

Climate change made simple

Three terms to be familiar with in order to understand what all the fuss is about.

'Climate' refers to the long term pattern of weather that characterises a region.

'Climate variation' is a naturally occurring phenomenon whereby a region's climate will gradually change over time.

'Climate change' refers to the changes in climate that result from an alteration of the earth's atmospheric composition through human activity such as burning fossil fuels and land clearing.

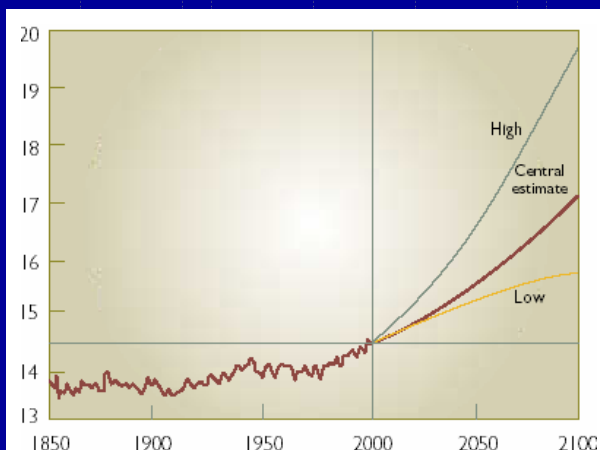


Figure 1: Average global temperatures from 1850 projected through to 2100. (IPCC 2001)

Preparing for climate change

Climate change impacts will be gradual and widespread. It is essential that individuals and governments at all levels prepare for the impacts of climate change through the development and implementation of proactive strategies that assist with the mitigation of and adaptation to climate change.

The impacts of climate change on coastal communities

The changes coastal residents can expect & the measures we can implement to curb the impacts of climate change.

Impact	2050	2100
Temperature rise (°C)	0.7 – 1.9	1.2 – 4.5
Sea level rise (cm)	5 - 32	9 - 88
Coastal retreat (m)	Up to 22	Up to 88

Table 1: Possible impacts residents in coastal communities can expect from climate change

What can you do in your own home to minimise some of these impacts

ELECTRONIC APPLIANCES (26%)

- avoid leaving appliances in stand-by mode
- subscribe to greenpower electricity services
- choose energy efficient appliances sized appropriately to your needs

LIGHTS (5%)

- use energy efficient light bulbs & turn lights off when not required

HEATING/COOLING (11%)

- insulate ceilings, walls and doors. Seal draughts.
- dress appropriately for the weather
- avoid greenhouse gas intensive methods of heating/cooling. See www.yourhome.gov.au

WATER HEATING (16%)

- use energy efficient heating systems (gas or solar power)
- take shorter showers

Total Emissions

WASTES (landfill) 5%

- avoid products with excessive packaging
- compost
- buy in bulk
- reuse & recycle

COOKING (3%)

- cook via gas or microwave rather than an electric stovetop
- cook in bulk
- thaw food in fridge not microwave
- use flat bottomed pans

TRANSPORT (34%)

- utilise public transport or car pool
- purchase green vehicles, see: www.greenvehicleguide.gov.au

Figure 1: Simple strategies to reduce the volume of greenhouse gases your home produces.

It's all about you

Did you know?

The average surface global temperature over the last century has increased by approximately 0.7°C. In Australia on average this figure is slightly higher at almost 0.8 °C

What does this mean for you?

Climate change is predicted to continue and models of the Sydney region project an additional average temperature increase of as much as 0.2°C per decade. This will be combined with a likely decrease in overall rainfall.

The impacts of these changes are expected to include a sea level rise of between 9-88cm by 2100, which will mean increased coastal flooding and inundation. Other expected impacts include increased frequency of bushfires and coastal storms.

What can you do?

There are many ways in which we can limit the long term effects of climate change, these include:

- Using energy efficient appliances.
- Employing energy smart building design.
- Using green energy.
- Reducing our dependencies on fossil fuelled vehicles by car pooling, cycling or using public transport.

Australian households generate almost one-fifth of Australia's greenhouse gases. Outlined in Figure 1: are simple strategies to reduce the volume of greenhouse gases your home produces

Further Information

Australian Greenhouse Office

www.greenhouse.gov.au

Bureau of Meteorology

www.bom.gov.au

CSIRO Marine and Atmospheric Research

www.cmar.csiro.au

Intergovernmental Panel for Climate Change

www.ipcc.ch

NSW Greenhouse office

<http://www.greenhouse.nsw.gov.au/>

Sydney Coastal Councils Group

www.sydneycoastalcouncils.com.au

This fact sheet has been developed as part of the Sydney Coastal Councils Group / Macquarie University Partnership Program for SCCG Member Councils



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Climate Change and Sydney's Coast
Fact Sheet: Coastal Communities

