Release date: May 2016

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electric consumption (billion kWh	n		Total floors buildings us (million squ	ing electricity	Electricity energy intensity (kWh/square foot)			
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Principal building activity									
Education	8	68	59	744	6,067	5,427	10.5	11.1	10.8
Food sales	31	27	Q	557	562	Q	55.3	47.5	Q
Food service	70	12	N	1,429	390	N	48.7	31.0	N
Health care	7	29	71	510	1,209	2,437	14.0	24.1	29.1
Inpatient	N	10	64	N	282	2,092	N	35.5	30.4
Outpatient	7	19	7	510	927	345	14.0	20.6	20.8
Lodging	4	43	42	299	2,739	2,788	14.2	15.7	15.0
Mercantile	28	92	86	1,773	5,379	4,168	16.0	17.1	20.7
Retail (other than mall)	16	30	36	1,336	2,435	1,659	12.1	12.3	21.9
Enclosed and strip malls	12	62	50	436	2,944	2,510	27.8	21.2	19.9
Office	37	96	120	3,183	6,547	6,221	11.7	14.6	19.4
Public assembly	10	34	36	1,034	2,596	1,929	10.0	13.1	18.7
Public order and safety	4	9	9	331	557	552	10.7	16.4	15.8
Religious worship	7	14	Q	1,362	2,953	Q	5.1	4.8	Q
Service	17	17	Q	2,047	2,185	Q	8.5	7.9	Q
Warehouse and storage	14	30	40	2,034	5,690	4,845	6.8	5.2	8.2
Other	5	26	25	391	913	667	13.1	28.2	37.5
Vacant	1	3	3	288	1,054	356	4.2	3.1	9.0
Year constructed									
Before 1920	11	11	10	1,073	1,717	1,011	10.2	6.5	9.8
1920 to 1945	16	22	26	1,325	2,530	2,012	11.9	8.7	13.1
1946 to 1959	19	36	30	1,614	3,395	2,199	11.7	10.7	13.6
1960 to 1969	29	62	55	1,860	4,945	3,394	15.7	12.6	16.4
1970 to 1979	32	70	68	1,960	4,828	3,768	16.6	14.5	18.1
1980 to 1989	43	89	102	2,739	6,350	5,701	15.6	14.0	17.9
1990 to 1999	43	84	86	2,459	5,843	4,816	17.7	14.3	17.8
2000 to 2003	16	45	50	1,017	3,116	3,060	16.2	14.5	16.2
2004 to 2007	16	42	39	999	3,363	2,124	15.9	12.4	18.5
2008 to 2012	18	38	33	935	2,755	1,963	19.3	13.8	16.8

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n		Total floors buildings us (million squ	ing electricity		Electricity energy inter (kWh/squar	ntensity		
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6	
Census region and division										
Northeast	29	80	112	2,180	6,634	6,478	13.2	12.0	17.3	
New England	10	22	18	894	2,083	1,215	11.6	10.6	14.9	
Middle Atlantic	18	57	94	1,285	4,551	5,263	14.3	12.6	17.8	
Midwest	47	104	99	3,530	8,536	6,494	13.2	12.1	15.3	
East North Central	31	68	75	2,044	5,607	4,892	15.2	12.2	15.4	
West North Central	16	35	24	1,486	2,928	1,602	10.5	12.1	15.0	
South	113	224	193	6,460	15,174	11,392	17.5	14.8	17.0	
South Atlantic	59	118	109	3,116	7,883	6,608	19.0	15.0	16.6	
East South Central	18	31	21	1,182	2,243	1,398	15.4	13.9	15.1	
West South Central	36	75	62	2,161	5,048	3,385	16.6	14.8	18.5	
West	55	93	95	3,812	8,498	5,682	14.4	10.9	16.8	
Mountain	16	22	29	983	2,062	1,766	16.2	10.9	16.2	
Pacific	39	70	67	2,828	6,436	3,916	13.8	10.9	17.0	
Climate region ¹										
Very cold/Cold	73	175	171	5,787	14,575	10,924	12.6	12.0	15.7	
Mixed-humid	84	159	172	5,079	11,714	10,629	16.6	13.6	16.2	
Mixed-dry/Hot-dry	36	58	59	2,518	5,694	3,531	14.2	10.1	16.7	
Hot-humid	45	92	84	2,199	5,652	4,151	20.5	16.2	20.2	
Marine	5	16	14		1,207	811	13.8	13.0	17.4	
Number of floors										
One	187	244	114	11,454	18,676	7,923	16.3	13.1	14.4	
Two	43	138	77	3,406	11,454	5,068	12.8	12.1	15.3	
Three	11	57	42	915	4,512	2,675	11.8	12.6	15.6	
Four to nine	2	58	170	206	4,127	9,085	10.8	14.2	18.7	
Ten or more	N	Q	97	N	4,127 Q	5,296	10.8 N	Q Q	18.3	
Elevators and escalators (more than one may apply)			3,			3,230			10.5	
Any elevators	5	161	373	357	10,752	20,832	14.4	15.0	17.9	
Number of elevators										
One	5	93	49	334	6,794	3,992	13.9	13.7	12.3	
Two to five	Q	68	154	Q	3,936	8,753	Q	17.2	17.6	
Six or more	N	Q	170	N	3,550 Q	8,087	Q N	Q	21.0	
Any escalators	N	2	64	N	98	3,543	N	18.6	18.2	
Number of workers (main shift)						3,343		10.0	10.2	
Fewer than 5	91	40	3	8,248	6,359	922	11.0	6.2	3.5	
5 to 9	67	42	2		4,337	478	16.2	9.7	5.1	
10 to 19	59	68	6	2,586	6,203	834	22.7	10.9	6.8	
20 to 49	27	153	40	986	10,964	2,564	27.1	14.0	15.6	
50 to 99	Q	122	91	Q	7,445	6,024	Q	16.4	15.2	
						□, □ = T	~		10.2	
100 to 249	N	66	119	N	3,157	7,784	N	20.9	15.3	

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electricity consumption (billion kWh)			Total floorsp buildings us (million squ	ing electricity		Electricity energy inter (kWh/squar		
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Weekly operating hours									
Fewer than 40	16	15	4	2,908	3,080	560	5.5	4.9	7.0
40 to 48	43	72	40	4,277	7,962	3,498	10.0	9.0	11.5
49 to 60	48	110	81	3,927	10,571	5,927	12.2	10.4	13.6
61 to 84	48	108	93	2,058	7,725	6,017	23.5	14.0	15.4
85 to 167	54	84	62	1,297	3,882	4,185	41.5	21.7	14.8
Open continuously	34	111	220	1,514	5,621	9,859	22.7	19.8	22.3
Ownership and occupancy									
Nongovernment owned	221	383	384	14,147	29,692	21,781	15.6	12.9	17.6
Owner occupied	114	173	169	7,732	13,765	8,824	14.7	12.6	19.1
Leased to tenant(s)	92	169	137	5,264	11,745	8,800	17.4	14.4	15.6
Owner occupied and leased	15	40	78	993	3,736	4,091	14.9	10.7	19.0
Unoccupied	(*)	1	Q	158	445	Q	2.6	2.0	Q
Government owned	23	117	116	1,834	9,150	8,265	12.5	12.8	14.0
Federal	Q	Q	16	Q	Q	1,074	Q	Q	14.5
State	4	37	39	330	2,581	2,611	13.0	14.3	15.1
Local	18	74	61	1,402	6,171	4,580	12.5	12.0	13.2
Party responsible for operation									
and maintenance of energy									
systems									
Building owner	194	401	434		32,440	25,749		12.3	16.9
Business owner or tenant	43	85	54		5,417	3,548		15.7	15.2
Property management	2	7	9		529	598		12.8	15.8
Other	4	7	Q	220	456	Q	17.9	16.3	Q
Provider of direct input on energy- related equipment purchases									
<u> </u>	200	419	112	12 967	22.007	26 202	1//	12.2	16.8
Building owner	200 35	65	443		33,997 3,728	26,282		12.3 17.6	
Business owner or tenant	2	3	7						15.2
Property management Other		12	9		315 801	483 546		10.2 15.0	13.9 15.8
	/	12	9	333	OOT	340	20.7	13.0	13.0
Number of establishments	196	225	256	12 605	25 507	16 202	1	107	1 0
One		325	256		25,597 7,655	16,202		12.7	15.8
2 to 5	42	95	112		7,655	7,312		12.4	15.3
6 to 10	5	38	28		2,582	1,437		14.6	19.3
11 to 20	Q	31	37		1,819	1,815		17.1	20.5
More than 20	N (*)	10	66		659	3,136		15.3	21.1
Currently unoccupied	(*)	1	Q	172	529	Q	2.4	2.0	Q

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n	ŀ	Total floorspouldings us	ing electricity	<i>'</i>	Electricity energy inter (kWh/squar	•	
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Predominant exterior wall material									
Brick, stone, or stucco	122	259	215	6,493	19,763	13,353	18.8	13.1	16.1
Concrete (block or poured)	51	134	137	3,147	9,185	8,072	16.2	14.6	17.0
Concrete panels	6	39	75	490	2,973	4,984	12.2	13.2	15.1
Siding or shingles	37	24	Q	2,743	2,285	536	13.4	10.5	20.1
Metal panels	24	33	22	2,922	3,858	1,275	8.4	8.4	17.4
Window glass	Q	4	26	Q	250	1,062	Q	16.3	24.9
Other	Q	Q	7	Q	Q	407	Q	Q	18.2
No one major type	Q	Q	6	Q	Q	358	Q	Q	15.6
Predominant roof material									
Metal surfacing	61	71	37	5,204	7,247	2,573	11.7	9.8	14.5
Synthetic or rubber	48	159	214	2,290	11,290	12,034	21.2	14.1	17.8
Built-up	37	130	170	2,002	9,472	9,832	18.7	13.7	17.2
Slate or tile shingles	24	20	15	1,264	1,858	1,100	18.6	10.8	13.6
Wooden materials (including									
shingles)	8	4	Q	523	435	Q	15.6	9.2	Q
Asphalt, fiberglass, or									
other shingles	62	98	37	4,477	7,476	2,726	13.8	13.1	13.4
Concrete	Q	11	16	Q	537	914	Q	21.0	17.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No one major type	Q	Q	4	Q	Q	449	Q	Q	8.6
Roof characteristics									
Roof tilt									
Flat	102	316	381	4,932	21,893	21,920	20.8	14.4	17.4
Shallow pitch	Q	Q	Q	Q	Q	Q	Q	Q	Q
Steeper pitch	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cool roof	41	105	179	1,937	7,164	10,278	21.2	14.6	17.4

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n		buildings us	Total floorspace of Electricity buildings using electricity energy intensity (million square feet) (kWh/square foot				
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Renovations in buildings constructed before 2008 (more than one may apply)									
Any type of renovation	96	244	308	6,027	17,927	17,959	15.9	13.6	17.2
Addition or annex	18	74	112	1,223	5,242	6,505	15.0	14.2	17.2
Reduction in floorspace	6	6	24	254	437	1,042	21.8	14.7	22.7
Roof replacement	42	113	174	2,832	8,303	9,631	14.9	13.6	18.1
Exterior wall replacement	8	21	41	558	1,546	2,117	14.4	13.9	19.2
Interior wall reconfiguration	41	119	197	2,512	8,620	10,118	16.3	13.8	19.5
Window replacement	24	65	88	1,598	5,389	5,264	14.8	12.0	16.6
HVAC equipment upgrade	51	145	236	3,060	10,777	12,812	16.7	13.5	18.4
Lighting upgrade	52	140	217	2,760	9,742	12,912	18.8	14.4	16.8
Electrical upgrade	36	80	149	2,167	6,145	7,776	16.6	13.0	19.1
Plumbing system upgrade	35	73	115	1,897	5,556	6,354	18.3	13.1	18.0
Insulation upgrade	20	43	64	1,111	3,245	3,196	17.6	13.1	19.9
Fire, safety, or security upgrade	32	89	161	1,752	6,452	8,959	18.3	13.8	18.0
Structural upgrade	7	22	40	429	1,574	1,909	16.6	13.8	20.9
Other	Q	Q	8	Q	1,374 Q	442	Q	13.8 Q	17.0
No renovations	130	217	159	9,019	18,160	10,125	14.4	12.0	15.7
Buildings constructed 2008 or later	130	38	33	935	2,755	1,963	19.3	13.8	16.8
Energy sources (more than one may apply)	244	F00	500	45.004	20.044	20.046	45.2	12.0	16.6
Electricity	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Natural gas	148	365	390	8,575	26,906	23,244	17.3	13.6	16.8
Fuel oil	14	103	265	1,163	5,435	13,602	11.7	19.0	19.5
District heat	Q	16	86	Q	1,048	4,878	Q	15.0	17.6
District chilled water	Q	13	71	Q	901	3,643	Q	14.4	19.4
Propane	20	46	44	1,700	3,086	2,899	11.8	15.0	15.1
Other	5	20	25	471	1,572	1,758	10.9	12.6	14.1
Space-heating energy sources				0 = 00		.=			
Electricity	149	334	291	8,569	23,280	17,181	17.4	14.4	16.9
Electricity main	106	191	142	5,631	13,195	7,378	18.9	14.4	19.3
Electricity secondary	43	144	149	2,938	10,085	9,803	14.5	14.2	15.2
Other excluding electricity	78	151	194	5,695	13,489	11,838	13.7	11.2	16.4
Buildings without heating	17	14	15	1,717	2,072	1,027	9.6	6.7	14.3
Primary space-heating									
energy source	400	404	4.40	F C24	12.405	7 270	40.0	44.4	40.2
Electricity	106	191	142	5,631	13,195	7,378	18.9	14.4	19.3
Natural gas	105	257	250	6,851	19,975	16,161	15.3	12.9	15.5
Fuel oil	5	11	7	609	1,257	676	8.2	9.0	10.9
District heat	Q	16	84	Q	1,048	4,711	Q	15.0	17.8
Propane	8	8	Q	937	933	Q	8.4	9.1	Q
Other	2	3	Q	197	361	Q	8.2	7.7	Q

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n		Total floors; buildings us (million squ	ing electricity		Electricity energy inter (kWh/squar	•	o Over	
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6	
Cooling energy sources										
Electricity	228	477	454	13,359	35,444	27,231	17.0	13.5	16.7	
Other excluding electricity	Q	11	44	Q	795	2,397	Q	13.7	18.3	
Buildings without cooling	14	11	2	2,553	2,603	419	5.6	4.4	4.5	
Water-heating energy sources										
Electricity	128	269	252	8,230	19,572	14,953	15.6	13.7	16.8	
Other excluding electricity	97	220	243	5,109	16,899	14,253	19.0	13.0	17.0	
Buildings without water heating	18	11	5	2,643	2,370	841	6.8	4.6	5.5	
Cooking energy sources										
Electricity	75	148	230	2,976	9,460	12,715	25.3	15.7	18.1	
Other excluding electricity	49	82	116	1,830	5,402	6,163	27.0	15.1	18.8	
Buildings without cooking	119	270	154	11,175	23,979	11,168	10.6	11.3	13.8	
Energy end uses (more than one may apply)										
Buildings with space heating	227	486	485	14,264	36,770	29,019	15.9	13.2	16.7	
Buildings with cooling	229	488	498	13,428	36,239	29,627	17.1	13.5	16.8	
Buildings with water heating	226	489	495	13,338	36,472	29,205	16.9	13.4	16.9	
Buildings with cooking	125	230	346	4,806	14,862	18,878	26.0	15.5	18.3	
Buildings with manufacturing	12	33	22	826	2,638	1,614	14.2	12.4	13.8	
Buildings with electricity										
generation	16	149	324	917	7,180	17,545	17.8	20.8	18.5	
Percent of floorspace heated										
Not heated	17	14	15	1,717	2,072	1,027	9.6	6.7	14.3	
1 to 50	24	38	36	2,323	5,016	2,776	10.4	7.5	13.1	
51 to 99	37	88	109	2,248	6,174	6,224	16.6	14.2	17.5	
100	166	361	340	9,694	25,580	20,019	17.1	14.1	17.0	
Percent of floorspace cooled										
Not cooled	14	11	2	2,553	2,603	419	5.6	4.4	4.5	
1 to 50	37	70	47	3,679	9,554	5,657	10.0	7.3	8.2	
51 to 99	47	147	188	2,673	9,522	10,532	17.4	15.4	17.8	
100	146	272	263	7,076	17,162	13,438	20.6	15.8	19.6	
Percent lit when open										
Zero	1	Q	Q	240	Q	Q	2.8	Q	Q	
1 to 50	34	55	24	3,559	6,665	2,405	9.5	8.3	10.1	
51 to 99	82	223	221	4,984	16,289	13,541	16.4	13.7	16.3	
100	126	220	253	6,625	15,184	13,917	19.0	14.5	18.2	
Building never open/electricity	٠		_	F-70	630	^	2.0	4.0	_	
not used	1	1	Q	573	639	Q	2.0	1.9	Q	

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	consumptio	Total electricity consumption (billion kWh)			Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)			
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet		
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6		
Percent lit during off hours											
Zero	85	95	52	8,255	11,757	4,734	10.2	8.1	11.0		
1 to 50	131	338	315	6,866	24,296	19,591	19.0	13.9	16.1		
51 to 100	18	50	97	600	2,041	4,285	30.4	24.5	22.5		
Building always open with											
no "off hours"	10	16	36	260	748	1,435	39.5	21.3	25.1		
Electricity not used	N	N	N	N	N	N	N	N	N		
Heating equipment											
(more than one may apply)											
Heat pumps	32	80	68	1,906	5,784	4,155	16.6	13.8	16.4		
Furnaces	34	53	19	2,508	4,714	1,433	13.6	11.3	13.2		
Individual space heaters	39	107	125	3,757	8,898	8,096	10.3	12.1	15.5		
District heat	Q	16	85	Q	1,048	4,839	Q	15.0	17.6		
Boilers	16	130	204	1,129	9,652	11,657	13.8	13.4	17.5		
Packaged heating units	155	335	282	8,431	23,972	16,785	18.3	14.0	16.8		
Other	3	23	12	159	886	525	20.3	26.3	22.4		
Cooling equipment											
(more than one may apply)											
Residential-type central air	75	07	2.4	F 240	7.004	1.642	112	44.2	445		
conditioners	75	87	24		7,804	1,643	14.2	11.2	14.5		
Heat pumps	37	83	68		6,148	4,214	17.2	13.6	16.2		
Individual air conditioners	23	64	73		5,416	5,005	11.5	11.8	14.6		
District chilled water	Q	13	71		901	3,643	Q	14.4	19.4		
Central chillers	Q	87	240		4,449	12,484	Q	19.5	19.2		
Packaged air conditioning units	119	308	299		21,729	18,188	22.7	14.2	16.4		
Swamp coolers	5	11	12		864	763	18.7	13.0	15.7		
Other	Q	Q	7	Q	Q	265	Q	Q	27.4		
Main equipment replaced since 1990 (more than one may apply)											
Heating	88	172	128	5,739	13,465	8,353	15.3	12.7	15.3		
Cooling	98	183	164	6,043	14,166	10,493	16.2	12.9	15.6		
Water-heating equipment											
Centralized system	181	303	244	10,637	22,855	14,043	17.0	13.3	17.3		
Distributed system	24	74	60	1,901	6,205	4,581	12.6	12.0	13.0		
Combination of centralized and											
distributed system	21	111	192	800	7,412	10,581	25.6	15.0	18.1		

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n	Total floorspace of buildings using electricity (million square feet)				Electricity energy intensity (kWh/square foot)			
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	
All buildings	244	500	500		38,841	30,046	15.2	12.9	16.6	
				13,301	30,041	30,040	13.2	12.5	10.0	
Lighting equipment types (more than one may apply)										
Incandescent	86	221	305	5,370	15,993	17,044	16.0	13.8	17.9	
Standard fluorescent	227	483	487		36,814	29,212	16.2	13.1	16.7	
Compact fluorescent	120	334	435		23,389	23,873	18.4	14.3	18.2	
High-intensity discharge (HID)	20	133	230		8,653	13,635	17.6	15.3	16.9	
	44	174	261		11,448	14,179	17.0	15.2		
Halogen LED	28								18.4	
Other	28 Q	125 Q	262 6		7,613 Q	13,397 293	26.8 Q	16.4 Q	19.6 19.3	
Other	Q	Q		Q	Q	293	Q	Q	19.5	
Refrigeration equipment (more than one may apply)										
Any refrigeration	212	454	483	12,013	33,246	28,386	17.6	13.7	17.0	
Walk-in units	105	186	316	2,142	9,277	16,942	49.0	20.0	18.6	
Cases or cabinets	94	184	305	2,483	9,809	16,427	37.8	18.7	18.6	
Large cold storage areas	8	32	58	156	1,248	2,767	52.2	25.4	21.0	
Commercial ice makers	85	215	353	2,100	11,717	18,918	40.4	18.4	18.6	
Residential-type or compact units	135	371	405	10,311	28,259	23,811	13.1	13.1	17.0	
Vending machines	33	287	423		17,672	24,480	18.3	16.2	17.3	
No refrigeration	32	45	16	3,968	5,596	1,660	8.0	8.1	9.8	
Office equipment										
(more than one may apply)	204	402	404	11 024	25.770	20.200	47.4	12.5	46.7	
Desktop computers	204	482	491		35,779	29,360	17.1	13.5	16.7	
With flat screen monitors	199	476	491		35,422	29,303	17.4	13.4	16.8	
With multiple monitors	44	179	299		12,296	16,226	18.4	14.6	18.5	
Laptop computers	118	393	456		28,847	26,734	15.0	13.6	17.1	
Dedicated servers	86	347	436		23,333	25,395	18.5	14.9	17.2	
Laser printers	115	349	393		24,644	22,934	17.2	14.1	17.1	
Inkjet printers	119	209	196		16,716	12,540	17.0	12.5	15.7	
FAX machines	154	427	449		30,661	26,667	16.4	13.9	16.8	
Photocopiers	77	375	456	5,688	27,050	26,539	13.5	13.9	17.2	
Number of desktop computers										
None	40	17	Q		3,062	686	9.9	5.6	Q	
1 to 4	121	76	8		7,402	1,324	17.4	10.3	6.0	
5 to 9	50	70	13		5,430	1,026	17.0	12.8	13.1	
10 to 19	19	81	30		6,179	1,863	13.9	13.1	15.9	
20 to 49	11	124	75		7,902	4,556	17.8	15.7	16.4	
50 to 99	Q	64	55		4,563	3,694	Q	13.9	14.9	
100 to 249	Q	53	105		3,571	6,152	Q	15.0	17.1	
250 or more	N	15	206	N	732	10,745	N	20.0	19.1	

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n		Total floors buildings us (million squ	ing electricity		nsity e foot)		
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Number of laptop computers									
None	125	106	43	8,075	9,995	3,312	15.5	10.7	13.1
1 to 4	99	132	42	6,543	11,397	3,221	15.1	11.6	13.1
5 to 9	13	73	40	994	5,079	2,273	13.5	14.4	17.4
10 to 19	6	67	58	297	4,518	3,528	19.0	14.8	16.5
20 to 49	Q	69	84	Q	4,587	4,985	Q	15.0	16.9
50 to 99	N	33	52	Q	1,937	3,297	Q N	17.3	15.8
100 to 249	N	11	79	N	982	4,235	N	11.2	18.7
250 or more	N	Q	101	N N	962 Q	5,197	N	Q Q	19.4
230 OI IIIOIE	IN	Ų	101	IN	ų .	3,19/	IV	Q	19.4
Number of dedicated servers									
None	158	153	63	11,339	15,509	4,651	13.9	9.9	13.6
1 to 4	82	263	152	4,525	18,595	10,976	18.1	14.2	13.8
5 to 9	Q	41	58	Q	2,446	3,712	Q	16.8	15.5
10 to 19	Q	22	87	Q	1,266	4,425	Q	17.2	19.7
20 to 49	Q	17	53	Q	822	2,928	Q	20.7	18.1
50 or more	Q	Q	87	Q	Q	3,354	Q	Q	25.9
Number of abote contains									
Number of photocopiers	167	124	4.4	10.202	44.702	2.507	16.2	10.5	42.5
None	167	124	44	10,293	11,792	3,507	16.2	10.5	12.5
One	53	118	44	4,197	9,634	3,250	12.5	12.2	13.6
2 to 4	23	169	101	1,380	12,031	6,902	16.3	14.0	14.6
5 to 9	Q	56	87	Q	3,485	5,312	Q	16.1	16.4
10 or more	Q	32	224	Q	1,900	11,075	Q	17.0	20.2
Number of TVs or video displays									
None	91	99	34	7,722	10,674	3,718	11.7	9.3	9.1
One	56	51	13	3,854	4,899	1,237	14.5	10.5	10.7
2 to 4	62	126	48	3,217	9,910	3,338	19.3	12.7	14.3
5 to 9	26	67	57	908	4,218	3,021	28.6	16.0	18.8
10 to 19	6	65	75	180	3,919	4,069	33.9	16.7	18.5
20 to 49	Q	50	88	Q	2,983	5,010	Q	16.7	17.5
50 to 99	Q	22	55	Q	1,169	3,177	Q	18.8	17.2
100 or more	N	19	130	N	1,070	6,477	N	17.4	20.1
					2,0,0				
Food preparation or serving areas in non-food service buildings									
(more than one may apply)									
Snack bar or concession stand	14	37	140	378	1,958	7,549	37.3	19.0	18.5
Fast food or small restaurant	18	64	142	438	2,666	6,684	41.9	24.1	21.2
Cafeteria or large restaurant	Q	58	201	436 Q	4,268	10,913	41.9 Q	13.6	18.4
Commercial kitchen/	Q	J0	201	<u>Q</u>	7,200	10,313	Q	13.0	10.4
food preparation area	8	101	182	536	5,763	9,850	15.3	17.6	18.5
Small kitchen area	28	71	105	2,297	5,931	5,826	12.0	12.0	17.9
		·	103	2,237	J,JJ±	3,020	12.0		

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n .		Total floorsp buildings us (million squ	ing electricity		Electricity energy inter (kWh/squar	-	
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Separate computer areas (more than one may apply)									
Data center or server farm	Q	43	192	Q	1,941	9,058	Q	22.1	21.2
Computer-based training room	6	91	203	325	5,568	11,831	18.5	16.3	17.2
Student or public computer center	4	72	127	356	5,710	8,276	10.7	12.7	15.3
HVAC conservation features (more than one may apply)									
Economizer cycle	27	178	334	1,118	11,110	18,521	24.0	16.0	18.0
Regular HVAC maintenance	174	445	490	9,050	31,653	28,541	19.2	14.0	17.2
Building automation system (BAS) ²	31	225	413	1,601	13,348	22,101		16.9	18.7
Window and interior lighting features (more than one may apply)									
Multipaned windows	150	373	407	8,864	27,482	23,384	16.9	13.6	17.4
Tinted window glass	96	282	340	5,153	19,825	19,421	18.7	14.2	17.5
Reflective window glass	25	107	169	1,519	6,598	7,720	16.5	16.2	21.9
External overhangs or awnings	115	218	217	5,723	14,634	11,705	20.1	14.9	18.5
Skylights or atriums	19	105	208	1,527	8,212	12,337	12.6	12.7	16.8
Light scheduling	52	193	296	2,401	12,227	15,635	21.7	15.8	18.9
Occupancy sensors	35	227	347	1,699	14,108	20,064	20.7	16.1	17.3
Multi-level lighting or dimming	19	99	155	813	5,480	8,240	23.0	18.1	18.8
Daylight harvesting	4	32	74	225	1,963	3,927		16.1	18.7
Demand responsive lighting Building automation system (BAS) for	8	32	39	494	1,997	2,246	16.8	16.0	17.6
lighting ²	10	82	147	423	4,003	7,641	23.8	20.4	19.3
Equipment usage reduced when									
building not in full use									
(more than one may apply)									
Heating	165	360	367	11,219	28,994	22,935	14.7	12.4	16.0
Cooling	165	363	375	10,666	28,578	23,272		12.7	16.1
Lighting	223	466	447	14,552	36,182	27,860	15.3	12.9	16.1

Table C21. Electricity consumption and conditional energy intensity by building size, 2012

	Total electri consumptio (billion kWh	n .		Total floorspace of buildings using electricity (million square feet)			Electricity energy intensity (kWh/square foot)		
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 square feet	10,000 square	10,001 to 100,000 square feet	Over 100,000 square feet
All buildings	244	500	500	15,981	38,841	30,046	15.2	12.9	16.6
Annual consumption (kilowatthours)									
10,000 or less	4	(*)	Q	2,289	787	Q	1.7	0.3	Q
10,001 to 50,000	43	6	Q	6,754	3,589	Q	6.4	1.8	Q
50,001 to 100,000	48	14	Q	3,399	3,880	Q	14.1	3.6	Q
100,001 to 500,000	122	157	4	3,294	16,126	1,892	37.1	9.7	2.1
500,001 to 1,000,000	21	135	9	210	8,065	1,775	98.3	16.8	4.9
1,000,001 to 5,000,000	Q	175	198	Q	6,259	14,446	Q	28.0	13.7
Over 5,000,000	N	Q	289	N	Q	11,442	N	Q	25.2

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).

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.

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.