

Table C33. Total fuel oil consumption and expenditures, 2012

	All buildings using fuel oil			Fuel oil expenditures		
	Number of buildings (thousand)	Total floorspace (million square feet)	Floorspace per building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
All buildings	467	20,200	43.3	134	974	3,230
Building floorspace (square feet)						
1,001 to 5,000	204	604	3.0	21	151	522
5,001 to 10,000	74	559	7.6	10	74	253
10,001 to 25,000	67	1,123	16.7	20	147	494
25,001 to 50,000	39	1,490	38.3	14	102	329
50,001 to 100,000	39	2,822	71.5	23	171	559
100,001 to 200,000	19	2,858	148.6	20	147	461
200,001 to 500,000	18	5,370	303.4	14	98	329
Over 500,000	6	5,374	924.0	12	84	284
Principal building activity						
Education	30	2,185	71.9	28	205	658
Food sales	Q	Q	Q	Q	Q	Q
Food service	Q	Q	Q	Q	Q	Q
Health care	23	2,776	118.5	20	142	444
Inpatient	9	2,257	264.4	16	117	362
Outpatient	15	520	34.9	Q	Q	Q
Lodging	28	2,051	74.0	8	61	204
Mercantile	44	1,119	25.6	9	69	241
Retail (other than mall)	37	454	12.3	7	53	188
Enclosed and strip malls	7	665	97.8	Q	Q	Q
Office	86	5,328	62.2	18	131	449
Public assembly	27	1,663	Q	7	48	160
Public order and safety	34	908	26.9	2	17	59
Religious worship	23	391	16.6	5	39	134
Service	86	733	8.6	16	118	394
Warehouse and storage	26	1,773	68.1	5	38	129
Other	28	738	26.5	10	71	243
Vacant	Q	Q	Q	Q	Q	Q
Year constructed						
Before 1920	56	1,099	19.7	16	119	398
1920 to 1945	44	1,447	32.8	14	105	355
1946 to 1959	53	1,530	28.9	18	133	428
1960 to 1969	75	2,407	32.2	20	144	478
1970 to 1979	58	2,614	45.1	16	118	383
1980 to 1989	50	3,806	75.5	16	114	385
1990 to 1999	51	3,201	62.4	14	98	330
2000 to 2003	35	1,467	42.4	10	75	253
2004 to 2007	18	1,497	82.0	3	22	74
2008 to 2012	27	1,133	42.7	6	46	145

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All buildings	467	20,200	43.3	134	974	3,230
Census region and division						
Northeast	217	6,079	28.1	90	652	2,146
New England	115	1,866	16.3	47	344	1,119
Middle Atlantic	102	4,213	41.4	42	308	1,027
Midwest	77	3,935	51.1	15	108	367
East North Central	46	2,619	57.3	10	70	237
West North Central	31	1,316	42.1	5	38	130
South	131	7,051	54.0	23	167	553
South Atlantic	69	4,419	64.0	16	118	387
East South Central	30	797	27.0	3	21	73
West South Central	32	1,835	57.5	4	28	94
West	43	3,135	73.6	7	48	164
Mountain	8	1,092	Q	Q	Q	Q
Pacific	35	2,043	59.2	5	34	117
Climate region¹						
Very cold/Cold	271	8,008	29.6	81	592	1,967
Mixed-humid	131	7,287	55.5	43	314	1,043
Mixed-dry/Hot-dry	22	1,605	72.7	2	18	62
Hot-humid	36	2,597	72.6	6	43	133
Marine	7	703	100.0	1	8	26
Number of floors						
One	256	4,139	16.1	42	306	1,009
Two	105	3,375	32.0	32	233	783
Three	58	2,091	36.2	23	167	553
Four to nine	38	6,246	164.6	28	207	679
Ten or more	9	4,349	477.7	8	62	207
Number of workers (main shift)						
Fewer than 5	214	1,489	7.0	31	227	767
5 to 9	73	717	9.8	9	65	222
10 to 19	45	765	17.0	11	83	270
20 to 49	44	1,824	41.2	17	122	409
50 to 99	39	3,137	79.6	21	153	514
100 to 249	30	4,040	136.5	22	161	526
250 or more	21	8,229	389.8	22	162	523
Weekly operating hours						
Fewer than 40	58	538	9.3	10	70	241
40 to 48	125	2,668	21.3	27	194	635
49 to 60	102	3,910	38.4	25	181	604
61 to 84	49	3,104	63.4	20	143	477
85 to 167	30	1,868	62.0	9	64	211
Open continuously	102	8,113	79.2	44	322	1,062

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All buildings	467	20,200	43.3	134	974	3,230
Ownership and occupancy						
Nongovernment owned	365	14,057	38.5	91	663	2,224
Owner occupied	223	6,308	28.3	56	411	1,372
Leased to tenant(s)	108	4,749	43.8	23	171	578
Owner occupied and leased	29	2,928	101.6	11	79	267
Unoccupied	Q	Q	Q	Q	Q	Q
Government owned	101	6,143	60.6	43	311	1,007
Federal	Q	1,083	Q	Q	Q	Q
State	15	1,400	95.8	5	39	125
Local	83	3,660	44.2	34	250	808
Party responsible for operation and maintenance of energy systems						
Building owner	412	18,105	43.9	121	879	2,911
Business owner or tenant	41	1,420	34.5	10	70	233
Property management	3	454	Q	1	7	24
Other	Q	Q	Q	Q	Q	Q
Provider of direct input on energy-related equipment purchases						
Building owner	418	18,292	43.8	123	895	2,964
Business owner or tenant	29	1,142	39.1	6	47	156
Property management	4	353	83.1	2	12	41
Other	15	414	26.9	3	20	69
Number of establishments						
One	356	11,534	32.4	98	716	2,368
2 to 5	89	4,944	55.7	25	179	589
6 to 10	7	873	129.1	5	38	124
11 to 20	4	884	203.4	1	8	26
More than 20	5	1,893	391.8	4	32	116
Currently unoccupied	Q	Q	Q	Q	Q	Q
Predominant exterior wall material						
Brick, stone, or stucco	156	8,798	56.3	59	432	1,418
Concrete (block or poured)	106	4,462	42.2	28	203	678
Concrete panels	12	3,015	245.5	7	51	163
Siding or shingles	108	1,092	10.1	21	154	525
Metal panels	73	1,195	16.4	13	98	330
Window glass	4	865	221.8	2	16	53
Other	Q	491	Q	Q	Q	Q
No one major type	Q	Q	Q	Q	Q	Q

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All buildings	467	20,200	43.3	134	974	3,230
Predominant roof material						
Metal surfacing	124	2,024	16.4	23	167	562
Synthetic or rubber	104	7,980	76.9	40	288	958
Built-up	63	5,780	92.2	31	229	748
Slate or tile shingles	18	724	40.6	4	32	117
Wooden materials (including shingles)	Q	Q	Q	Q	Q	Q
Asphalt, fiberglass, or other shingles	139	2,569	18.5	27	195	655
Concrete	3	620	195.7	3	22	60
Other	Q	Q	Q	Q	Q	Q
No one major type	Q	Q	Q	Q	Q	Q
Roof characteristics						
Roof tilt						
Flat	171	14,380	84.3	68	496	1,644
Shallow pitch	155	3,891	25.1	34	248	822
Steeper pitch	141	1,929	13.7	32	230	764
Cool roof	80	6,090	76.6	33	237	791
Renovations in buildings constructed before 2008 (more than one may apply)						
Any type of renovation	233	12,546	53.8	80	584	1,934
Addition or annex	65	4,629	71.6	34	248	795
Reduction in floorspace	9	549	Q	Q	Q	Q
Roof replacement	130	7,374	56.7	55	398	1,313
Exterior wall replacement	22	1,636	72.8	11	82	263
Interior wall reconfiguration	107	7,620	71.4	39	283	920
Window replacement	70	4,239	60.4	35	255	824
HVAC equipment upgrade	112	8,810	78.7	48	350	1,151
Lighting upgrade	105	8,632	82.0	52	378	1,245
Electrical upgrade	82	5,588	68.4	38	277	911
Plumbing system upgrade	69	4,912	70.8	33	243	818
Insulation upgrade	34	2,510	74.0	13	96	320
Fire, safety, or security upgrade	79	6,775	86.1	39	283	932
Structural upgrade	23	1,737	75.0	9	68	226
Other	Q	371	Q	Q	Q	Q
No renovations	207	6,521	31.5	47	344	1,151
Buildings constructed 2008 or later	27	1,133	42.7	6	46	145

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All buildings	467	20,200	43.3	134	974	3,230
Energy sources (more than one may apply)						
Electricity	467	20,200	43.3	134	974	3,230
Natural gas	164	13,663	83.4	41	298	1,002
Fuel oil	467	20,200	43.3	134	974	3,230
District heat	10	3,110	307.5	6	47	159
District chilled water	8	2,134	263.2	4	32	108
Propane	90	3,080	34.3	43	314	1,008
Other	41	1,133	27.6	8	59	201
Space-heating energy sources						
Fuel oil	270	4,351	16.1	104	753	2,484
Fuel oil main	205	2,542	12.4	98	715	2,357
Fuel oil secondary	65	1,809	28.0	5	39	127
Other excluding fuel oil	185	15,319	82.8	29	207	692
Buildings without heating	12	530	Q	2	13	54
Primary space-heating energy source						
Electricity	85	4,651	54.4	10	71	226
Natural gas	114	9,022	79.0	16	117	396
Fuel oil	205	2,542	12.4	98	715	2,357
District heat	10	2,991	304.7	5	38	130
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling energy sources						
Fuel oil	Q	Q	Q	Q	Q	Q
Other excluding fuel oil	360	19,241	53.4	109	794	2,635
Buildings without cooling	106	891	8.4	22	161	541
Water-heating energy sources						
Fuel oil	77	1,911	24.7	60	433	1,401
Other excluding fuel oil	334	17,797	53.3	66	477	1,632
Buildings without water heating	56	492	8.9	9	64	198
Cooking energy sources						
Fuel oil	Q	Q	Q	Q	Q	Q
Other excluding fuel oil	163	12,628	77.5	74	540	1,772
Buildings without cooking	300	7,506	25.0	58	423	1,422
Energy end uses (more than one may apply)						
Buildings with space heating	455	19,670	43.2	132	961	3,176
Buildings with cooling	360	19,309	53.6	112	813	2,689
Buildings with water heating	411	19,708	47.9	125	911	3,032
Buildings with cooking	166	12,694	76.3	76	551	1,808
Buildings with manufacturing	25	863	35.0	6	47	152
Buildings with electricity generation	214	17,073	79.8	68	491	1,613

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All buildings	467	20,200	43.3	134	974	3,230
Percent of floorspace heated						
Not heated	12	530	Q	2	13	54
1 to 50	65	2,005	30.9	10	69	218
51 to 99	58	3,815	65.8	18	132	439
100	332	13,849	41.7	104	759	2,519
Heating equipment (more than one may apply)						
Heat pumps	44	3,047	68.9	12	88	292
Furnaces	42	870	20.8	7	54	184
Individual space heaters	177	5,874	33.1	38	275	912
District heat	10	3,088	306.8	6	44	150
Boilers	139	9,340	67.3	80	583	1,897
Packaged heating units	218	9,580	44.0	46	335	1,126
Other	Q	Q	Q	Q	Q	Q
Water-heating equipment						
Centralized system	314	10,979	34.9	85	616	2,072
Distributed system	52	2,510	48.4	13	98	324
Combination of centralized and distributed system	45	6,219	138.0	27	197	636
Food preparation or serving areas in non-food service buildings (more than one may apply)						
Snack bar or concession stand	24	4,868	202.6	16	114	384
Fast food or small restaurant	19	3,624	192.9	8	60	200
Cafeteria or large restaurant	35	7,093	204.0	42	306	1,002
Commercial kitchen/food preparation area	49	6,678	135.2	33	237	783
Small kitchen area	82	4,666	57.2	31	225	745
HVAC conservation features (more than one may apply)						
Economizer cycle	86	11,271	131.6	43	313	1,026
Regular HVAC maintenance	318	18,901	59.5	111	809	2,681
Building automation system (BAS) ²	119	13,867	116.3	58	423	1,371
Equipment usage reduced when building not in full use (more than one may apply)						
Heating	320	14,165	44.3	92	673	2,233
Cooling	254	13,963	54.9	78	566	1,880
Lighting	427	18,903	44.3	123	897	2,971

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All buildings	467	20,200	43.3	134	974	3,230
Annual consumption (gallons)						
1,000 or less	311	9,042	29.0	14	99	349
1,001 to 5,000	111	4,830	43.6	33	239	810
5,001 to 10,000	29	2,528	86.9	26	190	620
10,001 to 25,000	10	2,302	226.7	21	156	519
Over 25,000	5	1,498	280.4	40	291	932

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.

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/> • 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 F of the 2012 Commercial Buildings Energy Consumption Survey.