Data release date: June 2023

Revised data release date: March 2024

Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

Number of

housing

(million) (trillion Btu)

units Total site energy consumption^a

Average site energy consumption^a (million Btu per household using the end use)

	Total		Space	Motor	Air condi	Refrig-			Space	Motor	Air condi	Dofria	
	West ^b	Total	heating ^c	heating	Air condi- tioning	erators	Other ^d	Total	heating ^c	heating	tioning	Refrig- erators	O ther ^d
All homes	27.72	1,790	605	438	145	79	522	64.6	24.1	15.9	7.0	2.9	18.8
Census division													
Mountain	9.22	727	284	140	80	28	196	78.9	32.0	15.3	10.0	3.0	21.3
Mountain North	4.62	413	208	80	18	13	93	89.5	45.6	17.5	4.8	2.9	20.1
Mountain South	4.60	314	75	60	62	14	103	68.3	17.6	13.0	14.6	3.1	22.5
Pacific	18.51	1,063	322	298	65	52	326	57.4	19.8	16.2	5.2	2.8	17.6
Census urban/rural classification ^e													
Urban	25.24	1,584	523	397	134	71	460	62.8	23.0	15.8	7.1	2.8	18.2
Urbanized area	22.74	1,417	454	359	123	64	417	62.3	22.2	15.9	7.1	2.8	18.3
Urban cluster	2.50	167	69	37	11	7	43	66.7	29.6	15.2	6.5	2.7	17.2
Rural	2.48	206	82	41	11	8	63	82.9	34.9	16.7	6.4	3.4	25.2
Climate region ^f													
Very cold and Cold	6.35	548	276	108	22	18	124	86.3	43.9	17.1	4.4	2.9	19.6
Mixed-humid	N	N	N	N	N	N	N	N	N	N	N	N	N
Mixed-dry and Hot-dry	14.03	815	179	210	110	41	274	58.0	14.5	15.0	9.2	3.0	19.5
Hot-humid	0.47	14	*	4	3	1	7	30.3	1.3	8.7	9.7	3.1	14.3
Marine	6.87	413	150	117	11	18	117	60.2	23.3	17.0	3.1	2.6	17.0
Housing unit type													
Single-family detached	16.97	1,384	508	306	113	57	400	81.5	31.6	18.1	8.6	3.4	23.6
Single-family attached	1.69	86	27	25	6	4	24	51.0	18.3	14.8	5.2	2.4	14.0

Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

Number of housing

units Total site energy consumption^a

(million) (trillion Btu)

Average site energy consumption^a (million Btu per household using the end use)

West ^b	Total	heating ^c	h 4:					Space		Air condi	Refrig-	
27 72			heating	tioning	erators	O ther ^d	Total	$heating^{c}$	heating	tioning	erators	Other d
27.72	1,790	605	438	145	79	522	64.6	24.1	15.9	7.0	2.9	18.8
1.89	68	13	23	5	4	23	36.2	8.4	12.2	4.4	2.0	12.4
5.70	167	27	64	13	10	53	29.2	5.8	11.3	3.3	1.8	9.2
1.47	85	30	21	8	4	23	58.1	22.1	14.0	6.7	2.6	15.6
17.40	1,362	503	301	110	58	391	78.3	30.7	17.4	8.1	3.3	22.5
15.57	1,272	473	277	102	53	366	81.7	32.0	17.9	8.3	3.4	23.5
0.59	18	4	7	1	1	5	29.7	8.3	11.9	3.0	2.0	8.2
1.24	73	26	17	6	3	20	58.8	21.9	14.1	6.6	2.6	15.8
10.33	428	103	137	35	22	132	41.4	11.8	13.3	5.0	2.1	12.8
3.09	198	62	53	17	8	57	64.0	22.6	17.3	7.9	2.6	18.5
7.00	217	37	80	17	13	71	31.0	6.3	11.5	3.6	1.8	10.2
0.24	13	4	3	1	1	3	54.1	22.8	13.8	7.1	2.6	14.6
3.27	204	84	50	9	8	52	62.3	27.8	15.3	4.7	2.6	16.0
2.73	177	64	45	13	8	47	64.7	25.9	16.4	6.8	2.9	17.3
2.95	170	58	44	12	8	48	57.7	22.2	15.1	5.6	2.8	16.3
4.71	283	99	70	23	13	80	60.2	23.6	14.9	6.7	2.7	16.9
3.95	240	76	57	22	11	74	60.9	21.5	14.6	7.4	2.8	18.7
4.05	293	99	69	25	13	87	72.4	26.8	17.0	7.9	3.2	21.6
3.89	290	86	72	30	12	90	74.5	24.4	18.5	9.1	3.2	23.0
1.16	75	21	19	6	3	25	64.3	20.0	16.5	6.6	2.8	21.4
	5.70 1.47 17.40 15.57 0.59 1.24 10.33 3.09 7.00 0.24 3.27 2.73 2.95 4.71 3.95 4.05 3.89	1.89 68 5.70 167 1.47 85 17.40 1,362 15.57 1,272 0.59 18 1.24 73 10.33 428 3.09 198 7.00 217 0.24 13 3.27 204 2.73 177 2.95 170 4.71 283 3.95 240 4.05 293 3.89 290	1.89 68 13 5.70 167 27 1.47 85 30 17.40 1,362 503 15.57 1,272 473 0.59 18 4 1.24 73 26 10.33 428 103 3.09 198 62 7.00 217 37 0.24 13 4 3.27 204 84 2.73 177 64 2.95 170 58 4.71 283 99 3.95 240 76 4.05 293 99 3.89 290 86	1.89 68 13 23 5.70 167 27 64 1.47 85 30 21 17.40 1,362 503 301 15.57 1,272 473 277 0.59 18 4 7 1.24 73 26 17 10.33 428 103 137 3.09 198 62 53 7.00 217 37 80 0.24 13 4 3 3.27 204 84 50 2.73 177 64 45 2.95 170 58 44 4.71 283 99 70 3.95 240 76 57 4.05 293 99 69 3.89 290 86 72	1.89 68 13 23 5 5.70 167 27 64 13 1.47 85 30 21 8 17.40 1,362 503 301 110 15.57 1,272 473 277 102 0.59 18 4 7 1 1.24 73 26 17 6 10.33 428 103 137 35 3.09 198 62 53 17 7.00 217 37 80 17 0.24 13 4 3 1 3.27 204 84 50 9 2.73 177 64 45 13 2.95 170 58 44 12 4.71 283 99 70 23 3.95 240 76 57 22 4.05 293 99 69 25 3.89 290 86 72 30	1.89 68 13 23 5 4 5.70 167 27 64 13 10 1.47 85 30 21 8 4 17.40 1,362 503 301 110 58 15.57 1,272 473 277 102 53 0.59 18 4 7 1 1 1.24 73 26 17 6 3 10.33 428 103 137 35 22 3.09 198 62 53 17 8 7.00 217 37 80 17 13 0.24 13 4 3 1 1 3.27 204 84 50 9 8 2.73 177 64 45 13 8 2.95 170 58 44 12 8 4.71 283 99 70 23 13 3.95 240 76 57 <td< td=""><td>1.89 68 13 23 5 4 23 5.70 167 27 64 13 10 53 1.47 85 30 21 8 4 23 17.40 1,362 503 301 110 58 391 15.57 1,272 473 277 102 53 366 0.59 18 4 7 1 1 5 1.24 73 26 17 6 3 20 10.33 428 103 137 35 22 132 3.09 198 62 53 17 8 57 7.00 217 37 80 17 13 71 0.24 13 4 3 1 1 3 3.27 204 84 50 9 8 52 2.73 170 58 44 12 8 48 4.71 283 99 70 23 13<td>1.89 68 13 23 5 4 23 36.2 5.70 167 27 64 13 10 53 29.2 1.47 85 30 21 8 4 23 58.1 17.40 1,362 503 301 110 58 391 78.3 15.57 1,272 473 277 102 53 366 81.7 0.59 18 4 7 1 1 5 29.7 1.24 73 26 17 6 3 20 58.8 10.33 428 103 137 35 22 132 41.4 3.09 198 62 53 17 8 57 64.0 7.00 217 37 80 17 13 71 31.0 0.24 13 4 3 1 1 3 54.1 3.27 204 84 50 9 8 52 62.3 2.73 177 64 45 13 8 47 64.7 2.95 170 58 44 12 8 48 <t< td=""><td>1.89 68 13 23 5 4 23 36.2 8.4 5.70 167 27 64 13 10 53 29.2 5.8 1.47 85 30 21 8 4 23 58.1 22.1 17.40 1,362 503 301 110 58 391 78.3 30.7 15.57 1,272 473 277 102 53 366 81.7 32.0 0.59 18 4 7 1 1 5 29.7 8.3 1.24 73 26 17 6 3 20 58.8 21.9 10.33 428 103 137 35 22 132 41.4 11.8 3.09 198 62 53 17 8 57 64.0 22.6 7.00 217 37 80 17 13 71 31.0 6.3 0.24 13 4 3 1 1 3 54.1 22.8 3.27 204 84 50 9 8 52 62.3 27.8 2.73 177 64</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 5.70 167 27 64 13 10 53 29.2 5.8 11.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 0.59 18 4 7 1 1 5 29.7 8.3 11.9 1.24 73 26 17 6 3 20 58.8 21.9 14.1 10.33 428 103 137 35 22 132 41.4 11.8 13.3 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.00 217 37 80 17 13 71 31.0</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.9</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 2.0 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.8 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 2.6 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 3.3 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 3.4 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 2.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 2.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 2.1 3.09 198 62</td></t<></td></td></td<>	1.89 68 13 23 5 4 23 5.70 167 27 64 13 10 53 1.47 85 30 21 8 4 23 17.40 1,362 503 301 110 58 391 15.57 1,272 473 277 102 53 366 0.59 18 4 7 1 1 5 1.24 73 26 17 6 3 20 10.33 428 103 137 35 22 132 3.09 198 62 53 17 8 57 7.00 217 37 80 17 13 71 0.24 13 4 3 1 1 3 3.27 204 84 50 9 8 52 2.73 170 58 44 12 8 48 4.71 283 99 70 23 13 <td>1.89 68 13 23 5 4 23 36.2 5.70 167 27 64 13 10 53 29.2 1.47 85 30 21 8 4 23 58.1 17.40 1,362 503 301 110 58 391 78.3 15.57 1,272 473 277 102 53 366 81.7 0.59 18 4 7 1 1 5 29.7 1.24 73 26 17 6 3 20 58.8 10.33 428 103 137 35 22 132 41.4 3.09 198 62 53 17 8 57 64.0 7.00 217 37 80 17 13 71 31.0 0.24 13 4 3 1 1 3 54.1 3.27 204 84 50 9 8 52 62.3 2.73 177 64 45 13 8 47 64.7 2.95 170 58 44 12 8 48 <t< td=""><td>1.89 68 13 23 5 4 23 36.2 8.4 5.70 167 27 64 13 10 53 29.2 5.8 1.47 85 30 21 8 4 23 58.1 22.1 17.40 1,362 503 301 110 58 391 78.3 30.7 15.57 1,272 473 277 102 53 366 81.7 32.0 0.59 18 4 7 1 1 5 29.7 8.3 1.24 73 26 17 6 3 20 58.8 21.9 10.33 428 103 137 35 22 132 41.4 11.8 3.09 198 62 53 17 8 57 64.0 22.6 7.00 217 37 80 17 13 71 31.0 6.3 0.24 13 4 3 1 1 3 54.1 22.8 3.27 204 84 50 9 8 52 62.3 27.8 2.73 177 64</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 5.70 167 27 64 13 10 53 29.2 5.8 11.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 0.59 18 4 7 1 1 5 29.7 8.3 11.9 1.24 73 26 17 6 3 20 58.8 21.9 14.1 10.33 428 103 137 35 22 132 41.4 11.8 13.3 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.00 217 37 80 17 13 71 31.0</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.9</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 2.0 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.8 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 2.6 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 3.3 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 3.4 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 2.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 2.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 2.1 3.09 198 62</td></t<></td>	1.89 68 13 23 5 4 23 36.2 5.70 167 27 64 13 10 53 29.2 1.47 85 30 21 8 4 23 58.1 17.40 1,362 503 301 110 58 391 78.3 15.57 1,272 473 277 102 53 366 81.7 0.59 18 4 7 1 1 5 29.7 1.24 73 26 17 6 3 20 58.8 10.33 428 103 137 35 22 132 41.4 3.09 198 62 53 17 8 57 64.0 7.00 217 37 80 17 13 71 31.0 0.24 13 4 3 1 1 3 54.1 3.27 204 84 50 9 8 52 62.3 2.73 177 64 45 13 8 47 64.7 2.95 170 58 44 12 8 48 <t< td=""><td>1.89 68 13 23 5 4 23 36.2 8.4 5.70 167 27 64 13 10 53 29.2 5.8 1.47 85 30 21 8 4 23 58.1 22.1 17.40 1,362 503 301 110 58 391 78.3 30.7 15.57 1,272 473 277 102 53 366 81.7 32.0 0.59 18 4 7 1 1 5 29.7 8.3 1.24 73 26 17 6 3 20 58.8 21.9 10.33 428 103 137 35 22 132 41.4 11.8 3.09 198 62 53 17 8 57 64.0 22.6 7.00 217 37 80 17 13 71 31.0 6.3 0.24 13 4 3 1 1 3 54.1 22.8 3.27 204 84 50 9 8 52 62.3 27.8 2.73 177 64</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 5.70 167 27 64 13 10 53 29.2 5.8 11.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 0.59 18 4 7 1 1 5 29.7 8.3 11.9 1.24 73 26 17 6 3 20 58.8 21.9 14.1 10.33 428 103 137 35 22 132 41.4 11.8 13.3 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.00 217 37 80 17 13 71 31.0</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.9</td><td>1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 2.0 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.8 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 2.6 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 3.3 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 3.4 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 2.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 2.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 2.1 3.09 198 62</td></t<>	1.89 68 13 23 5 4 23 36.2 8.4 5.70 167 27 64 13 10 53 29.2 5.8 1.47 85 30 21 8 4 23 58.1 22.1 17.40 1,362 503 301 110 58 391 78.3 30.7 15.57 1,272 473 277 102 53 366 81.7 32.0 0.59 18 4 7 1 1 5 29.7 8.3 1.24 73 26 17 6 3 20 58.8 21.9 10.33 428 103 137 35 22 132 41.4 11.8 3.09 198 62 53 17 8 57 64.0 22.6 7.00 217 37 80 17 13 71 31.0 6.3 0.24 13 4 3 1 1 3 54.1 22.8 3.27 204 84 50 9 8 52 62.3 27.8 2.73 177 64	1.89 68 13 23 5 4 23 36.2 8.4 12.2 5.70 167 27 64 13 10 53 29.2 5.8 11.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 0.59 18 4 7 1 1 5 29.7 8.3 11.9 1.24 73 26 17 6 3 20 58.8 21.9 14.1 10.33 428 103 137 35 22 132 41.4 11.8 13.3 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.00 217 37 80 17 13 71 31.0	1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 3.09 198 62 53 17 8 57 64.0 22.6 17.3 7.9	1.89 68 13 23 5 4 23 36.2 8.4 12.2 4.4 2.0 5.70 167 27 64 13 10 53 29.2 5.8 11.3 3.3 1.8 1.47 85 30 21 8 4 23 58.1 22.1 14.0 6.7 2.6 17.40 1,362 503 301 110 58 391 78.3 30.7 17.4 8.1 3.3 15.57 1,272 473 277 102 53 366 81.7 32.0 17.9 8.3 3.4 0.59 18 4 7 1 1 5 29.7 8.3 11.9 3.0 2.0 1.24 73 26 17 6 3 20 58.8 21.9 14.1 6.6 2.6 10.33 428 103 137 35 22 132 41.4 11.8 13.3 5.0 2.1 3.09 198 62

Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

Number of housing

units Total site energy consumption^a

(million) (trillion Btu)

Average site energy consumption^a (million Btu per household using the end use)

	Total		Space	Water	Air condi	Refrig-			Space	Water	Air condi	Refrig-	
	West ^b	Total	heating ^c	heating	tioning	erators	O ther ^d	Total	$heating^{c}$	heating	tioning	erators	O ther ^d
All homes	27.72	1,790	605	438	145	79	522	64.6	24.1	15.9	7.0	2.9	18.8
2016 to 2020	1.02	58	18	13	5	3	19	57	18.6	12.8	5.6	2.6	18.8
Total square footage ^h													
Less than 1,000	7.89	273	60	91	21	15	86	34.7	9.2	11.7	3.9	2.0	10.9
1,000 to 1,499	6.53	357	109	99	29	17	103	54.7	18.5	15.2	6.1	2.6	15.8
1,500 to 1,999	5.30	379	130	92	33	17	108	71.5	26.6	17.3	8.2	3.2	20.4
2,000 to 2,499	3.34	277	107	58	21	11	79	82.9	33.0	17.6	8.0	3.3	23.8
2,500 to 2,999	1.92	184	71	37	16	7	52	95.7	38.4	19.6	9.8	3.8	27.1
3,000 or more	2.74	319	128	60	26	11	94	116.7	48.1	22.1	11.0	4.2	34.4
Number of household members													
1 member	7.23	315	123	71	23	16	82	43.5	19.1	9.8	4.8	2.2	11.3
2 members	9.31	630	230	139	51	27	182	67.7	26.7	15.0	7.2	2.9	19.6
3 members	4.12	284	90	73	22	12	87	68.9	24.0	17.9	7.0	3.0	21.1
4 members	4.08	313	97	85	25	13	92	76.7	26.1	20.8	8.0	3.3	22.7
5 members	1.71	138	38	39	13	6	42	80.8	24.5	23.1	9.4	3.5	24.7
6 or more members	1.28	111	28	31	10	4	37	86.3	26.9	24.7	10.1	3.4	28.6
2020 annual household income													
Less than \$5,000	0.90	39	10	12	3	2	12	43.0	12.5	13.4	5.8	2.1	12.9
\$5,000 to \$9,999	0.72	28	7	9	2	2	8	38.1	12.1	12.0	4.2	2.3	11.3
\$10,000 to \$19,999	2.03	94	31	27	7	5	26	46.5	17.3	13.2	5.1	2.3	12.6
\$20,000 to \$39,999	5.26	287	96	75	25	13	78	54.4	20.4	14.3	6.3	2.6	14.8
\$40,000 to \$59,999	4.32	254	88	64	21	12	70	58.9	22.6	14.9	6.7	2.7	16.2
\$60,000 to \$99,999	6.30	413	143	99	34	19	117	65.4	24.8	15.9	7.0	3.0	18.6
\$100,000 to \$149,999	4.06	308	108	72	24	13	91	75.8	29.0	17.7	7.5	3.2	22.3

Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

Number of

housing

units Total site energy consumption^a

(million) (trillion Btu)

Average site energy consumption^a

(million Btu per household using the end use)

	Total West ^b	Total	Space heating ^c	Water A	Air condi- tioning	Refrig- erators	Other ^d	Total	Space heating ^c	Water heating	Air condi- tioning	Refrig- erators	Other ^d
All homes	27.72	1,790	605	438	145	79	522	64.6	24.1	15.9	7.0	2.9	18.8
\$150,000 or more	4.13	369	123	81	29	14	122	89.2	31.7	19.7	9.0	3.4	29.5
Payment method for energy bills													
All paid by household	25.56	1,710	586	412	139	75	499	66.9	25.1	16.2	7.2	2.9	19.5
Some paid by household, some													
included in rent or condo fee	1.27	49	12	16	3	3	15	38.5	12.1	12.7	3.8	2.1	11.5
All included in rent or condo fee	0.89	31	8	10	3	2	9	34.9	10.3	11.4	5.1	1.9	10.2
Some other method	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main heating fuel													
Natural gas	16.13	1,281	496	296	92	50	348	79.4	30.7	18.4	7.2	3.1	21.6
Electricity	7.62	320	70	86	38	19	108	42.0	9.1	11.3	7.0	2.5	14.1
Fuel oil or kerosene	0.11	12	7	2	Q	*	2	105.5	63.8	18.2	Q	2.3	20.1
Propane	0.72	63	28	11	3	2	18	87.4	39.1	15.6	5.4	3.5	25.2
Wood	0.67	34	5	11	2	2	15	51.0	8.9	17.2	4.2	2.9	22.3
Some other fuel ⁱ	N	N	N	N	N	N	N	N	N	N	N	N	N
Does not use heating equipment	2.47	80	N	31	10	6	32	32.2	N	13.3	7.1	2.5	12.8

Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

Number of housing

units Total site energy consumption^a Average site energy consumption^a

(million) (trillion Btu) (million Btu per household using the end use)

	Total West ^b	Total	Space heating ^c		Air condi- tioning	U	O ther ^d	Total	Space heating ^c		Air condi- tioning	•	O ther ^d
All homes	27.72	1,790	605	438	145	79	522	64.6	24.1	15.9	7.0	2.9	18.8

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

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.

^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 West includes all primary occupied housing units in the West Census Region. 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.

^e 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.

^f 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*.

^g Rented includes households that occupy their primary housing units without paying rent.

^h 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.

¹ Some other fuel includes coal and district steam.

^{* =} Estimate is less than 0.5 and rounds to zero.

Data release date: June 2023

Revised data release date: March 2024

Relative standard errors (RSEs) for Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

RSEs for number of housing

units RSEs for total site energy consumption^a

	Total		Cmana						Smann				
	Total West ^b	Total	Space heating ^c	Water A heating	Air condi- tioning	Refrig- erators	Other ^d	Total	Space heating ^c	Water heating	Air condi- tioning	Refrig- erators	O ther ^d
All homes	0.00	0.74	1.25	1.02	1.62	0.76	1.40	0.74	1.36	1.02	1.31	0.76	1.40
Census division													
Mountain	0.00	1.03	1.62	1.29	2.28	1.14	2.00	1.03	1.72	1.28	1.93	1.12	2.00
Mountain North	0.00	1.40	1.89	1.96	3.27	1.76	2.73	1.40	1.85	1.93	2.93	1.74	2.73
Mountain South	0.00	1.70	3.35	1.95	2.49	1.46	3.18	1.70	3.59	1.92	2.21	1.45	3.18
Pacific	0.00	1.09	2.03	1.37	2.77	1.12	1.85	1.09	2.14	1.40	2.29	1.13	1.85
Census urban/rural classification ^e													
Urban	0.58	1.06	1.52	1.25	1.74	1.09	1.67	0.74	1.49	1.08	1.36	0.80	1.40
Urbanized area	0.81	1.31	1.93	1.35	1.77	1.30	1.87	0.86	1.68	1.08	1.45	0.93	1.51
Urban cluster	5.53	6.06	6.37	7.22	10.26	6.07	6.92	2.91	4.60	3.74	6.86	2.49	4.24
Rural	5.87	6.00	6.41	6.70	8.78	6.48	7.51	2.61	4.46	3.15	4.94	2.73	4.91
Climate region ^f													
Very cold and Cold	1.37	1.33	1.82	1.61	2.97	2.06	2.13	1.16	1.79	1.39	2.35	1.71	1.84
Mixed-humid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mixed-dry and Hot-dry	1.21	1.65	3.09	1.83	1.88	1.71	2.60	1.36	2.96	1.66	1.71	1.29	2.39
Hot-humid	0.00	3.62	46.12	5.21	8.60	3.18	4.93	3.62	42.85	4.71	6.10	3.23	4.93
Marine	2.39	2.62	3.26	2.82	5.16	2.96	3.44	2.16	2.98	2.47	4.69	1.79	2.77
Housing unit type													
Single-family detached	0.00	0.92	1.46	1.24	1.88	0.89	1.74	0.92	1.37	1.24	1.58	0.89	1.74
Single-family attached	0.00	2.71	5.33	3.70	7.48	2.47	3.43	2.71	5.77	3.72	5.88	2.47	3.43

Relative standard errors (RSEs) for Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

RSEs for number of housing

units RSEs for total site energy consumption^a

	Total		Space	Water .	Air condi	Refrig-			Space	Water	Air condi	Refrig-	
	West ^b	Total	heating ^c	heating	tioning	erators	O ther ^d	Total	heating ^c	heating	tioning	erators	Other ^d
All homes	0.00	0.74	1.25	1.02	1.62	0.76	1.40	0.74	1.36	1.02	1.31	0.76	1.40
Apartments in buildings with 2–4 units	0.00	4.11	8.08	4.95	9.62	5.04	8.80	4.11	8.12	4.79	9.38	5.04	8.80
Apartments in buildings with 5 or													
more units	0.00	1.75	3.79	3.23	4.63	1.95	3.29	1.75	4.00	3.19	4.31	1.89	3.29
Mobile homes	0.00	3.12	5.33	3.85	7.98	4.11	4.31	3.12	5.60	3.85	7.21	4.00	4.31
Ownership of housing unit													
Owned	0.92	1.26	1.60	1.58	2.27	1.25	2.05	1.02	1.60	1.26	1.70	0.96	1.79
Single-family	0.90	1.36	1.66	1.66	2.31	1.32	2.22	1.02	1.57	1.38	1.70	0.92	1.86
Apartments	11.85	11.64	18.74	13.14	16.95	10.96	11.50	6.84	17.23	7.37	12.64	4.39	7.12
Mobile homes	3.65	4.64	6.64	5.95	10.79	5.16	5.66	3.79	6.82	4.55	8.67	4.20	4.67
Rented ^g	1.55	3.04	4.58	2.77	5.52	2.40	3.81	2.02	3.47	2.17	3.96	1.59	3.04
Single-family	4.55	6.25	6.98	6.06	8.60	5.55	7.48	2.97	4.32	3.17	5.46	2.33	4.44
Apartments	1.00	1.89	3.99	2.96	5.15	2.29	3.64	1.84	4.08	3.07	4.38	2.06	3.54
Mobile homes	19.20	18.65	21.19	22.77	28.73	21.67	21.99	9.16	19.52	11.48	17.59	9.68	12.57
Year of construction													
Before 1950	0.00	3.36	4.76	4.29	7.47	3.22	4.62	3.36	5.03	4.44	6.73	3.15	4.62
1950 to 1959	0.00	2.41	4.53	3.07	6.42	3.09	4.33	2.41	4.25	3.07	5.71	3.09	4.33
1960 to 1969	0.00	3.29	5.73	3.67	6.41	3.30	3.84	3.29	5.65	3.59	5.69	3.25	3.84
1970 to 1979	0.00	2.49	3.96	3.17	5.06	2.22	3.17	2.49	4.00	3.14	4.21	2.12	3.17
1980 to 1989	0.00	2.74	4.57	2.87	4.90	2.22	4.65	2.74	4.48	2.83	4.52	2.22	4.65
1990 to 1999	0.00	2.40	3.35	2.51	4.75	1.96	3.92	2.40	3.62	2.50	4.52	1.96	3.92
2000 to 2009	0.00	2.39	3.81	2.62	4.20	1.88	3.73	2.39	3.83	2.60	3.86	1.87	3.73
2010 to 2015	5.40	6.92	8.52	7.65	8.83	7.08	10.97	4.49	6.02	6.34	6.97	3.98	9.25

Relative standard errors (RSEs) for Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

RSEs for number of housing

units RSEs for total site energy consumption^a

	Total		Space	Water .	Air condi	Refrig-			Space	Water	Air condi	Refrig-	
	West ^b	Total	heating ^c	heating	tioning	erators	Other ^d	Total	heating ^c	heating	tioning	erators	Other ^d
All homes	0.00	0.74	1.25	1.02	1.62	0.76	1.40	0.74	1.36	1.02	1.31	0.76	1.40
2016 to 2020	6.14	7.46	9.42	8.27	11.96	7.92	9.40	5.02	7.19	6.31	9.56	3.39	7.97
Total square footage ^h													
Less than 1,000	2.20	2.72	3.68	3.41	4.85	3.35	4.14	1.78	3.35	2.67	3.97	2.01	3.67
1,000 to 1,499	3.39	3.66	4.64	4.50	5.61	4.10	3.68	1.64	3.36	2.48	4.18	2.22	1.98
1,500 to 1,999	3.51	3.62	4.12	4.50	5.58	3.52	4.22	1.38	2.56	2.49	3.73	1.75	2.71
2,000 to 2,499	4.58	4.85	4.92	5.69	6.87	4.94	5.91	1.76	2.71	3.09	4.36	2.27	3.55
2,500 to 2,999	5.90	6.05	7.46	7.11	7.96	6.00	5.96	2.55	4.23	4.04	6.75	2.64	3.85
3,000 or more	4.59	4.69	4.68	5.25	8.18	4.74	6.60	2.31	3.39	3.17	5.91	2.42	4.55
Number of household members													
1 member	3.10	3.63	4.55	4.28	5.26	3.74	4.33	2.11	3.30	2.49	3.91	1.71	3.54
2 members	2.87	2.96	3.61	2.79	4.69	3.18	3.59	1.57	2.90	1.65	3.19	1.48	2.58
3 members	5.32	5.36	6.38	5.90	6.70	5.02	6.04	2.49	4.16	2.34	4.85	2.42	3.53
4 members	4.26	4.28	5.18	4.99	6.46	4.94	4.50	2.63	4.69	2.80	4.12	2.76	2.62
5 members	6.30	6.16	6.96	6.89	10.51	7.28	6.94	3.79	6.89	3.94	7.66	3.70	4.20
6 or more members	8.85	8.90	11.66	9.99	11.22	8.66	10.69	5.15	9.18	5.40	7.13	3.09	8.59
2020 annual household income													
Less than \$5,000	9.77	10.72	14.61	11.84	17.58	10.53	12.25	6.77	11.92	8.02	13.57	5.24	9.22
\$5,000 to \$9,999	14.97	16.37	16.81	18.52	19.95	17.40	18.46	6.97	13.27	7.33	11.37	8.21	11.38
\$10,000 to \$19,999	6.11	6.74	8.98	7.77	10.38	7.98	9.50	4.77	7.99	6.11	8.70	4.49	8.00
\$20,000 to \$39,999	3.64	4.02	5.36	4.79	6.30	4.68	4.95	2.12	4.29	2.75	4.70	2.20	3.50
\$40,000 to \$59,999	4.01	4.21	5.44	4.93	6.13	4.48	4.40	3.02	4.60	2.91	5.52	2.81	3.32
\$60,000 to \$99,999	2.99	3.06	4.12	3.29	5.11	3.66	3.23	2.06	3.76	2.36	3.03	1.90	2.50

Relative standard errors (RSEs) for Table CE3.5 Annual household site end-use consumption in the West—totals and averages, 2020

RSEs for number of housing

units RSEs for total site energy consumption^a

	Total		Space						Space		Air condi	Refrig-	ou d
	West	Total	heating ^c	heating	tioning	erators	Other	Total	heating ^c	heating	tioning	erators	Other ^d
All homes	0.00	0.74	1.25	1.02	1.62	0.76	1.40	0.74	1.36	1.02	1.31	0.76	1.40
\$100,000 to \$149,999	4.08	3.92	4.67	4.61	6.21	4.38	4.44	2.07	3.19	2.89	4.08	2.51	2.68
\$150,000 or more	4.34	4.92	4.51	5.45	7.32	4.57	6.51	2.18	2.93	2.67	5.08	2.12	4.13
Payment method for energy bills													
All paid by household	0.50	0.82	1.31	1.08	1.66	0.82	1.50	0.85	1.45	1.06	1.43	0.80	1.47
Some paid by household, some													
included in rent or condo fee	8.83	8.88	12.15	10.13	14.59	9.69	10.57	5.82	12.68	5.88	12.07	5.72	7.02
All included in rent or condo fee	9.52	11.46	12.68	12.97	16.95	10.18	13.18	5.94	9.52	7.45	11.31	3.51	8.95
Some other method	63.98	63.37	62.08	70.40	73.00	63.18	62.56	25.71	49.90	32.81	106.73	4.63	13.61
Main heating fuel													
Natural gas	1.30	1.42	1.66	1.50	2.69	1.49	2.24	0.96	1.47	1.10	1.90	1.18	1.87
Electricity	2.75	3.41	3.78	4.00	5.13	3.44	4.10	1.99	3.28	2.60	3.58	1.97	3.03
Fuel oil or kerosene	17.12	15.08	13.03	20.49	83.36	18.32	25.61	6.10	12.73	8.03	77.54	6.97	15.18
Propane	10.97	10.42	12.30	10.64	14.93	10.95	11.40	5.43	8.78	4.49	9.88	4.97	7.59
Wood	12.40	14.99	19.60	15.52	24.33	14.01	17.29	7.44	13.01	8.70	15.41	6.06	12.35
Some other fuel ⁱ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Does not use heating equipment	6.32	7.21	0.00	8.15	9.60	6.38	7.63	3.25	0.00	4.27	7.33	2.76	4.06

Relative standard errors (RSEs) for Table CE3.5 Annual household site end-use consumption in the West-totals and averages, 2020

RSEs for number of housing units RSEs for total site energy consumption RSEs for average site energy consumption RSEs f

	West ^b	Total	heating ^c		tioning	erators	O ther ^d	Total l	heating ^c		tioning	erators	O ther ^d
All homes	0.00	0.74	1.25	1.02	1.62	0.76	1.40	0.74	1.36	1.02	1.31	0.76	1.40

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 West includes all primary occupied housing units in the West Census Region. 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.

e 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.

^f 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*.

^g Rented includes households that occupy their primary housing units without paying rent.

^h 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.

¹ Some other fuel includes coal and district steam.