

TOWARDS A CLIMATE CHANGE SCENARIO THAT IS ECOLOGICALLY SUSTAINABLE, FAIR, AND WELFARE-INCREASING

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To resolve the climate change dilemma, many believe that a global emissions protocol must be negotiated with the aim of stabilising greenhouse gases at no more than 450 parts-per-million (ppm) of CO₂-equivalent. But more is required than this to deal with climate change and to promote the broader goal of sustainable development. It will also be necessary to:

- ♣ initially stabilise the human population at no more than 8 billion, and eventually reduce population numbers further;
- ♣ reduce the rate of resource use so it is again within the Earth's sustainable carrying capacity (resource use currently exceeds biocapacity by around 40%);
- ♣ improve the distribution of income and wealth between and within nations;
- ♣ make the transition from a growth-based economy to a qualitatively-improving steady-state economy.

High-income countries will need to make this transition immediately, which will mean having to radically cut greenhouse gas emissions as well as reduce per capita resource consumption. Low-income countries will need a further phase of growth, albeit growth that is as green, equitable, and efficient as possible. This will mean that low-income countries will need to enjoy some increase in greenhouse gas emissions in the short-term, but will need to rapidly stabilise their population growth. Eventually low-income countries will also need to make the transition to a qualitatively-improving steady-state economy. Towards the end of the century, and barring wars and political factors, it should be possible to have everyone enjoying a per capita GDP of around \$15,000 (at 2004 prices) – an outcome that would be ecologically sustainable, fair, and welfare-improving.