



Climate change

What is it? What does it mean?

Scientists all over the world agree – the earth is getting warmer, mainly due to human activity. Everything we do, from driving our car, the electricity we use, the holiday flights we take, right down to the fossil fuels used to make nearly everything we own, are contributing to the greenhouse gases being released into the atmosphere.

This release of greenhouse gases into the atmosphere is trapping more of the sun's heat as the blanket of gases around the Earth becomes thicker and thicker. As a result, the Earth's temperature is starting to rise, ocean temperatures are rising, global sea levels are rising and extreme weather events are occurring.

Another serious effect of greenhouse gas carbon pollution is **ocean acidification**. Approximately a quarter of human-produced carbon dioxide is being absorbed by our oceans. As the carbon dioxide dissolves in the sea, this makes the ocean more acidic.

However, scientists also agree – if we reduce pollution to an acceptable level, the worst effects of climate change can largely be avoided.

What could this mean for Ningaloo Reef?

Coral reef eco systems like Ningaloo are very sensitive to rises in sea temperature. When the sea temperature rises between 1 and 2 degrees above its normal temperature, for a six to eight week period, corals can become 'bleached'. Corals can recover from a bleaching event; however prolonged or repeated bleaching can lead to starvation and death.

The sea temperature along the Western Australian coastline, over the past 50 years has risen by 0.6 – 1 degree (Pearce and Feng 2007). Ningaloo Reef experienced its first ever coral bleaching in 2006. The most recent coral bleaching event at Ningaloo Reef was during the months of January and February, 2011, due to prolonged high sea temperatures. Approximately 20% of the reef was affected. (DEC 2011)

With ocean acidity rising and global sea temperatures rising, this may result in reefs largely becoming dominated by algae, losing their biodiversity and potentially their attractiveness to tourists. This would have a devastating effect on the tourism industries operating on the world heritage listed Ningaloo Reef.

Sources; <http://climatecommission.gov.au/wp-content/uploads/4259-CC-WA-Key-Messages-4.2-Web.pdf>

What can you do?

It's the little things that count! Although some of these changes may seem insignificant on its own, the cumulative effect of these small changes done by millions of people around the world will make a big difference.

At home;

- Energy saving actions – turning off lights, aircon and appliances when not needed
- Turn equipment off at the mains when not in use
- Encourage the use of natural light and opening windows for ventilation
- Using energy efficient equipment – e.g. light bulbs
- Waste management – reduce, reuse and recycle where ever possible
- Reduce paper use
- Ditch the car! Walk, bike, or use public transport whenever you can
- Using or installing renewable energy e.g. solar power

How to reduce your holiday emissions;

When you fly, make it count. Did you know flying is one of the fastest growing causes of CO₂?

So;

- Take fewer, but longer holidays
- Take holidays and travel closer to home
- Travel by train and public transport wherever possible
- Book direct flights and avoid stop overs
- Use public transport or walk in your destination

Support Eco-certified Products. Why? Eco certified tours have met certain requirements designed to protect you and also the environment. Have satisfaction in the knowledge you supported Eco-tourism.

For more information on climate change and how we can make a difference, check out the following links...

<http://www.climatechange.gov.au/climate-change.aspx>

<http://climatecommission.gov.au/wp-content/uploads/4259-CC-WA-Key-Messages-4.2-Web.pdf>

<http://www.cleanerclimate.com/useful-information/what-is-climate-change>

<http://www.responsibletravel.com/Copy/tips-for-responsible-travel>

http://www.ecotourism.org.au/eco_certification.asp