

Adaptation important but don't give up on mitigation—what the new IPCC report means for Aotearoa

21 March 2023

Alistair Woodward, John Kerr, Simon Hales

Summary

The latest report from the IPCC finds extreme weather events are more common and more severe than in the past, and that human activities are undoubtedly fuelling climate change. Without stronger action to reduce greenhouse gas emissions, global heating will roughly triple by the end of the century.

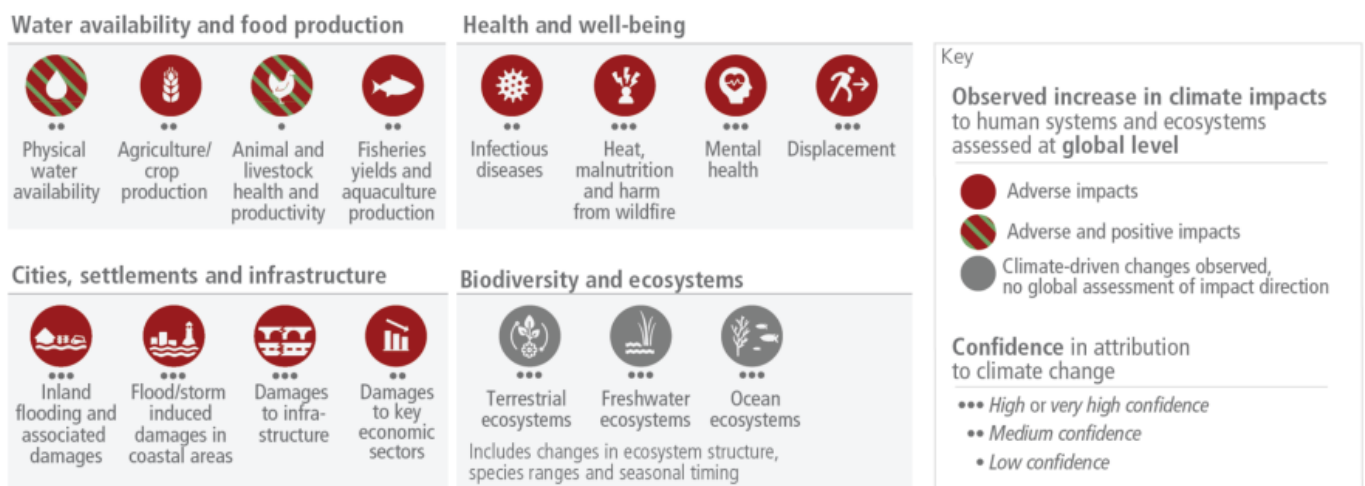
Climate change already damages human health and wellbeing, including in New Zealand.

This article places the new report in the New Zealand context, highlighting public health impacts as well as policy pathways for both adapting to, and mitigating the current and future impacts of climate change.

The latest synthesis report from the IPCC, [published today](#), summarises the state of knowledge of climate change, its widespread impacts and risks, and the need for climate change mitigation and adaptation. It is aimed squarely at policymakers and draws on the latest research detailed in Sixth Assessment reports.

Global greenhouse emissions have risen faster since 2000 than ever before, though the rate of increase has slowed in the last decade. There have been improvements in energy and carbon efficiency but these have been outweighed by increased consumption of goods and other polluting activities.

We are more certain than ever before of increases in extreme events such as heatwaves, extraordinary rainfall and tropical cyclones, and, notably, there is also increased confidence in attribution: it is most unlikely these extremes would have occurred without human-induced climate change.



Observed widespread and substantial impacts and related losses and damages attributed to climate change. Source: IPCC AR6 Summary for Policymakers.

Implications for Aotearoa New Zealand

Aotearoa New Zealand (NZ) will not escape this warming future unscathed. Water-borne and water-related health risks are a [particular challenge in New Zealand](#), and will be amplified considerably by projected climate change. Examples include diarrheal diseases due to contamination of drinking water supplies.¹

In language that will ring true to New Zealanders following the recent unprecedented flooding events in January and February this year, the IPCC notes that:

Individual livelihoods have been affected through ... destruction of homes and infrastructure, and loss of property and income, human health and food security, with adverse effects on gender and social equity.

Notably, mental health challenges are highlighted in the Assessment Report more strongly than before, and these are highly relevant in NZ. Both extreme events and the steady grind of slow onset climate change diminish mental well-being. The NZ College of Clinical Psychologists has [previously warned](#) that myriad physical and social impacts of climate change can cause psychological stress and trauma, “which can lead to debilitating mental health problems and reduce the ability of the wider health system to provide mental health services.”

We need adaption *and* mitigation

Adaptation is critical, and we should be planning for worst plausible outcomes in the longer term, not just the most likely events in the immediate future. This adaptation will be challenged by the severity of climate extremes, and the increased frequency of cascading disasters.

But we must not give up on mitigation. There are a number of different reasons for this:

- Firstly there is the moral argument. A rich, high-emitting country like NZ should be leading not following.
- Secondly mitigation is in our national self-interest. Continuing ‘business as usual’ could lead to global heating by 2100 that may be three times or more what we have seen so far. In this scenario, recent storms and floods would be commonplace later this century.
- Lastly there is economic argument. If NZ fails to meet international agreements our trading partners will apply heavy penalties. And we do not want let opportunity pass as first movers in innovation and sustainability are more likely than laggards to prosper. For example the IPCC report concluded:

The economic benefits for human health from air quality improvement arising from mitigation action can be of the same

order of magnitude as mitigation costs, and potentially even larger.

Mitigation is possible – fast, deep reductions in emissions would slow global heating within about 20 years, and there are models of success overseas. The new IPCC report notes at least 18 countries have sustained absolute production-based GHG and consumption-based CO2 reductions for longer than 10 years.

Policy action is needed

We need policy changes now that serve both adaptation and mitigation. Examples include better, sustainable, transport options; housing that is low energy and disaster resistant; and, agricultural reforms to promote shifts to sustainable healthy diets, reduce pollution and dependence on fossil fuels and at the same time better protect our food supply in the face of extreme weather.

We also need adaptation policies that increase social resilience and institutional capacity. Investments in physical infrastructure (such as roads and pipes) are only part of what is needed. We need to pay attention also to community building, poverty reduction, ending inequities and improving climate literacy. We need to build institutions, such as those responsible for disaster response and health care, that are better prepared for the complex and fast-moving challenges of climate change.

This will require trade-offs and new directions, such as built-in redundancy rather than slimmed ‘efficiency’, protection of diverse skills and capacities, devolution of critical functions such as emergency response, shortened supply chains, greater responsiveness to and valuing of traditional and local knowledge, and an emphasis on the ability of institutions to learn rapidly.

Inaction is not an option. As IPCC Chair Hoesung Lee said at [the launch of the report](#):

This Synthesis Report underscores the urgency of taking more ambitious action and shows that, if we act now, we can still secure a liveable sustainable future for all.

What is new in this article?

- The latest IPCC Synthesis Report details the current and future impact of climate change, and the urgent need for climate action: both mitigation and adaptation
- We highlight public health impacts of relevance to NZ, such as water-related impacts and mental health.

Implications for public health and policy

- NZ must focus policy on both adaptation to, and mitigation of climate change, and these policies need to be designed and implemented together.
- These actions should not just cover physical infrastructure like housing but also social justice and institutional resilience.
- We need built-in redundancy rather than slimmed 'efficiency'.

Author details

[Prof Alistair Woodward](#), Professor - Medical Epidemiology and Biostatistics, University of Auckland

[Dr John Kerr](#), Department of Public Health, University of Otago, Wellington, and Science Lead, Public Health Communication Centre (PHCC)

[Prof Simon Hales](#), Department of Public Health, University of Otago, Wellington, and Co-director of the PHCC

References

1. Lai H, Hales S, Woodward A, et al. Effects of heavy rainfall on waterborne disease hospitalizations among young children in wet and dry areas of New Zealand. *Environ Int* 2020;145:106136. doi: 10.1016/j.envint.2020.106136 [published Online First: 20200925]

Public Health Expert Briefing (ISSN 2816-1203)

Source URL:

<https://www.phcc.org.nz/briefing/adaptation-important-dont-give-mitigation-what-new-ipcc-report-means-aotearoa>