

Climate change

Climate change is a change in global climate patterns over many decades that has been caused by increasing levels of greenhouse gas emissions, primarily from the burning of fossil fuels like coal.

Climate change is a serious and complex issue, which presents challenges and opportunities for Tasmania.

What are greenhouse gases (emissions)?

Greenhouse gases trap heat in the atmosphere and make the Earth warmer.

Those with the most significant impact on global warming are water vapour, carbon dioxide, methane and nitrous oxide. Other common greenhouse gases include ozone and chlorofluorocarbons.

Greenhouse gases are measured in tonnes (T) and mega-tonnes (a million metric tonnes) of carbon dioxide equivalent (Mt CO₂-e) that groups all greenhouse gases together into a single measurement, based on how much global warming they may cause.

What are carbon sinks?

A carbon or emissions sink is a carbon storage reservoir, like a forest, which absorbs more carbon than it releases.

What's the difference between climate and weather?

Weather is measured over a short period of time, like your weekly forecast or monthly outlook, and climate tells us about atmospheric conditions over relatively long periods of time.

Where does our information come from?

There is a range of scientific information available about the projected impacts of climate change at the local, national and international levels.

The three main sources of information for Tasmania are:

- The Climate Futures for Tasmania Project
- The CSIRO / Bureau of Meteorology
- The Intergovernmental Panel on Climate Change (IPCC)

What are the projected climate change impacts for Tasmania?



Significant change in rainfall patterns



Increase in storms, creating coastal erosion



Rise in annual average temperatures



Longer fire seasons, more days of high fire danger



More hot days and heatwaves



Increased ocean acidification and water temperature



Fewer frosts



Rise in sea levels

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