Insurance Council of Australia

Insurance Council of Australia – Question on Notice

Planning and Environment Committee – Inquiry into the Planning System and the Impacts of Climate Change on the Environment and Communities

1. **The Hon. JACQUI MUNRO:** Is there an understanding of how much baking those things into the National Construction Code will cost? You have obviously got the $4 billion cost at the consumer end at the moment. Is there an anticipated cost for construction over time?

ALIX PEARCE: Our analysis looked at both the costs and benefits. I don't have that exact stat in front of me. I'd be happy to take that on notice and provide the full report. But it did look at what would be the additional costs of using more resilient materials, for example, and found that the financial and economic benefits were considerable and far outweighed those up-front costs.

Answer

The Insurance Council of Australia (ICA) commissioned the Centre for International Economics (CIE) to conduct a high-level economic analysis of the anticipated costs and benefits of amending the National Construction Code and relevant referenced standards. The report is available at https://insurancecouncil.com.au/wp-content/uploads/2023/10/CIE-Final-Report_ICA_Economic-Analysis-09102023.pdf

CIE identified the main impacts that could potentially be avoided with more resilient buildings, including:

- costs associated with rebuilding or repairing damaged buildings.
- costs associated with replacing and repairing home contents.
- disruption related costs, including for example temporary accommodation, the stress and mental health problems associated with temporary accommodation and the location of temporary accommodation.

The report's high-level finding is that annual residential building costs from extreme weather events addressed by the National Construction Code (bushfires, cyclones and floods) are around $4 billion per year (detailed breakdown appears below). These report estimates these costs will double by 2050, as events become more severe or more frequent because of climate change. It also notes that changing the NCC is only one lever to bolster resilience, there are other policy opportunities to better protect Australians. The most important of these is changes to land use planning.

	Bushfire	Cyclone	Flood	Total
	$ million	$ million	$ million	$ million
Insured losses	247.58	584.04	794.56	1 626.17
Uninsured losses	61.90	146.01	198.64	406.54
Under-insured losses	60.11	431.29	190.03	681.42
Mental health impacts	80.47	577.12	200.31	857.91
Loss of housing	23.07	165.47	57.43	245.98
Employment impacts	13.71	98.31	34.12	146.13
Total	**486.84**	**2 002.24**	**1 475.09**	**3 964.16**

Source: CIE estimates.

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Cyclones

CIE estimates the residential building-related costs from tropical cyclones could be around $2 billion per year.

The analysis examined previous work identifying limitations of the NCC and identified a range of areas where it could potentially be strengthened to improve buildings' resilience from the impact of cyclones. These impacts include the threat of water ingress, which is when water penetrates through the building's windows, vents, doors, or other similar vents.

Previous work found that water ingress is one of the main drivers of insurance claims following a cyclone and this occurred even when wind speeds were well below the design speed. The report concludes there are significant opportunities and economic benefits from strengthening the NCC to reduce water ingress from wind-driven rain.

There are also opportunities to address high internal pressure in houses in Wind Region B which are currently not designed for high internal pressure. Internal pressure occurs when a house experiences damage to an external opening, such as a window, door or garage door in a tropical cyclone, and when combined with the large uplift pressures on the roof, can result in roof failures.

Bushfires

CIE estimates that residential building-related costs of bushfires are around $487 million per year.

The report proposes a series of relatively low-cost bushfire mitigation measures which are currently outside the scope of NCC, but which have potential to improve resilience. These include increasing separation distances between buildings to limit the spread of fires between houses, as well as the use of non-combustible fences. It also proposes changes to the types of materials used for retaining walls, and their positioning around houses to lessen the fire risk.

The report also looks at how fire can be minimised by the use of more fire-resistant water tanks, and reducing risk by storing combustible materials like firewood and gas cylinders in safer distances away from houses.

Flood

CIE estimates that residential building related costs of flooding are around $1.5 billion per year.

The report found that in many cases, changes to land use planning offers the most practical, direct and cost-effective option to improve building resilience because it avoids exposure to risk in the first place.

It also found that the current building standards and codes are underpinned by historical rainfall regimes and do not adequately account for current and future conditions. To address this, land use planning, building regulations and rainfall and runoff guidelines should be informed by forward looking science and modelling that takes into account the growing risk of flooding events in the future.

In addition, the report highlighted that the current building standards and codes do not achieve the desired outcomes in minimising damage when floods occur, and that there are opportunities to enhance flood resilience through building standards, including increased floor heights. It found the return on investment when making structural improvements to homes to improve resilience, such as increasing flood elevation, is greater in homes situated in high-risk flood zones, compared to those homes situated in lower flood risk areas.

2. **The CHAIR**: I'm just curious about whether you have looked at the Government's framework for valuing green infrastructure and public spaces and whether that's something that you're using in your modelling in terms of impacts on resilience at the property scale because we've heard a lot about canopy deep soil et cetera being one of the ways of combating heat and those "high-risk" perils...Is that something that you look at? Are you at that level yet in terms of ensuring against those kinds of hazards and risks at the property level?

ALIX PEARCE: Andrew might be able to talk specifically to an individual insurer approach. I haven't looked at that specific framework that you've mentioned but happy to take that one on notice.

Answer

The Insurance Council is aware the NSW Government has released a 'Framework for Valuing Green Infrastructure and Public Spaces' and notes it provides guidance to support practitioners undertaking cost–benefit analysis of projects, programs and policies relating to green infrastructure and public space. Based on the Chair's comments, ICA will scrutinize the Framework in more detail, particularly in relation to green infrastructure, to examine how its contents may inform our approach to improving household resilience.

3. **CHAIR**: Just on that then, would it be possible for you to provide on notice a copy of that submission [ICA pre-budget submission] to this inquiry?

MATHEW JONES: Absolutely.

Answer

The Insurance Council of Australia's 2024/2025 pre budget submission is available on our website. Visit https://insurancecouncil.com.au/wp-content/uploads/2024/01/2024-25-Pre-Budget-submission.pdf