

Table A5. Commercial sector key indicators and consumption
(quadrillion Btu per year, unless otherwise noted)

Key indicators and consumption	Reference case							Annual Growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Key indicators								
Total floorspace (billion square feet)								
Surviving	78.0	79.3	82.4	87.1	91.9	96.2	100.7	1.0%
New additions	2.3	1.8	1.7	2.1	2.0	2.0	2.3	1.0%
Total	80.3	81.1	84.1	89.1	93.9	98.2	103.0	1.0%
Energy consumption intensity (thousand Btu per square foot)								
Delivered energy consumption	106.0	107.3	105.0	103.2	101.3	101.2	100.3	-0.3%
Electricity related losses	117.0	117.3	111.2	111.7	112.3	111.9	111.1	-0.2%
Total energy consumption	223.0	224.6	216.2	214.9	213.6	213.1	211.4	-0.2%
Delivered energy consumption by fuel								
Purchased electricity								
Space heating ¹	0.18	0.18	0.17	0.16	0.16	0.16	0.16	-0.4%
Space cooling ¹	0.47	0.56	0.51	0.51	0.52	0.53	0.54	-0.1%
Water heating ¹	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-0.2%
Ventilation	0.50	0.51	0.54	0.57	0.60	0.63	0.65	1.0%
Cooking	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-0.2%
Lighting	1.03	1.01	1.01	1.05	1.08	1.12	1.15	0.5%
Refrigeration	0.40	0.39	0.35	0.34	0.34	0.35	0.36	-0.3%
Office equipment (PC)	0.22	0.21	0.19	0.19	0.20	0.21	0.22	0.1%
Office equipment (non-PC)	0.25	0.26	0.32	0.37	0.40	0.44	0.46	2.3%
Other uses ²	1.29	1.30	1.44	1.63	1.82	2.02	2.24	2.2%
Delivered energy	4.46	4.54	4.63	4.93	5.23	5.57	5.89	1.0%
Natural gas								
Space heating ¹	1.61	1.65	1.69	1.71	1.68	1.68	1.65	-0.0%
Space cooling ¹	0.03	0.04	0.04	0.03	0.03	0.03	0.03	-1.1%
Water heating ¹	0.43	0.44	0.48	0.50	0.52	0.53	0.54	0.9%
Cooking	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.9%
Other uses ³	0.95	0.98	1.01	1.03	1.06	1.12	1.21	0.8%
Delivered energy	3.20	3.29	3.41	3.48	3.50	3.58	3.65	0.4%
Distillate fuel oil								
Space heating ¹	0.16	0.14	0.12	0.11	0.10	0.10	0.09	-1.7%
Water heating ¹	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.9%
Other uses ⁴	0.22	0.26	0.20	0.20	0.20	0.20	0.19	-1.2%
Delivered energy	0.41	0.43	0.35	0.34	0.33	0.33	0.32	-1.2%
Marketed renewables (biomass)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.0%
Other fuels ⁵	0.33	0.34	0.33	0.33	0.34	0.35	0.36	0.2%
Delivered energy consumption by end use								
Space heating ¹	1.95	1.97	1.98	1.99	1.95	1.94	1.90	-0.1%
Space cooling ¹	0.50	0.60	0.54	0.54	0.55	0.56	0.57	-0.2%
Water heating ¹	0.55	0.56	0.60	0.62	0.64	0.66	0.66	0.7%
Ventilation	0.50	0.51	0.54	0.57	0.60	0.63	0.65	1.0%
Cooking	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.8%
Lighting	1.03	1.01	1.01	1.05	1.08	1.12	1.15	0.5%
Refrigeration	0.40	0.39	0.35	0.34	0.34	0.35	0.36	-0.3%
Office equipment (PC)	0.22	0.21	0.19	0.19	0.20	0.21	0.22	0.1%
Office equipment (non-PC)	0.25	0.26	0.32	0.37	0.40	0.44	0.46	2.3%
Other uses ⁶	2.90	3.00	3.09	3.30	3.53	3.79	4.11	1.3%
Delivered energy	8.51	8.71	8.84	9.20	9.52	9.93	10.33	0.7%

Table A5. Commercial sector key indicators and consumption (continued)
(quadrillion Btu per year, unless otherwise noted)

Key indicators and consumption	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Electricity related losses	9.39	9.52	9.35	9.95	10.54	10.99	11.45	0.7%
Total energy consumption by end use								
Space heating ¹	2.34	2.35	2.32	2.32	2.28	2.26	2.22	-0.2%
Space cooling ¹	1.49	1.76	1.56	1.57	1.59	1.61	1.62	-0.3%
Water heating ¹	0.75	0.75	0.78	0.80	0.82	0.83	0.83	0.4%
Ventilation	1.56	1.57	1.62	1.72	1.80	1.86	1.91	0.8%
Cooking	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.6%
Lighting	3.21	3.14	3.05	3.16	3.27	3.35	3.40	0.3%
Refrigeration	1.24	1.21	1.06	1.03	1.02	1.03	1.05	-0.5%
Office equipment (PC)	0.67	0.66	0.57	0.58	0.60	0.62	0.64	-0.1%
Office equipment (non-PC)	0.77	0.81	0.95	1.11	1.22	1.30	1.37	2.1%
Other uses ⁶	5.62	5.72	6.01	6.58	7.19	7.78	8.46	1.6%
Total	17.90	18.22	18.19	19.15	20.06	20.92	21.78	0.7%
Nonmarketed renewable fuels⁷								
Solar thermal	0.03	0.03	0.03	0.03	0.03	0.04	0.04	1.3%
Solar photovoltaic	0.00	0.01	0.01	0.01	0.01	0.01	0.01	2.6%
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.7%
Total	0.03	0.03	0.04	0.04	0.04	0.05	0.05	1.6%

¹Includes fuel consumption for district services.

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

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

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

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

⁶Includes 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), plus residual fuel oil, liquefied petroleum gases, coal, motor gasoline, and kerosene.

⁷Represents delivered energy displaced by solar thermal space heating and water heating, and electricity generation by solar photovoltaic systems.

Btu = British thermal unit.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding. Data for 2009 and 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2009 and 2010 based on: U.S. Energy Information Administration (EIA), *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). Projections: EIA, AEO2012 National Energy Modeling System run REF2012.D121011B.