Climate Change: Public Policy Statement

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Context

Based on expert scientific findings[1], the Actuaries Institute recognises that the world's climate is warming at the fastest rate in modern history and that greenhouse gas emissions by human activity are the main cause of this warming. Climate change is having major environmental, economic and social impacts and these impacts are increasing over time.

Climate change poses serious risks to communities and to the sectors that actuaries advise, including government, insurance, banking, wealth management, superannuation and investments.

Actuaries have considerable expertise in managing risk and uncertainty. Working with other stakeholders and often in multidisciplinary teams, actuaries are well placed to assist in:

- Identifying and understanding the risks and the range of consequences of climate change in the short term, medium term and long term;
- developing policy options and strategies to respond to these risks; and
- developing and implementing frameworks to manage the risks over time.

Issues

Based on the scientific findings of the IPCC[2], and work of the international Actuarial Association[3], climate change will likely have a major impact on at least four key areas.

- **Extreme weather events**: There is medium-high confidence that the frequency and severity of extreme weather-related events, including bushfires, floods, cyclones, storms, hail, drought and higher sea levels, will increase and more locations will be subject to such events.
- **Population and health**: There is high confidence there will be wider, faster and more severe spread of infectious illnesses and vector-borne diseases and increases in heat-related mortality and morbidity.

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[1] IPCC 2014
[2] IPCC, 2018.
[3] International Actuarial Association, 2017.

Institute of Actuaries of Australia
ABN 69 000 423 656
Level 2, 50 Carrington Street, Sydney NSW Australia 2000
t +61 (0) 2 9239 6100 **f** +61 (0) 2 9239 6170
e actuaries@actuaries.asn.au **w** www.actuaries.asn.au

- **Scarcity of resources**: There is medium-high confidence that water, terrestrial and marine food production, forestry, biodiversity and ecosystems will be adversely impacted.
- **Economic value of assets**: The value of new and legacy investments in many sectors will change in line with a transition to a net zero greenhouse gas emissions economy.

Policy positions

1. **The Actuaries Institute supports the goal of 2015 Paris Agreement on climate change to limit temperature increase to well below 2°C above pre-industrial levels, to pursue efforts to limit temperature increase to 1.5°C above pre-industrial levels, and to achieve net-zero emissions of greenhouse gases by the second half of the 21st Century.[4]**

    - In line with Australia's commitment to the Paris Agreement, the Actuaries Institute supports the development of a **transition plan** to achieve the goals of the Paris Agreement through an orderly, policy driven transition. This transition plan should set out clear targets, which will minimise economic shocks and enable businesses and investors to invest in new infrastructure required for a net zero emissions economy.
    - Such a transition policy needs to be developed in collaboration with other signatories to the Paris Agreement in order to deliver effective mitigation of greenhouse gas emissions on a global basis.
    - The Australian economy is currently heavily reliant on fossil fuels and industries that have high greenhouse gas emissions, and a transition to a net zero emissions economy will have significant implications for Australian businesses and communities. The Actuaries Institute recommends that any transition plan includes an assessment of the economic, environmental, social and intergenerational impacts of transition, and aims to minimise any adverse impacts.
    - The Actuaries Institute recommends that any transition plan also seeks to maximise opportunities for the Australian economy, including consideration of Australia's abundant renewable energy resources, leading scientific and technical capabilities, and access to natural resources such as rare earth elements.

2. **The Actuaries Institute supports the development of public policy to improve resilience against climate physical risk and natural disaster risk and the implementation of adaptation measures to reduce Australia's vulnerability to climate and disaster risk.**

    Any such policies and measures should:

[4] The Institute notes every Australian State and Territory government has a target to achieve net zero emissions by 2050 and the IPCC (2018) finding that urgent and increased mitigation ambition in coming years is required to limit temperature increases to be in line with the Paris Agreement.

- Be informed by actuarial assessment of risk-based evaluation of climate and disaster risk, in order to provide a risk signal to drive effective and efficient risk mitigation and adaptation at an individual risk level.
- Comprehensively assess the economic, environmental and social costs of natural disasters, including allowance for the impact of climate change.
- Integrate the consideration of climate and disaster risk within national construction codes and land use and long-term planning.
- Include on-going monitoring of the effectiveness of the policies and measures in improving resilience and reducing risk.
- Consider the holistic costs and benefits of adaptation strategies to improve resilience against climate and disaster risk, including impacts on household and business financial security, health, environmental, social and intergenerational equity.
- Be achieved through the active and strategic collaboration of all stakeholders including financial institutions, emergency management and local, state and federal government.
- Proactively address insurance affordability and availability issues that may arise for some Australian businesses and communities due to increased climate risk, including by investing in mitigation and strengthening building codes.

3. The Actuaries Institute seeks to promote a well-informed public debate on responses to climate change, and to support actuarial contributions to the development of effective responses to climate change.

Actuaries can contribute through:

- Advising their clients and employers in the insurance, banking, superannuation, investment, government and other sectors on identifying, assessing and disclosing the risks and opportunities arising from climate change. This can include disclosure under the recommendations of the FSB's Taskforce on Climate-Related Financial Disclosures (TCFD), regulatory reporting to APRA, ASIC and the RBA, and advice to boards of directors in meeting their corporate responsibilities.
- Ongoing research into understanding and managing the financial and economic risks and opportunities arising from climate change. This includes development of data sources, methods and tools to enable qualitative and quantitative assessment of climate-related risks and opportunities.
- Development of risk management frameworks for climate-related risks for regulated entities, including methods for assessing pricing implications, setting risk appetites, and estimating any additional capital requirements related to climate change.

- Ongoing assessment and scenario analysis of the impact of climate change on physical risks such as extreme weather events in Australia, including impacts on insurers, banks, superannuation funds and investors. This includes the development of the Australian Actuaries Climate Index.
- Ongoing assessment and scenario analysis of the impact of transition risks and opportunities in investment portfolios, including impacts on insurers, banks, superannuation funds and investors.
- Evaluation and assessment of transition policies and adaptation strategies taking into account economic, environmental, social, intergenerational and health impacts.
- Collaboration with other professionals and stakeholders such as climate scientists, accountants, economists, actuarial associations, governments, regulators, businesses and the public.

References

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