

Data release date: March 2023

Revised data release date: March 2024

**Table CE1.1 Summary annual household site consumption and expenditures in the United States—totals and intensities, 2020**

	Number of housing units (million)	Site energy consumption <sup>a</sup>			Energy expenditures <sup>a</sup>				
		Total U.S. <sup>b</sup> (trillion Btu)	Per household (million Btu)	Per household member (million Btu)	Per square foot (thousand Btu)	Total (billion dollars)	Per household (dollars)	Per household member (dollars)	Per square foot (dollars)
<b>All homes</b>	123.53	9,481	76.8	31.3	42.2	232.76	1,884	768	1.04
<b>Census region and division</b>									
Northeast	21.92	1,956	89.2	36.8	48.8	49.60	2,263	932	1.24
New England	5.88	528	89.9	36.4	46.6	14.92	2,539	1,028	1.32
Middle Atlantic	16.04	1,428	89.0	36.9	49.7	34.68	2,162	896	1.21
Midwest	27.04	2,619	96.9	40.9	48.3	51.18	1,892	798	0.94
East North Central	18.55	1,823	98.3	41.5	49.1	35.51	1,915	808	0.96
West North Central	8.50	796	93.7	39.5	46.4	15.66	1,844	777	0.91
South	46.84	3,116	66.5	27.2	36.8	86.14	1,839	753	1.02
South Atlantic	24.84	1,584	63.8	26.5	35.0	45.96	1,850	770	1.01
East South Central	7.38	523	70.9	30.3	37.7	13.89	1,882	806	1.00
West South Central	14.62	1,009	69.0	26.9	39.7	26.30	1,799	702	1.03
West	27.72	1,790	64.6	25.0	39.1	45.84	1,653	641	1.00
Mountain	9.22	727	78.9	31.4	42.7	15.24	1,653	658	0.89
Mountain North	4.62	413	89.5	34.9	44.4	6.80	1,474	576	0.73
Mountain South	4.60	314	68.3	27.7	40.6	8.43	1,833	745	1.09
Pacific	18.51	1,063	57.4	22.0	37.0	30.60	1,653	633	1.07
<b>Census urban/rural classification<sup>c</sup></b>									
Urban	100.44	7,510	74.8	30.3	43.1	180.76	1,800	728	1.04
Urbanized area	89.24	6,649	74.5	29.9	42.9	161.24	1,807	726	1.04
Urban cluster	11.20	861	76.9	33.1	44.9	19.52	1,743	750	1.02
Rural	23.09	1,971	85.4	35.8	39.0	51.99	2,252	945	1.03
<b>Climate region<sup>d</sup></b>									
Very cold/Cold	42.50	4,044	95.2	39.9	48.0	82.82	1,948	816	0.98
Mixed-humid	36.79	2,830	76.9	31.6	41.3	73.72	2,004	824	1.08
Mixed-dry/Hot-dry	15.06	887	58.9	22.3	37.9	26.07	1,732	654	1.12
Hot-humid	22.31	1,306	58.6	23.6	34.8	39.57	1,774	715	1.05
Marine	6.87	413	60.2	24.1	37.5	10.57	1,540	617	0.96
<b>Housing unit type</b>									
Single-family detached	77.07	7,293	94.6	35.9	41.8	169.90	2,205	836	0.97
Single-family attached	7.45	500	67.1	27.6	41.6	12.32	1,653	681	1.02
Apartments in buildings with 2–4 units	9.34	500	53.5	22.2	54.7	13.14	1,406	585	1.44
Apartments in buildings with 5 or more units	22.84	769	33.7	17.9	37.2	25.28	1,107	589	1.22
Mobile homes	6.83	419	61.3	25.3	50.5	12.12	1,773	731	1.46
<b>Ownership of housing unit</b>									
Owned	82.92	7,501	90.5	35.9	41.6	177.03	2,135	847	0.98
Single-family	73.22	6,950	94.9	37.0	41.2	161.09	2,200	857	0.96
Apartments	4.32	218	50.6	25.8	42.5	6.37	1,474	754	1.24
Mobile homes	5.38	333	61.8	26.5	49.4	9.57	1,779	764	1.42
Rented <sup>e</sup>	40.61	1,980	48.8	21.0	44.8	55.72	1,372	591	1.26
Single-family	11.30	843	74.6	25.4	46.8	21.12	1,869	636	1.17
Apartments	27.86	1,051	37.7	18.5	42.6	32.05	1,151	563	1.30
Mobile homes	1.45	86	59.5	21.3	55.1	2.54	1,752	627	1.62



**Table CE1.1 Summary annual household site consumption and expenditures in the United States—totals and intensities, 2020**

	Number of housing units (million)	Site energy consumption <sup>a</sup>			Energy expenditures <sup>a</sup>				
		Total U.S. <sup>b</sup> (trillion Btu)	Per household (million Btu)	Per household member (million Btu)	Per square foot (thousand Btu)	Total (billion dollars)	Per household (dollars)	Per household member (dollars)	Per square foot (dollars)
<b>All homes</b>	123.53	9,481	76.8	31.3	42.2	232.76	1,884	768	1.04
Does not use heating equipment	5.79	229	39.5	15.1	31.1	7.94	1,371	522	1.08

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated 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> 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.

<sup>b</sup> *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.

<sup>c</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, while urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

<sup>d</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/Cold*.

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

<sup>f</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.

<sup>g</sup> *Some other fuel* includes coal and district steam.

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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**Relative standard errors (RSEs) for Table CE1.1 Summary annual household site consumption and expenditures in the United States—totals and intensities, 2020**

	RSEs for number of housing units								
	Total U.S. <sup>b</sup>	RSEs for site energy consumption <sup>a</sup>				RSEs for energy expenditures <sup>a</sup>			
		Total	Per household	Per household member	Per square foot	Total	Per household	Per household member	Per square foot
<b>All homes</b>	0.00	0.40	0.40	0.57	0.43	0.35	0.35	0.55	0.45
<b>Census region and division</b>									
Northeast	0.00	0.78	0.78	0.93	0.84	0.88	0.88	1.13	0.99
New England	0.00	1.34	1.34	1.61	1.44	1.25	1.25	1.63	1.32
Middle Atlantic	0.00	1.07	1.07	1.24	1.11	1.26	1.26	1.56	1.28
Midwest	0.00	0.90	0.90	1.22	0.83	0.75	0.75	1.07	0.75
East North Central	0.00	1.13	1.13	1.50	0.99	1.00	1.00	1.28	1.03
West North Central	0.00	1.29	1.29	1.98	1.33	0.94	0.94	1.70	1.13
South	0.00	0.65	0.65	0.91	0.67	0.59	0.59	0.93	0.72
South Atlantic	0.00	1.02	1.02	1.34	0.97	0.89	0.89	1.36	1.00
East South Central	0.00	1.54	1.54	1.92	1.66	1.11	1.11	1.53	1.50
West South Central	0.00	1.22	1.22	1.57	1.22	1.04	1.04	1.45	1.34
West	0.00	0.74	0.74	1.11	0.75	0.86	0.86	1.19	0.94
Mountain	0.00	1.03	1.03	1.68	1.03	1.12	1.12	1.77	1.36
Mountain North	0.00	1.40	1.40	2.45	1.58	1.53	1.53	2.48	1.77
Mountain South	0.00	1.70	1.70	2.01	1.49	1.65	1.65	2.10	1.67
Pacific	0.00	1.09	1.09	1.44	1.14	1.13	1.13	1.48	1.26
<b>Census urban/rural classification<sup>c</sup></b>									
Urban	0.28	0.60	0.48	0.68	0.50	0.53	0.43	0.63	0.52
Urbanized area	0.42	0.69	0.49	0.75	0.52	0.61	0.45	0.71	0.57
Urban cluster	2.74	3.19	1.53	1.92	1.59	2.99	1.24	1.47	1.41
Rural	1.23	1.49	0.94	1.25	0.97	1.37	0.75	1.15	0.91
<b>Climate region<sup>d</sup></b>									
Very cold/Cold	0.54	0.77	0.62	0.79	0.62	0.69	0.54	0.70	0.67
Mixed-humid	0.77	1.17	0.78	1.03	0.66	1.12	0.74	1.06	0.75
Mixed-dry/Hot-dry	1.23	1.57	1.24	1.72	1.22	1.70	1.40	1.91	1.52
Hot-humid	0.69	1.36	1.07	1.32	1.10	1.35	1.04	1.33	1.20
Marine	2.39	2.62	2.16	2.70	1.86	2.81	1.96	2.61	1.56
<b>Housing unit type</b>									
Single-family detached	0.00	0.45	0.45	0.61	0.52	0.42	0.42	0.55	0.58
Single-family attached	0.00	1.67	1.67	2.10	1.73	1.35	1.35	1.71	1.41
Apartments in buildings with 2–4 units	0.00	2.20	2.20	2.70	2.26	1.72	1.72	2.35	2.09
Apartments in buildings with 5 or more units	0.00	1.22	1.22	1.24	1.11	1.24	1.24	1.54	1.31
Mobile homes	0.00	1.58	1.58	2.59	1.64	1.48	1.48	2.43	1.56
<b>Ownership of housing unit</b>									
Owned	0.42	0.59	0.49	0.63	0.51	0.58	0.44	0.56	0.59
Single-family	0.36	0.57	0.52	0.63	0.51	0.53	0.46	0.53	0.56
Apartments	4.13	6.67	4.49	3.99	4.18	6.12	4.10	3.80	3.79
Mobile homes	2.05	2.71	1.71	3.08	2.11	2.82	1.57	2.94	1.96
Rented <sup>e</sup>	0.86	1.51	0.98	1.22	0.93	1.35	0.87	1.22	0.86
Single-family	2.35	2.88	1.37	1.66	1.63	2.83	1.19	1.56	1.46
Apartments	0.64	1.34	1.16	1.56	1.18	1.26	1.07	1.57	1.16
Mobile homes	7.62	7.67	4.35	5.02	3.86	7.76	3.89	4.65	4.00

**Relative standard errors (RSEs) for Table CE1.1 Summary annual household site consumption and expenditures in the United States—totals and intensities, 2020**

	RSEs for number of housing units	RSEs for site energy consumption <sup>a</sup>			RSEs for energy expenditures <sup>a</sup>				
		Total U.S. <sup>b</sup>	Total	Per household	Per household member	Per square foot	Total	Per household	Per household member
<b>All homes</b>	0.00	0.40	0.40	0.57	0.43	0.35	0.35	0.55	0.45
<b>Year of construction</b>									
Before 1950	0.00	1.35	1.35	1.63	1.24	1.12	1.12	1.46	1.26
1950 to 1959	0.00	1.48	1.48	1.80	1.52	1.53	1.53	1.82	1.62
1960 to 1969	0.00	1.56	1.56	2.06	1.46	1.52	1.52	1.67	1.68
1970 to 1979	0.00	1.34	1.34	1.32	1.04	1.13	1.13	1.07	1.23
1980 to 1989	0.00	1.34	1.34	1.66	1.15	1.29	1.29	1.64	1.24
1990 to 1999	0.00	1.32	1.32	1.56	1.04	1.22	1.22	1.43	1.12
2000 to 2009	0.00	1.40	1.40	1.67	1.28	1.14	1.14	1.53	1.22
2010 to 2015	2.84	4.04	2.66	2.54	1.87	3.68	1.99	2.33	1.74
2016 to 2020	3.44	4.72	2.96	3.22	2.36	4.17	2.40	2.85	2.13
<b>Total square footage<sup>f</sup></b>									
Less than 1,000	1.20	1.65	1.03	1.35	0.93	1.71	1.07	1.40	1.07
1,000 to 1,499	1.54	1.89	0.89	1.33	0.89	1.72	0.77	1.24	0.81
1,500 to 1,999	1.59	1.68	0.78	1.41	0.73	1.72	0.80	1.26	0.77
2,000 to 2,499	2.32	2.44	0.82	1.26	0.81	2.52	0.83	1.17	0.81
2,500 to 2,999	2.55	2.61	1.08	1.69	1.09	2.59	1.00	1.52	0.99
3,000 or more	1.93	2.07	1.09	1.48	1.00	2.05	0.96	1.40	0.85
<b>Number of household members</b>									
1 member	1.25	1.66	1.05	1.05	0.87	1.56	0.84	0.84	0.91
2 members	1.15	1.27	0.85	0.85	0.64	1.23	0.70	0.70	0.67
3 members	1.87	1.80	1.28	1.28	1.28	1.82	0.98	0.98	1.29
4 members	2.08	2.31	1.29	1.29	1.39	2.27	1.16	1.16	1.41
5 members	4.12	4.26	2.10	2.10	1.69	4.32	1.80	1.80	1.71
6 or more members	4.58	4.85	2.31	2.77	2.41	4.58	2.16	2.55	2.44
<b>2020 annual household income</b>									
Less than \$5,000	4.63	5.74	3.65	4.19	3.51	5.23	2.78	4.04	3.50
\$5,000 to \$9,999	5.53	6.15	3.16	4.37	3.51	5.74	2.45	4.15	2.91
\$10,000 to \$19,999	3.21	3.46	1.91	2.68	1.91	3.25	1.61	2.54	1.93
\$20,000 to \$39,999	1.98	2.16	1.30	1.81	1.09	2.04	1.04	1.64	1.05
\$40,000 to \$59,999	1.83	2.07	1.44	1.85	1.27	1.95	1.18	1.51	1.18
\$60,000 to \$99,999	1.58	1.67	0.92	1.30	0.86	1.60	0.72	1.00	0.88
\$100,000 to \$149,999	1.83	1.91	1.19	1.38	1.05	2.12	1.16	1.30	1.32
\$150,000 or more	1.93	2.23	1.28	1.32	1.18	2.17	1.04	1.22	1.20
<b>Payment method for energy bills</b>									
All paid by household	0.27	0.46	0.46	0.58	0.45	0.40	0.36	0.54	0.45
Some paid by household, some included in rent or condo fee	3.90	4.50	3.02	4.35	2.72	4.38	2.66	3.75	2.39
All included in rent or condo fee	4.78	5.40	3.00	3.74	2.64	5.45	2.47	3.53	3.38
Some other method	25.04	37.24	22.86	22.50	14.39	29.01	14.65	19.63	7.10
<b>Main heating fuel</b>									
Natural gas	0.77	0.87	0.54	0.71	0.53	0.89	0.56	0.71	0.59
Electricity	0.92	1.17	0.83	1.06	0.76	1.11	0.78	1.04	0.77
Fuel oil or kerosene	3.50	3.32	1.57	2.42	1.72	3.26	1.42	2.23	1.78
Propane	3.76	4.33	1.70	2.30	1.93	4.22	1.54	2.27	1.82
Wood	4.88	5.67	2.37	3.66	3.38	6.04	2.39	3.70	3.86
Some other fuel <sup>g</sup>	35.67	38.88	24.00	25.24	31.01	35.97	13.54	15.68	27.63
Does not use heating equipment	4.41	5.09	2.37	2.92	2.30	4.58	2.27	2.84	2.18

**Relative standard errors (RSEs) for Table CE1.1 Summary annual household site consumption and expenditures in the United States—totals and intensities, 2020**

	RSEs for number of housing units	RSEs for site energy consumption <sup>a</sup>				RSEs for energy expenditures <sup>a</sup>				
		Total U.S. <sup>b</sup>	Total	Per household	Per household member	Per square foot	Total	Per household	Per household member	Per square foot
<b>All homes</b>	0.00	0.40	0.40	0.57	0.43	0.35	0.35	0.55	0.45	

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated 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> 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.

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<sup>g</sup> *Some other fuel* includes coal and district steam.