science webinar series

# Scenario analysis of climate-related physical risk for buildings and infrastructure: Guidelines from the Climate Measurement Standards Initiative (CMSI)

**Wednesday 16 September 2020, 2.00–3.00pm (AEST)**
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The Task Force on Climate-related Financial Disclosures (TCFD), launched in 2015 by the Financial Stability Board, is quite broad in its guidance on how to assess and disclose climate-related risk. Industry have a need for expert guidance to ensure that disclosures are comparable, consistent and aligned with agreed standards and best available science.

The Climate Measurement Standards Initiative (CMSI) was formed to address this need. The CMSI is a first step in providing Australia with a common understanding of financial disclosures, in the first instance regarding future damage to residential and commercial properties by climate-related phenomena. The CMSI is an industry-led collaboration between insurers, banks, scientists, reporting standards professionals and service providers to support TCFD reporting. It has developed open-source technical, business and scientific guidance for climate-related physical risk projections of future repair and replacement costs of Australian buildings and infrastructure assets.

The Earth Systems and Climate Change (ESCC) Hub has supported the Science Committee of the CMSI, which provided guidance on relevant scientific methods, data and uncertainties for standardised climate scenario analysis. It also assessed scientific gaps and needs and proposed a future roadmap.

In this webinar, CMSI Secretariat lead Sharanjit Paddam (QBE) will provide an overview of the CMSI, including financial disclosure of climate risks and the co-design approach undertaken. Hub researchers and CMSI Science Committee members Dr Andrew Dowdy (BoM) and Dr Michael Grose (CSIRO) will discuss the recently released CMSI Science Report, including the key acute climate hazards (such as storms, fires, etc.) that cause damage to infrastructure and the chronic climate hazards (such as mean changes in a range of variables) that can be important for exposure of infrastructure and other sectors such as agriculture and the financial services sector.

**Dr Michael Grose** is a research scientist at CSIRO working on regional climate change processes, attribution and projections. He has a strong interest in climate research and communication on topics with impact. Michael leads the ESCC Hub regional climate change projections research project.

**Sharanjit Paddam** is Head of ESG Risk at QBE Insurance Group where his responsibilities include reporting on climate-related risks and opportunities. Sharanjit is co-chair of a technical working group within the Australian Sustainable Finance Initiative and leads the Secretariat for the Climate Measurement Standards Initiative.

**Dr Andrew Dowdy** is a senior research scientist at the Australian Bureau of Meteorology. Andrew's research is focused on extreme weather phenomena and the physical processes influencing their risk of occurrence. Andrew leads the ESCC Hub extreme weather projections research project.

Content from this webinar is sourced from outputs from the Earth Systems and Climate Change Hub **Case Study 5.6: Climate Measurement Standards Initiative**.

*The Earth Systems and Climate Change Hub science webinars are open to anyone interested in finding out more about the Hub's research.*