

Table 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector, 1980-2002
(Million Metric Tons of Carbon Dioxide ¹)

Year	End-Use Sectors								Electric Power Sector ⁴	Total ⁷
	Residential		Commercial ²		Industrial ³		Transportation			
	Primary ⁵	Total ⁶	Primary ⁵	Total ⁶	Primary ⁵	Total ⁶	Primary ⁵	Total ⁶	Primary ⁵	
1980	R385.1	R908.9	R244.5	652.5	R1,192.5	R1,787.4	1,383.9	1,386.2	1,529.0	R4,735.0
1981	R360.7	R877.7	225.8	R652.2	R1,123.0	R1,714.0	1,369.4	R1,371.7	1,536.7	R4,615.6
1982	R359.0	R872.1	R226.0	R654.1	R983.0	R1,506.7	1,338.3	1,340.5	1,467.1	R4,373.4
1983	R340.2	R866.3	225.7	660.5	R923.0	R1,466.4	R1,343.0	1,345.3	1,506.5	R4,338.5
1984	R348.7	R885.7	R236.2	693.6	R1,035.8	R1,612.3	R1,387.1	1,389.6	1,573.5	R4,581.3
1985	R351.3	R899.6	217.9	694.0	R989.8	R1,567.4	1,406.3	R1,408.9	1,604.6	R4,569.9
1986	R342.4	R895.1	R216.1	698.8	R963.0	R1,523.2	R1,460.2	1,462.9	1,598.2	R4,580.0
1987	R345.7	R921.8	R219.9	724.6	R1,004.1	R1,585.4	1,504.4	1,506.9	1,664.5	R4,738.6
1988	R366.6	R969.5	R230.1	760.0	R1,053.9	R1,659.1	1,564.1	1,566.8	1,740.8	R4,955.5
1989	R371.5	R989.6	229.9	R784.0	R1,045.2	R1,677.0	R1,581.5	1,584.3	R1,806.7	R5,034.8
1990	R339.1	R950.8	R224.1	R779.5	R1,063.1	R1,688.8	R1,566.8	R1,569.5	R1,795.5	R4,988.6
1991	R346.7	R966.7	R225.5	R781.0	R1,029.8	R1,643.9	R1,546.8	R1,549.4	R1,792.2	R4,941.0
1992	R356.7	R967.7	R225.8	R781.1	R1,088.7	R1,723.5	R1,567.9	R1,570.5	R1,803.7	R5,042.7
1993	R371.7	R1,026.7	R223.1	R806.2	R1,062.1	R1,705.1	R1,588.1	R1,590.6	R1,883.6	R5,128.6
1994	R363.9	R1,020.0	R225.6	R819.6	R1,078.0	R1,733.5	R1,628.4	R1,631.7	R1,908.9	R5,204.7
1995	R360.3	R1,025.7	R228.4	R836.7	R1,085.9	R1,732.0	R1,658.3	R1,661.4	R1,922.9	R5,255.8
1996	R388.4	R1,085.3	R236.9	R867.9	R1,122.2	R1,785.2	R1,702.1	R1,705.3	R1,994.0	R5,443.7
1997	R370.1	R1,076.6	237.1	R911.2	R1,122.6	R1,800.4	R1,719.5	R1,722.7	R2,061.7	R5,511.0
1998	R338.1	R1,096.2	R219.6	R922.4	R1,090.6	R1,776.0	R1,754.6	R1,757.9	R2,149.6	R5,552.5
1999	R358.6	R1,123.9	R222.2	R933.5	R1,085.1	R1,767.0	R1,802.7	R1,806.0	R2,161.9	R5,630.5
2000	R378.5	R1,169.4	R237.0	R1,005.9	R1,068.3	R1,774.1	R1,845.7	R1,849.2	R2,269.2	R5,798.6
2001	R366.2	R1,160.8	R227.1	R1,018.3	R1,048.2	R1,685.3	R1,823.6	R1,827.3	R2,226.6	R5,691.7
2002 ^P	372.3	1,193.0	231.1	1,012.9	1,030.5	1,673.7	1,846.3	1,849.7	2,249.0	5,729.3

¹ Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

² Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

³ Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

⁴ Electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

⁵ Carbon dioxide emissions from the combustion of fossil fuels. The electric power sector also has a small amount of emissions from geothermal power generation and the combustion of the plastics component of municipal solid waste.

⁶ In addition to "Primary" emissions, also includes emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector, which are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. (Electricity retail sales to

"Other," which are primarily for use in government buildings and for street and highway lighting, are added to the commercial sector, except for approximately 5 percent used by railroads and railways and attributed to the transportation sector.)

⁷ The sum of "Primary" emissions in the five energy-use sectors equals the sum of "Total" emissions in the four end-use sectors.

R=Revised. P=Preliminary.

- Notes:
- See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 8.
 - Because of the continuing goal to improve estimation methods for greenhouse gases, data are frequently revised on an annual basis in keeping with the latest findings of the international scientific community.
 - Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see <http://www.eia.doe.gov/environment.html>.

Sources: • 1980-1989—Energy Information Administration (EIA), *Emissions of Greenhouse Gases in the United States*, annual reports and unpublished revisions. • 1990 forward—EIA, *Emissions of Greenhouse Gases in the United States 2002* (October 2003), Tables 6-10.