



Over many decades thousands of scientists have painted an unambiguous picture: the global climate is changing and humanity is almost surely the dominant cause. The risks have never been clearer and the case for action has never been more urgent.

Our Earth's surface is warming rapidly and we can already see social, economic and environmental impacts in Australia.

Failing to take sufficient action today entails potentially huge risks to our economy, society and way of life into the future. This is the critical decade for action.

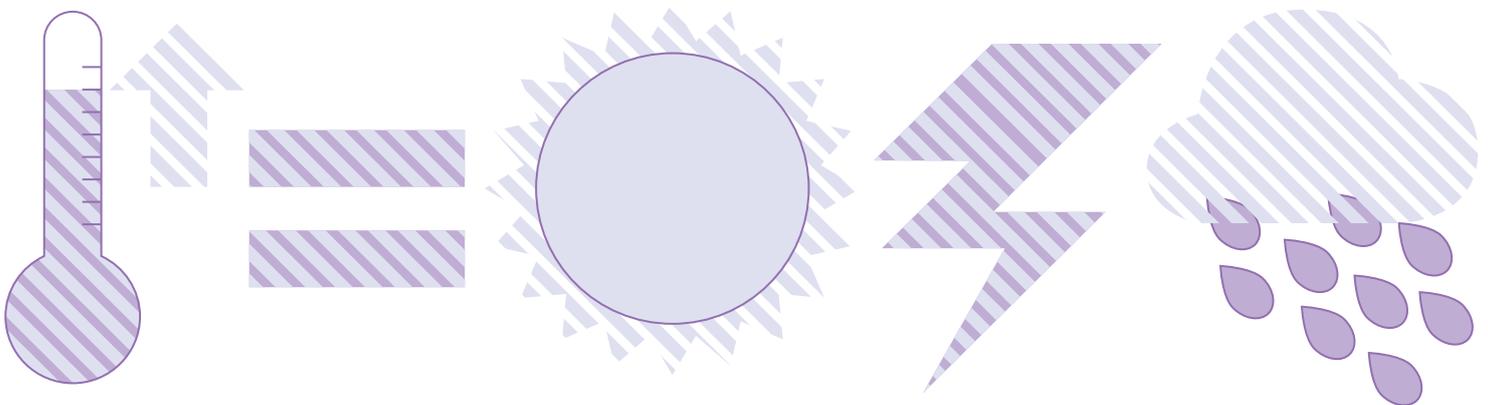
The following points highlight the key messages arising from the accompanying report *The Critical Decade*:

1. There is no doubt that the climate is changing. The evidence is overwhelming and clear.

- The atmosphere is warming, the ocean is warming, ice is being lost from glaciers and ice caps and sea levels are rising. The biological world is changing in response to a warming world.
- Global surface temperature is rising fast; the last decade was the hottest on record.

2. We are already seeing the social, economic and environmental impacts of a changing climate.

- With less than 1 degree of warming globally the impacts are already being felt in Australia.
- In the last 50 years the number of record hot days in Australia has more than doubled. This has increased the risk of heatwaves and associated deaths, as well as extreme bush fire weather in South Eastern and South Western Australia.
- Sea level has risen by 20 cm globally since the late 1800s, impacting many coastal communities. Another 20 cm increase by 2050, which is feasible at current projections, would more than double the risk of coastal flooding.
- The Great Barrier Reef has suffered from nine bleaching events in the past 31 years. This iconic natural ecosystem, and the economy that depends upon it, face serious risks from climate change.



3. It is beyond reasonable doubt that human activities – the burning of fossil fuels and deforestation – are triggering the changes we are witnessing in the global climate.

- A very large body of observations, experiments, analyses, and physical theory points to increasing greenhouse gases in the atmosphere – with carbon dioxide being the most important – as the primary cause of the observed warming.
- Increasing carbon dioxide emissions are primarily produced by the burning of fossil fuels, such as coal and oil, as well as deforestation.
- Natural factors, like changes in the Earth's orbit or solar activity, cannot explain the world-wide warming trend.

4. This is the critical decade. Decisions we make from now to 2020 will determine the severity of climate change our children and grandchildren experience.

- Without strong and rapid action there is a significant risk that climate change will undermine our society's prosperity, health, stability and way of life.
- To minimise this risk, we must decarbonise our economy and move to clean energy sources by 2050. That means carbon emissions must peak within the next few years and then strongly decline.
- The longer we wait to start reducing carbon emissions, the more difficult and costly those reductions become.
- This decade is critical. Unless effective action is taken, the global climate may be so irreversibly altered we will struggle to maintain our present way of life. The choices we make this decade will shape the long-term climate future for our children and grandchildren.

