



## Climate Change - What Does it Mean? Fact Sheet

As the planet warms our climate changes and extreme weather events like heatwaves, floods, storms and droughts are more intense, happen in more places and occur more often. Climate change affects everyone in the world.

### What causes climate change?

Greenhouse gases absorb the heat from the sun. Human activity produces more greenhouse gases which accumulate in the Earth's atmosphere, making the Earth warmer and causing our weather patterns to change. We call this global warming and it causes climate change.

### Have greenhouse gases always been here?

Yes. They have always been a natural part of the atmosphere and can be helpful to the Earth. Greenhouse gases hold the sun's heat which keeps the Earth warm enough for us to live on.

The problem is that now we have too many greenhouse gases because of human activities in the past and at present. These gases are trapped in the atmosphere and are causing the world to warm. When we talk about this problem, we call it the enhanced greenhouse effect.

What greenhouse gases are due to human activity?

The most common types of greenhouse gases made by humans are:

- carbon dioxide
- methane (from cows)
- nitrous oxide (which is also called laughing gas!)
- CFCs (chlorofluorocarbons are used mostly in spray cans, refrigerators and air conditioners).

Carbon dioxide is the most common. It causes problems for the environment as it can stay in the atmosphere for between 50 and 200 years.

### How are greenhouse gases produced?

Greenhouse gases can be created as a result of human activities such as:

- burning fossil fuels (coal, oil or gas)
- using energy made by burning fossil fuels (this includes a lot of our electricity)
- some types of farming activities (raising cattle and sheep, using fertilisers and growing certain crops)
- cutting down trees and clearing land
- decomposition (breakdown) of food, plant wastes and sewerage
- making goods and products that we buy.

### What are the effects of climate change?

Scientists believe that if we do not reduce the amount of greenhouse gases we produce, the Earth's temperature will





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keep rising. This will cause more heatwaves, longer droughts, more storms, stronger cyclones, higher sea levels and less usable water all over the world.

Australia may be seriously affected by climate change if the amount of greenhouse gases keeps rising.

Everybody can take action to help combat climate change. Why not get started by checking out '[Ten Tips to Combat Climate Change](#)'.

