

APPENDIX

Emissions scenarios developed by IPCC

The IPCC used two methods to develop scenarios of future emissions:

- * One method used global models to develop four scenarios which were subsequently used by Working Group I to develop scenarios of future warming. All of these four scenarios assumed the same global economic growth rates taken from the World Bank projections and the same population growth estimates taken from the United Nations studies. The anthropogenic emissions of carbon dioxide and methane from these scenarios are shown in Figures 1 and 2 below.
- * The second method used studies of the energy and agriculture sectors submitted by over 21 countries and international organizations to estimate CO₂ emissions.

Both scenario approaches indicate that CO₂ emissions will grow from about 7 BtC (billion or 1000 million tonnes carbon) per year now to 12-15 BtC per year by the year 2025. Scenario A (Business as Usual) includes a partial phase-out of CFCs under the Montreal Protocol and lower CO₂ and CH₄ emissions than the Reference Scenario. The Reference Scenario developed through country and international studies of the energy and agriculture groups, includes higher CO₂ emissions and assumed a total CFC phase-out. The results indicate that the CO₂ equivalent concentrations and their effects on global climate are similar.

Figure 1. Projected Man-Made CO₂ Emissions
(Billion or 1000 million tonnes carbon per year)

