

AN ASSESSMENT OF THE NEED TO ADAPT BUILDINGS IN NEW ZEALAND TO CLIMATE CHANGE

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The scientific evidence is very strong: climate change presents very serious global risks, and it demands an urgent global response. This paper is part of the dissemination phase of a research project that assessed the need to adapt houses in New Zealand to climate change based on medium-low and medium-high climate change scenarios from research by the National Institute of Water and Atmospheric Research (NIWA).

The building sector's vulnerability to climate change is assessed through:

- Topology and condition review of the national building stocks;
- House overheating conditions and energy consumption simulations; and
- Scenario-based social impacts study.

Adaptation options and recommendations are presented for a broad range of building related climate change impacts. Economic modelling and cost benefit analyses are used to investigate the economic viability of a range of adaptation options.

Although the effects of climate change are expected to be less severe in New Zealand than in many other parts of the world, the key message from this report is that the strong-, early-, and coordinated action on climate change can limit potentially large social, cultural and economic costs in New Zealand.

References: