

Table C20. Electricity consumption and conditional energy intensity by climate region, 2012

	Total electricity consumption (billion kWh)					Total floorspace of buildings using electricity (million square feet)					Electricity energy intensity (kWh/square foot)				
	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine
All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Building floorspace (square feet)															
1,001 to 5,000	40	48	15	26	Q	2,712	2,545	958	1,096	Q	14.6	18.8	15.2	23.7	14.0
5,001 to 10,000	33	37	21	19	3	3,075	2,534	1,561	1,102	218	10.8	14.5	13.6	17.4	13.5
10,001 to 25,000	56	47	20	29	6	5,304	3,734	2,291	1,808	429	10.6	12.7	8.9	15.9	14.7
25,001 to 50,000	47	47	20	30	Q	4,311	3,163	1,922	1,900	375	10.9	14.9	10.6	15.8	11.1
50,001 to 100,000	72	65	17	33	5	4,960	4,817	1,480	1,943	403	14.5	13.4	11.5	16.9	12.9
100,001 to 200,000	62	59	25	36	7	4,241	4,214	1,666	1,975	265	14.7	14.1	14.9	18.4	25.8
200,001 to 500,000	65	59	24	29	4	4,287	3,445	1,328	1,265	327	15.2	17.0	18.0	22.7	11.3
Over 500,000	43	54	10	19	Q	2,396	2,970	536	912	Q	18.1	18.1	18.9	20.5	Q
Principal building activity															
Education	43	51	11	27	Q	4,739	4,426	1,075	1,878	Q	9.1	11.6	10.3	14.3	Q
Food sales	25	18	Q	7	Q	540	326	Q	135	Q	45.8	55.7	Q	54.6	Q
Food service	23	34	11	13	Q	636	636	229	250	Q	35.8	52.7	47.4	51.8	Q
Health care	39	32	12	22	2	1,754	1,218	398	686	100	22.3	26.1	29.8	32.0	22.9
Inpatient	23	25	Q	14	Q	878	790	268	364	Q	26.7	31.2	37.3	37.5	Q
Outpatient	16	7	2	8	Q	876	427	130	322	Q	18.0	16.7	14.2	25.7	Q
Lodging	31	31	10	15	Q	1,999	1,929	836	917	Q	15.4	16.1	12.3	16.9	Q
Mercantile	67	62	28	44	6	3,911	3,444	1,652	1,979	335	17.1	17.9	17.1	22.2	18.0
Retail (other than mall)	27	22	12	19	Q	1,977	1,623	699	924	Q	13.5	13.7	17.2	20.5	Q
Enclosed and strip malls	40	39	16	25	Q	1,934	1,821	953	1,054	Q	20.7	21.6	17.1	23.7	Q
Office	93	87	27	34	13	6,033	5,496	1,873	1,776	774	15.4	15.8	14.3	19.1	17.3
Public assembly	29	22	12	15	Q	2,351	1,479	834	622	Q	12.4	14.6	14.4	24.2	Q
Public order and safety	5	10	Q	Q	Q	477	597	Q	Q	Q	9.7	17.2	Q	Q	Q
Religious worship	7	9	2	5	Q	1,623	1,698	461	674	Q	4.6	5.1	4.2	7.8	Q
Service	14	14	4	4	Q	1,924	1,503	580	429	Q	7.1	9.5	7.4	9.1	Q
Warehouse and storage	22	22	14	23	Q	3,910	3,584	2,858	2,023	Q	5.7	6.3	4.9	11.5	Q
Other	19	23	8	Q	Q	763	677	249	Q	Q	24.9	33.7	32.8	Q	Q
Vacant	3	2	Q	Q	Q	627	410	323	Q	Q	4.5	3.7	Q	Q	Q
Year constructed															
Before 1920	15	14	Q	Q	Q	2,198	1,217	Q	Q	Q	6.9	11.6	Q	Q	Q
1920 to 1945	23	26	8	7	Q	2,484	2,173	667	420	Q	9.4	11.8	11.4	15.6	Q
1946 to 1959	37	25	11	11	Q	3,066	2,407	964	577	Q	12.0	10.4	10.9	19.5	Q
1960 to 1969	47	55	24	17	4	4,095	3,375	1,490	931	306	11.4	16.4	15.9	18.7	12.5
1970 to 1979	64	59	18	26	3	4,055	3,099	1,674	1,497	232	15.8	19.1	11.0	17.2	13.1
1980 to 1989	62	67	26	69	9	4,277	4,365	2,228	3,208	712	14.6	15.4	11.5	21.4	13.2
1990 to 1999	73	69	23	40	7	4,769	4,288	1,518	2,200	344	15.3	16.2	15.3	18.4	21.6
2000 to 2003	39	33	11	25	Q	2,392	2,313	952	1,376	Q	16.2	14.3	11.7	18.1	Q
2004 to 2007	31	31	Q	14	Q	1,962	2,176	Q	876	Q	15.8	14.1	13.3	16.0	Q
2008 to 2012	28	36	Q	10	Q	1,988	2,011	890	700	Q	13.9	17.8	16.7	14.6	Q

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All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Census region and division															
Northeast	142	79	N	N	N	10,283	5,008	N	N	N	13.8	15.7	N	N	N
New England	51	N	N	N	N	4,192	N	N	N	N	12.1	N	N	N	N
Middle Atlantic	91	79	N	N	N	6,091	5,008	N	N	N	15.0	15.7	N	N	N
Midwest	210	39	N	N	N	15,875	2,685	N	N	N	13.3	14.5	N	N	N
East North Central	158	Q	N	N	N	11,506	Q	N	N	N	13.7	Q	N	N	N
West North Central	53	22	N	N	N	4,369	1,647	N	N	N	12.1	13.5	N	N	N
South	N	298	13	219	N	N	19,729	1,495	11,802	N	N	15.1	8.9	18.6	N
South Atlantic	N	203	N	83	N	N	13,073	N	4,534	N	N	15.6	N	18.3	N
East South Central	N	51	N	20	N	N	3,761	N	1,063	N	N	13.6	N	18.4	N
West South Central	N	44	13	116	N	N	2,895	1,495	6,204	N	N	15.0	8.9	18.7	N
West	67	N	139	Q	35	5,128	N	10,248	Q	2,416	13.1	N	13.6	Q	14.6
Mountain	41	N	27	N	N	3,318	N	1,494	N	N	12.2	N	17.7	N	N
Pacific	26	N	113	Q	35	1,811	N	8,753	Q	2,416	14.6	N	12.9	Q	14.6
Number of floors															
One	158	171	77	126	14	11,779	11,970	6,521	6,855	927	13.4	14.3	11.8	18.4	14.9
Two	97	87	30	38	7	8,256	6,088	2,492	2,403	690	11.7	14.3	12.0	15.8	10.7
Three	55	36	8	9	Q	4,425	2,289	697	527	Q	12.3	15.7	11.6	16.6	Q
Four to nine	80	78	29	35	9	5,246	4,616	1,577	1,570	408	15.2	17.0	18.2	22.6	21.8
Ten or more	31	43	9	12	Q	1,580	2,459	455	647	Q	19.6	17.6	19.3	18.4	Q
Elevators and escalators (more than one may apply)															
Any elevators	197	188	57	78	18	12,793	10,758	3,357	3,953	1,081	15.4	17.5	17.0	19.8	16.9
Number of elevators															
One	59	50	11	23	5	4,935	3,460	1,052	1,322	351	11.9	14.3	10.0	17.6	13.0
Two to five	82	74	27	32	8	5,279	3,898	1,476	1,625	434	15.5	18.9	18.2	19.4	19.1
Six or more	57	65	20	23	5	2,578	3,400	829	1,006	296	21.9	19.1	24.0	23.1	18.4
Any escalators	26	25	6	8	Q	1,386	1,366	373	363	Q	18.5	18.0	15.4	22.5	Q
Number of workers (main shift)															
Fewer than 5	45	47	16	22	Q	5,991	5,006	2,326	1,890	316	7.5	9.4	7.0	11.7	9.3
5 to 9	34	36	17	23	Q	3,165	2,519	1,533	1,505	Q	10.7	14.3	10.9	15.2	8.3
10 to 19	42	46	20	22	3	3,373	2,883	1,708	1,382	277	12.3	15.9	11.7	15.9	9.8
20 to 49	71	66	28	44	10	5,387	4,280	2,115	2,154	577	13.2	15.4	13.1	20.6	18.1
50 to 99	73	71	21	44	5	4,891	4,634	1,441	2,209	302	15.0	15.3	14.4	20.0	15.2
100 to 249	67	61	28	26	Q	4,203	3,744	1,554	1,211	Q	16.0	16.4	17.7	21.2	Q
250 or more	87	88	23	39	9	4,276	4,356	1,066	1,651	466	20.3	20.2	21.8	23.7	19.5
Weekly operating hours															
Fewer than 40	14	11	5	5	Q	2,642	2,065	987	752	Q	5.2	5.3	5.1	6.5	Q
40 to 48	48	45	26	31	5	5,297	5,072	2,614	2,295	459	9.0	8.8	9.9	13.5	11.5
49 to 60	86	82	23	38	9	7,407	6,958	2,419	2,845	796	11.7	11.8	9.6	13.4	11.1
61 to 84	86	78	34	45	6	6,188	4,682	2,305	2,189	437	13.9	16.7	14.7	20.6	14.6
85 to 167	75	66	22	30	7	4,080	2,679	1,278	1,045	282	18.5	24.6	17.0	28.4	25.3
Open continuously	110	134	43	72	7	5,672	5,966	2,140	2,876	339	19.4	22.4	20.0	25.0	21.4

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All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Roof characteristics															
Roof tilt															
Flat	273	259	102	140	25	17,994	15,064	7,227	6,941	1,520	15.2	17.2	14.2	20.1	16.4
Shallow pitch	89	106	39	57	8	7,415	8,052	3,373	3,555	624	11.9	13.2	11.4	16.1	12.2
Steeper pitch	58	50	11	24	3	5,878	4,305	1,143	1,506	272	9.8	11.6	10.0	15.7	9.8
Cool roof	98	101	49	66	11	6,506	6,074	2,961	3,231	607	15.1	16.6	16.5	20.6	17.6
Renovations in buildings constructed before 2008 (more than one may apply)															
Any type of renovation	244	216	56	112	21	17,122	13,851	4,137	5,438	1,364	14.2	15.6	13.5	20.6	15.3
Addition or annex	90	70	12	30	Q	6,116	4,426	798	1,473	Q	14.7	15.8	14.7	20.7	Q
Reduction in floorspace	8	20	Q	Q	Q	409	888	Q	Q	Q	19.3	22.8	Q	Q	Q
Roof replacement	132	114	21	54	8	9,036	6,937	1,631	2,514	647	14.6	16.5	12.8	21.5	12.0
Exterior wall replacement	23	25	8	13	Q	1,546	1,381	564	587	Q	14.7	18.0	13.7	21.8	Q
Interior wall reconfiguration	140	113	30	58	15	9,326	6,512	2,151	2,407	854	15.1	17.4	14.0	24.0	17.4
Window replacement	68	66	9	28	5	5,602	4,201	820	1,171	457	12.1	15.8	11.4	23.5	11.5
HVAC equipment upgrade	164	148	33	76	12	11,030	8,981	2,268	3,601	768	14.8	16.5	14.5	21.1	16.2
Lighting upgrade	158	134	37	69	12	10,970	8,087	2,519	3,062	777	14.4	16.6	14.7	22.4	15.0
Electrical upgrade	102	94	19	41	10	7,061	5,165	1,324	2,019	519	14.4	18.1	14.0	20.3	18.4
Plumbing system upgrade	87	78	20	31	7	5,876	4,613	1,347	1,523	447	14.7	16.9	14.6	20.5	15.1
Insulation upgrade	51	42	9	20	Q	3,674	2,423	559	728	Q	13.9	17.2	16.8	27.1	Q
Fire, safety, or security upgrade	107	99	22	44	11	7,235	5,608	1,550	2,122	648	14.8	17.6	14.0	20.7	16.8
Structural upgrade	28	19	7	13	Q	1,734	1,091	464	440	Q	16.0	17.3	15.7	28.7	Q
Other	3	Q	Q	Q	Q	272	Q	Q	Q	Q	11.6	Q	Q	Q	Q
No renovations	148	164	82	98	14	12,176	11,560	6,717	5,863	988	12.1	14.2	12.2	16.7	14.0
Buildings constructed 2008 or later	28	36	Q	10	Q	1,988	2,011	890	700	Q	13.9	17.8	16.7	14.6	Q
Energy sources (more than one may apply)															
Electricity	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Natural gas	344	302	113	113	31	24,511	19,361	7,520	5,300	2,033	14.0	15.6	15.1	21.3	15.1
Fuel oil	139	134	32	63	13	8,008	7,287	1,605	2,597	703	17.4	18.4	20.1	24.1	19.1
District heat	33	51	Q	8	Q	1,926	3,012	Q	374	Q	16.9	17.0	17.6	22.0	Q
District chilled water	23	38	10	14	Q	1,227	2,027	Q	752	Q	18.9	18.7	16.9	18.9	Q
Propane	52	24	9	25	Q	3,574	2,183	842	998	Q	14.5	11.1	10.1	25.0	Q
Other	21	14	9	Q	Q	1,986	1,017	496	Q	Q	10.4	13.4	18.0	Q	Q
Space-heating energy sources															
Electricity	231	274	92	157	19	15,252	17,288	6,815	8,300	1,374	15.1	15.9	13.5	18.9	14.2
Electricity main	80	159	59	132	9	4,771	9,282	4,600	6,969	583	16.8	17.1	12.9	19.0	15.2
Electricity secondary	151	116	33	25	11	10,481	8,006	2,215	1,331	792	14.4	14.4	14.9	18.6	13.4
Other excluding electricity	185	136	53	35	15	15,192	9,428	3,669	1,790	944	12.2	14.5	14.5	19.3	15.5
Buildings without heating	3	5	7	29	Q	842	706	1,259	1,912	Q	4.1	7.0	5.6	15.0	Q
Primary space-heating energy source															
Electricity	80	159	59	132	9	4,771	9,282	4,600	6,969	583	16.8	17.1	12.9	19.0	15.2
Natural gas	275	187	77	50	23	20,554	12,884	5,252	2,710	1,588	13.4	14.5	14.6	18.5	14.4
Fuel oil	15	8	N	N	N	1,623	919	N	N	N	9.5	9.0	N	N	N
District heat	32	50	Q	8	Q	1,884	2,916	Q	362	Q	16.9	17.2	17.6	22.4	Q
Propane	10	6	Q	Q	N	1,096	658	Q	Q	N	8.8	9.4	Q	Q	N
Other	4	Q	N	N	N	516	Q	N	N	N	8.0	Q	N	N	N

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All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Heating equipment (more than one may apply)															
Heat pumps	31	92	22	29	6	2,150	6,182	1,669	1,387	458	14.6	14.8	12.9	21.1	12.5
Furnaces	39	43	11	12	Q	3,558	3,009	995	937	Q	10.9	14.3	11.2	12.4	Q
Individual space heaters	130	81	21	29	10	10,112	6,697	1,703	1,607	631	12.9	12.1	12.3	18.1	15.6
District heat	33	51	Q	8	Q	1,926	3,002	Q	362	Q	16.9	17.0	17.6	22.4	Q
Boilers	158	114	36	32	9	11,551	7,029	1,777	1,499	581	13.7	16.3	20.1	21.3	16.2
Packaged heating units	255	250	104	140	22	17,640	15,485	7,351	7,217	1,495	14.5	16.1	14.2	19.4	14.6
Other	18	12	Q	Q	Q	819	487	Q	Q	Q	22.1	23.7	Q	Q	Q
Cooling equipment (more than one may apply)															
Residential-type central air conditioners	62	59	29	34	Q	5,468	4,620	2,250	2,319	Q	11.4	12.9	13.1	14.6	Q
Heat pumps	36	94	22	29	8	2,457	6,173	1,876	1,451	581	14.5	15.2	11.6	20.1	14.5
Individual air conditioners	63	62	12	20	3	5,046	4,683	1,025	1,344	322	12.5	13.1	11.5	15.0	10.5
District chilled water	23	38	10	14	Q	1,227	2,027	Q	752	Q	18.9	18.7	16.9	18.9	Q
Central chillers	117	117	28	55	11	6,757	5,913	1,348	2,474	549	17.3	19.8	21.1	22.1	20.8
Packaged air conditioning units	248	238	90	133	18	16,452	14,627	6,306	6,449	1,318	15.1	16.3	14.3	20.6	13.5
Swamp coolers	9	Q	10	Q	Q	680	Q	710	Q	Q	13.5	Q	14.2	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main equipment replaced since 1990 (more than one may apply)															
Heating	141	133	42	62	10	10,930	8,958	3,528	3,255	887	12.9	14.9	11.8	19.1	11.0
Cooling	153	156	46	81	10	11,402	10,471	3,633	4,345	850	13.4	14.9	12.7	18.5	11.7
Water-heating equipment															
Centralized system	260	251	85	117	15	18,894	15,231	6,259	5,983	1,168	13.8	16.5	13.6	19.5	12.4
Distributed system	48	45	25	37	3	4,184	3,619	2,221	2,298	366	11.4	12.4	11.4	16.0	9.4
Combination of centralized and distributed system	105	111	35	57	16	6,489	6,922	2,105	2,556	721	16.2	16.0	16.5	22.3	22.0
Lighting equipment types (more than one may apply)															
Incandescent	221	216	63	97	15	14,837	13,429	4,139	4,769	1,232	14.9	16.1	15.2	20.3	12.2
Standard fluorescent	406	404	146	207	34	29,315	26,407	11,018	11,096	2,246	13.9	15.3	13.3	18.7	14.9
Compact fluorescent	313	297	103	149	27	20,485	17,410	6,692	7,285	1,944	15.3	17.1	15.4	20.5	13.8
High-intensity discharge (HID)	139	142	35	60	7	8,734	8,547	2,661	3,035	420	15.9	16.6	13.0	19.7	16.5
Halogen	162	166	52	83	15	10,366	9,391	3,257	4,152	893	15.6	17.6	16.1	20.1	16.8
LED	164	134	40	66	11	9,156	6,936	2,514	2,733	732	17.9	19.2	16.1	24.0	15.4
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration equipment (more than one may apply)															
Any refrigeration	390	390	137	202	32	27,633	24,268	9,429	10,299	2,015	14.1	16.1	14.5	19.6	15.7
Walk-in units	207	220	64	100	16	10,742	10,079	2,842	3,922	775	19.3	21.8	22.4	25.4	21.1
Cases or cabinets	206	202	70	88	17	11,215	9,694	3,232	3,856	722	18.4	20.8	21.6	22.8	23.4
Large cold storage areas	32	33	13	17	Q	1,531	1,297	554	701	Q	20.9	25.6	23.6	24.1	Q
Commercial ice makers	213	234	67	119	20	11,045	12,168	3,441	5,199	881	19.3	19.2	19.5	23.0	22.2
Residential-type or compact units	322	304	108	149	28	23,817	20,411	8,210	8,180	1,762	13.5	14.9	13.2	18.2	15.9
Vending machines	259	252	81	129	21	16,400	15,132	5,131	6,115	1,157	15.8	16.7	15.7	21.1	18.4
No refrigeration	30	26	15	19	4	3,653	3,153	2,314	1,703	401	8.1	8.2	6.7	10.9	9.0

Table C20. Electricity consumption and conditional energy intensity by climate region, 2012

	Total electricity consumption (billion kWh)					Total floorspace of buildings using electricity (million square feet)					Electricity energy intensity (kWh/square foot)				
	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine	Very cold/Cold	Mixed-humid	Mixed-dry/Hot-dry	Hot-humid	Marine
All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Office equipment (more than one may apply)															
Desktop computers	395	397	143	209	33	28,233	25,161	10,487	10,929	2,252	14.0	15.8	13.7	19.1	14.8
With flat screen monitors	391	391	143	207	33	27,828	24,907	10,407	10,799	2,220	14.1	15.7	13.7	19.2	15.0
With multiple monitors	174	176	66	90	18	11,074	10,043	4,291	4,365	1,173	15.7	17.5	15.4	20.6	15.2
Laptop computers	330	325	112	173	28	23,554	21,132	8,003	8,961	1,836	14.0	15.4	14.0	19.3	15.0
Dedicated servers	294	292	109	148	26	19,394	17,637	7,303	7,388	1,648	15.2	16.5	14.9	20.0	16.0
Laser printers	297	287	105	144	24	20,318	17,516	7,372	7,492	1,558	14.6	16.4	14.2	19.3	15.1
Inkjet printers	172	179	65	93	15	13,171	12,084	4,887	5,087	1,006	13.1	14.8	13.3	18.3	14.5
FAX machines	350	354	111	185	30	24,671	22,169	8,441	9,504	1,897	14.2	16.0	13.1	19.5	15.8
Photocopiers	320	301	105	156	27	22,559	19,141	7,727	8,118	1,732	14.2	15.7	13.6	19.2	15.9
Number of desktop computers															
None	25	18	9	12	Q	3,053	2,260	1,255	1,073	164	8.0	8.1	7.2	10.9	11.4
1 to 4	62	76	26	37	4	5,646	5,258	2,339	2,070	355	11.0	14.4	11.1	17.7	12.6
5 to 9	44	44	15	24	6	3,424	2,748	1,522	1,332	396	12.7	16.1	10.0	18.3	15.5
10 to 19	46	35	22	22	Q	3,387	2,625	1,707	1,369	300	13.6	13.2	12.7	16.0	15.8
20 to 49	67	66	25	49	4	4,627	4,189	1,675	2,254	349	14.4	15.7	14.8	21.8	10.8
50 to 99	44	33	18	24	Q	3,047	2,542	1,181	1,371	Q	14.5	12.8	15.0	17.2	Q
100 to 249	62	61	12	20	5	4,104	3,474	785	1,041	324	15.1	17.5	15.8	19.1	15.1
250 or more	70	83	26	33	8	3,998	4,326	1,278	1,491	384	17.6	19.2	20.0	22.3	20.4
Number of laptop computers															
None	89	90	40	48	8	7,732	6,290	3,739	3,041	580	11.5	14.3	10.8	15.7	13.2
1 to 4	88	88	34	54	9	8,025	6,735	3,030	2,736	636	11.0	13.0	11.3	19.7	13.7
5 to 9	38	44	15	28	Q	2,577	2,712	1,332	1,555	Q	14.9	16.1	11.2	18.0	Q
10 to 19	41	42	25	19	Q	2,950	2,525	1,426	1,289	Q	14.0	16.8	17.7	14.9	Q
20 to 49	60	45	17	27	5	3,880	2,992	925	1,505	341	15.6	15.1	17.9	17.7	15.4
50 to 99	33	25	9	17	Q	2,116	1,753	511	710	Q	15.4	14.1	16.8	24.2	Q
100 to 249	30	39	Q	10	4	1,978	1,979	Q	508	234	14.9	19.5	15.1	19.8	18.1
250 or more	40	43	5	17	Q	2,028	2,436	261	657	Q	19.8	17.8	18.3	26.4	Q
Number of dedicated servers															
None	125	124	43	73	9	11,892	9,785	4,440	4,614	768	10.5	12.6	9.8	15.8	11.7
1 to 4	164	171	62	88	11	12,362	11,333	4,780	4,808	814	13.3	15.1	13.0	18.4	13.7
5 to 9	38	28	15	17	Q	2,387	1,795	1,008	872	Q	16.0	15.6	15.0	19.1	Q
10 to 19	41	34	10	20	Q	2,098	1,914	506	901	Q	19.6	18.0	19.3	22.4	Q
20 to 49	26	23	6	13	Q	1,509	1,172	418	530	Q	16.9	19.3	14.9	25.3	Q
50 or more	25	36	16	9	6	1,039	1,422	591	277	234	23.8	25.0	27.2	33.1	27.3
Number of photocopiers															
None	99	115	48	65	8	8,727	8,281	4,016	3,884	684	11.4	13.9	11.9	16.7	11.4
One	78	63	30	36	8	6,535	4,855	2,974	2,181	535	11.9	13.0	10.1	16.3	14.8
2 to 4	103	87	33	63	7	8,011	6,177	2,444	3,211	469	12.8	14.1	13.5	19.6	14.2
5 to 9	54	52	14	21	Q	3,691	2,880	932	1,146	Q	14.7	18.0	14.6	18.0	Q
10 or more	85	99	28	37	9	4,322	5,230	1,377	1,579	514	19.6	18.9	20.3	23.2	17.3

Table C20. Electricity consumption and conditional energy intensity by climate region, 2012

	Total electricity consumption (billion kWh)					Total floorspace of buildings using electricity (million square feet)					Electricity energy intensity (kWh/square foot)				
	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine
All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Number of TVs or video displays															
None	83	68	27	38	8	8,419	6,505	3,634	2,888	669	9.9	10.4	7.5	13.0	11.7
One	43	41	14	19	Q	3,519	3,628	1,380	1,241	223	12.3	11.2	9.8	15.2	19.0
2 to 4	78	75	24	52	7	6,455	4,739	1,934	2,811	527	12.1	15.8	12.6	18.4	12.7
5 to 9	51	44	21	30	Q	3,076	2,532	1,031	1,266	Q	16.5	17.3	20.5	23.9	Q
10 to 19	49	53	14	27	Q	2,949	2,763	923	1,269	Q	16.5	19.0	15.0	21.5	Q
20 to 49	42	49	22	22	Q	2,788	2,778	1,200	1,066	Q	15.0	17.7	18.7	20.7	Q
50 to 99	24	29	Q	10	Q	1,479	1,507	Q	504	Q	16.1	19.4	15.8	20.4	Q
100 or more	49	57	17	22	3	2,601	2,970	815	957	203	19.0	19.4	20.6	23.2	15.5
Food preparation or serving areas in non-food service buildings (more than one may apply)															
Snack bar or concession stand	68	65	20	31	6	3,820	3,535	914	1,321	294	17.9	18.3	22.1	23.6	21.4
Fast food or small restaurant	70	69	29	48	7	3,257	2,893	1,425	1,867	345	21.5	23.9	20.7	25.7	21.5
Cafeteria or large restaurant	88	104	24	37	6	5,691	6,145	1,161	1,894	331	15.5	17.0	21.0	19.8	19.4
Commercial kitchen/ food preparation area	104	105	30	45	8	6,504	5,737	1,478	2,066	365	16.0	18.4	20.3	21.8	21.7
Small kitchen area	76	64	20	38	5	5,783	4,646	1,313	2,027	286	13.1	13.8	15.2	18.9	17.2
Separate computer areas (more than one may apply)															
Data center or server farm	86	79	33	30	11	4,065	3,890	1,414	1,230	505	21.3	20.3	23.1	24.1	21.6
Computer-based training room	100	100	37	57	6	6,406	6,036	2,207	2,756	318	15.5	16.6	16.6	20.7	19.8
Student or public computer center	71	75	22	33	Q	5,892	5,069	1,359	1,892	Q	12.1	14.7	16.3	17.3	Q
HVAC conservation features (more than one may apply)															
Economizer cycle	225	177	63	54	20	13,546	9,729	3,821	2,347	1,305	16.6	18.2	16.4	22.9	15.5
Regular HVAC maintenance	381	367	132	199	30	25,864	22,200	9,200	10,031	1,949	14.7	16.5	14.3	19.8	15.2
Building automation system (BAS) ²	238	217	78	116	22	14,019	11,822	4,473	5,501	1,235	17.0	18.3	17.4	21.0	17.5
Window and interior lighting features (more than one may apply)															
Multipaned windows	355	325	86	141	24	25,363	20,416	5,878	6,632	1,440	14.0	15.9	14.7	21.2	16.6
Tinted window glass	224	230	94	145	26	14,273	14,413	7,170	6,933	1,611	15.7	15.9	13.1	20.9	15.9
Reflective window glass	105	89	42	54	9	6,088	4,283	2,554	2,412	500	17.3	20.9	16.6	22.5	18.4
External overhangs or awnings	167	189	66	107	21	10,662	10,362	4,492	5,386	1,160	15.7	18.2	14.7	19.8	17.9
Skylights or atriums	109	113	42	55	13	7,645	7,033	3,687	2,770	941	14.3	16.0	11.3	20.0	13.4
Light scheduling	193	164	69	94	21	11,334	8,922	4,291	4,597	1,119	17.1	18.4	16.0	20.3	18.8
Occupancy sensors	226	186	66	106	24	14,604	10,406	4,733	4,672	1,456	15.5	17.9	13.9	22.6	16.8
Multi-level lighting or dimming	96	90	36	41	9	5,507	4,562	1,887	2,006	571	17.5	19.6	19.2	20.4	16.3
Daylight harvesting	43	27	16	18	4	2,472	1,596	891	918	237	17.6	16.8	18.5	19.7	16.8
Demand responsive lighting	22	27	16	14	Q	1,402	1,379	1,167	693	Q	15.4	19.4	13.3	19.7	Q
Building automation system (BAS) for lighting ²	91	66	31	41	11	4,581	3,376	1,711	1,922	477	19.8	19.4	17.9	21.4	23.2
Equipment usage reduced when building not in full use (more than one may apply)															
Heating	319	297	113	138	26	24,165	21,130	8,546	7,448	1,858	13.2	14.0	13.2	18.5	14.0
Cooling	310	292	114	162	24	22,653	20,659	8,665	8,847	1,692	13.7	14.1	13.2	18.3	14.4
Lighting	388	375	138	201	34	29,198	25,547	10,596	10,933	2,319	13.3	14.7	13.1	18.4	14.7

Table C20. Electricity consumption and conditional energy intensity by climate region, 2012

	Total electricity consumption (billion kWh)					Total floorspace of buildings using electricity (million square feet)					Electricity energy intensity (kWh/square foot)				
	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine	Very cold/ Cold	Mixed-humid	Mixed-dry/ Hot-dry	Hot-humid	Marine
All buildings	419	415	152	220	35	31,286	27,422	11,743	12,002	2,416	13.4	15.2	13.0	18.4	14.6
Annual consumption (kilowatthours)															
10,000 or less	2	1	1	(*)	Q	1,444	900	478	161	Q	1.3	1.4	1.2	1.7	Q
10,001 to 50,000	18	15	9	6	Q	4,191	3,106	1,911	1,128	166	4.3	4.9	4.9	5.4	7.6
50,001 to 100,000	22	19	9	11	Q	2,661	2,024	1,506	1,205	Q	8.2	9.2	6.2	8.8	Q
100,001 to 500,000	95	93	37	49	9	7,644	6,936	3,032	2,879	823	12.4	13.4	12.2	16.9	11.3
500,001 to 1,000,000	54	57	17	34	Q	3,574	3,340	1,235	1,723	Q	15.0	17.0	13.8	20.0	Q
1,000,001 to 5,000,000	137	120	46	65	11	8,125	6,552	2,323	3,124	616	16.9	18.4	19.6	20.7	18.0
Over 5,000,000	92	111	34	56	9	3,648	4,564	1,258	1,783	326	25.1	24.2	26.8	31.2	27.2

¹These climate regions were created by the Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE).

²In earlier CBECS publications, BAS was referred to as *Energy Management and Control System (EMCS)*.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 20 buildings were sampled.

N = No cases in reporting sample.

(*) = Value rounds to zero in the units displayed.

Notes: • Because of rounding, data may not sum to totals. • See the *Guide to the 2012 CBECS Detailed Tables* or *CBECS Terminology* for definitions of terms used in these tables and/or comparison of differences with prior CBECS tables. Both references can be accessed from <http://www.eia.gov/consumption/commercial/data/2012/> • Site electricity is the amount of electricity delivered to commercial buildings. Primary electricity, which is not included in the *Total of major fuels* category, is site electricity plus the conversion losses in the generation, transmission, and distribution processes. • Statistics for the *Energy end uses* category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, ventilation, and air conditioning.

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-871A and E of the 2012 Commercial Buildings Energy Consumption Survey.