2025-26 PRE-BUDGET SUBMISSION



AUSTRALIAN GOVERNMENT - THE TREASURY

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Submission issued January 2025

2025-26 Federal Pre-Budget Submission



INFORMATION ABOUT THE INSTITUTE

- The Australian Institute of Architects (Institute) is the peak body for the architectural profession in Australia. It is an independent, national member organisation with more than 14,500 members across Australia and overseas.
- The Institute's vision is: We advance architecture together.
- The Institute's purpose is: We support our members to be ethical, effective and engaged practitioners. Our work will strengthen the architectural profession, shape egalitarian communities and build a sustainable peak body.
- At the time of this submission the National President is Jane Cassidy FRAIA and the Chief Executive Officer is Cameron Bruhn Hon. FRAIA.

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The Australian Institute of Architects recognises the unceded sovereign lands and rights of Aboriginal and Torres Strait Islander peoples as the First Peoples of these lands and waters.

This recognition generates acknowledgement and respect for Aboriginal and Torres Strait Islander Countries, Cultures and Communities, and their ways of being, knowing and doing.

Caring for Country practices including architecture and place shaping have existed on this continent since time immemorial.

The Institute recognises a professional commitment to engage and act meaningfully through reciprocal partnership and relationships with Aboriginal and Torres Strait Islander peoples.

Together we will support and develop the emergence of new possibilities for our shared future.

About the cover photo

The photo is from the Institute's 2024 National Awards program online gallery. The project is Mari-Mari-Ba - Affordable Housing by architect Deicke Richards. It received a National Commendation for Residential Architecture - Multiple Housing. Traditional Land Owners are the Yuggera and Turrbal people. The photographer is Christopher Frederick Jones. To read more see: <u>https://www.architecture.com.au/archives/awards/mari-mari-ba-affordable-housing-deicke-richards</u>

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SUMMARY OF 2025-26 FEDERAL BUDGET RECOMMENDATIONS

FEDERAL BUDGET PRIORITY AREA 1. HOUSING AUSTRALIA – INVEST IN RESILIENT SOCIAL AND AFFORDABLE HOUSING DESIGN

INITIATIVE NO. 1: NATIONAL HOUSING PROJECTS DESIGN GUIDE

The Institute recommends that the Federal Government through its statutory agency, Housing Australia, invests \$1.5 million in a National Housing Projects Design Guide to establish more comprehensive design criteria for assessing access to Housing Australia financing and/or funds.

FEDERAL BUDGET PRIORITY AREA 2. NATIONAL URBAN POLICY RESEARCH AND PLANNING

INITIATIVE NO. 1: OFFICE OF THE AUSTRALIAN GOVERNMENT ARCHITECT

The Institute recommends that Federal Government provides \$5.0 million funding over four years for the establishment of the Office of the Australian Government Architect.

INITIATIVE NO. 2: LOCAL GOVERNMENT DESIGN REVIEW PANELS

The Institute recommends that the Federal Government provides \$64 million in funding for Local Governments to establish and operate local or regional Design Review Panels to ensure local housing solutions are consistent with the NUP.

FEDERAL BUDGET PRIORITY AREA 3: BUILDING BEST - SUSTAINABLE, DURABLE, INNOVATIVE AND PRODUCTIVE

INITIATIVE NO. 1: A BUILT ENVIRONMENT DECARBONISATION TRAINING FUND

\$1.5 mi over three years for training for design and construction professions to upskill for the design and building of low embodied carbon buildings.

INITIATIVE NO. 2: NATIONAL CONSTRUCTION CODE BUILDING RESILIENCE

\$3.0 million over three years to establish greater building resilience measures in the National Construction Code so that Australia's buildings can better withstand and quickly recover from climate change extreme weather events.

INITIATIVE NO. 3: RESIDENTIAL BUILDING EMBODIED CARBON MEASUREMENT

\$1.0 million to enable the Nationwide Home Energy Rating Scheme (NatHERS) to be enhanced so it can measure embodied carbon and provide flexible pathways in the National Constructions Code for de-carbonising our buildings.

INITIATIVE NO. 4: MODULAR AND PREFABRICATED CONSTRUCTION FOR MORE HOMES MORE QUICKLY

- \$4.0 million of funding over three years to develop provisions in the National Construction Code for modular and pre-fabricated building.
- A federal government led industry working group to develop a national strategy and framework that will accelerate the use of prefabricated and modular housing to deliver more housing more quickly in Australia.
- A policy commitment to minimum modular and prefabricated requirements for Housing Australia projects that fund/ finance new dwellings.
- \$2.0 million of funding over four years for an industry education program for architects and designers about modular and prefabricated residential buildings.



DETAILS OF 2025-26 FEDERAL BUDGET RECOMMENDATIONS

FEDERAL BUDGET PRIORITY AREA 1. HOUSING AUSTRALIA – INVEST IN RESILIENT SOCIAL AND AFFORDABLE HOUSING DESIGN

<u>INITIATIVE NO. 1: NATIONAL HOUSING PROJECTS DESIGN GUIDE</u> The Institute recommends that the Federal Government through its statutory agency, Housing Australia, invests \$1.5 million in a National Housing Projects Design Guide to establish more comprehensive design criteria for assessing access to Housing Australia financing and/or funds.

Housing Australia funding and finance initiatives provides an opportunity to address multiple policy agendas of the Federal Government including:

- Speedier and more productive delivery of needed housing adopting new building techniques and materials such as modular and prefabricated construction¹
- Improving housing quality, liveability, climate resilience and longevity²
- Building low carbon, climate resilient homes consistent with the new National Urban Policy³
- Reduce embodied carbon in our built environment to meet Australia's Net Zero 2050 Plan⁴

Under the Housing Australia Investment Mandate Direction 2018⁵ new dwellings must only comply with the National Construction Code's (NCC) residential energy efficiency provisions (currently NatHERS⁶ 7-Star) and the Livable Housing Design Standards. However other critical NCC minimum provisions, including those which address condensation or the structural reliability of buildings to withstand extreme weather events, are not mandated.

A Design Guide, that sits alongside and is referenced in the Housing Australia Investment Mandate Direction 2018⁷, would enhance the performance of our built environment by providing working examples of how design can elevate liveability, reduce ongoing costs and improve amenity for home occupiers for minimal to no extra costs.

The Design Guide would demonstrate the design principles and considerations with practical case studies including the performance benefits and cost-effectiveness of the different design scenarios for:

- designing and building for future climatic needs and extremes
- housing for dense urban environments
- elevating housing liveability and durability

³ National Urban Policy published 29 November 2024 at:

https://www.infrastructure.gov.au/department/media/publications/national-urban-policy... ⁴ See note 2 above

⁶ Nationwide House Energy Rating Scheme

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¹ Also called Modern Methods of Construction (MMC) or Design for Manufacture and Assembly (DfMA).

² https://www.industry.gov.au/news/building-ministers-meeting-communique-june-2024

⁵ Reference compiled version No. 15 as amended and in force on 20 December 2024 – Sections 28E and 28T. See: https://www.legislation.gov.au/F2018L00994/latest/downloads

⁷ similar to the way the (NDIS) Specialist Disability Accommodation Rules 2021 (SDA Rules) requires enrolled SDA dwellings to apply the NDIS Specialist Disability Accommodation Design Standard



- designing out embodied carbon including though re-purposing buildings as housing.
- the use of modular /prefabricated construction methods to address our housing needs in an efficient and economically viable way⁸.

FEDERAL BUDGET PRIORITY AREA 2. NATIONAL URBAN POLICY RESEARCH AND PLANNING

The Federal Government has released its National Urban Policy (NUP). The Institute endorses this policy. The Australian Institute of Architects recommends the following investments to implement and realise its ambitious aspirations of the NUP.

<u>INITIATIVE NO. 1: OFFICE OF THE AUSTRALIAN GOVERNMENT ARCHITECT</u> The Institute recommends that Federal Government provides \$5.0 million funding over four years for the establishment of the Office of the Australian Government Architect.

The National Urban Plan envisages that the Minister for Cities will lead the implementation of the plan by working closely with units of the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA).

To maximise the outcomes from the NUP, the Minister for Cities will need the services of an Office of the Australian Government Architect (OAGA) (that could either sit within or independent of the DITRDCA) to ensure the quality of the advice to the minister and the integrity of the outcomes from the NUP.

Most Australian states and territories maintain the position of a "Government Architect" or other design and procurement advisor to provide leadership and independent strategic advice to government in relation to architecture and urban design and a range of specific built environment projects.

The OAGA would be tasked with the following:

- Assisting the Minister for Cities in the implementation of the NUP:
- Providing strategic advice on urban planning, design quality, and the integration of buildings with the public realm to ensure best value and societal outcomes for taxpayers and the community;
- Publishing /endorsing design guides, best practice guides, and other built design related material; ensure best value from funding programs such as the Housing Australia Future Fund and the Thriving Suburbs program.
- Establishing cross-jurisdictional forums with state and territory government architects;
- Assisting relevant Ministers to identify key projects requiring Federal Government funding;
- Establishing guidelines for Design Review Panels funded by the Federal Government.

INITIATIVE NO. 2: LOCAL GOVERNMENT DESIGN REVIEW PANELS

The Institute recommends that the Federal Government provides \$64 million in funding for Local Governments to establish and operate local or regional Design Review Panels to ensure local housing solutions are consistent with the NUP.

⁸ The UK Government's Homes England, is regarded as an important accelerator for modular/ prefabricated housing. See:

https://committees.parliament.uk/publications/43073/documents/214242/default/



As Australia's population grows, more dense housing development and, therefore, a change in the types of housing seen as the norm are required if we are to prevent runaway urban sprawl.

Governments face two challenges - of attracting households and families people to live in denser types of housing such as apartments and townhouses and community acceptance of infill development in existing precincts and neighbourhoods.

Well-designed housing and residential precincts must be highly livable in terms of immediate access to recreational and greenspace – as the neighbourhood replaces the backyard – and to feel settled, connected to and engaged with their community.

Urban design, planning and development needs to be undertaken purposefully and carefully by local governments to achieve these outcomes. However, local governments, who are responsible for local planning schemes, and development approvals face capacity constraints (both financial and skills) to undertake the required depth of urban design and planning and balance multiple interests in respect of development applications.

Local government Design Review Panels (DRP) can assist these processes. These panels are made up of design and planning experts (architects, planners, urban designers, landscape designers) who use their expertise to rapidly evaluate the design integrity of complex or significant development proposals in relation to the local environment and community context. They can assist in early identification of potential risk areas and thereby ensure better-integrated solutions.

We note that Section 96 of the Australian Constitution and the Commonwealth Local Government (Financial Assistance) Act 1995 would permit the Federal Government to directly assist local governments through General Purpose Grants⁹.

FEDERAL BUDGET PRIORITY AREA 3: BUILDING BEST - SUSTAINABLE, DURABLE, INNOVATIVE AND PRODUCTIVE

<u>INITIATIVE NO. 1: A BUILT ENVIRONMENT DECARBONISATION TRAINING FUND</u> \$1.5 mi over three years for training for design and construction professions to upskill for the design and building of low embodied carbon buildings.

The overall design of a building is still the most effective means to reduce embodied carbon. A "design-led" approach to decarbonisation can:

- cleverly 'adaptively re-use' (repurpose) an existing building rather than demolish an existing building and re-build, thereby reducing the overall embodied carbon of the project (and help reduce the problem of demolition waste)
- optimally design and right-size buildings for their purpose
- flexibly design for potential future uses
- design out the use of superfluous materials
- replace either newly manufactured materials or those environmentally damaging sources with reused or recycled materials

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⁹ <u>https://www.infrastructure.gov.au/territories-regions-cities/local-government/financial-assistance-grant-local-government/national-principles-allocation-grants</u>



A design led-approach, involving highly efficient and effective design, economises materials used to construct a building and can save money. However, many of these design decisions such as adaptive reuse and optimum design and sizing all occur need to be made well before the "shovel-ready" phase of construction, or contractors are even engaged. The architecture profession and other design professionals, such as engineers, are therefore the "front line" for decarbonising the built environment as their design work gives specification to how buildings will be designed efficiently.

Yet construction professionals as much as design professionals do need the opportunity to understand how embodied carbon is designed out of buildings and how they will safely and cost-effectively construct a low embodied carbon building using low-embodied carbon materials.

Investment is required to transform all professions' and practitioners' skills, practices, and supply chains to keep pace with a rapidly evolving industry and maintain investment confidence.

The Australian Institute of Architects is a national organisation and has the capability to deliver the proposed training education through its established professional education unit. This unit already delivers a carbon curriculum package which is freely available to all design and building professionals.

INITIATIVE NO. 2: NATIONAL CONSTRUCTION CODE BUILDING RESILIENCE \$3.0 million over three years to establish greater building resilience measures in the National Construction Code so that Australia's buildings can better withstand and quickly recover from climate change extreme weather events.

In June 2024 the Building Ministers Meeting agreed to include climate resilience as a specific objective of the Australian Building Codes Board (ABCB) from 2025. Building ministers across Australia recognised the need to make Australia's buildings more resilient to extreme weather events being driven by climate change.

Not only do buildings need to be designed and constructed to avoid or withstand the destructive force of weather events such as rain deluges, flooding (including riverine and overland flow flooding), high winds and wind gusts and fires, but they also need to be recoverable, such as after flooding inundation. The Brisbane Sustainability Agency, for example, has led local change with its Flood Resilient Homes Program¹⁰, which enables property owners to easily clean and move back in quickly after a flood event with minimal long-term disruption.

The low resilience of buildings is rendering many homes and buildings uninsurable or unaffordable for many households to insure. The Climate Council in 2022 has estimated that by 2030 approximately 520,940 properties, or one in every 25, will be 'high risk' and uninsurable with 80% of that risk attributable to riverine flooding¹¹.

¹⁰ https://www.sustainablebrisbane.com.au/home-flood-resilience/

¹¹ Climate Council 2022. <u>UNINSURABLE NATION: AUSTRALIA'S MOST CLIMATE-VULNERABLE PLACES</u> <u>https://www.climatecouncil.org.au/resources/uninsurable-nation-australias-most-climate-vulnerable-places/</u>



More recently, the Australia Institute¹² has reported that between 2022 and 2023, average home insurance premiums in Australia rose by 14%, the biggest rise in a decade with nearly one in eight households experiencing home insurance affordability stress and paying more than four weeks gross income on home insurance premiums. They noted, as a contributing factor, the major floods in eastern Australia which had pushed insured losses in 2022 to a record \$7 billion, almost double previous records.

There are also measurable human, social and economic benefits to designing and building more resilient buildings so families, communities and business quickly recover from the impact of climate change extreme weather events.

The shortest pathway to improving the resilience of our buildings is through the National Construction Code (NCC) which is adopted into use by each state and territory. The Australian Institute of Architects looks to the Australian Building Codes Board to set a high bar for even the minimum standards established by the NCC so that as many buildings as possible are designed and constructed to a robust specification.

Preparing each three-yearly revision of the National Construction Code involves a major collaboration between the Australian Building Codes Board, organisations delivering specifically commissioned research and modelling, and volunteered expertise from industry and professional bodies.

Therefore, we recommend making a clear and committed three-year investment to ensure a much stronger set of required resilience provisions in the 2028 National Construction Code. This work is urgent and needs to commence in 2025.

INITIATIVE NO. 3: RESIDENTIAL BUILDING EMBODIED CARBON MEASUREMENT \$1.0 million to enable the Nationwide Home Energy Rating Scheme (NatHERS) to be enhanced so it can measure embodied carbon and provide flexible pathways in the National Constructions Code for de-carbonising our buildings.

Over many years the use of the Nationwide Home Energy Rating Scheme (NatHERS)¹³ star energy efficiency ratings has improved the operational energy efficiency of Australians' houses and apartments.

The next challenge is to reduce the embodied the carbon that is generated through the materials, construction, refurbishment, maintenance and the eventual demolition of a building at the end of its life.

¹² Richardson, D., Long , S., and Campbell, R. 2024 <u>Premium price the impact of climate change on insurance costs.</u> The Australia Institute. <u>https://australiainstitute.org.au/report/premium-price-the-impact-of-climate-change-on-insurance-costs/</u>

¹³ https://www.nathers.gov.au/



The Australian construction industry is responsible for 18.1 per cent of our national carbon footprint, or more than 90 million tonnes of greenhouse gas emissions every year^{14,15}. Almost one quarter (23.8%) of these emissions are attributable to residential construction.

The National Construction Code can then prescribe parameters for embodied carbon in different construction types. However, providing a NatHERS embodied carbon tool will give an alternative and more flexible approach for designers and builders to meet the National Construction Code requirements for embodied carbon.

This single project is a very small investment that generates a very large return in meeting our 2050 carbon reduction goals.

Using such tools to inform efficient upfront design choices to decarbonise a building can also help drive down materials costs and assist affordability of residential construction.

INITIATIVE NO. 4: MODULAR AND PREFABRICATED CONSTRUCTION FOR MORE HOMES MORE QUICKLY

- \$4.0 million of funding over three years to develop provisions in the National Construction Code for modular and pre-fabricated building.
- A federal government led industry working group to develop a national strategy and framework that will accelerate the use of prefabricated and modular housing to deliver more housing more quickly in Australia.
- A policy commitment to minimum modular and prefabricated requirements for Housing Australia projects that fund/ finance new dwellings.
- \$2.0 million of funding over four years for an industry education program for architects and designers about modular and prefabricated residential buildings.

Australia is yet to benefit from a large untapped productivity gain by using prefabricated and modular construction at scale¹⁶. In March 2024 the Building Ministers Meeting directed the Australian Building Codes Board (ABCB) to consult with industry and recommend regulatory improvements to stimulate Australia's prefabricated and modular housing industry. ¹⁷

Our National Construction Code has evolved around construction on-site. Acknowledging that some components have, for many years, been able to be pre-fabricated offsite, it represents a much greater incremental step when as much as 85% of a dwelling might be manufactured offsite.

Modular and prefabricated construction is a means to deliver more homes more quickly. Manufacture in a factory setting can take place around the clock and under all weather conditions. Manufacturing in a factory can also reduce material wastage and embodied carbon, apply robotic machinery to efficiently

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¹⁴ Yu, M., Weidmann, T., Crawford, R. and Tait, C. 2017. The carbon footprint of Australia's construction sector. <u>Procedia Engineering 180 (2017) 211 – 220.</u>

¹⁵ UNSW 2023 quoting Yu et al's data. <u>Embodied carbon in buildings: a new frontier in greenhouse gas</u> <u>reduction.</u> Interview by Samantha Dunn with Associate Professor Philip Oldfield, head of UNSW's School of Built Environment in the Faculty of Arts, Design & Architecture.

https://www.unsw.edu.au/newsroom/news/2023/09/embodied-carbon-in-buildings--a-new-frontier-in-greenhouse-gas-r

¹⁶Also called "Modern Methods of Construction" (MMC) and "Design for Manufacture and Assembly" (DfMA).

¹⁷ Building Ministers' Meeting: Communiqué March 2024. Australian Government Department of Industry Science and Resources. <u>https://www.industry.gov.au/news/building-ministers-meeting-communique-march-2024</u>



perform manual tasks and deploy stringent manufacturing models for quality control. Using trained manufacturing workers, Australia's critically needed construction workers are then freed up to continue their important work of on-site construction

A UK Government report¹⁸ has realised the critical need for its government housing initiatives such as the UK's Homes England to procure modular housing at scale to increase capacity and achieve greater scale economies of scale and stabilise the nation's modular housing industry. An efficient industry operating at scale will also improve housing affordability.

The UK Government report also highlights the need to specify not only the percentages of "MMC" homes but the pre-manufactured value (PMV)¹⁹ for each home according to agreed definitions²⁰ that were developed by government and a cross industry working group.

In 2O24 the Australian Government' s Building Ministers Meeting tasked the Australian Building Codes Board (ABCB) to consult with industry regarding regulatory improvements that would stimulate Australia's prefabricated and modular housing industry²¹.

The ABCB has also released a handbook for industry in December 2024. However, it is clear that more performance provisions will be required within the National Construction Code in the coming years and possibly also additional Australian Standards to ensure Australian industry can manufacture modular and prefabricated housing at scale to a high minimum standard.

It is essential that work commences now as the housing supply crisis deepens, and we therefore recommend:

- \$4.0 million of funding over three years for the Australian Building Codes Board to develop provisions in the National Construction Code for modular and pre-fabricated building
- a Federal Government led industry working group to develop a national strategy and framework that will accelerate the use of prefabricated and modular housing to deliver more housing more quickly in Australia.
- a policy commitment to minimum modular and prefabricated requirements for Housing Australia projects that fund/ finance new dwellings.

A critical success factor for modular and prefabricated construction is the design at the front end. Whereas on-site construction permits design variation during construction, the essence of rapidly premanufactured housing is that design is completed and locked in before the manufacture and subsequent installation on-site.

¹⁸ Letter from Lord Moylan to Rt Hon. Michael Gove MP, Secretary of State, Department for Levelling Up, Housing and Communities. See: <u>https://committees.parliament.uk/committee/518/built-environment-committee/news/199612/mmc-sector-may-continue-to-struggle-without-a-fresh-approach-from-the-government/</u>

¹⁹ Especially Clauses 28-33 (ibid)

²⁰ MMC Definitions Framework Developed by the Ministry of Housing, Communities and Local Government MMC cross industry working group. See:

https://www.gov.uk/government/publications/modern-methods-of-construction-working-groupdeveloping-a-definition-framework

²¹ https://www.industry.gov.au/news/building-ministers-meeting-communique-march-2024



Architects and other building designers would benefit from bespoke continuing professional development to work confidently with clients, builders and manufacturers when designing prefabricated and modular projects in terms of both off-site components and site requirements and works. This includes the technical issues and the contractual and compliance issues as different jurisdictions (such as NSW) develop their separate regulatory frameworks.

We therefore further recommend:

 \$2.0 million of funding over four years for an industry education program for architects and designers about modular and prefabricated residential buildings. As noted above, the Australian Institute of Architects is a national organisation and has the capability to deliver education to architects, building designer and other built environment consulting professionals (e.g engineers) through its established professional education unit.

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