

Table 1. Anthropogenic CO₂ budget for the anthropocene (1800 to 1994) and for the decades of the 1980s and 1990s.

CO ₂ sources and sinks	1800 to 1994 (Pg C)*	1980 to 1999 (Pg C)¶
<i>Constrained sources and sinks</i>		
(1) Emissions from fossil fuel and cement production	244 [†] ± 20	117 ± 5
(2) Storage in the atmosphere	-165 [‡] ± 4	-65 ± 1
(3) Uptake and storage in the ocean	-118 [§] ± 19	-37 ± 8
<i>Inferred net terrestrial balance</i>		
(4) Net terrestrial balance = [-(1) - (2) - (3)]	39 ± 28	-15 ± 9
<i>Terrestrial balance</i>		
(5) Emissions from land-use change	100 to 180	24 ± 12
(6) Terrestrial biosphere sink = [-(1) - (2) - (3)] - (5)	-61 to -141	-39 ± 18

*Errors as estimated by respective sources; errors of sums and differences are calculated by quadratic error propagation. [†]From (19), with an error estimate of ±8%. [‡]Calculated from the change in atmospheric PCO₂ (1800: 281 ± 2 ppm; 1994: 359 ± 0.4 ppm). [§]This study includes anthropogenic CO₂ storage in marginal seas and the Arctic Ocean. ^{||}Based on (2); see text for details. [¶]From (23), integrated for the period 1980 to 1999.