

3.1.4 2002 Commercial Energy End-Use Carbon Dioxide Emissions Splits, by Fuel Type
(10⁶ metric tons of carbon equivalent) (1)

	Natural Gas	Petroleum					Coal	Electricity (3)	Total	Percent
		Distil.	Resid.	LPG	Oth(2)	Total				
Lighting							68.7	68.7	25.0%	
Space Heating	20.4	3.4	1.7		0.3	5.4	2.5	10.4	38.7	14.1%
Space Cooling	0.2							31.2	31.4	11.4%
Water Heating	8.5	1.4				1.4		7.2	17.1	6.2%
Electronics								16.0	16.0	5.8%
Ventilation								13.9	13.9	5.1%
Refrigeration								10.4	10.4	3.8%
Computers								7.0	7.0	2.6%
Cooking	3.8							1.6	5.4	2.0%
Other (4)	4.1	0.4		1.6	0.9	2.9		15.7	22.7	8.3%
Adjust to SEDS (5)	9.3	4.4				4.4		30.1	43.7	15.9%
Total	46.2	9.6	1.7	1.6	1.2	14.1	2.5	212.2	275.0	100%

Note(s): 1) Excludes emissions of buildings-related energy consumption in the industrial sector. Emissions assume complete combustion from energy consumption, excluding gas flaring, coal mining, and cement production. Emissions exclude wood since it is assumed that the carbon released from combustion is reabsorbed in a future carbon cycle. Carbon emissions calculated from EIA, Assumptions to the AEO 2004 and differ by as much as 2% from EIA, AEO 2004, Table A19. Sector total varies by 0.1% from EIA, AEO 2004.
 2) Includes kerosene space (0.3 MMTCE) heating and motor gasoline other uses (0.9 MMTCE). 3) Excludes electric imports by utilities.
 4) Includes service station equipment, automated teller machines, telecommunications equipment, medical equipment, pumps, lighting, emergency electric generators, and manufacturing in commercial buildings. 5) Emissions related to a discrepancy between data sources. Energy attributable to the commercial sector, but not directly to specific end-uses.

Source(s): EIA, AEO 2004, Jan. 2004, Table A2, p. 134-136 and Table A5, p. 141-142 for energy consumption, and Table A19, p. 158 for emissions; EIA, National Energy Modeling System for AEO 2004, Jan. 2004; EIA, Assumptions to the AEO 2004, Jan. 2004, p. 9 for emissions coefficients; A.D. Little/BTS, Energy Consumption Characteristics of Commercial Building HVAC Systems, Volume II: Thermal Distribution, Auxiliary Equipment and Ventilation, Oct. 1999, p 1-2; and BTP/Navigant Consulting, U.S. Lighting Market Characterization, Volume I, Sept. 2002, Table 8-2, p.63.