

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Building floorspace (square feet)									
1,001 to 5,000	26	52	52	2,154	2,814	2,524	12.2	18.4	20.8
5,001 to 10,000	19	53	41	1,858	3,745	2,886	10.4	14.1	14.3
10,001 to 25,000	28	72	59	3,102	5,844	4,620	9.0	12.3	12.8
25,001 to 50,000	17	80	52	2,205	5,227	4,240	7.9	15.3	12.2
50,001 to 100,000	24	70	98	2,336	5,052	6,217	10.3	13.8	15.8
100,001 to 200,000	21	75	94	2,089	4,639	5,634	9.9	16.2	16.7
200,001 to 500,000	24	86	71	1,795	5,135	3,722	13.5	16.7	19.0
Over 500,000	21	65	44	1,338	3,089	2,606	15.8	21.0	16.7
Principal building activity									
Education	24	53	57	2,829	4,625	4,784	8.4	11.5	11.9
Food sales	Q	23	31	Q	485	609	Q	47.9	51.7
Food service	16	33	33	501	716	603	31.1	46.1	55.0
Health care	11	47	49	553	1,846	1,757	19.9	25.6	27.8
Inpatient	8	35	31	307	1,161	906	25.8	30.2	33.8
Outpatient	3	12	18	246	685	851	12.5	17.7	21.4
Lodging	10	41	38	738	2,768	2,319	13.4	14.8	16.5
Mercantile	16	90	100	1,296	4,877	5,147	12.4	18.5	19.5
Retail (other than mall)	9	24	50	935	1,689	2,807	9.5	13.9	17.8
Enclosed and strip malls	7	67	50	361	3,189	2,340	20.0	21.0	21.5
Office	49	132	73	3,760	7,521	4,671	12.9	17.5	15.6
Public assembly	16	32	32	1,541	2,051	1,968	10.7	15.7	16.2
Public order and safety	Q	8	10	Q	503	671	Q	16.2	14.5
Religious worship	5	9	9	1,316	1,629	1,613	3.8	5.8	5.7
Service	7	17	14	1,001	1,999	1,512	6.7	8.3	9.3
Warehouse and storage	11	34	39	1,825	5,012	5,731	6.0	6.7	6.7
Other	6	27	23	511	774	686	11.7	34.5	33.8
Vacant	1	4	2	581	740	378	2.5	5.9	5.0
Census region and division									
Northeast	51	93	77	5,088	5,841	4,362	10.0	15.9	17.6
New England	12	21	18	1,426	1,507	1,259	8.4	13.7	14.2
Middle Atlantic	39	72	59	3,662	4,334	3,103	10.6	16.7	18.9
Midwest	42	113	94	4,340	7,792	6,428	9.7	14.5	14.7
East North Central	31	76	68	3,088	4,935	4,520	9.9	15.5	14.9
West North Central	12	36	27	1,252	2,857	1,907	9.3	12.7	14.1
South	60	240	230	4,879	13,676	14,470	12.2	17.6	15.9
South Atlantic	30	121	135	2,499	6,881	8,228	12.2	17.6	16.4
East South Central	11	34	26	746	2,176	1,902	14.3	15.8	13.5
West South Central	18	85	70	1,635	4,620	4,340	11.3	18.3	16.1
West	29	105	109	2,567	8,236	7,189	11.1	12.8	15.2
Mountain	5	28	35	548	2,076	2,189	8.9	13.3	15.8
Pacific	24	78	75	2,019	6,160	5,000	11.8	12.6	14.9

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Climate region¹									
Very cold/Cold	76	174	170	7,748	12,427	11,111	9.7	14.0	15.3
Mixed-humid	65	182	169	5,796	10,839	10,787	11.2	16.8	15.6
Mixed-dry/Hot-dry	19	68	66	1,718	5,392	4,633	10.8	12.6	14.3
Hot-humid	19	112	89	1,214	5,637	5,151	15.7	19.9	17.4
Marine	3	16	16	398	1,250	768	8.1	13.0	20.5
Number of floors									
One	51	235	259	4,986	16,099	16,968	10.2	14.6	15.3
Two	35	126	98	3,517	9,227	7,184	9.9	13.7	13.6
Three	26	46	38	2,759	2,757	2,585	9.3	16.8	14.5
Four to nine	52	89	90	4,409	4,582	4,426	11.8	19.4	20.3
Ten or more	18	55	25	1,203	2,879	1,286	14.8	19.0	19.8
Elevators and escalators (more than one may apply)									
Any elevators	86	235	218	6,991	12,835	12,116	12.3	18.3	18.0
Number of elevators									
One	27	57	63	2,918	3,781	4,422	9.1	15.1	14.3
Two to five	31	97	95	2,485	5,194	5,033	12.4	18.6	18.9
Six or more	28	82	60	1,589	3,860	2,660	17.7	21.1	22.6
Any escalators	15	30	21	866	1,660	1,115	17.6	18.1	18.8
Number of workers (main shift)									
Fewer than 5	31	58	44	4,713	5,996	4,821	6.5	9.7	9.2
5 to 9	17	50	45	1,844	3,800	3,326	9.3	13.1	13.4
10 to 19	20	54	59	1,598	4,158	3,866	12.2	13.0	15.2
20 to 49	25	104	91	2,109	6,493	5,912	11.9	16.0	15.4
50 to 99	29	85	100	2,766	5,152	5,558	10.6	16.4	18.0
100 to 249	21	76	88	1,624	4,308	5,010	13.0	17.7	17.6
250 or more	38	124	84	2,221	5,638	3,956	17.2	22.0	21.2
Weekly operating hours									
Fewer than 40	9	15	11	2,267	2,413	1,868	4.0	6.2	5.9
40 to 48	36	69	49	4,201	6,203	5,332	8.7	11.1	9.2
49 to 60	36	106	96	3,647	9,110	7,668	9.8	11.7	12.6
61 to 84	28	121	100	2,631	7,049	6,120	10.6	17.2	16.4
85 to 167	29	69	102	1,627	3,238	4,499	17.7	21.4	22.7
Open continuously	43	171	152	2,501	7,532	6,961	17.3	22.7	21.8

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Ownership and occupancy									
Nongovernment owned	129	443	416	12,014	27,842	25,764	10.8	15.9	16.1
Owner occupied	67	183	206	6,268	11,374	12,679	10.7	16.1	16.2
Leased to tenant(s)	47	188	164	3,820	11,996	9,993	12.2	15.6	16.4
Owner occupied and leased	15	71	46	1,682	4,236	2,903	9.1	16.8	15.9
Unoccupied	(*)	Q	Q	245	237	Q	1.4	2.9	Q
Government owned	52	109	94	4,860	7,703	6,685	10.7	14.1	14.1
Federal	8	7	9	624	436	513	12.0	15.3	16.6
State	18	38	25	1,440	2,451	1,631	12.2	15.5	15.5
Local	27	64	61	2,795	4,816	4,541	9.6	13.4	13.3
Party responsible for operation and maintenance of energy systems									
Building owner	159	454	417	15,176	29,392	27,095	10.5	15.4	15.4
Business owner or tenant	18	81	82	1,458	5,191	4,485	12.6	15.6	18.3
Property management	Q	11	5	Q	652	499	Q	17.3	10.5
Other	Q	5	6	Q	310	370	Q	17.4	17.0
Provider of direct input on energy-related equipment purchases									
Building owner	161	472	428	15,390	30,852	27,905	10.5	15.3	15.3
Business owner or tenant	16	62	65	1,129	3,526	3,506	14.1	17.5	18.4
Property management	Q	6	4	Q	472	317	Q	12.3	13.4
Other	2	12	14	264	695	722	7.8	16.7	19.2
Number of establishments									
One	117	327	333	10,982	21,621	21,881	10.6	15.1	15.2
2 to 5	41	105	103	4,016	7,196	6,545	10.1	14.6	15.8
6 to 10	10	36	25	708	2,180	1,425	13.7	16.5	17.3
11 to 20	4	33	32	294	1,816	1,565	13.6	18.0	20.3
More than 20	10	50	17	550	2,401	844	17.7	20.8	19.7
Currently unoccupied	(*)	1	Q	325	331	Q	1.2	2.4	Q
Predominant exterior wall material									
Brick, stone, or stucco	118	262	216	10,871	15,508	13,231	10.9	16.9	16.3
Concrete (block or poured)	40	160	122	3,462	9,851	7,091	11.6	16.2	17.3
Concrete panels	4	46	70	323	3,547	4,578	13.4	13.0	15.3
Siding or shingles	12	27	32	1,490	1,971	2,103	7.9	13.8	15.3
Metal panels	Q	34	41	374	3,559	4,121	10.0	9.6	10.0
Window glass	Q	14	16	Q	641	642	Q	22.5	24.3
Other	Q	4	8	Q	264	411	Q	16.8	20.1
No one major type	Q	Q	4	Q	Q	272	Q	Q	15.9

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Predominant roof material									
Metal surfacing	17	58	94	1,885	4,923	8,216	9.1	11.7	11.4
Synthetic or rubber	58	174	190	5,239	10,511	9,864	11.0	16.5	19.3
Built-up	45	181	111	3,886	10,690	6,730	11.7	16.9	16.4
Slate or tile shingles	18	21	20	1,571	1,416	1,235	11.3	14.5	16.4
Wooden materials (including shingles)	3	6	5	211	524	370	12.5	12.1	13.2
Asphalt, fiberglass, or other shingles	35	88	74	3,423	6,129	5,127	10.2	14.3	14.4
Concrete	3	14	13	292	686	605	9.8	21.1	20.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No one major type	Q	3	Q	Q	321	Q	Q	8.1	Q
Roof characteristics									
Roof tilt									
Flat	115	398	286	9,546	23,107	16,092	12.1	17.2	17.8
Shallow pitch	35	105	158	3,700	8,556	10,763	9.5	12.2	14.7
Steeper pitch	31	49	65	3,629	3,881	5,594	8.5	12.6	11.7
Cool roof	36	136	152	2,866	7,912	8,601	12.6	17.2	17.7
Renovations in buildings constructed before 2008 (more than one may apply)									
Any type of renovation	128	359	161	11,303	21,563	9,046	11.4	16.6	17.8
Addition or annex	43	98	64	2,996	6,369	3,604	14.2	15.3	17.8
Reduction in floorspace	7	24	5	370	1,122	242	19.0	21.3	19.4
Roof replacement	70	203	57	5,818	11,878	3,070	12.0	17.1	18.4
Exterior wall replacement	19	34	18	1,444	1,886	891	12.9	18.0	19.8
Interior wall reconfiguration	74	195	88	5,648	11,022	4,580	13.1	17.7	19.2
Window replacement	55	95	25	5,001	5,800	1,450	11.1	16.4	17.5
HVAC equipment upgrade	94	248	91	7,466	14,502	4,681	12.6	17.1	19.4
Lighting upgrade	86	233	91	7,222	13,482	4,710	12.0	17.3	19.2
Electrical upgrade	74	137	53	5,699	7,712	2,677	13.0	17.8	19.9
Plumbing system upgrade	55	117	50	4,553	6,604	2,650	12.0	17.7	19.1
Insulation upgrade	30	67	29	2,325	3,554	1,674	12.8	18.8	17.4
Fire, safety, or security upgrade	65	160	57	5,027	9,177	2,959	13.0	17.4	19.3
Structural upgrade	14	34	20	1,061	1,737	1,113	13.5	19.6	18.4
Other	Q	8	Q	Q	484	Q	Q	17.2	Q
No renovations	53	193	260	5,572	13,982	17,750	9.5	13.8	14.7
Buildings constructed 2008 or later	N	N	89	N	N	5,653	N	N	15.7
Energy sources (more than one may apply)									
Electricity	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Natural gas	130	407	366	11,504	25,420	21,801	11.3	16.0	16.8
Fuel oil	54	174	154	4,076	8,826	7,298	13.1	19.7	21.2
District heat	26	47	31	1,874	2,380	1,710	13.7	19.6	18.1
District chilled water	12	42	31	804	2,044	1,759	15.0	20.6	17.8
Propane	12	44	54	1,095	3,015	3,576	11.2	14.5	15.2
Other	10	22	17	855	1,581	1,366	11.7	14.2	12.7

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Space-heating energy sources									
Electricity	102	349	324	8,447	20,696	19,888	12.0	16.8	16.3
Electricity main	42	205	192	3,200	11,143	11,862	13.2	18.4	16.2
Electricity secondary	59	143	132	5,247	9,553	8,026	11.3	15.0	16.5
Other excluding electricity	72	184	168	7,543	12,803	10,676	9.6	14.4	15.7
Buildings without heating	7	19	19	884	2,046	1,885	8.4	9.4	9.9
Primary space-heating energy source									
Electricity	42	205	192	3,200	11,143	11,862	13.2	18.4	16.2
Natural gas	95	264	252	9,209	18,153	15,625	10.3	14.5	16.2
Fuel oil	9	8	7	1,248	797	497	6.9	10.0	14.4
District heat	25	46	29	1,850	2,365	1,582	13.7	19.6	18.6
Propane	2	6	10	345	704	898	5.4	8.0	11.5
Other	Q	3	Q	Q	336	Q	Q	9.3	Q
Cooling energy sources									
Electricity	169	514	476	14,558	32,233	29,243	11.6	16.0	16.3
Other excluding electricity	5	27	24	423	1,443	1,394	12.3	18.9	17.2
Buildings without cooling	7	10	10	1,893	1,870	1,812	3.8	5.3	5.7
Water-heating energy sources									
Electricity	77	297	276	7,044	18,122	17,589	10.9	16.4	15.7
Other excluding electricity	96	243	221	8,069	15,566	12,626	11.9	15.6	17.5
Buildings without water heating	8	11	14	1,762	1,857	2,234	4.6	6.2	6.2
Cooking energy sources									
Electricity	61	195	198	4,764	10,195	10,192	12.8	19.1	19.4
Other excluding electricity	37	112	97	2,850	5,831	4,714	13.1	19.3	20.6
Buildings without cooking	83	244	215	9,260	19,519	17,543	8.9	12.5	12.3
Energy end uses (more than one may apply)									
Buildings with space heating	174	532	492	15,990	33,499	30,564	10.9	15.9	16.1
Buildings with cooling	174	541	500	14,981	33,675	30,637	11.6	16.1	16.3
Buildings with water heating	173	540	496	15,112	33,688	30,215	11.5	16.0	16.4
Buildings with cooking	98	307	295	7,614	16,026	14,906	12.9	19.2	19.8
Buildings with manufacturing	9	38	20	1,246	2,294	1,539	7.2	16.5	13.0
Buildings with electricity generation	53	210	227	3,328	10,918	11,395	15.9	19.2	19.9
Percent of floorspace heated									
Not heated	7	19	19	884	2,046	1,885	8.4	9.4	9.9
1 to 50	15	39	44	2,124	4,564	3,427	7.0	8.6	12.9
51 to 99	35	108	91	3,449	5,872	5,324	10.1	18.4	17.1
100	124	385	357	10,417	23,062	21,813	11.9	16.7	16.4

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Percent of floorspace cooled									
Not cooled	7	10	10	1,893	1,870	1,812	3.8	5.3	5.7
1 to 50	31	65	57	4,311	8,396	6,184	7.2	7.8	9.2
51 to 99	62	167	152	5,149	9,200	8,378	12.1	18.1	18.2
100	81	310	291	5,521	16,080	16,075	14.6	19.3	18.1
Percent lit when open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	25	47	41	3,513	4,801	4,315	7.2	9.8	9.6
51 to 99	79	236	211	6,938	15,190	12,687	11.3	15.5	16.6
100	76	267	256	5,907	15,017	14,801	12.9	17.8	17.3
Building never open/electricity not used	1	1	1	495	487	396	1.6	3.0	2.3
Percent lit during off hours									
Zero	40	95	97	5,584	9,684	9,478	7.1	9.8	10.2
1 to 50	122	349	313	9,964	21,827	18,962	12.2	16.0	16.5
51 to 100	16	82	67	1,154	3,047	2,725	13.6	26.9	24.7
Building always open with no "off hours"	Q	25	33	Q	987	1,284	Q	25.6	25.7
Electricity not used	N	N	N	N	N	N	N	N	N
Heating equipment (more than one may apply)									
Heat pumps	25	81	74	2,021	4,880	4,945	12.1	16.7	14.9
Furnaces	18	52	36	1,603	4,277	2,775	11.2	12.2	13.1
Individual space heaters	49	130	93	5,421	8,933	6,397	9.0	14.6	14.5
District heat	25	47	30	1,857	2,378	1,690	13.7	19.6	18.0
Boilers	64	155	131	5,896	9,242	7,300	10.8	16.8	17.9
Packaged heating units	89	337	346	7,683	20,863	20,642	11.5	16.1	16.8
Other	Q	16	19	Q	620	752	Q	26.4	25.4
Cooling equipment (more than one may apply)									
Residential-type central air conditioners	32	88	66	3,062	6,623	5,079	10.4	13.4	13.0
Heat pumps	27	85	77	2,204	5,185	5,148	12.2	16.5	14.9
Individual air conditioners	39	77	43	3,978	5,157	3,285	9.9	15.0	13.2
District chilled water	12	42	31	804	2,044	1,759	15.0	20.6	17.8
Central chillers	55	153	121	3,529	7,633	5,879	15.5	20.0	20.6
Packaged air conditioning units	94	323	309	7,815	19,583	17,755	12.0	16.5	17.4
Swamp coolers	5	13	11	360	773	785	12.8	17.2	13.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main equipment replaced since 1990 (more than one may apply)									
Heating	91	297	N	8,694	18,863	N	10.5	15.7	N
Cooling	110	335	N	9,732	20,970	N	11.4	16.0	N

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Water-heating equipment									
Centralized system	107	322	299	9,510	19,888	18,136	11.2	16.2	16.5
Distributed system	23	75	60	2,213	5,666	4,809	10.3	13.2	12.6
Combination of centralized and distributed system	43	143	137	3,390	8,134	7,270	12.8	17.6	18.8
Lighting equipment types (more than one may apply)									
Incandescent	96	296	219	8,536	17,161	12,708	11.3	17.3	17.3
Standard fluorescent	172	540	486	15,612	34,113	30,356	11.0	15.8	16.0
Compact fluorescent	120	392	377	10,400	22,575	20,842	11.5	17.4	18.1
High-intensity discharge (HID)	45	177	160	3,884	10,426	9,086	11.7	17.0	17.6
Halogen	70	198	210	5,184	11,489	11,386	13.4	17.3	18.5
LED	53	182	179	3,578	9,230	9,263	14.9	19.8	19.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration equipment (more than one may apply)									
Any refrigeration	161	512	476	14,123	30,838	28,684	11.4	16.6	16.6
Walk-in units	72	271	263	4,362	12,772	11,227	16.6	21.2	23.4
Cases or cabinets	71	254	258	4,627	12,078	12,013	15.4	21.0	21.5
Large cold storage areas	10	39	48	554	1,713	1,904	18.9	22.9	25.3
Commercial ice makers	77	295	281	4,686	13,981	14,067	16.5	21.1	20.0
Residential-type or compact units	130	418	363	11,908	26,467	24,006	10.9	15.8	15.1
Vending machines	93	339	310	6,931	18,916	18,089	13.4	17.9	17.2
No refrigeration	20	39	34	2,751	4,708	3,765	7.2	8.4	9.0
Office equipment (more than one may apply)									
Desktop computers	168	521	488	14,509	32,652	29,902	11.6	16.0	16.3
With flat screen monitors	167	513	485	14,222	32,261	29,677	11.7	15.9	16.4
With multiple monitors	68	236	219	4,825	13,279	12,842	14.0	17.8	17.1
Laptop computers	140	444	384	11,877	27,542	24,067	11.8	16.1	15.9
Dedicated servers	113	390	365	9,080	23,038	21,251	12.5	16.9	17.2
Laser printers	122	372	362	9,908	22,701	21,646	12.3	16.4	16.7
Inkjet printers	78	238	208	7,215	15,507	13,513	10.8	15.4	15.4
FAX machines	141	463	425	12,128	28,379	26,175	11.7	16.3	16.2
Photocopiers	126	405	377	10,859	25,382	23,036	11.6	16.0	16.4
Number of desktop computers									
None	13	30	22	2,365	2,893	2,547	5.4	10.5	8.8
1 to 4	41	88	76	4,241	6,160	5,268	9.6	14.3	14.5
5 to 9	18	54	62	1,361	4,235	3,825	12.9	12.8	16.1
10 to 19	12	49	69	1,230	3,728	4,431	9.7	13.0	15.5
20 to 49	21	96	93	1,852	5,630	5,612	11.2	17.1	16.6
50 to 99	22	53	44	1,797	3,397	3,090	12.1	15.7	14.4
100 to 249	21	73	65	1,826	3,948	3,953	11.6	18.5	16.6
250 or more	35	107	78	2,201	5,554	3,723	15.8	19.3	21.0

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Number of laptop computers									
None	41	107	127	4,997	8,003	8,382	8.2	13.4	15.1
1 to 4	42	124	106	4,318	8,926	7,918	9.8	13.9	13.4
5 to 9	13	65	49	1,210	3,945	3,191	10.9	16.4	15.2
10 to 19	17	53	60	1,315	3,424	3,604	13.2	15.5	16.7
20 to 49	24	65	65	1,836	4,121	3,686	13.2	15.8	17.6
50 to 99	15	38	33	1,173	2,109	1,951	12.5	17.9	16.9
100 to 249	10	47	33	858	2,557	1,802	12.1	18.2	18.4
250 or more	18	53	38	1,167	2,459	1,916	15.5	21.6	19.7
Number of dedicated servers									
None	68	161	145	7,795	12,507	11,198	8.7	12.9	12.9
1 to 4	66	213	218	6,037	14,100	13,960	11.0	15.1	15.6
5 to 9	11	47	43	871	2,894	2,476	12.8	16.3	17.2
10 to 19	14	50	46	972	2,476	2,262	14.2	20.1	20.3
20 to 49	6	36	28	456	1,898	1,404	13.8	18.7	20.2
50 or more	16	45	31	744	1,671	1,148	21.3	27.1	26.8
Number of photocopiers									
None	55	146	134	6,016	10,163	9,414	9.2	14.4	14.2
One	28	88	98	3,284	7,278	6,518	8.6	12.1	15.0
2 to 4	36	128	129	3,383	8,374	8,555	10.5	15.3	15.0
5 to 9	23	69	53	1,567	3,740	3,556	14.4	18.5	14.8
10 or more	40	120	97	2,625	5,990	4,406	15.1	20.0	22.1
Number of TVs or video displays									
None	41	98	85	5,432	9,030	7,654	7.5	10.8	11.1
One	17	55	48	2,275	3,965	3,751	7.4	13.9	12.9
2 to 4	38	96	101	3,303	6,650	6,511	11.6	14.4	15.6
5 to 9	25	60	66	1,651	2,895	3,602	15.0	20.7	18.2
10 to 19	17	74	55	1,513	3,931	2,724	11.4	18.9	20.2
20 to 49	14	65	61	1,078	3,618	3,362	12.9	17.9	18.1
50 to 99	11	33	33	723	1,633	2,022	15.5	20.5	16.2
100 or more	18	70	61	900	3,823	2,824	19.8	18.3	21.7
Food preparation or serving areas in non-food service buildings (more than one may apply)									
Snack bar or concession stand	24	87	80	1,571	4,371	3,943	15.2	19.8	20.4
Fast food or small restaurant	19	98	107	973	4,522	4,292	19.8	21.7	24.9
Cafeteria or large restaurant	35	124	102	2,763	6,865	5,594	12.6	18.1	18.2
Commercial kitchen/food preparation area	36	133	123	2,882	6,932	6,336	12.5	19.2	19.4
Small kitchen area	37	89	77	3,432	5,626	4,996	10.8	15.8	15.5

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7
Separate computer areas (more than one may apply)									
Data center or server farm	27	116	96	1,582	5,332	4,192	16.8	21.7	22.9
Computer-based training room	41	121	137	3,192	6,743	7,789	12.9	17.9	17.6
Student or public computer center	30	91	82	2,719	6,200	5,422	11.0	14.7	15.1
HVAC conservation features (more than one may apply)									
Economizer cycle	70	231	238	5,107	12,760	12,881	13.7	18.1	18.5
Regular HVAC maintenance	150	492	467	12,116	29,468	27,660	12.4	16.7	16.9
Building automation system (BAS) ²	78	273	318	5,489	14,738	16,823	14.2	18.5	18.9
Window and interior lighting features (more than one may apply)									
Multipaned windows	115	387	428	10,323	23,505	25,902	11.1	16.5	16.5
Tinted window glass	76	331	312	6,055	20,075	18,269	12.5	16.5	17.1
Reflective window glass	26	138	137	2,050	6,633	7,154	12.5	20.8	19.1
External overhangs or awnings	67	248	234	4,870	14,329	12,863	13.9	17.3	18.2
Skylights or atriums	41	157	134	3,028	10,446	8,603	13.5	15.0	15.6
Light scheduling	57	223	262	4,203	12,411	13,649	13.5	18.0	19.2
Occupancy sensors	83	255	270	5,917	14,314	15,640	14.1	17.8	17.3
Multi-level lighting or dimming	28	110	135	2,057	5,860	6,617	13.4	18.8	20.4
Daylight harvesting	9	45	54	802	2,393	2,919	11.8	18.9	18.5
Demand responsive lighting	6	38	36	536	2,236	1,966	10.3	17.2	18.2
Building automation system (BAS) for lighting ²	22	86	131	1,140	4,512	6,416	19.2	19.0	20.5
Equipment usage reduced when building not in full use (more than one may apply)									
Heating	132	386	375	12,595	26,348	24,203	10.4	14.7	15.5
Cooling	133	392	377	11,857	26,347	24,312	11.2	14.9	15.5
Lighting	173	506	458	15,895	33,301	29,398	10.9	15.2	15.6
Annual consumption (kilowatthours)									
10,000 or less	1	1	1	1,062	1,077	945	1.4	1.3	1.3
10,001 to 50,000	15	20	15	3,333	4,152	3,017	4.4	4.8	5.1
50,001 to 100,000	16	26	21	1,904	3,170	2,528	8.2	8.1	8.3
100,001 to 500,000	48	118	117	4,271	8,810	8,231	11.2	13.4	14.2
500,001 to 1,000,000	18	80	67	1,411	4,392	4,247	12.8	18.1	15.8
1,000,001 to 5,000,000	50	154	176	3,210	8,186	9,343	15.5	18.8	18.8
Over 5,000,000	34	153	113	1,683	5,758	4,138	20.2	26.6	27.4

Table C22. Electricity consumption and conditional energy intensity by year constructed, 2012

	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012	1959 or before	1960 to 1989	1990 to 2012
All buildings	181	551	510	16,874	35,545	32,449	10.7	15.5	15.7

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.