CSIRO
10 Murray Dwyer Circuit, Mayfield West NSW 2304
PO Box 330, Newcastle NSW 2300 Australia

csiro.au | ABN 41 687 119 230

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Senator Mehreen Faruqi
Chair
Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability
PO Box 6100
Parliament House
Canberra ACT 2600
Via email: climaterisk.insurance.sen@aph.gov.au

Dear Chair

Re: Impact of Climate Risk on Insurance Premiums and Availability

Thank you for the letter dated 23 May 2024 and the invitation for CSIRO to provide a submission to the Select Committee Inquiry into the Impact of Climate Risk on Insurance Premiums and Availability. CSIRO has a long-standing history in climate science and research on how to understand and respond to climate risk.

CSIRO has co-developed, with the Bureau of Meteorology, the biennial State of the Climate report series since 2010, presenting the latest climate observations, analyses, and projections for Australia[1]. In January 2020, CSIRO was tasked by the Prime Minister to deliver an independent study recommending ways in which Australia can increase its climate and disaster resilience[2]. Now, as a partner agency of the Australian Climate Service, CSIRO is co-developing the evidence for Australia's first National Climate Risk Assessment[3]. The Australian Climate Service is also involved in working with the Hazard Insurance Partnership, which connects government with the insurance industry on issues of disaster risk reduction and hazard insurance.

Insurance can play a key role in reducing the impact of natural disasters by supporting communities in their recovery and incentivising the building of resilience measures into property decisions and business models.

This submission highlights key areas of relevance to CSIRO research and collaborations. This includes work in sectors such as primary industries[4,5,6,7,8], fisheries management[9], built environment and infrastructure[10], supply chains[11], and the natural environment[12]. We routinely undertake post-bushfire building surveys to identify the factors that lead to loss, damage and survival of houses impacted by bushfire[13] and we recently characterised the physical factors that led to the 2022 flooding in the Northern Rivers region of NSW[14].

CSIRO is currently developing methods for national bushfire hazard mapping as part of the National Bushfire Intelligence Capability[15]. We have developed climate risk management frameworks, training materials and tools for working with communities, industry and government[16]. In collaboration with Value Advisory Partners, we have also developed the Enabling Resilience Investment approach to support the planning of community transitions towards sustainable, well-adapted and disaster-resilient futures[17]. A key learning is that many of the methodologies used in risk, economic and business case assessments tend to insufficiently consider the systemic nature of risks and consequently underestimate their magnitude[18].

Collaborating with the insurance sector, CSIRO has investigated options to improve data sharing between government and industry to better inform decision-making for disaster risk reduction[19]. We partnered with

Suncorp on their One House project, with James Cook University (Cyclone Testing Station and Centre for Disaster Studies) and Room 11 Architects, to test a climate-resilient house design[20]. CSIRO is also working with state and territory governments to develop guidance for bushfire resilient buildings and homes.[21]

The insurance industry plays an important role in incentivising improved climate risk management and preparedness, and there is strong progress being made on increased adaptation and resilience measures for events such as tropical cyclones, as evidenced by decreases in the impacts on life and property.

We would be pleased to discuss further our portfolio of relevant research with the committee should that be of interest. If you require anything further, please don't hesitate to contact .

Yours sincerely

Dr Peter Mayfield
Executive Director – Environment, Energy and Resources

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[13] Leonard, J., Opie, K., Blanchi, R., Newnham, G., and Holland, M. (2016). Wye River / Separation Creek post bushfire building survey findings. CSIRO, Australia.

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