1.4.2 2010 Buildings Energy End-Use Carbon Dioxide Emissions Splits, by Fuel Type (Million Metric Tons) (1)

	Natural	Petroleum								
	Gas	Distil.	Resid.	LPG	Oth(2)	Total	Coal	Electricity (3)	Total	Percent
Space Heating (4)	272.9	49.0	6.7	18.7	2.6	77.0	6.2	128.2	484.3	21.3%
Space Cooling	2.3							340.5	342.8	15.1%
Lighting								334.1	334.1	14.7%
Water Heating	91.9	9.2		4.6		13.7		98.5	204.1	9.0%
Refrigeration (5)								149.8	149.8	6.6%
Electronics (6)								143.0	143.0	6.3%
Ventilation (7)								95.2	95.2	4.2%
Computers								68.2	68.2	3.0%
Wet Cleaning (8)	2.9							57.8	60.8	2.7%
Cooking	20.9			1.9		1.9		36.5	59.4	2.6%
Other (9)	15.8	0.9		19.1	3.8	23.9		158.4	198.1	8.7%
Adjust to SEDS (10)	36.2	18.4				18.4		75.4	129.9	5.7%
Total	**442.9**	**77.5**	**6.7**	**44.3**	**6.4**	**134.8**	**6.2**	**1685.7**	**2269.6**	100%

Note(s): 1) 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 2011 and differs from EIA, AEO 2012 Early Release, Table A18. Buildings sector total varies by 0.1% from EIA, AEO 2012 Early Release. 2) Includes kerosene space heating (2.6 MMT) and motor gasoline other uses (3.8 MMT). 3) Excludes electric imports by utilities. 4) Includes residential furnace fans (23.9 MMT). 5) Includes refrigerators (135.2 MMT) and freezers (14.6 MMT). 6) Includes color television (58.2 MMT) and other office equipment. 7) Commercial only; residential fan and pump energy use included proportionately in space heating and cooling. 8) Includes clothes washers (5.8 MMT), natural gas clothes dryers (2.9 MMT), electric clothes dryers (34.3 MMT), and dishwashers (17.8 MMT). Does not include water heating energy. 9) Includes residential small electric devices, heating elements, motors, swimming pool heaters, hot tub heaters, outdoor grills, and natural gas outdoor lighting. Includes commercial service station equipment, ATMs, telecommunications equipment, medical equipment, pumps, emergency electric generators, and manufacturing performed in commercial buildings. 10) Emissions related to a discrepancy between data sources and that results from energy attributable to the buildings sector, but not directly to specific end-uses.

Source(s): EIA, Annual Energy Outlook 2012 Early Release, Jan. 2012, Summary Reference Case Tables, Table A2, p. 3-5, Table A4, p. 9-10 and Table A5, p. 11-12 for energy consumption, and Table A18, p. 36 for emissions; EIA, National Energy Modeling System (NEMS) for AEO 2012 Early Release, Jan. 2012; EIA, Assumptions to the Annual Energy Outlook 2011, July 2011, Table 1.2, p. 14 for carbon coefficients; BTS/A.D. Little, Electricity Consumption by Small End-Uses in Residential Buildings, Aug. 1998, Appendix A for residential electric end-uses; BTS/A.D. Little, Energy Consumption Characteristics of Commercial Building HVAC Systems, Volume II: Thermal Distribution, Auxiliary Equipment, and Ventilation, Oct. 1999, p. 1-2; BTP/Navigant Consulting, U.S. Lighting Market Characterization, Volume I, Sept. 2002, Table 8-2, p.63; and EIA, AEO 1999, Dec. 1998, Table A4, p. 118-119 and Table A5, p. 120-121 for 1996 data.