

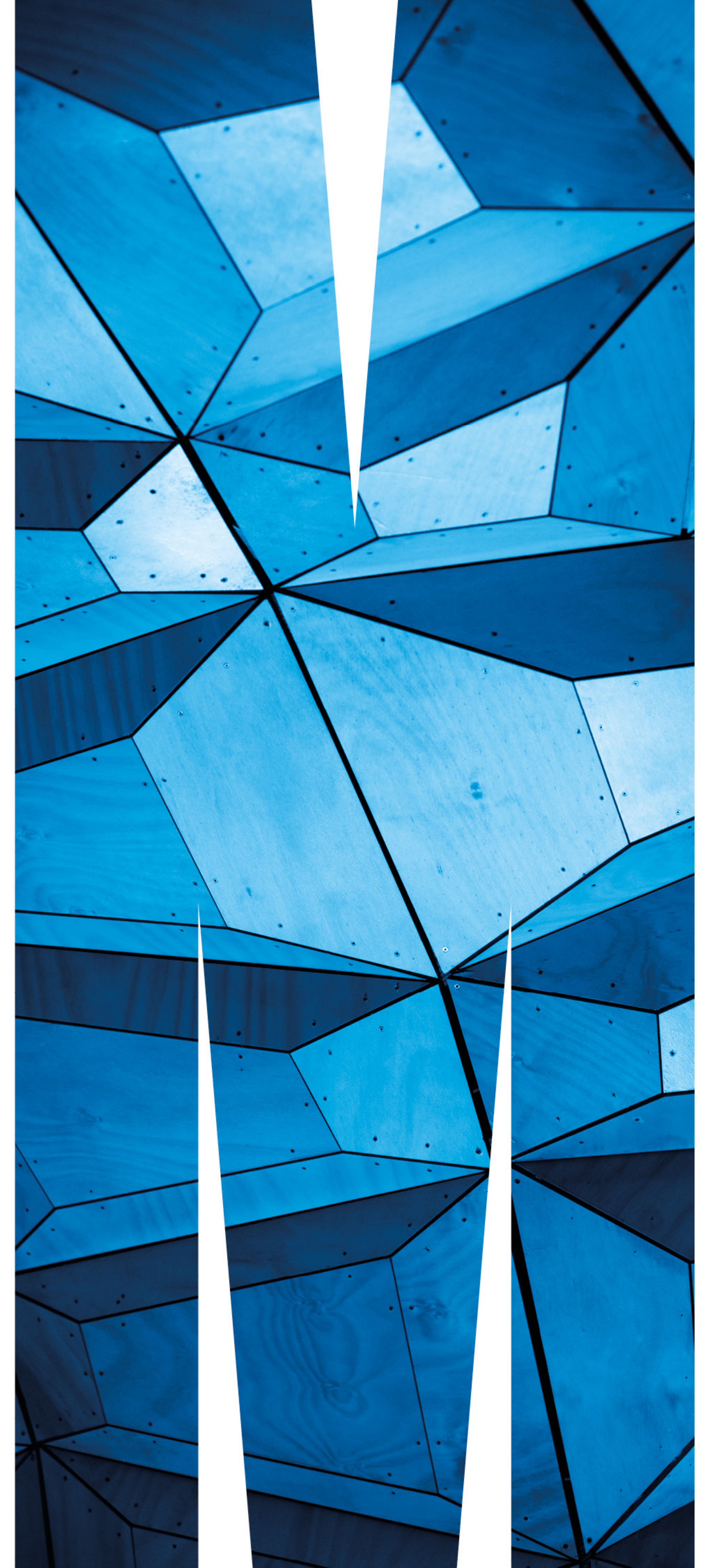
Climate change as an emerging disaster risk in Australia and Oceania

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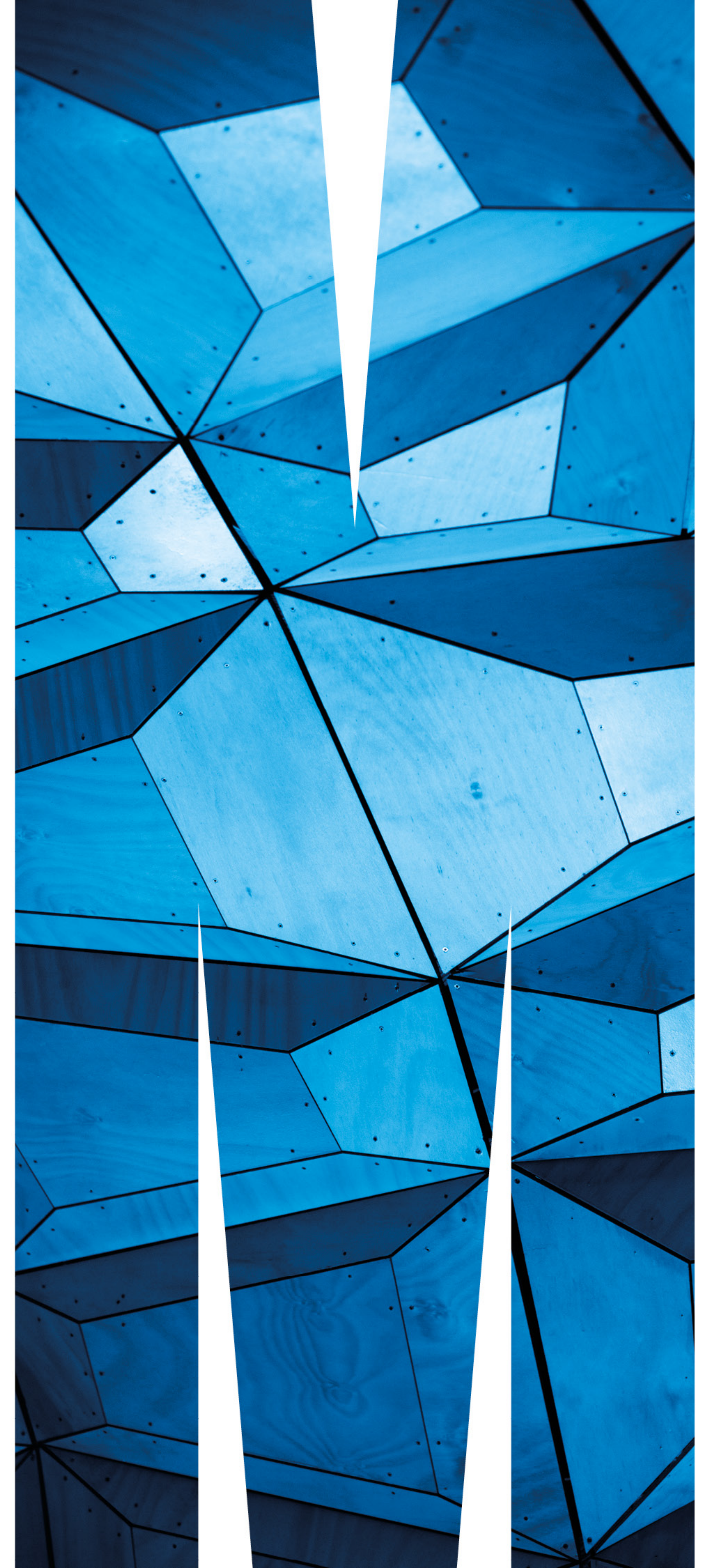
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Introduction:

This study profiles climate change as an emerging disaster risk in Oceania. The rationale for undertaking this study was to investigate climate change and disaster risk in Oceania. The role of this analysis is to examine what evidence exists to support decision making and profile the nature, type and potential human and economic impact of climate change and disaster risk in Oceania.

Aim:

To evaluate perceptions of climate change and disaster risk in the Oceania region.



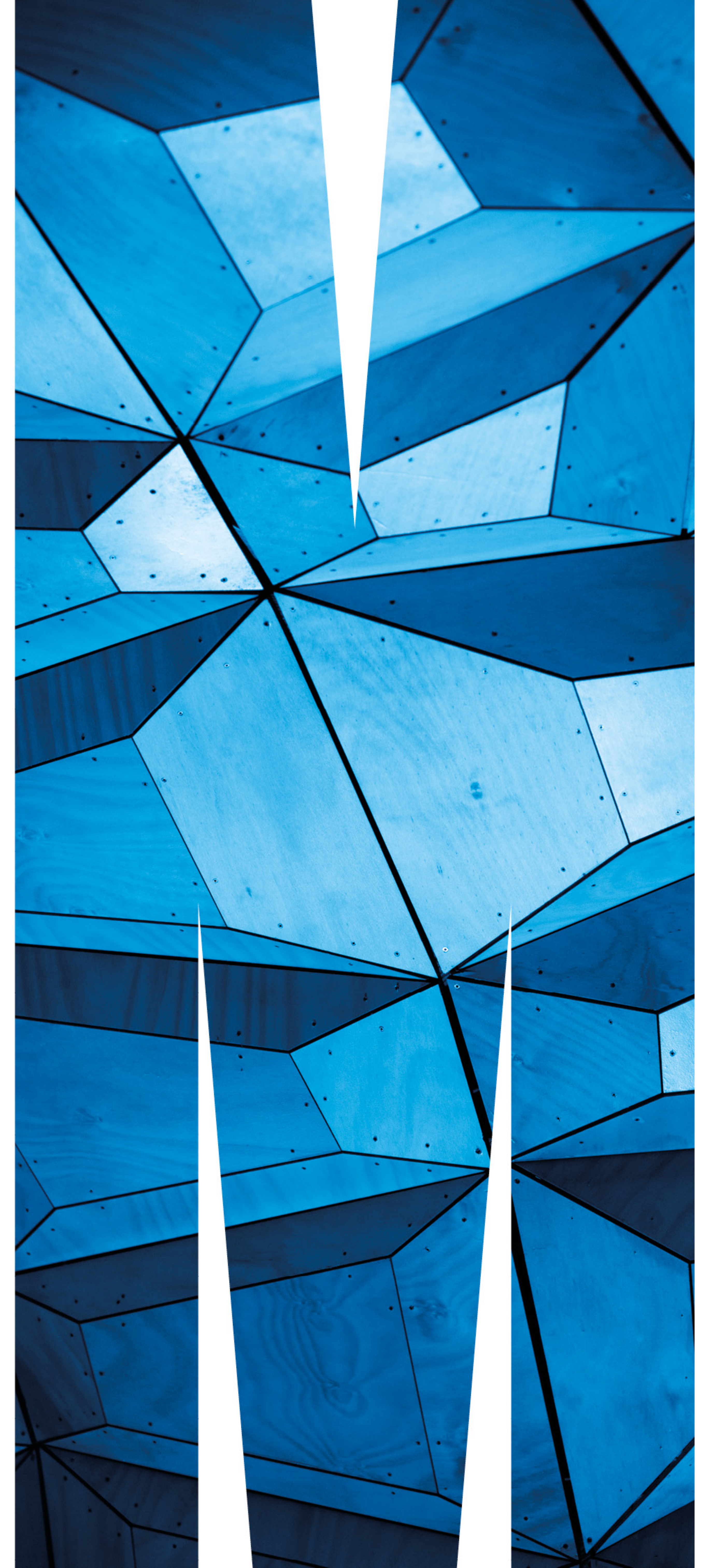


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Method:

Thirty individual interviews with participants from 9 different countries was conducted. All of the participants were engaged in disaster management in the Oceania region as researchers, practitioners in emergency management or disaster healthcare, policy managers or academics.

Data collection was conducted between April and November 2017. Thematic analysis was conducted using narrative inquiry to gather first hand insights on their perceptions of current and emerging threats and propose improvements in risk management practice to capture, monitor and control disaster risk.





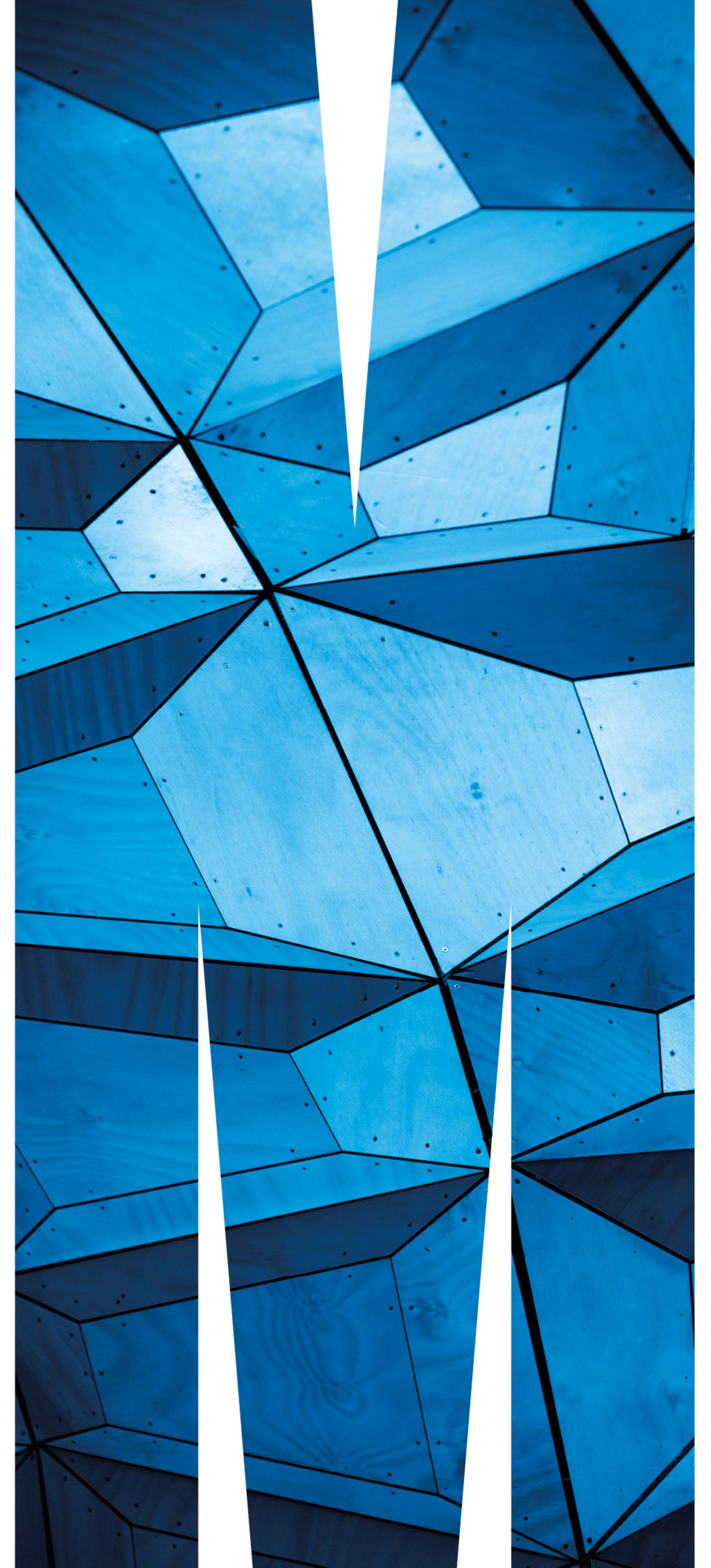
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Results:

The majority of interviewees viewed climate change as a risk or hazard. When this perception was explored further a breadth of impacts in Oceania related to climate change were described.

Hazards identified included:

- climate variability and climate related disasters;
- increasing infectious disease related to climate change;
- increasing heatwaves; climate issues in island areas and loss of land mass; and
- trans-nation migration and increased transportation risk due to rising sea levels.





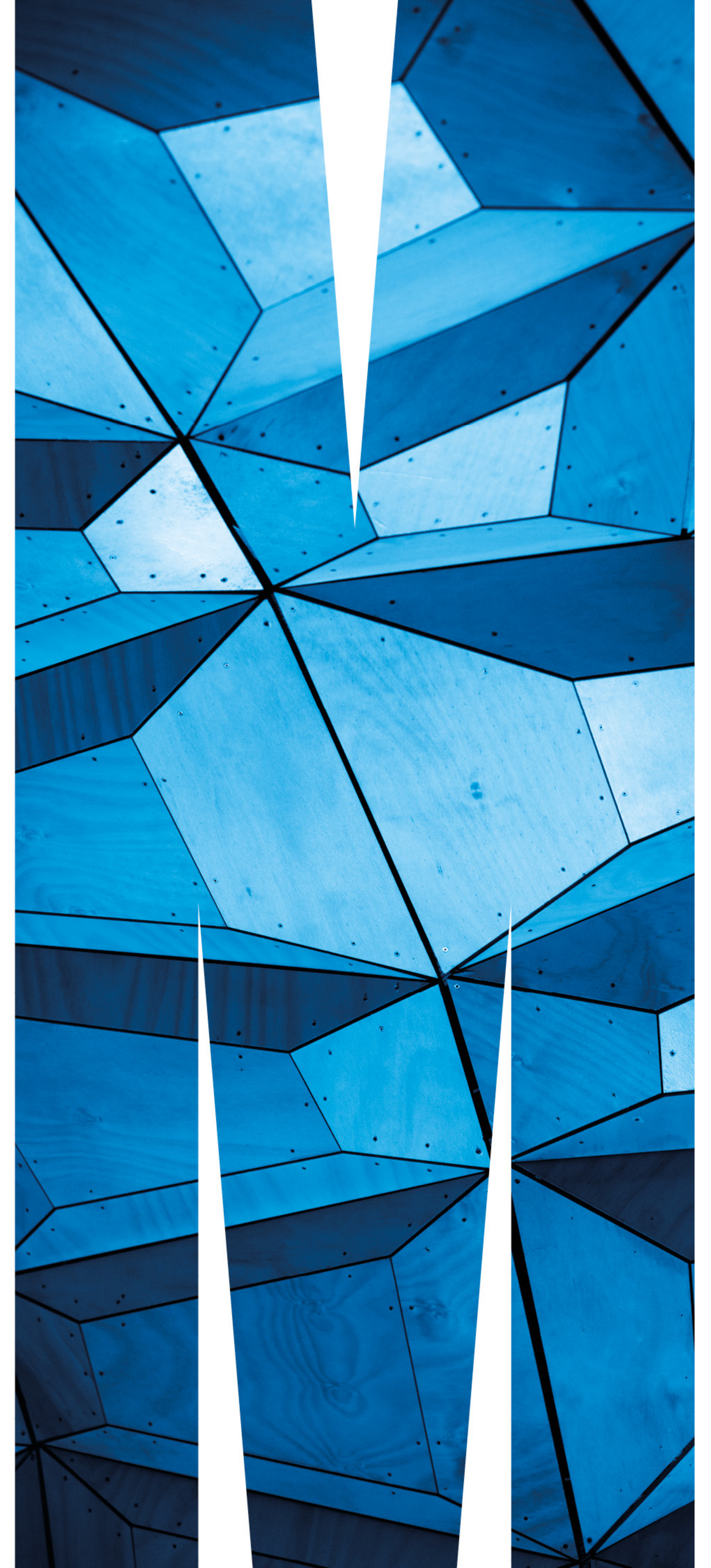
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Results:

These emerging risks are reflective of both the geographical location of countries in Oceania where land mass due to rising oceans has been previously reported, and climate change driven migration of island populations.

The impact of climate change on basic needs was identified by a Pacific resident who voiced concern of the sustainability of small island states to support the needs of populations impacted by climate change. A concern of access to food and fresh water was expressed:

'Climate change causes migration due to food and water insecurity'



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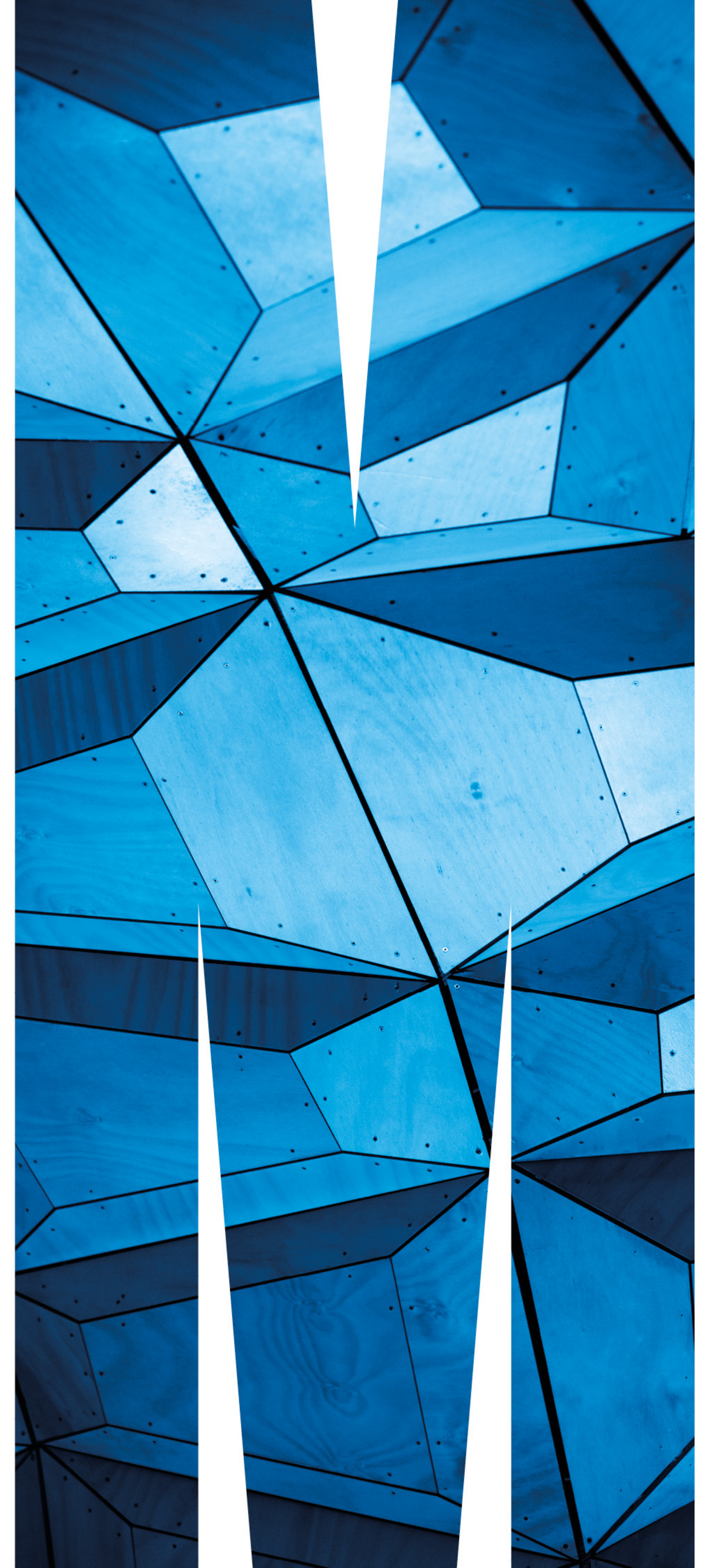
Results:

When participants described why they thought climate change was a risk, human impact on the natural environment featured strongly in participant responses. Descriptors included:

‘human development and its imbalance with nature’; ‘increasing global warming influencing natural disaster risk’; and, ‘manmade causes/manmade impacts on planetary health,’.

Insights on how climate change supported risk analysis and decision making varied between respondents. Geography, societal change and political will were key factors described:

‘The location of Oceania lends itself to these risks. What’s reported seems to indicate that they are escalating in size and population numbers are increasing therefore the footprint is increasing’.





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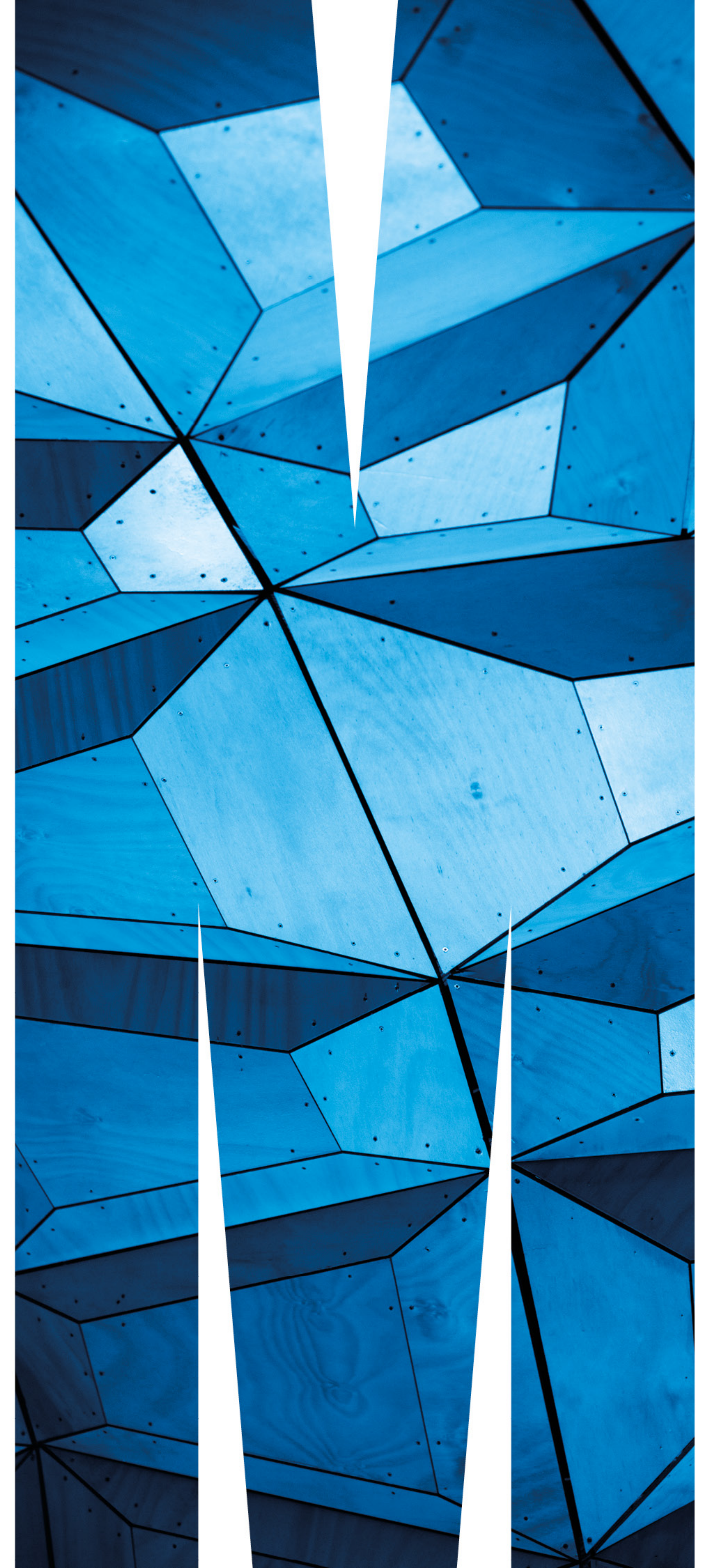
Results:

An Australian respondent described climate change as having an indirect, influencing affect across populations' vulnerability:

'Populations are vulnerable to emerging risks; overall vulnerability is increasing due to climate change with more hot days and less cool days'.

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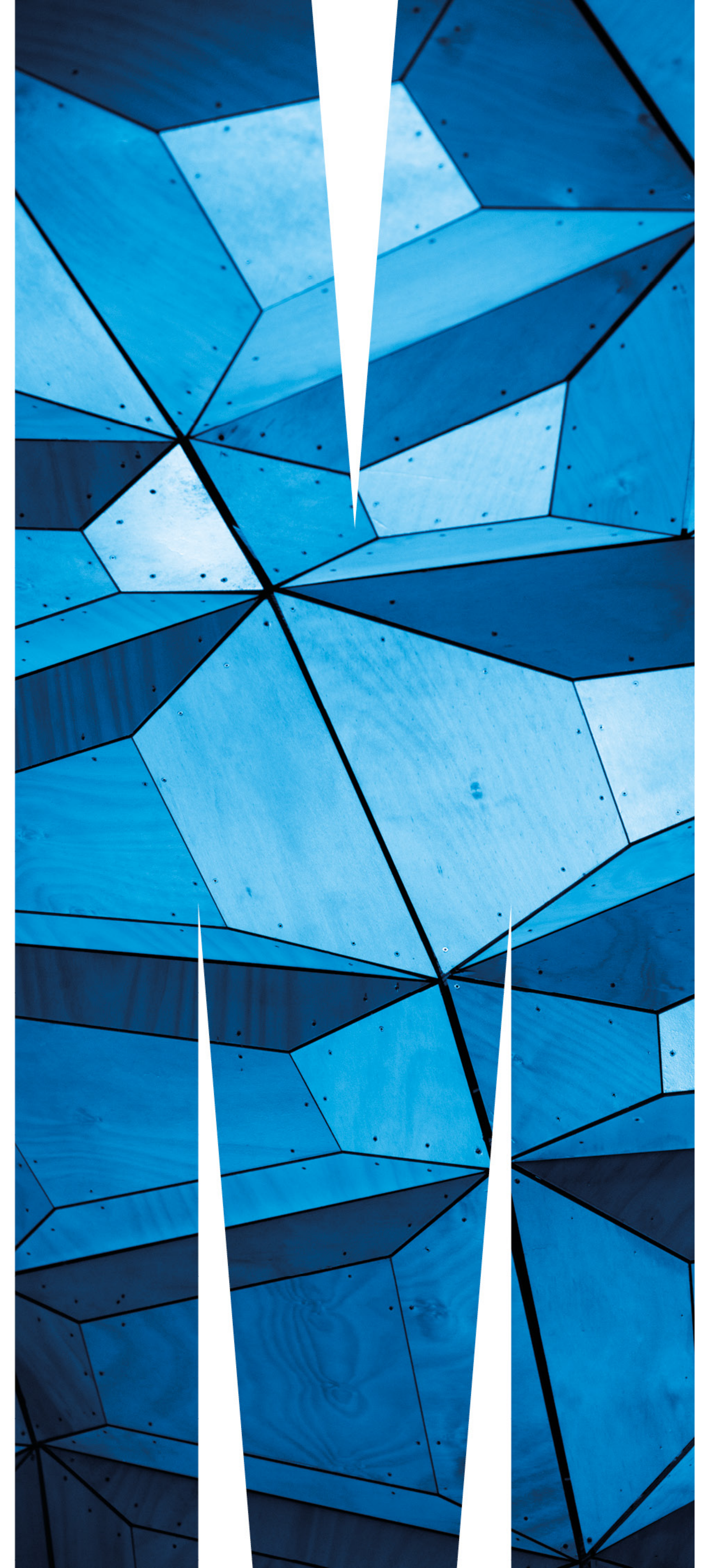
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Results:

When examining barriers to improvement in understanding disaster risk, interviewees identified challenges related to risk appreciation of slow impact events and inadequate measurement of the long term health effects of disaster:

'The use of the word disaster is the Achilles heel in risk assessment as it has a connotation that infers a large event rather than a small event or slow burning/onset or series of small events - terminology is important in ensuring event capture'.

'There is a lack of evidence to describe long term health effects associated with disasters and therefore investment in preventing or responding to these consequences. There is a lack of evidence for interventions and validation of them and little evaluation of determinants of risks associated with disasters – we need to look at determinants of an event not just the response'.





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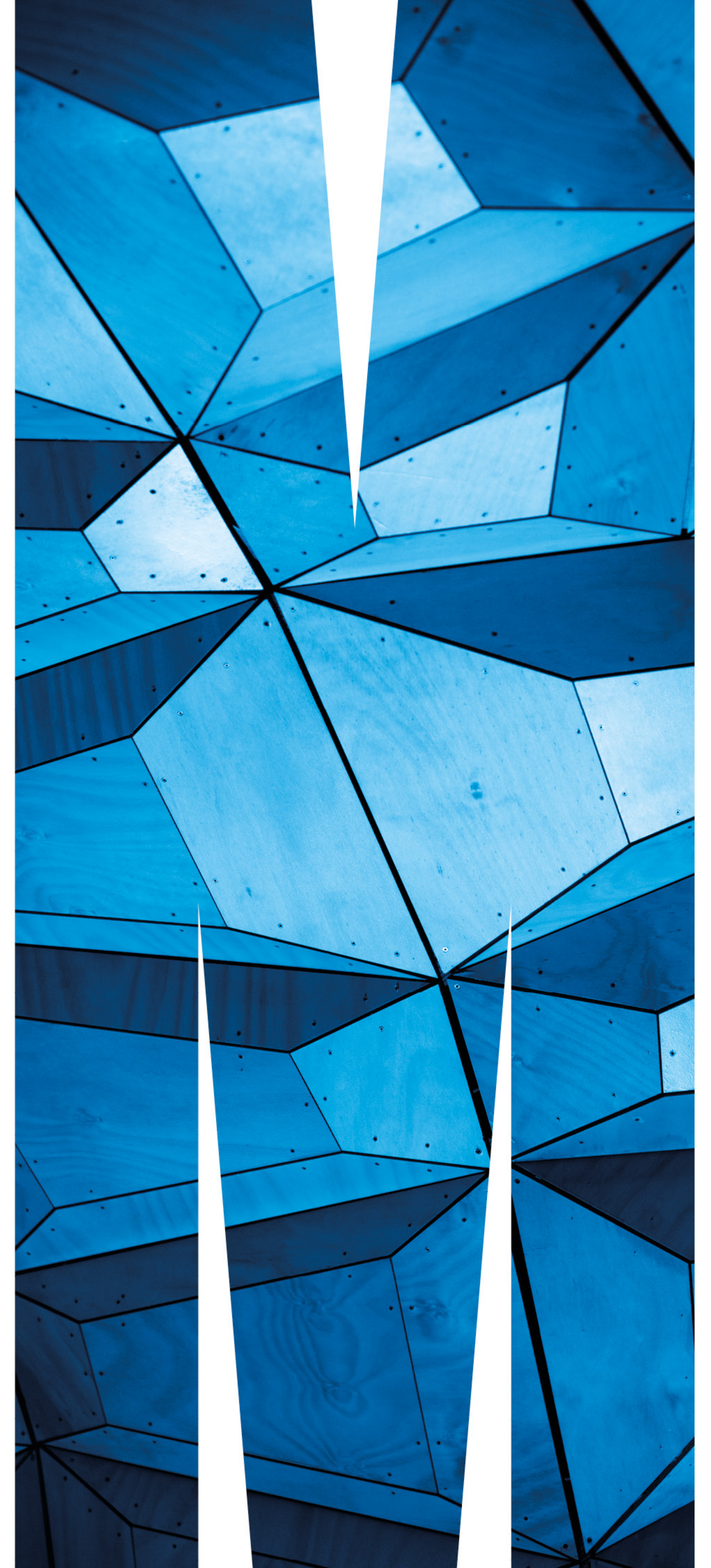
Results:

When examining solutions to improving disaster risk assessment a strong theme of community and individual engagement and responsibility emerged; particularly in reference to understanding and ownership of risk:

'Ensuring grassroots training on preparedness and response on the disaster risks that are relevant to those communities. Providing training to communities and ensuring plans are local and relevant.'

'Every community needs to own risk management strategy that is updated regularly with new and evolving knowledge. Urban planning needs disaster risk strategies built into them with detail. Then communicate these actions into the local population'

'Improve connectedness in communities, and knowing people and groups within them – this should be a function of disaster practice that creates trusted networks'





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Conclusion:

Climate change is perceived as a significant contemporary and future disaster risk in the Oceania region. Strategies for action identified by respondents include improved government and community engagement in risk understanding, ownership and mitigation; and improved understanding of the long term effects of disaster impact upon human health.

