## **Economics from the Ground Up**

## A case study - a global response to a global problem

Increased carbon emissions (much of it from human industry, transportation and agriculture) mean the composition of the Earth's atmosphere is altering. As these greenhouse gases become more concentrated in the atmosphere, the atmosphere is gradually warming. The entire planet will be affected by the climatic changes and impacts that are predicted including increased incidence of droughts and floods, rising sea levels and more frequent and more severe extreme weather events.

The willingness of countries around the globe to actually co-operate in an attempt to negotiate agreements that will address this inherently global problem is a positive example of globalisation in action. These first began with the Rio Earth Summit in 1992, where the *UN Framework Convention on Climate Change* was adopted. The goal of the convention was to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human-induced climate change.

In 1997, the Kyoto Protocol, a supplement to the initial convention, was signed. It set binding obligations on industrialised countries to reduce their emissions. Most UN members have signed and ratified the Kyoto Protocol, the major exception being the United States. Canada has since withdrawn, and Australia was very late to ratify Kyoto (2007).

However, in spite of these agreements, carbon emissions continue to rise. Many countries did not meet the targets that they agreed to under Kyoto. Between the beginning of the period of rapid globalisation starting around 1990, global average carbon dioxide concentrations in the atmosphere have increased from around 350 parts per million to more than 391 parts per million. Although some countries have taken unilateral action to reduce their carbon emissions, it has become increasingly clear that it will only be through concerted global, multilateral action that includes all countries, that any real change can be achieved. The Kyoto protocol



only required industrialised nations to reduce their emissions, and many agree it was unlikely to be effective in tackling a major source of increased emissions into the future – the improvement of material living standards for those in developing countries that are currently attempting to industrialise their economies to meet the basic needs of their populations.

Furthermore, as climate change worsens, global challenges will also increase. There is much evidence to show that it will be countries in the developing world that will be hardest hit by climate change in many cases. Low-lying Pacific Ocean island nations are already experiencing the rise of tides and the impact on their freshwater aquifers, while other drought-prone parts of the globe are likely to suffer from more frequent lack of rain. There are also fears that global warming will bring a new round of global refugees from countries where the effects of climate change are felt most acutely. It is likely only through the use of global solutions that these global problems will be able to be tackled.