



## GLOBAL WARMING

**Global warming is the increase in the average temperature of the earth's surface as a result of greenhouse gases (like carbon dioxide and methane) being released into the atmosphere.**

**The two major contributing factors to greenhouse gas emissions are agricultural activity (livestock manure, decaying plant and animal matter, burning organic matter, fertilisers) and fuel combustion (power plants, cars and emissions from other industries).**

**These activities, especially because of the volume in which they occur in developed countries, are a significant part of global warming and its associated impact on the environment.**

### The effects of global warming

Global warming may not appear to have an immediate effect on the lives of people in Australia, but scientists have recorded distinct climate changes which are affecting the whole world.

In fact, poor countries that have contributed the least to global warming are the countries most seriously affected.

Global warming is linked to:

- the expansion of the world's deserts, particularly the Sahara and Gobi deserts. People in these areas are struggling to make a living from unsuitable land or migrating to cities where they often end up in urban slums.
- rising sea levels due to higher temperatures melting polar ice caps. This threatens people living near sea level. The tiny Pacific island nation of Tuvalu is already experiencing severe floods and is at risk of being flooded completely.
- increased flooding. Around two billion people could be vulnerable to floods by 2050, most of them from poor communities. This is double the current figure.
- changing weather patterns and the increased frequency of cyclones.
- increasing health risks. For example, malaria is spreading because more areas are now warm enough to support the parasite-carrying mosquito populations. Dengue fever, respiratory illness and encephalitis are also among the growing health hazards.



Your car emissions may well be causing environmental degradation and drought in places like Ethiopia.

While developed nations have the resources to deal with many of the detrimental results, climate change is already a serious problem for some of the world's poorest communities.

Many people living in poverty have no choice but to live in areas prone to hazards and usually have so little income or resources that they have no margin for survival if disaster, hunger or ill health strikes.

### Is it possible to reverse the effect?

We can do a lot as individuals to reduce our own contribution to greenhouse gases. It's also vital to act as a nation to reduce emissions from industry and cars. The Kyoto Protocol is one tool to achieve this. It is an international treaty requiring its signatories in industrialised countries to reduce their greenhouse gas emissions.

Australia's greenhouse gas emission levels are contributing towards global warming, but so far the Australian Government has not signed the treaty. Without action from developed countries including Australia, the effects of global warming are likely to be devastating for both rich and poor nations.

### For you to do



Source: <http://www.nicholsoncartoons.com.au/>

1. In your own words, write a brief explanation of the cartoon. What is the cartoonist's point of view?
2. List the ways that global warming is impacting developing countries?
3. What steps can your school community take to reduce greenhouse gas emissions? Discuss ways to bring about change in your school.