

Report says not too late to avoid a 3 C warmer world

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Australian scientists are urging the Government to accelerate Australia's transition to net zero greenhouse gas emissions over the next two decades to ensure the country is cushioned from the worst impacts of

climate change.

In a [landmark report](#) released today, scientists say Australia is well positioned to meet the climate change challenge by combining our scientific knowledge with economic opportunities associated with moves to net [zero greenhouse gas emissions](#).

"We're on track for 3°C [global warming](#) and the impacts on Australia's environment and people would be devastating," said Dr. Andrew King from the University of Melbourne, one of the contributing authors to the Australian Academy of Science led report, *The Risks To Australia of a 3°C Warmer World*.

The 98 page report looks into the risks to Australia's future, based on the current global trajectory of greenhouse gas emissions, and finds that the world reaching [net zero emissions](#) by 2050 is an absolute minimum, if Australia is to avoid potentially insurmountable challenges to its cities, ecosystems, industries and food and health systems.

Dr. King and colleagues from across Australia say while the planet is well on the path to harmful climate change, as with COVID-19, science has solutions.

"It's not too late," Dr. King said. "If we make rapid and drastic cuts to greenhouse gas emissions we can avoid the worst impacts of climate change."

Scientists say Australia will need to rapidly remove greenhouse gas emissions from a range of sectors including electricity generation and distribution; electrify the transport sector, industry and buildings; increase energy efficiency across the board; and reduce non-energy related GHG emissions from all sectors including industrial processes and agriculture.

"Australia must revisit its [emission](#) reduction commitments and work with other countries to provide the leadership and collaboration required to place Australia and the world on a safer climate trajectory," said Academy Fellow Professor Ove Hoegh-Guldberg, the chair of the expert panel that developed the report.

The Risks To Australia of a 3°C Warmer World focuses on the consequences of 3°C of global warming for four areas of importance to Australia's future: ecosystems; food production; cities and towns; and health and wellbeing. It also focuses on Australia's contribution to what must be done to stay well below 2°C and thus limit these impacts.

To achieve net zero, it says Australia will need to rapidly remove greenhouse gas emissions from a range of sectors including [electricity generation](#) and distribution; electrify the [transport sector](#), industry and buildings; increase energy efficiency across the board; and reduce non-energy related GHG emissions from all sectors including industrial processes and agriculture.

It also urges the Government to:

- scale up the development and implementation of next-generation zero greenhouse gas technologies.
- systematically explore how our food production and supply systems should prepare for the challenges of climate change under growing extremes including the implications for carbon sequestration.
- improve our understanding of climate impacts, including tipping points, as well as the compounding effects of multiple stressors at global warming of 2°C or more so that we can develop effective adaptation responses.

Dr. King said scientists hope the report will spur decision-makers into

action.

"If we don't tackle our [greenhouse gas emissions](#) now, Australia's future generations will pay the price."

More information: The risks to Australia of a 3°C warmer world.
[www.science.org.au/news-and-ev ... stralia-warmer-world](http://www.science.org.au/news-and-events/2021-04-late-warmer-world)

Provided by University of Melbourne

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