	2,658	223	2,530	444	242	925	124	2,871	69	679	641	2,235
2,000 to 2,499	2,978	287	2,716	516	246	989	148	3,034	72	738	743	1,925
2,500 to 2,999	3,312	361	2,867	573	258	1,039	151	3,195	74	777	799	2,070
3,000 or more	4,124	459	3,322	756	260	1,131	185	3,409	75	806	1,041	3,099
<b>Number of household members</b>												
1 member	2,109	185	1,650	311	166	907	126	1,427	46	391	435	1,724
2 members	2,610	253	2,287	449	223	983	140	2,470	64	620	655	2,597
3 members	2,589	241	2,627	518	259	1,002	147	3,482	77	809	741	2,061
4 members	2,581	236	2,846	562	270	1,023	141	4,313	87	943	832	2,192
5 members	2,744	265	3,166	628	292	1,195	133	4,552	98	1,060	899	3,892
6 or more members	2,965	270	3,158	619	273	1,267	149	5,314	111	1,231	974	Q
<b>2020 annual household income</b>												
Less than \$5,000	2,502	127	1,902	317	194	1,010	121	2,751	65	594	537	Q
\$5,000 to \$9,999	1,993	121	1,750	287	176	826	110	2,572	66	663	486	Q
\$10,000 to \$19,999	2,386	165	1,812	317	163	1,032	113	2,176	56	515	478	Q
\$20,000 to \$39,999	2,404	204	2,050	360	195	962	125	2,615	64	597	518	Q
\$40,000 to \$59,999	2,385	219	2,209	406	209	851	122	2,689	67	648	573	2,963
\$60,000 to \$99,999	2,485	245	2,303	441	236	1,028	134	2,794	69	684	660	2,109
\$100,000 to \$149,999	2,717	270	2,556	509	255	974	148	2,931	74	775	743	2,700
\$150,000 or more	2,738	305	3,073	686	287	1,115	173	3,026	74	826	1,025	2,249
<b>Payment method for energy bills</b>												
All paid by household	2,577	245	2,419	470	232	1,006	141	2,766	69	686	673	2,381
Some paid by household, some included in rent or condo fee	1,405	77	1,125	207	112	842	118	1,834	55	510	458	Q
All included in rent or condo fee	1,630	77	1,283	187	139	534	99	2,075	61	587	469	Q
Some other method	1,193	146	1,296	226	199	Q	Q	Q	61	339	470	N

**Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

Average site electricity consumption<sup>a</sup>  
(kWh per household using the end use)

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	2,484	233	2,318	457	226	999	139	2,706	69	680	654	2,363

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

kWh = kilowatthours

<sup>a</sup> Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included. Small amounts of standby power for devices that some households have but do not use (for example, dishwashers) are not included.

<sup>b</sup> Includes main (primary) and secondary space heating.

<sup>c</sup> Includes electricity used for evaporative coolers.

<sup>d</sup> Housing units are classified using criteria created by the U.S. Census Bureau based on 2010 Census data. Urbanized areas are densely settled groupings of blocks or tracts with 50,000 or more people. Urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

<sup>e</sup> The Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), created these climate regions. We combined climate regions for this publication. The Subarctic region is included with data for *Very-cold and Cold*.

<sup>f</sup> *Rented* includes households that occupy their primary housing units without paying rent.

<sup>g</sup> *Total square footage* includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See *2020 RECS Square Footage Methodology* for full details about data collection and processing.

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

Revised data release date: March 2024

**Relative standard errors (RSEs) for Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

**RSEs for average site electricity consumption<sup>a</sup>**

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	1.36	1.00	0.67	0.89	0.99	1.83	1.77	0.94	0.55	0.78	0.89	7.82
<b>Census region and division</b>												
Northeast	5.27	2.07	1.47	2.78	2.78	3.13	4.06	2.24	1.23	1.98	2.33	12.84
New England	6.02	3.01	2.53	4.61	4.09	4.57	5.83	3.59	1.81	2.50	3.32	19.60
Middle Atlantic	6.57	2.79	1.80	3.14	3.41	4.29	5.20	3.09	1.53	2.82	2.92	15.42
Midwest	3.91	1.76	1.42	1.59	2.24	2.92	3.23	2.59	1.42	1.91	2.28	20.53
East North Central	5.70	2.18	1.67	2.04	3.01	3.62	4.27	3.40	1.90	2.70	3.15	26.71
West North Central	4.73	2.16	2.02	2.45	3.64	4.52	3.47	3.26	2.02	2.52	3.17	27.11
South	1.53	1.67	1.08	1.40	1.45	4.49	3.74	1.37	1.20	1.45	1.67	18.37
South Atlantic	2.20	2.81	1.61	1.92	2.30	5.59	4.33	1.67	1.43	1.87	2.50	23.50
East South Central	3.13	3.74	2.02	2.42	2.94	8.32	7.73	2.25	2.23	2.57	3.58	43.65
West South Central	3.42	2.49	1.67	2.45	2.06	12.44	9.27	2.41	2.04	2.56	3.12	30.39
West	2.84	1.85	1.31	1.87	2.31	8.14	5.05	1.87	1.28	1.86	2.10	8.52
Mountain	4.74	2.66	1.93	2.77	2.46	13.97	5.82	2.89	1.79	2.24	2.83	12.94
Mountain North	5.32	2.70	2.93	4.02	3.97	17.44	6.15	4.40	2.45	3.01	3.76	24.73
Mountain South	6.19	5.47	2.21	3.08	3.25	21.58	9.77	4.16	2.49	3.34	5.23	17.54
Pacific	3.87	2.72	2.29	2.80	4.28	10.00	8.53	2.57	1.73	2.68	2.98	9.75
<b>Census urban/rural classification<sup>d</sup></b>												
Urban	1.81	1.16	0.76	1.04	1.23	2.56	2.05	1.10	0.60	0.91	1.08	8.56
Urbanized area	1.92	1.33	0.84	1.11	1.35	2.73	2.17	1.32	0.64	1.07	1.20	8.92
Urban cluster	4.63	3.04	2.47	2.60	3.15	7.16	6.39	2.21	1.53	2.03	3.24	36.59
Rural	2.40	2.49	1.36	1.77	2.11	3.15	4.07	1.63	1.26	1.42	2.29	20.00
<b>Climate region<sup>e</sup></b>												
Very cold and Cold	3.03	1.44	1.03	1.47	1.84	2.26	2.45	1.69	1.04	1.48	1.67	11.10
Mixed-humid	1.78	1.96	1.04	1.38	1.73	3.45	2.87	1.48	1.18	1.41	1.84	20.15
Mixed-dry and Hot-dry	6.70	3.39	1.67	2.16	2.97	14.34	7.95	3.38	2.07	3.36	3.65	12.12
Hot-humid	2.82	2.24	1.55	2.02	2.01	8.55	9.69	1.85	1.66	2.20	2.46	21.86
Marine	5.97	3.78	4.69	6.63	7.27	15.17	13.51	3.79	2.40	3.57	4.61	14.37

Relative standard errors (RSEs) for Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020

RSEs for average site electricity consumption<sup>a</sup>

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	1.36	1.00	0.67	0.89	0.99	1.83	1.77	0.94	0.55	0.78	0.89	7.82
<b>Housing unit type</b>												
Single-family detached	1.51	1.01	0.76	0.96	1.05	1.93	1.92	1.11	0.65	0.88	1.11	8.00
Single-family attached	4.78	3.90	2.74	3.17	3.56	6.71	6.49	3.32	1.56	2.32	3.31	22.14
Apartments in buildings with 2–4 units	5.91	5.76	3.82	4.87	5.52	13.51	11.52	3.68	3.03	4.47	4.71	0.00
Apartments in buildings with 5 or more units	4.23	3.22	2.02	2.51	3.70	11.18	6.66	2.64	2.35	3.04	3.18	0.00
Mobile homes	4.51	4.33	2.65	4.06	5.45	15.16	9.34	2.94	3.60	4.83	4.28	65.12
<b>Ownership of housing unit</b>												
Owned	1.53	1.10	0.85	1.05	1.16	1.86	1.95	1.07	0.66	0.92	1.06	8.23
Single-family	1.68	1.05	0.85	1.04	1.10	1.87	1.96	1.11	0.63	0.92	1.17	8.17
Apartments	12.80	10.58	5.04	6.95	8.54	17.96	14.74	5.53	3.81	5.49	6.04	0.00
Mobile homes	4.79	5.25	3.53	5.02	6.32	18.43	10.25	3.54	4.11	4.99	4.40	79.86
Rented <sup>f</sup>	2.56	2.98	1.50	1.98	2.35	7.05	4.90	1.82	1.58	1.89	1.95	48.18
Single-family	5.17	4.13	2.48	2.71	3.66	9.39	8.30	2.97	2.30	2.52	3.00	47.29
Apartments	3.39	2.92	1.85	2.39	3.04	11.26	6.76	2.36	2.15	2.97	2.46	0.00
Mobile homes	8.02	8.47	6.02	6.81	10.05	26.11	25.58	6.14	6.30	9.92	10.39	0.00
<b>Year of construction</b>												
Before 1950	4.20	2.70	1.94	3.21	3.28	4.33	5.30	2.54	1.86	2.73	2.65	17.22
1950 to 1959	5.21	3.12	2.30	3.22	3.81	5.51	6.57	4.21	2.05	2.60	2.77	13.77
1960 to 1969	4.71	3.17	3.14	3.79	3.17	5.63	4.56	3.09	2.08	2.66	2.83	20.06
1970 to 1979	3.62	3.13	2.09	2.55	3.17	4.82	4.50	2.23	1.91	2.40	2.59	18.73
1980 to 1989	3.61	3.34	2.01	2.39	3.12	5.44	6.64	2.31	1.56	2.00	2.88	25.89
1990 to 1999	3.71	2.35	2.26	2.72	2.68	5.71	4.49	2.44	1.57	1.96	2.29	22.73
2000 to 2009	2.86	2.86	2.02	2.67	1.98	4.76	4.93	1.86	1.79	2.35	2.85	17.04
2010 to 2015	5.05	4.34	3.31	3.81	3.82	8.67	8.34	3.82	2.61	3.43	5.04	23.99
2016 to 2020	5.42	5.19	4.01	4.65	5.26	8.84	9.83	3.95	3.09	4.12	5.26	20.68
<b>Total square footage<sup>g</sup></b>												
Less than 1,000	2.90	2.39	1.82	2.48	3.45	7.89	6.55	2.31	1.76	2.68	2.68	40.13

Relative standard errors (RSEs) for Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020

RSEs for average site electricity consumption<sup>a</sup>

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	1.36	1.00	0.67	0.89	0.99	1.83	1.77	0.94	0.55	0.78	0.89	7.82
1,000 to 1,499	2.93	2.20	1.76	1.96	2.55	5.47	5.44	1.65	1.25	1.75	2.02	17.61
1,500 to 1,999	3.07	1.91	1.84	1.73	2.30	5.94	3.74	2.08	1.62	2.06	1.85	25.48
2,000 to 2,499	3.57	1.99	2.20	2.72	2.57	4.33	5.19	2.64	1.38	2.08	2.23	14.42
2,500 to 2,999	4.11	2.46	2.33	2.51	2.99	4.83	4.59	2.97	1.93	2.52	2.96	12.63
3,000 or more	3.89	2.41	1.67	2.07	2.13	3.15	3.35	2.28	1.23	1.64	2.11	13.89
<b>Number of household members</b>												
1 member	2.72	2.58	1.52	1.93	2.76	4.77	4.40	1.41	1.10	1.48	1.66	20.36
2 members	2.34	2.05	1.23	1.32	1.72	2.73	2.59	1.13	0.86	1.14	1.53	13.35
3 members	3.70	3.11	1.91	2.40	2.70	5.18	5.14	1.79	1.27	1.76	2.21	16.63
4 members	3.55	2.86	2.12	2.40	2.79	5.33	5.32	1.92	1.62	1.92	2.35	14.80
5 members	5.63	5.54	3.95	4.66	4.25	8.30	7.97	3.37	2.57	3.40	4.17	26.92
6 or more members	10.93	6.35	3.70	5.10	5.49	9.69	9.01	4.32	3.14	4.17	5.45	57.11
<b>2020 annual household income</b>												
Less than \$5,000	8.09	8.39	4.65	8.08	7.31	13.06	16.04	5.22	4.80	6.96	7.43	0.00
\$5,000 to \$9,999	7.95	8.81	5.84	6.88	6.60	17.15	13.78	6.52	5.97	8.03	6.02	0.00
\$10,000 to \$19,999	4.69	5.40	3.26	4.60	4.27	12.81	9.46	3.15	2.26	3.18	4.86	64.39
\$20,000 to \$39,999	3.18	2.89	1.93	2.25	3.28	6.14	5.70	2.01	1.42	1.81	2.70	38.88
\$40,000 to \$59,999	3.85	3.05	2.43	2.91	2.84	4.38	5.54	2.48	2.04	2.52	2.55	46.34
\$60,000 to \$99,999	2.77	2.16	1.71	1.74	2.26	3.29	3.63	1.68	1.35	1.73	1.83	15.94
\$100,000 to \$149,999	4.62	3.36	2.18	2.21	2.66	4.04	4.32	2.67	1.57	1.98	2.17	20.92
\$150,000 or more	4.21	2.43	1.86	2.35	2.37	4.10	3.84	2.49	1.28	1.76	2.47	11.29
<b>Payment method for energy bills</b>												
All paid by household	1.38	1.02	0.72	0.94	1.04	1.86	1.79	0.96	0.59	0.83	0.97	7.85
Some paid by household, some included in rent or condo fee	10.03	7.52	3.88	5.58	8.81	20.33	9.83	6.59	4.83	6.15	5.88	54.12
All included in rent or condo fee	5.25	8.32	3.82	5.84	7.69	12.92	12.30	3.58	5.20	6.50	6.48	0.00
Some other method	31.74	25.54	19.16	24.80	17.50	48.76	76.85	11.35	22.32	47.17	26.20	0.00

**Relative standard errors (RSEs) for Table CE5.3a Detailed household site electricity end-use consumption, part 1—averages, 2020**

**RSEs for average site electricity consumption<sup>a</sup>**

	Space heating <sup>b</sup>	Air handlers for heating	Air conditioning <sup>c</sup>	Air handlers for cooling	Ceiling fans	Dehumidifiers	Humidifiers	Water heating	Clothes washers	Clothes dryers	Lighting	Electric vehicle charging
<b>All homes</b>	1.36	1.00	0.67	0.89	0.99	1.83	1.77	0.94	0.55	0.78	0.89	7.82

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.

<sup>a</sup> Electricity consumption from on-site solar photovoltaic generation (that is, solar panels) is included. Small amounts of standby power for devices that some households have but do not use (for example, dishwashers) are not included.

<sup>b</sup> Includes main (primary) and secondary space heating.

<sup>c</sup> Includes electricity used by evaporative coolers.

<sup>d</sup> Housing units are classified using criteria created by the U.S. Census Bureau based on 2010 Census data. Urbanized areas are densely settled groupings of blocks or tracts with 50,000 or more people. Urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

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<sup>f</sup> *Rented* includes households that occupy their primary housing units without paying rent.

<sup>g</sup> *Total square footage* includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See *2020 RECS Square Footage Methodology* for full details about data collection and processing.