

Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption
(Million Metric Tons of Carbon Dioxide^a)

| | By Source | | | | | By Sector | | | | | |
|--------------------|-------------------|----------------------------|---------------------------|------------|-------|-------------|-------------------------|-------------------------|----------------|-----------------------------|-------|
| | Wood ^b | Biomass Waste ^c | Fuel Ethanol ^d | Bio-diesel | Total | Residential | Commercial ^e | Industrial ^f | Transportation | Electric Power ^g | Total |
| 1973 Total | 143 | (s) | NA | NA | 143 | 33 | 1 | 109 | NA | (s) | 143 |
| 1975 Total | 140 | (s) | NA | NA | 141 | 40 | 1 | 100 | NA | (s) | 141 |
| 1980 Total | 232 | (s) | NA | NA | 232 | 80 | 2 | 150 | NA | (s) | 232 |
| 1985 Total | 252 | 14 | 3 | NA | 270 | 95 | 2 | 168 | 3 | 1 | 270 |
| 1990 Total | 208 | 24 | 4 | NA | 237 | 54 | 8 | 147 | 4 | 23 | 237 |
| 1995 Total | 222 | 30 | 8 | NA | 260 | 49 | 9 | 166 | 8 | 28 | 260 |
| 1996 Total | 229 | 32 | 6 | NA | 266 | 51 | 10 | 170 | 6 | 30 | 266 |
| 1997 Total | 222 | 30 | 7 | NA | 259 | 40 | 10 | 172 | 7 | 30 | 259 |
| 1998 Total | 205 | 30 | 8 | NA | 242 | 36 | 9 | 160 | 8 | 30 | 242 |
| 1999 Total | 208 | 29 | 8 | NA | 245 | 37 | 9 | 161 | 8 | 30 | 245 |
| 2000 Total | 212 | 27 | 9 | NA | 248 | 39 | 9 | 161 | 9 | 29 | 248 |
| 2001 Total | 188 | 33 | 10 | (s) | 231 | 35 | 9 | 147 | 10 | 31 | 231 |
| 2002 Total | 187 | 36 | 12 | (s) | 235 | 36 | 9 | 144 | 12 | 35 | 235 |
| 2003 Total | 188 | 36 | 16 | (s) | 240 | 38 | 9 | 141 | 16 | 37 | 240 |
| 2004 Total | 199 | 35 | 20 | (s) | 255 | 38 | 10 | 151 | 20 | 36 | 255 |
| 2005 Total | 200 | 37 | 23 | 1 | 261 | 40 | 10 | 150 | 23 | 37 | 261 |
| 2006 Total | 197 | 36 | 31 | 2 | 266 | 36 | 9 | 151 | 33 | 38 | 266 |
| 2007 Total | 196 | 37 | 39 | 3 | 276 | 39 | 9 | 146 | 41 | 39 | 276 |
| 2008 Total | 193 | 39 | 55 | 3 | 290 | 44 | 10 | 139 | 57 | 40 | 290 |
| 2009 Total | 181 | 41 | 62 | 3 | 287 | 47 | 10 | 125 | 64 | 41 | 287 |
| 2010 Total | 186 | 42 | 73 | 2 | 303 | 41 | 10 | 136 | 74 | 42 | 303 |
| 2011 Total | 189 | 42 | 73 | 8 | 312 | 42 | 11 | 139 | 80 | 40 | 312 |
| 2012 Total | 189 | 42 | 73 | 8 | 312 | 39 | 10 | 141 | 80 | 42 | 312 |
| 2013 Total | 204 | 45 | 75 | 13 | 337 | 54 | 11 | 141 | 87 | 43 | 337 |
| 2014 Total | 210 | 47 | 76 | 13 | 346 | 55 | 12 | 142 | 88 | 49 | 346 |
| 2015 January | 17 | 4 | 6 | (s) | 28 | 4 | 1 | 12 | 6 | 4 | 28 |
| February | 15 | 3 | 6 | 1 | 26 | 3 | 1 | 11 | 7 | 4 | 26 |
| March | 16 | 4 | 7 | 1 | 28 | 4 | 1 | 12 | 7 | 4 | 28 |
| April | 16 | 4 | 6 | 1 | 27 | 3 | 1 | 12 | 7 | 4 | 27 |
| May | 16 | 4 | 7 | 1 | 28 | 4 | 1 | 12 | 8 | 4 | 28 |
| June | 16 | 4 | 7 | 2 | 28 | 3 | 1 | 12 | 8 | 4 | 28 |
| July | 17 | 4 | 7 | 1 | 29 | 4 | 1 | 12 | 8 | 4 | 29 |
| August | 17 | 4 | 7 | 1 | 29 | 4 | 1 | 12 | 8 | 4 | 29 |
| September | 16 | 4 | 7 | 1 | 28 | 3 | 1 | 11 | 8 | 4 | 28 |
| October | 16 | 4 | 7 | 1 | 28 | 4 | 1 | 12 | 8 | 4 | 28 |
| November | 16 | 4 | 7 | 1 | 28 | 3 | 1 | 12 | 7 | 4 | 28 |
| December | 17 | 4 | 7 | 1 | 29 | 4 | 1 | 12 | 8 | 4 | 29 |
| Total | 194 | 47 | 79 | 14 | 334 | 41 | 14 | 141 | 90 | 48 | 334 |
| 2016 January | 16 | 4 | 6 | 1 | 27 | 3 | 1 | 12 | 7 | 4 | 27 |
| February | 15 | 4 | 6 | 1 | 26 | 3 | 1 | 11 | 7 | 4 | 26 |
| March | 15 | 4 | 7 | 1 | 28 | 3 | 1 | 11 | 8 | 4 | 28 |
| April | 14 | 4 | 6 | 1 | 26 | 3 | 1 | 11 | 7 | 4 | 26 |
| May | 15 | 4 | 7 | 2 | 28 | 3 | 1 | 11 | 8 | 4 | 28 |
| June | 15 | 4 | 7 | 2 | 28 | 3 | 1 | 12 | 8 | 4 | 28 |
| July | 16 | 4 | 7 | 2 | 29 | 3 | 1 | 12 | 9 | 4 | 29 |
| August | 16 | 4 | 7 | 2 | 29 | 3 | 1 | 12 | 9 | 4 | 29 |
| September | 15 | 4 | 7 | 2 | 27 | 3 | 1 | 11 | 8 | 4 | 27 |
| October | 15 | 4 | 7 | 2 | 27 | 3 | 1 | 11 | 8 | 4 | 27 |
| November | 15 | 4 | 7 | 2 | 28 | 3 | 1 | 12 | 8 | 4 | 28 |
| December | 16 | 4 | 7 | 2 | 29 | 3 | 1 | 12 | 9 | 4 | 29 |
| Total | 184 | 47 | 81 | 19 | 332 | 35 | 14 | 138 | 98 | 47 | 332 |
| 2017 January | 16 | 4 | 6 | 1 | 27 | 3 | 1 | 12 | 7 | 4 | 27 |
| February | 15 | 4 | 6 | 1 | 25 | 3 | 1 | 11 | 7 | 4 | 25 |
| March | 16 | 4 | 7 | 1 | 28 | 3 | 1 | 12 | 8 | 4 | 28 |
| April | 15 | 4 | 7 | 2 | 27 | 3 | 1 | 11 | 8 | 4 | 27 |
| 4-Month Total | 61 | 16 | 26 | 5 | 108 | 12 | 5 | 46 | 30 | 15 | 108 |
| 2016 4-Month Total | 61 | 16 | 26 | 5 | 107 | 12 | 5 | 46 | 30 | 16 | 107 |
| 2015 4-Month Total | 64 | 15 | 25 | 3 | 108 | 14 | 4 | 47 | 27 | 16 | 108 |

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

^b Wood and wood-derived fuels.

^c Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

^d Fuel ethanol minus denaturant.

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

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

^g The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 12.1–12.6. See Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#environment> (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.