

Table 5. Commercial Sector Key Indicators and Consumption
(quadrillion Btu, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Key Indicators													
Total Floorspace (billion square feet)													
Surviving	71.1	72.4	73.7	75.0	76.2	77.4	78.5	79.7	80.8	82.0	83.1	84.3	85.4
New Additions	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
Total	73.0	74.3	75.6	76.8	78.0	79.2	80.3	81.5	82.6	83.8	85.0	86.1	87.3
Energy Consumption Intensity (thousand Btu per square foot)													
Delivered Energy Consumption	115.1	113.9	110.3	110.7	111.7	111.8	111.7	111.9	112.2	112.5	112.5	112.6	112.4
Electricity Related Losses	127.0	126.8	125.7	125.9	126.9	127.6	127.9	128.3	128.6	128.7	129.0	129.2	129.2
Total Energy Consumption	242.1	240.8	236.0	236.6	238.6	239.3	239.6	240.2	240.8	241.2	241.6	241.8	241.6
Delivered Energy Consumption by Fuel													
Purchased Electricity													
Space Heating 1/	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18
Space Cooling 1/	0.46	0.55	0.54	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.51	0.51	0.51
Water Heating 1/	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18
Ventilation	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20
Cooking	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Lighting	1.19	1.18	1.17	1.17	1.17	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24
Refrigeration	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25
Office Equipment (PC)	0.14	0.18	0.22	0.25	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35
Office Equipment (non-PC)	0.32	0.35	0.38	0.41	0.43	0.45	0.48	0.49	0.51	0.53	0.55	0.57	0.58
Other Uses 2/	1.28	1.25	1.25	1.32	1.39	1.44	1.48	1.52	1.57	1.62	1.67	1.71	1.76
Delivered Energy	4.19	4.32	4.37	4.45	4.58	4.67	4.75	4.84	4.93	5.03	5.12	5.21	5.30
Natural Gas													
Space Heating 1/	1.38	1.35	1.26	1.37	1.39	1.41	1.43	1.45	1.47	1.49	1.50	1.52	1.52
Space Cooling 1/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Water Heating 1/	0.59	0.57	0.55	0.55	0.55	0.55	0.55	0.56	0.58	0.59	0.60	0.61	0.62
Cooking	0.24	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.28
Other Uses 3/	1.00	0.97	0.94	0.94	0.97	0.99	1.01	1.03	1.04	1.06	1.08	1.09	1.10
Delivered Energy	3.23	3.15	3.01	3.11	3.18	3.22	3.26	3.32	3.38	3.44	3.48	3.53	3.56
Distillate Fuel Oil													
Space Heating 1/	0.20	0.20	0.18	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Water Heating 1/	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Other Uses 4/	0.20	0.21	0.22	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Delivered Energy	0.47	0.48	0.46	0.44	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Marketed Renewables (biomass)													
Other Fuels 5/	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Other Fuels 5/	0.39	0.40	0.38	0.39	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Delivered Energy Consumption by End Use													
Space Heating 1/	1.75	1.71	1.60	1.73	1.76	1.78	1.80	1.82	1.84	1.87	1.88	1.89	1.90
Space Cooling 1/	0.48	0.57	0.57	0.51	0.51	0.52	0.52	0.53	0.53	0.53	0.53	0.54	0.54
Water Heating 1/	0.84	0.82	0.79	0.79	0.79	0.79	0.79	0.80	0.82	0.83	0.84	0.86	0.86
Ventilation	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20
Cooking	0.27	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.31	0.31	0.32	0.32
Lighting	1.19	1.18	1.17	1.17	1.17	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24
Refrigeration	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25
Office Equipment (PC)	0.14	0.18	0.22	0.25	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35
Office Equipment (non-PC)	0.32	0.35	0.38	0.41	0.43	0.45	0.48	0.49	0.51	0.53	0.55	0.57	0.58
Other Uses 6/	2.98	2.95	2.91	2.95	3.06	3.13	3.19	3.25	3.32	3.38	3.44	3.50	3.56
Delivered Energy	8.40	8.46	8.34	8.51	8.71	8.85	8.97	9.12	9.27	9.43	9.56	9.70	9.82

Table 5. Commercial Sector Key Indicators and Consumption
(quadrillion Btu, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Related Losses	9.27	9.42	9.51	9.68	9.90	10.10	10.28	10.46	10.63	10.79	10.96	11.13	11.28
Total Energy Consumption by End Use													
Space Heating 1/	2.12	2.08	1.95	2.10	2.14	2.16	2.17	2.20	2.22	2.24	2.26	2.27	2.28
Space Cooling 1/	1.50	1.77	1.74	1.57	1.58	1.60	1.60	1.61	1.61	1.61	1.62	1.62	1.63
Water Heating 1/	1.22	1.20	1.18	1.17	1.16	1.16	1.16	1.18	1.20	1.21	1.23	1.24	1.25
Ventilation	0.60	0.60	0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64
Cooking	0.36	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.38	0.39	0.39	0.39	0.40
Lighting	3.82	3.76	3.73	3.72	3.70	3.71	3.72	3.75	3.78	3.81	3.84	3.87	3.89
Refrigeration	0.74	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.78	0.78
Office Equipment (PC)	0.46	0.58	0.70	0.80	0.88	0.93	0.96	0.98	1.01	1.03	1.06	1.08	1.10
Office Equipment (non-PC)	1.03	1.12	1.21	1.29	1.37	1.44	1.50	1.56	1.62	1.67	1.73	1.78	1.83
Other Uses 6/	5.81	5.68	5.64	5.83	6.08	6.23	6.39	6.54	6.70	6.86	7.00	7.15	7.30
Total	17.67	17.88	17.84	18.18	18.61	18.95	19.25	19.57	19.90	20.22	20.53	20.83	21.10
Nonmarketed Renewable Fuels 7/													
Solar Thermal	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Table 5. Commercial Sector Key Indicators and Consumption
(quadrillion Btu, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005-2030
Key Indicators															
Total Floorspace (billion square feet)															
Surviving	86.6	87.8	89.0	90.2	91.6	92.9	94.3	95.7	97.2	98.7	100.2	101.8	103.3	104.9	1.5%
New Additions	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.5	1.0%
Total	88.5	89.7	91.0	92.3	93.7	95.1	96.6	98.0	99.5	101.1	102.6	104.2	105.7	107.3	1.5%
Energy Consumption Intensity (thousand Btu per square foot)															
Delivered Energy Consumption	112.3	112.3	112.6	112.7	112.7	112.6	112.4	112.4	112.4	112.3	112.3	112.2	112.3	112.3	-0.1%
Electricity Related Losses	129.3	129.2	129.0	128.9	128.4	128.1	127.7	127.4	127.1	126.7	126.5	126.3	125.8	125.6	0.0%
Total Energy Consumption	241.6	241.5	241.6	241.7	241.1	240.7	240.1	239.8	239.5	239.0	238.7	238.5	238.1	237.8	-0.1%
Delivered Energy Consumption by Fuel															
Purchased Electricity															
Space Heating 1/	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.4%
Space Cooling 1/	0.51	0.52	0.52	0.53	0.53	0.54	0.55	0.55	0.56	0.56	0.57	0.58	0.59	0.59	0.3%
Water Heating 1/	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.4%
Ventilation	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.24	0.24	1.0%
Cooking	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.3%
Lighting	1.25	1.26	1.28	1.29	1.31	1.33	1.34	1.36	1.38	1.39	1.41	1.43	1.45	1.47	0.9%
Refrigeration	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.29	0.30	1.0%
Office Equipment (PC)	0.36	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	3.2%
Office Equipment (non-PC)	0.60	0.62	0.64	0.66	0.68	0.70	0.73	0.75	0.77	0.80	0.83	0.85	0.88	0.91	3.9%
Other Uses 2/	1.81	1.86	1.92	1.97	2.03	2.08	2.15	2.21	2.27	2.33	2.40	2.46	2.53	2.60	3.0%
Delivered Energy	5.39	5.49	5.59	5.71	5.81	5.93	6.04	6.16	6.28	6.40	6.53	6.67	6.80	6.94	1.9%
Natural Gas															
Space Heating 1/	1.53	1.55	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.67	0.9%
Space Cooling 1/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.0%
Water Heating 1/	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.75	0.76	0.77	0.78	1.2%
Cooking	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.32	0.32	0.33	0.33	0.34	0.34	0.35	1.6%
Other Uses 3/	1.11	1.12	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.1%
Delivered Energy	3.59	3.63	3.70	3.75	3.78	3.82	3.85	3.89	3.94	3.97	4.01	4.05	4.09	4.13	1.1%
Distillate Fuel Oil															
Space Heating 1/	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.4%
Water Heating 1/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-0.4%
Other Uses 4/	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-0.7%
Delivered Energy	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.45	0.45	-0.2%
Marketed Renewables (biomass)															
Other Fuels 5/	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.0%
Other Fuels 5/	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.1%
Delivered Energy Consumption by End Use															
Space Heating 1/	1.91	1.92	1.95	1.96	1.98	1.99	2.00	2.01	2.02	2.03	2.05	2.06	2.07	2.08	0.8%
Space Cooling 1/	0.54	0.55	0.55	0.56	0.57	0.57	0.58	0.59	0.59	0.60	0.61	0.62	0.63	0.63	0.4%
Water Heating 1/	0.87	0.89	0.90	0.92	0.93	0.94	0.95	0.96	0.98	0.99	1.00	1.01	1.02	1.03	1.0%
Ventilation	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.24	0.24	1.0%
Cooking	0.32	0.33	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.37	0.37	0.37	0.38	0.38	1.4%
Lighting	1.25	1.26	1.28	1.29	1.31	1.33	1.34	1.36	1.38	1.39	1.41	1.43	1.45	1.47	0.9%
Refrigeration	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.29	0.30	1.0%
Office Equipment (PC)	0.36	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	3.2%
Office Equipment (non-PC)	0.60	0.62	0.64	0.66	0.68	0.70	0.73	0.75	0.77	0.80	0.83	0.85	0.88	0.91	3.9%
Other Uses 6/	3.61	3.68	3.75	3.82	3.89	3.96	4.03	4.11	4.19	4.26	4.34	4.43	4.51	4.60	1.8%
Delivered Energy	9.94	10.08	10.25	10.41	10.56	10.71	10.86	11.02	11.19	11.35	11.52	11.69	11.88	12.05	1.4%

Table 5. Commercial Sector Key Indicators and Consumption
(quadrillion Btu, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005-2030
Electricity Related Losses	11.45	11.60	11.74	11.90	12.03	12.18	12.33	12.49	12.65	12.81	12.98	13.16	13.30	13.48	1.4%
Total Energy Consumption by End Use															
Space Heating 1/	2.28	2.30	2.32	2.34	2.35	2.36	2.36	2.38	2.39	2.40	2.41	2.42	2.43	2.44	0.6%
Space Cooling 1/	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.72	1.73	1.75	1.76	1.77	1.79	0.0%
Water Heating 1/	1.26	1.27	1.29	1.30	1.31	1.32	1.33	1.35	1.36	1.37	1.38	1.39	1.40	1.41	0.7%
Ventilation	0.64	0.65	0.65	0.66	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.70	0.70	0.71	0.7%
Cooking	0.40	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	1.0%
Lighting	3.91	3.93	3.95	3.99	4.02	4.05	4.08	4.11	4.15	4.18	4.22	4.26	4.30	4.34	0.6%
Refrigeration	0.79	0.79	0.80	0.81	0.81	0.82	0.82	0.83	0.84	0.85	0.85	0.86	0.87	0.88	0.7%
Office Equipment (PC)	1.13	1.15	1.16	1.17	1.17	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	2.9%
Office Equipment (non-PC)	1.88	1.93	1.98	2.04	2.09	2.15	2.21	2.27	2.34	2.40	2.47	2.54	2.61	2.68	3.5%
Other Uses 6/	7.46	7.62	7.77	7.93	8.08	8.25	8.41	8.59	8.76	8.93	9.11	9.29	9.46	9.65	2.1%
Total	21.38	21.68	21.99	22.31	22.59	22.89	23.19	23.51	23.84	24.16	24.50	24.85	25.18	25.53	1.4%
Nonmarketed Renewable Fuels 7/															
Solar Thermal	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.7%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	13.3%
Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	2.9%

Table 5. Commercial Sector Key Indicators and Consumption
(quadrillion Btu, unless otherwise noted)

1/ Includes fuel consumption for district services.

2/ Includes miscellaneous uses, such as service station equipment, automated teller machines, telecommunications equipment, and medical equipment.

3/ Includes miscellaneous uses, such as pumps, emergency generators, combined heat and power in commercial buildings, and manufacturing performed in commercial buildings.

4/ Includes miscellaneous uses, such as cooking, emergency generators, and combined heat and power in commercial buildings.

5/ Includes residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

6/ Includes miscellaneous uses, such as service station equipment, automated teller machines, telecommunications equipment, medical equipment, pumps, emergency generators, combined heat and power in commercial buildings, manufacturing performed in commercial buildings, and cooking (distillate fuel oil), plus residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

7/ Includes primary energy displaced by solar thermal space heating and water heating, and electricity generation by solar photovoltaic systems.

Btu = British thermal unit.

PC = Personal computer.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 and 2005 are model results and may differ slightly from official EIA data reports.

Source: 2004 and 2005 based on: Energy Information Administration (EIA), Annual Energy Review 2005, DOE/EIA-0384(2005) (Washington, DC, July 2006). Projections: EIA, AEO2007 National Energy Modeling System run hp2007.d112106a.