

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Building floorspace (square feet)</b>									
1,001 to 5,000	51	17.4	12.8	4.0	9.0	19.4	5.3	1.82	0.105
5,001 to 10,000	97	13.3	12.3	3.7	7.8	14.9	10.2	1.41	0.106
10,001 to 25,000	187	11.7	11.2	3.2	7.7	16.0	19.6	1.23	0.105
25,001 to 50,000	457	12.8	13.1	4.2	9.6	16.7	44.7	1.25	0.098
50,001 to 100,000	985	14.1	15.5	6.0	10.7	16.6	94.9	1.36	0.096
100,001 to 200,000	2,115	15.3	16.8	6.9	13.7	19.6	195.2	1.42	0.092
200,001 to 500,000	4,808	16.9	17.4	7.7	13.6	22.1	445.6	1.57	0.093
Over 500,000	16,362	18.4	14.1	10.1	15.1	22.6	1558.7	1.76	0.095
<b>Principal building activity</b>									
Education	345	11.0	12.3	5.6	9.0	13.7	33.2	1.05	0.096
Food sales	345	48.7	52.0	35.0	54.8	81.4	32.4	4.57	0.094
Food service	215	44.9	23.8	18.9	38.4	73.2	21.3	4.44	0.099
Health care	683	25.8	14.1	7.0	13.1	19.2	61.2	2.31	0.090
Inpatient	7,687	31.0	17.2	20.5	32.7	43.9	671.8	2.71	0.087
Outpatient	227	18.7	10.0	6.3	12.8	19.0	21.4	1.77	0.094
Lodging	565	15.3	29.1	8.4	13.5	19.5	53.8	1.46	0.095
Mercantile	345	18.3	22.7	6.2	13.0	21.8	33.4	1.77	0.097
Retail (other than mall)	189	15.2	20.5	4.9	9.7	18.8	18.7	1.50	0.099
Enclosed and strip malls	757	21.1	24.4	13.8	19.5	27.8	72.4	2.02	0.096
Office	250	15.9	7.5	6.0	9.9	15.8	25.9	1.64	0.104
Public assembly	229	14.5	25.9	3.5	7.7	14.6	22.4	1.42	0.098
Public order and safety	255	14.9	11.5	3.9	9.1	16.2	24.3	1.42	0.095
Religious worship	58	5.2	12.2	2.2	3.5	5.7	6.1	0.55	0.106
Service	62	8.3	9.3	3.4	6.5	12.0	6.8	0.91	0.110
Warehouse and storage	123	6.6	13.2	1.6	3.7	7.5	12.5	0.67	0.101
Other	455	28.3	34.7	2.6	6.6	25.1	41.1	2.56	0.090
Vacant	66	4.5	32.7	0.8	1.6	3.6	7.0	0.48	0.105
<b>Year constructed</b>									
Before 1920	95	8.4	9.6	2.1	4.6	12.2	10.4	0.92	0.110
1920 to 1945	140	10.9	10.7	2.7	6.3	13.0	15.9	1.24	0.113
1946 to 1959	153	11.8	12.9	3.5	8.2	15.6	15.3	1.17	0.100
1960 to 1969	241	14.4	15.0	4.6	9.0	16.8	23.5	1.40	0.097
1970 to 1979	262	16.2	13.6	4.2	9.0	18.5	24.6	1.52	0.094
1980 to 1989	273	15.8	13.4	4.3	9.1	17.9	26.7	1.54	0.098
1990 to 1999	279	16.2	15.9	4.4	9.6	19.6	26.9	1.56	0.096
2000 to 2003	301	15.5	14.9	4.3	10.3	18.6	28.8	1.48	0.096
2004 to 2007	284	14.9	16.2	4.7	10.1	19.5	28.1	1.47	0.099
2008 to 2012	301	15.7	16.1	4.1	8.2	16.8	29.5	1.54	0.098

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Census region and division</b>									
Northeast	286	14.4	12.4	3.2	7.4	16.0	32.6	1.64	0.114
New England	177	12.1	12.1	2.9	6.5	15.0	22.8	1.55	0.129
Middle Atlantic	350	15.3	12.5	3.4	8.0	16.7	38.4	1.68	0.110
Midwest	213	13.4	14.5	3.2	7.8	14.8	18.5	1.17	0.087
East North Central	247	13.9	14.6	3.6	8.4	16.7	22.2	1.25	0.090
West North Central	161	12.5	14.1	2.5	6.4	13.0	13.0	1.00	0.081
South	254	16.1	16.3	4.7	10.1	19.4	22.8	1.44	0.090
South Atlantic	281	16.3	15.9	5.0	10.7	21.4	26.7	1.55	0.095
East South Central	200	14.6	16.4	4.8	10.3	18.9	17.6	1.29	0.088
West South Central	243	16.3	16.9	4.3	9.7	17.7	19.7	1.32	0.081
West	201	13.5	11.9	4.1	7.9	15.9	22.8	1.53	0.113
Mountain	212	13.9	14.6	3.9	7.3	17.2	19.7	1.29	0.093
Pacific	197	13.3	11.1	4.2	8.2	15.5	23.9	1.62	0.121
<b>Climate region<sup>1</sup></b>									
Very cold/Cold	217	13.4	13.6	3.1	7.5	15.0	20.8	1.28	0.096
Mixed-humid	254	15.2	14.5	4.1	9.5	17.7	24.1	1.44	0.095
Mixed-dry/Hot-dry	193	13.0	11.7	4.0	7.4	14.5	23.2	1.56	0.120
Hot-humid	298	18.4	17.6	5.7	13.3	22.6	27.2	1.68	0.091
Marine	256	14.6	11.2	4.7	9.1	17.3	28.4	1.62	0.111
<b>Number of floors</b>									
One	153	14.3	15.6	3.9	8.7	18.1	15.2	1.42	0.099
Two	230	13.0	13.1	3.7	8.2	15.1	22.5	1.27	0.098
Three	300	13.5	14.0	3.6	8.9	16.1	30.2	1.36	0.101
Four to nine	1,321	17.2	14.2	5.1	11.4	16.8	122.6	1.60	0.093
Ten or more	7,851	18.3	10.5	11.6	15.7	21.8	806.2	1.88	0.103
<b>Elevators and escalators (more than one may apply)</b>									
Any elevators	1,343	16.9	13.5	7.4	13.1	19.6	128.1	1.61	0.095
Number of elevators									
One	546	13.2	12.9	5.7	11.7	17.6	51.1	1.23	0.093
Two to five	1,906	17.5	14.4	9.2	14.6	22.0	180.3	1.66	0.095
Six or more	10,641	21.0	12.9	13.0	18.9	26.3	1042.8	2.05	0.098
Any escalators	6,854	18.2	13.7	10.8	19.1	20.7	651.8	1.73	0.095
<b>Number of workers (main shift)</b>									
Fewer than 5	52	8.6	26.7	2.6	5.9	13.2	5.4	0.89	0.103
5 to 9	103	12.5	16.0	5.0	9.5	17.5	10.7	1.30	0.104
10 to 19	181	13.7	14.0	6.3	12.0	22.0	18.5	1.41	0.103
20 to 49	429	15.1	14.8	6.7	12.1	21.3	41.4	1.46	0.097
50 to 99	1,042	15.9	15.9	8.7	14.4	21.4	97.7	1.49	0.094
100 to 249	1,984	16.9	13.9	10.5	15.7	24.3	188.7	1.61	0.095
250 or more	6,634	20.8	9.9	12.9	18.3	27.4	645.3	2.03	0.097

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Weekly operating hours</b>									
Fewer than 40	37	5.3	10.6	1.5	3.3	7.3	4.0	0.57	0.107
40 to 48	117	9.8	8.8	4.2	7.5	12.6	12.1	1.02	0.104
49 to 60	194	11.7	9.6	4.7	8.7	14.7	19.9	1.20	0.103
61 to 84	335	15.8	14.9	7.4	14.9	26.6	33.9	1.60	0.101
85 to 167	429	21.4	24.7	13.0	28.8	56.5	40.6	2.02	0.095
Open continuously	691	21.5	20.6	4.8	13.4	26.8	63.2	1.97	0.091
<b>Ownership and occupancy</b>									
Nongovernment owned	220	15.1	14.4	3.6	8.5	17.6	21.8	1.49	0.099
Owner occupied	190	15.0	17.6	3.4	7.9	16.4	18.1	1.43	0.095
Leased to tenant(s)	238	15.4	12.4	4.4	10.0	20.0	24.5	1.59	0.103
Owner occupied and leased	385	15.0	12.5	4.3	8.7	15.7	38.3	1.49	0.099
Unoccupied	26	2.5	N	0.8	1.7	2.3	2.9	0.28	0.112
Government owned	338	13.3	13.0	5.6	9.7	15.5	32.0	1.26	0.095
Federal	689	14.4	10.6	6.4	11.6	17.1	68.1	1.43	0.099
State	440	14.6	14.5	6.3	10.3	17.0	39.5	1.31	0.090
Local	282	12.5	12.7	5.5	9.5	15.3	27.3	1.21	0.097
<b>Party responsible for operation and maintenance of energy systems</b>									
Building owner	233	14.4	13.8	3.7	8.3	16.0	22.6	1.39	0.097
Business owner or tenant	258	16.3	16.3	5.1	11.5	22.7	26.4	1.67	0.102
Property management	350	14.8	10.5	3.9	8.5	20.2	35.9	1.52	0.103
Other	213	16.2	15.5	5.5	10.8	19.8	22.8	1.74	0.107
<b>Provider of direct input on energy-related equipment purchases</b>									
Building owner	232	14.3	13.8	3.7	8.4	16.1	22.7	1.40	0.097
Business owner or tenant	269	17.4	16.5	5.2	11.7	25.9	27.2	1.76	0.101
Property management	344	13.5	12.4	4.7	13.9	25.1	37.8	1.48	0.110
Other	262	16.4	15.5	5.1	10.7	20.0	26.3	1.64	0.100
<b>Number of establishments</b>									
One	190	14.3	14.9	3.8	8.6	17.1	18.5	1.39	0.097
2 to 5	288	14.0	13.1	4.4	9.2	17.3	28.6	1.39	0.099
6 to 10	520	16.3	12.0	5.4	12.8	18.2	51.4	1.61	0.099
11 to 20	1,033	18.6	13.0	7.4	13.6	19.3	105.3	1.90	0.102
More than 20	4,079	20.1	12.6	12.2	16.9	20.2	401.1	1.98	0.098
Currently unoccupied	26	2.2	N	0.8	1.5	2.3	2.9	0.25	0.111

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	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Predominant exterior wall material</b>									
Brick, stone, or stucco	269	15.1	14.3	4.6	10.0	19.6	26.4	1.47	0.098
Concrete (block or poured)	300	15.8	16.0	4.8	9.6	19.8	29.2	1.54	0.097
Concrete panels	601	14.3	12.7	4.0	8.9	15.9	58.3	1.38	0.097
Siding or shingles	85	12.8	11.9	3.4	8.3	16.4	9.2	1.39	0.109
Metal panels	96	9.8	13.8	2.4	5.3	10.5	9.1	0.93	0.095
Window glass	1,838	23.4	11.8	7.4	15.2	28.8	175.8	2.24	0.096
Other	369	16.0	16.3	2.9	9.5	17.2	37.1	1.62	0.101
No one major type	362	13.1	Q	3.0	7.2	16.4	36.1	1.31	0.100
<b>Predominant roof material</b>									
Metal surfacing	112	11.2	14.1	2.8	6.5	13.8	10.9	1.09	0.097
Synthetic or rubber	474	16.5	15.3	5.1	10.3	21.3	45.4	1.58	0.096
Built-up	427	15.8	14.0	5.2	10.0	19.1	41.2	1.53	0.097
Slate or tile shingles	154	13.9	13.9	4.4	10.0	20.4	16.6	1.50	0.108
Wooden materials (including shingles)	94	12.5	13.9	3.4	10.1	25.2	10.3	1.36	0.109
Asphalt, fiberglass, or other shingles	138	13.4	12.1	4.1	8.8	16.4	14.1	1.36	0.102
Concrete	595	18.9	14.4	6.5	15.7	26.0	59.1	1.88	0.099
Other	451	15.8	18.8	5.1	13.2	16.4	44.0	1.54	0.098
No one major type	292	8.0	15.8	1.7	4.0	13.2	30.9	0.85	0.106
<b>Roof characteristics</b>									
Roof tilt									
Flat	427	16.4	14.0	5.3	11.2	22.0	41.3	1.59	0.097
Shallow pitch	150	13.0	15.3	3.5	7.7	15.4	14.8	1.28	0.099
Steeper pitch	106	11.1	12.7	3.1	7.2	14.2	11.0	1.15	0.103
Cool roof	452	16.8	15.0	5.2	10.2	21.1	43.4	1.61	0.096

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	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Renovations in buildings constructed before 2008 (more than one may apply)</b>									
Any type of renovation	317	15.5	14.0	4.4	9.5	17.8	30.8	1.50	0.097
Addition or annex	466	15.8	16.4	5.1	9.8	18.5	43.1	1.46	0.093
Reduction in floorspace	542	20.5	13.8	4.9	13.1	23.0	48.2	1.83	0.089
Roof replacement	345	15.9	14.4	4.2	9.0	17.2	32.9	1.52	0.096
Exterior wall replacement	374	16.6	15.4	3.7	8.5	17.4	34.7	1.54	0.093
Interior wall reconfiguration	406	16.8	12.9	5.0	9.8	17.9	39.3	1.62	0.097
Window replacement	316	14.4	12.5	4.0	8.8	15.8	31.3	1.42	0.099
HVAC equipment upgrade	399	16.2	14.4	4.5	9.8	18.2	38.6	1.57	0.097
Lighting upgrade	423	16.1	14.5	5.0	10.2	19.5	40.8	1.55	0.096
Electrical upgrade	359	16.4	14.9	4.4	8.8	17.9	34.8	1.60	0.097
Plumbing system upgrade	350	16.1	13.8	4.6	9.7	18.1	34.7	1.60	0.099
Insulation upgrade	332	16.6	15.0	3.9	8.5	16.0	31.1	1.56	0.093
Fire, safety, or security upgrade	462	16.4	14.1	5.4	10.0	19.0	45.2	1.61	0.098
Structural upgrade	458	17.6	18.5	4.2	9.4	16.5	42.8	1.65	0.094
Other	331	15.3	12.8	2.5	9.1	25.1	34.1	1.57	0.103
No renovations	175	13.6	14.0	3.6	8.1	16.7	17.4	1.35	0.099
Buildings constructed 2008 or later	301	15.7	16.1	4.1	8.2	16.8	29.5	1.54	0.098
<b>Energy sources (more than one may apply)</b>									
Electricity	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44	0.098
Natural gas	308	15.4	14.5	4.6	9.5	18.5	30.0	1.50	0.097
Fuel oil	818	18.9	14.9	3.6	9.4	20.2	77.9	1.80	0.095
District heat	2,165	17.3	12.6	7.7	14.1	20.2	204.1	1.63	0.094
District chilled water	1,585	18.6	14.9	7.8	12.9	16.5	134.9	1.58	0.085
Propane	218	14.4	18.7	3.0	6.4	15.0	21.3	1.41	0.098
Other	298	13.1	13.2	3.6	7.2	13.1	30.9	1.36	0.104
<b>Space-heating energy sources</b>									
Electricity	271	15.8	14.4	5.2	10.2	19.6	26.1	1.52	0.096
Electricity main	242	16.8	15.2	5.6	10.8	21.3	23.1	1.61	0.096
Electricity secondary	322	14.7	13.4	4.7	9.3	16.7	31.4	1.43	0.097
Other excluding electricity	228	13.7	13.3	3.4	7.5	14.7	22.6	1.35	0.099
Buildings without heating	87	9.4	18.1	1.1	3.7	11.7	10.0	1.08	0.115
<b>Primary space-heating energy source</b>									
Electricity	242	16.8	15.2	5.6	10.8	21.3	23.1	1.61	0.096
Natural gas	263	14.2	13.7	4.2	8.8	16.4	26.0	1.40	0.099
Fuel oil	115	9.3	11.8	2.7	4.7	12.9	12.6	1.02	0.109
District heat	2,144	17.4	12.6	7.7	14.1	20.2	202.8	1.65	0.095
Propane	68	9.2	12.1	2.2	4.6	9.7	6.2	0.84	0.091
Other	73	8.0	9.0	4.0	5.9	12.7	8.3	0.90	0.113

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	Electricity consumption								
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
				25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44	0.098
<b>Cooling energy sources</b>									
Electricity	263	15.2	14.1	4.9	9.9	19.0	25.8	1.50	0.098
Other excluding electricity	1,170	17.3	16.1	7.4	10.9	15.6	97.8	1.45	0.084
Buildings without cooling	35	4.9	11.7	0.9	2.7	6.2	4.0	0.56	0.113
<b>Water-heating energy sources</b>									
Electricity	244	15.2	13.9	4.7	9.8	18.4	23.8	1.48	0.097
Other excluding electricity	318	15.5	14.5	4.7	9.8	19.8	31.1	1.51	0.098
Buildings without water heating	41	5.7	12.5	1.2	3.7	9.0	4.7	0.65	0.114
<b>Cooking energy sources</b>									
Electricity	449	18.0	16.6	5.0	12.3	28.0	42.8	1.72	0.095
Other excluding electricity	427	18.4	17.8	5.4	14.8	34.0	41.6	1.80	0.097
Buildings without cooking	149	11.7	11.6	3.5	7.5	14.1	15.0	1.18	0.101
<b>Energy end uses (more than one may apply)</b>									
Buildings with space heating	254	15.0	14.0	4.4	9.2	17.5	24.7	1.46	0.097
Buildings with cooling	272	15.3	14.2	4.9	9.9	18.8	26.6	1.50	0.098
Buildings with water heating	273	15.3	14.2	4.7	9.8	18.9	26.7	1.49	0.098
Buildings with cooking	441	18.2	17.0	5.1	13.2	30.9	42.3	1.74	0.096
Buildings with manufacturing	258	13.2	13.3	3.4	6.3	16.4	25.7	1.31	0.100
Buildings with electricity generation	1,195	19.1	15.8	7.2	14.0	24.5	112.4	1.80	0.094
<b>Percent of floorspace heated</b>									
Not heated	87	9.4	18.1	1.1	3.7	11.7	10.0	1.08	0.115
1 to 50	141	9.7	15.3	2.7	5.1	10.4	14.9	1.02	0.106
51 to 99	323	16.0	15.0	4.4	9.2	18.4	32.5	1.61	0.101
100	263	15.7	13.6	5.0	10.0	18.6	25.1	1.50	0.096
<b>Percent of floorspace cooled</b>									
Not cooled	35	4.9	11.7	0.9	2.7	6.2	4.0	0.56	0.113
1 to 50	130	8.1	12.1	3.3	6.1	11.3	13.7	0.85	0.105
51 to 99	425	16.8	15.1	5.8	11.3	20.7	42.1	1.66	0.099
100	285	18.1	14.2	6.0	12.0	22.0	27.2	1.72	0.095
<b>Percent lit when open</b>									
Zero	15	3.1	Q	0.6	2.4	3.7	1.7	0.37	0.116
1 to 50	104	9.0	16.9	2.7	5.7	11.9	10.3	0.90	0.100
51 to 99	315	15.1	14.4	5.0	10.2	18.4	31.0	1.48	0.098
100	270	16.8	13.4	5.1	10.2	20.8	26.3	1.64	0.097
Building never open/electricity not used	18	2.3	Q	0.3	1.0	2.3	1.9	0.25	0.108

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Percent lit during off hours</b>									
Zero	93	9.4	10.0	2.6	5.9	11.8	10.2	1.02	0.109
1 to 50	321	15.4	14.4	5.7	11.1	20.8	31.1	1.50	0.097
51 to 100	817	23.8	21.1	10.8	16.4	42.6	73.5	2.14	0.090
Building always open with no "off hours"	610	25.5	24.2	3.7	19.3	64.5	56.4	2.36	0.093
Electricity not used	N	N	N	N	N	N	N	N	N
<b>Heating equipment (more than one may apply)</b>									
Heat pumps	286	15.2	13.5	5.9	10.3	18.8	28.0	1.48	0.098
Furnaces	141	12.3	12.4	4.2	8.8	15.7	13.8	1.20	0.098
Individual space heaters	218	13.1	14.0	3.5	7.3	13.1	21.4	1.29	0.098
District heat	2,152	17.3	12.6	7.7	14.1	20.2	203.0	1.63	0.094
Boilers	645	15.6	13.9	4.0	9.1	16.0	62.8	1.52	0.097
Packaged heating units	275	15.7	15.1	4.7	10.0	19.6	26.5	1.51	0.096
Other	640	24.4	31.9	5.1	12.4	34.1	56.2	2.14	0.088
<b>Cooling equipment (more than one may apply)</b>									
Residential-type central air conditioners	121	12.6	12.3	4.3	8.9	17.0	12.4	1.30	0.103
Heat pumps	273	15.1	13.2	6.1	10.3	19.2	26.6	1.47	0.098
Individual air conditioners	226	12.9	13.0	3.8	8.0	14.8	23.2	1.32	0.103
District chilled water	1,585	18.6	14.9	7.8	12.9	16.5	134.9	1.58	0.085
Central chillers	2,016	19.3	15.0	9.0	15.0	23.0	189.3	1.81	0.094
Packaged air conditioning units	381	16.1	15.5	5.6	12.0	22.6	37.2	1.57	0.098
Swamp coolers	262	15.0	16.4	5.2	9.5	30.5	27.1	1.54	0.103
Other	Q	28.7	19.8	2.7	5.7	14.2	Q	2.70	0.094
<b>Main equipment replaced since 1990 (more than one may apply)</b>									
Heating	207	14.1	13.5	4.4	9.1	17.5	20.4	1.39	0.099
Cooling	226	14.5	13.3	4.8	9.8	18.7	22.6	1.45	0.100
<b>Water-heating equipment</b>									
Centralized system	217	15.3	14.5	4.6	9.7	19.0	21.2	1.49	0.097
Distributed system	229	12.4	11.1	4.4	8.3	15.0	23.9	1.30	0.104
Combination of centralized and distributed system	841	17.2	15.4	6.6	13.7	22.6	79.8	1.63	0.095

Table C14. Electricity consumption and expenditure intensities, 2012

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Lighting equipment types (more than one may apply)</b>									
Incandescent	335	15.9	14.7	4.1	9.4	18.5	31.8	1.51	0.095
Standard fluorescent	258	15.0	14.0	4.5	9.3	18.0	25.2	1.46	0.098
Compact fluorescent	386	16.5	14.8	5.0	10.6	20.5	37.2	1.59	0.096
High-intensity discharge (HID)	727	16.3	16.0	5.3	10.8	20.0	69.0	1.55	0.095
Halogen	529	17.0	15.7	5.5	11.1	20.8	50.8	1.64	0.096
LED	877	18.8	16.0	8.1	14.7	26.0	84.6	1.81	0.096
Other	965	21.4	17.2	18.4	24.6	42.7	88.9	1.97	0.092
<b>Refrigeration equipment (more than one may apply)</b>									
Any refrigeration	289	15.6	14.6	4.7	10.0	19.5	28.1	1.52	0.097
Walk-in units	747	21.4	19.5	14.5	28.5	57.4	70.8	2.03	0.095
Cases or cabinets	636	20.3	18.5	10.3	22.4	43.6	61.1	1.95	0.096
Large cold storage areas	1,253	23.5	26.5	16.4	27.8	52.6	115.9	2.17	0.092
Commercial ice makers	772	19.9	17.9	11.0	20.8	43.2	72.2	1.86	0.093
Residential-type or compact units	269	14.6	13.5	4.4	9.1	16.3	26.2	1.42	0.097
Vending machines	773	16.9	14.9	7.4	13.0	21.5	73.2	1.60	0.095
No refrigeration	75	8.3	10.2	2.0	5.1	11.0	8.1	0.90	0.108
<b>Office equipment (more than one may apply)</b>									
Desktop computers	296	15.3	14.0	5.1	10.0	18.7	28.9	1.49	0.098
With flat screen monitors	303	15.3	13.9	5.2	10.0	18.8	29.6	1.49	0.098
With multiple monitors	574	16.9	12.1	6.1	11.1	19.4	55.3	1.63	0.096
Laptop computers	355	15.2	13.2	5.1	9.7	17.5	34.5	1.48	0.097
Dedicated servers	497	16.3	13.7	6.3	11.5	19.9	48.1	1.57	0.097
Laser printers	366	15.8	13.5	5.5	10.4	19.0	35.5	1.53	0.097
Inkjet printers	239	14.5	13.9	4.8	9.4	18.3	23.9	1.44	0.100
FAX machines	323	15.4	14.0	5.2	10.1	18.7	31.5	1.50	0.097
Photocopiers	420	15.3	13.3	5.3	10.0	17.1	40.8	1.49	0.097
<b>Number of desktop computers</b>									
None	52	8.4	17.3	1.5	4.2	11.5	5.5	0.89	0.106
1 to 4	101	13.1	18.1	4.0	8.1	18.6	10.2	1.33	0.102
5 to 9	163	14.2	13.9	5.7	9.8	17.4	16.0	1.40	0.098
10 to 19	268	13.8	14.9	6.6	11.1	17.6	27.4	1.41	0.102
20 to 49	592	16.0	16.4	8.2	14.2	21.2	56.6	1.53	0.096
50 to 99	834	14.4	12.9	6.9	11.9	19.3	82.0	1.42	0.098
100 to 249	1,734	16.4	12.8	8.1	13.2	19.0	159.3	1.51	0.092
250 or more	4,957	19.2	10.9	10.2	14.8	23.0	478.1	1.85	0.096



**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption			Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
	<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44
<b>Number of laptop computers</b>									
None	110	12.9	18.6	2.7	7.1	16.6	11.1	1.30	0.101
1 to 4	140	12.9	15.4	4.6	8.7	16.7	13.9	1.28	0.099
5 to 9	361	15.1	14.2	6.7	10.7	17.5	34.4	1.44	0.095
10 to 19	720	15.6	14.1	8.0	12.5	18.8	71.1	1.54	0.099
20 to 49	1,072	16.0	13.2	7.4	13.1	19.3	102.6	1.53	0.096
50 to 99	1,485	16.3	10.4	8.3	12.5	17.7	146.5	1.61	0.099
100 to 249	2,610	17.3	13.7	7.0	10.8	16.7	239.0	1.58	0.092
250 or more	5,521	19.7	10.0	11.0	16.1	25.0	542.6	1.93	0.098
<b>Number of dedicated servers</b>									
None	107	11.9	15.2	3.0	7.1	15.0	10.9	1.20	0.101
1 to 4	318	14.6	14.5	6.1	11.1	19.2	31.1	1.42	0.098
5 to 9	1,037	16.1	12.8	6.6	13.1	23.3	98.7	1.53	0.095
10 to 19	2,174	19.1	14.5	9.9	17.0	25.3	210.7	1.85	0.097
20 to 49	2,752	18.7	10.5	10.8	17.1	26.8	256.4	1.74	0.093
50 or more	6,996	25.8	13.1	13.5	20.5	34.1	670.6	2.47	0.096
<b>Number of photocopiers</b>									
None	109	13.1	17.1	3.1	7.4	17.2	10.9	1.31	0.100
One	162	12.6	16.1	4.5	8.8	15.0	16.0	1.24	0.099
2 to 4	452	14.4	13.6	7.1	11.4	19.6	44.1	1.41	0.098
5 to 9	1,248	16.3	13.7	7.4	13.0	20.4	116.4	1.52	0.093
10 or more	3,446	19.7	11.1	11.1	14.9	23.3	336.1	1.92	0.098
<b>Number of TVs or video displays</b>									
None	93	10.1	12.6	2.6	6.0	12.8	9.7	1.05	0.104
One	105	12.1	12.0	4.1	9.1	16.7	10.4	1.19	0.099
2 to 4	228	14.3	13.3	5.6	10.7	20.8	23.3	1.46	0.102
5 to 9	477	18.4	14.9	8.5	15.0	28.1	46.0	1.78	0.096
10 to 19	953	18.0	14.2	9.9	16.2	28.5	87.3	1.64	0.092
20 to 49	1,318	17.3	15.6	9.4	15.5	22.6	127.8	1.68	0.097
50 to 99	1,606	17.7	17.6	10.4	14.9	24.5	146.8	1.61	0.091
100 or more	3,977	19.7	16.7	10.4	14.5	20.9	377.5	1.87	0.095
<b>Food preparation or serving areas in non-food service buildings (more than one may apply)</b>									
Snack bar or concession stand	1,246	19.3	18.6	9.5	18.8	42.3	118.5	1.83	0.095
Fast food or small restaurant	1,294	22.9	20.5	16.7	24.6	41.5	122.5	2.17	0.095
Cafeteria or large restaurant	2,006	17.1	14.8	7.3	12.0	20.2	189.4	1.62	0.094
Commercial kitchen/food preparation area	1,034	18.1	19.0	5.2	10.7	21.3	96.4	1.69	0.093
Small kitchen area	276	14.5	14.9	3.2	6.7	14.9	26.8	1.40	0.097

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption								
				Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44	0.098
<b>Separate computer areas (more than one may apply)</b>									
Data center or server farm	2,471	21.5	13.2	10.5	17.1	26.4	235.2	2.04	0.095
Computer-based training room	1,229	16.9	13.5	7.5	13.5	21.5	116.2	1.60	0.095
Student or public computer center	851	14.1	16.2	6.6	10.7	15.5	78.7	1.31	0.093
<b>HVAC conservation features (more than one may apply)</b>									
Economizer cycle	897	17.5	15.2	6.8	12.9	21.6	85.4	1.67	0.095
Regular HVAC maintenance	349	16.0	14.2	5.4	10.8	20.4	33.8	1.55	0.097
Building automation system (BAS) <sup>2</sup>	858	18.1	15.8	7.2	12.9	20.9	81.7	1.72	0.095
<b>Window and interior lighting features (more than one may apply)</b>									
Multipaned windows	314	15.6	14.9	4.6	9.6	18.4	30.1	1.49	0.096
Tinted window glass	390	16.2	14.1	5.2	10.8	20.7	37.4	1.55	0.096
Reflective window glass	553	19.0	15.8	5.3	11.3	20.8	52.6	1.81	0.095
External overhangs or awnings	298	17.1	16.3	5.4	11.4	22.0	28.6	1.65	0.096
Skylights or atriums	570	15.0	15.1	4.4	9.0	16.4	54.9	1.45	0.096
Light scheduling	590	17.9	15.5	6.7	12.9	22.8	57.8	1.75	0.098
Occupancy sensors	749	17.0	14.9	6.3	13.2	22.5	72.4	1.64	0.097
Multi-level lighting or dimming	780	18.7	16.9	7.5	14.9	25.6	75.5	1.81	0.097
Daylight harvesting	869	17.8	14.2	3.9	10.0	20.0	84.3	1.73	0.097
Demand responsive lighting	453	16.8	16.3	4.9	12.3	21.0	47.5	1.77	0.105
Building automation system (BAS) for lighting <sup>2</sup>	1,148	19.8	18.1	10.3	16.3	25.6	110.6	1.91	0.096
<b>Equipment usage reduced when building not in full use (more than one may apply)</b>									
Heating	242	14.1	13.0	4.3	9.0	16.9	24.0	1.40	0.099
Cooling	257	14.4	13.2	4.7	9.5	17.8	25.5	1.44	0.100
Lighting	239	14.5	13.6	4.3	9.1	17.3	23.5	1.42	0.098
<b>Annual consumption (kilowatthours)</b>									
10,000 or less	5	1.3	2.4	0.7	1.6	3.0	0.7	0.19	0.142
10,001 to 50,000	27	4.8	5.5	3.6	6.1	9.9	3.2	0.58	0.122
50,001 to 100,000	72	8.2	8.2	7.3	11.9	19.8	8.0	0.91	0.111
100,001 to 500,000	224	13.3	13.2	10.3	17.6	36.7	23.3	1.38	0.104
500,001 to 1,000,000	692	16.4	14.5	11.9	19.2	40.3	67.3	1.59	0.097
1,000,001 to 5,000,000	2,012	18.3	18.6	14.1	19.6	33.1	190.4	1.73	0.095
Over 5,000,000	10,676	25.9	18.0	19.0	26.8	39.5	963.6	2.34	0.090

**Table C14. Electricity consumption and expenditure intensities, 2012**

	Electricity consumption								
				Distribution of building-level intensities (kWh/square foot)			Electricity expenditures		
	per building (thousand kWh)	per square foot (kWh)	per worker (thousand kWh)	25th percentile	Median	75th percentile	per building (thousand dollars)	per square foot (dollars)	per kWh (dollars)
<b>All buildings</b>	237	14.6	14.1	3.8	8.7	17.2	23.3	1.44	0.098

<sup>1</sup>These 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).

<sup>2</sup>In 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.

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.