

Table 1. Relationship of Atmospheric Concentrations of Carbon Dioxide to Temperature

Stabilization CO ₂ -equivalent concentration (ppmv): range and best estimate		Equilibrium global average warming (°C)
320 ← 340 → 380	1	
370 ← 430 → 540	2	
440 ← 540 → 760	3	
530 ← 670 → 1060	4	
620 ← 840 → 1490	5	

Note: **Green** and **red** numbers represent low and high ends of ranges, respectively; **black bolded** numbers represent best estimates.

The report calculates the “likely” range (66% chance) of atmospheric concentrations associated with various degrees of warming, consistent with model results¹ and roughly consistent with paleoclimate evidence. There are large uncertainties in ‘**climate sensitivity**’—the amount of warming expected from different atmospheric concentrations of greenhouse gas—the range is 30% below and 40% above the best estimates.

¹The estimated “likely” range presented in this report corresponds to the range of model results in the Climate Modelling Intercomparison Project (CMIP3) global climate model archive.