# 2022-23 PRE -BUDGET SUBMISSION



Australian Government Department of the Treasury

prebudgetsubs@treasury.gov.au





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2022-23 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 13,000 members across Australia and overseas.
- The Institute's vision is: *Everyone benefits from good architecture*.
- The Institute's purpose is: *To demonstrate the value of architecture and support the profession.*
- At the time of this submission the National President is Tony Giannone FRAIA and the Acting Chief Executive Officer is Barry Whitmore.

#### Contact details for this submission:

Australian Institute of Architects ABN 72 000 023 012 Level 1, 41 Exhibition Street Melbourne, Victoria 3000 p: +61 (03) 8620 3877

Name: Paul Zanatta | National Advocacy and Policy Manager

Email: paul.zanatta@architecture.com.au

# About the cover photo

The Australian Institute of Architects' 2021 Sir Zelman Cowen Award for Public Architecture and The David Oppenheim Award for Sustainable Architecture. Monash Woodside Building for Technology and Design. Grimshaw in collaboration with Monash University. Photographer: Rory Gardiner.



## THE INSTITUTE'S 2022 FEDERAL BUDGET RECOMMENDATIONS

#### Strengthen the Cities and Regions Deals Program

- → **RECOMMENDATION 1: \$180 million** to support each of Australia's Cities Deals to deliver affordable housing and environmental improvement outcomes over the life of each of the nine deals.
- → RECOMMENDATION 2: \$12 million over the next four years to Bureau of Infrastructure and Transport Research Economics (BITRE) to develop long term indicators to compare the performance of Australian cities and to measure the full impact of Cities and Regions Deals.

#### Establish an Australian Government Architect's office

→ RECOMMENDATION 3: \$14 million over the next four years to establish an Australian Government Architect's office to advise the Australian Government and statutory agencies on best ways to achieve great designs and outcomes from government owned or government funded buildings

#### Further develop national natural disasters and climate event maps to de-risk Australian buildings

→ **RECOMMENDATION 4: \$50 million** to fund the Australian Climate Service to further develop national datasets and detailed maps of natural disaster and climate related events risks across Australia to be *freely and publicly available* to local governments, designers, planners and developers so that resilience is able to be built into the design and location our buildings using the best available data.

#### Make Australian buildings more efficient and cheaper to run,

- → RECOMMENDATION 5: \$6 million over three years to fund the Australian Building Codes Board to make provisions in the National Construction Code (2025) that require all residential dwellings to operate with net-zero regulated energy.
- → RECOMMENDATION 6: \$1 billion additional financing over four years through the Clean Energy Corporation for cleaner construction of energy efficient, low carbon Australian buildings and infrastructure.
- → RECOMMENDATION 7: Increase funding to \$20million per annum for the delivery of the Trajectory for Low Energy Buildings. This will enable the Australian Government to bring forward milestones and enable timely delivery of the Trajectory for Low Energy Buildings. The Trajectory has been agreed upon by Australia's energy and building ministers in 2019 to achieve zero energy and carbon-ready commercial and residential buildings in Australia. To support the delivery of the Trajectory, ongoing funding for the Nationwide Home Energy Rating Scheme (Nathers) and the National Australian Built Environment Rating System (NABERS) programs needs to be guaranteed.

#### Address First Nations housing as a priority

**▶ RECOMMENDATION 8: \$4 billion over four years to 2026** to fund a co-designed national housing deal with Aboriginal and /or Torres Strait Islander communities delivering 8,000 new indigenous social housing dwellings to increase dwelling numbers by 25% from 32,000 to 40,000. The deal will also address issues of overcrowding, quality, user-requirements, environmental sustainability and long-term maintenance.

### Make public buildings accessible for people with disabilites

→ RECOMMENDATION 9: Commit funding of \$150 million over three years for a national upgrade program to retrofit existing public buildings to be accessible by people with disabilities

#### Secure our future built environment workforce

→ RECOMMENDATION 10: \$80 million over 2 years to trial an employer wages subsidy to ensure that our Australian universities' architect graduates are able to gain a supervised graduate position in a practice and attain their registration.

Appendix I commencing on the following page contains the detailed background and rationale for each recommendation.



#### **APPENDIX I**

# **Detailed background and rationale to recommendations**

→ **RECOMMENDATION 1.1 \$180 million** to support each of Australia's Cities Deals to deliver affordable housing and environmental improvement outcomes over the life of each of the nine deals

#### Strengthening Cites Deals

The Institute recognises issues that are shaping Australian society. These issues include the global economy, technological change, population, social change, overseas tensions and international relations, natural disasters, climate change and finite natural resources.

The Covid-19 global pandemic of the past two years, has been an extraordinary challenge. In terms of urban design and planning, Covid-19 has raised important issues about housing affordability and overcrowding (especially for renters), city and urban open space, changing work patterns and the potentially altered demand for real-estate in the central business or activity districts of major cities. A recent 2022 ABC article<sup>1</sup> highlights some of the key issues for our urban settings in the long-term changes brought about in the workforce.

The Institute and its members understand that the if our cities and regional communities are well-designed, built and connected, we can better adapt to these challenges so that liveability, wellbeing, sustainability and productivity are enhanced. The Australian Government Cities Deals, Regions Deals and Smart Cities and Suburbs programs<sup>2,3</sup> are an important catalyst for reshaping our cities and regions.'

Some Cities Plans such as the Launceston City Deal Plan have set about to address housing and environmental recovery as first order goals. The Hobart City Deal includes Affordable Housing/ Urban Renewal to deliver a diverse range of affordable housing options close to work, play, transport and services The Perth City Deal plan is investing \$36 million to provide housing and support services to vulnerable people in need who are experiencing homelessness and rough sleeping in Perth.

However, other Cities Deals such as Adelaide and Geelong are not addressing affordable housing supply.

Similarly there are initiatives in some Cities Deals to address environment issues. Perth's City Deal includes a Digital Environmental Approvals Regime for Major Projects and \$60mi investment for waste recycling infrastructure to help Perth CBD and Western Australia become more sustainable and better protect the environment with City Deal projects being required to use recyclable materials wherever possible.

Launceston's City Deal includes a major initiative to reduce pollution in the Tamar Estuary and the Western Sydney City Deal will develop a strategy for South Creek that will investigate its restoration and protection. A major feature of the Darwin City Deal is a redeveloped and greener State Square to cool the city, other broader innovations to cool and green the city, along with promoting climate-appropriate

<sup>&</sup>lt;sup>1</sup> ABC News 5-1-2022. <u>Work from home is the new normal as employers struggle to make the daily grind work</u> https://www.abc.net.au/news/2022-01-05/force-the-workforce-back-to-office-or-wfh-forever/100718234

<sup>&</sup>lt;sup>2</sup>See: https://www.infrastructure.gov.au/cities/city-deals/

<sup>&</sup>lt;sup>3</sup> See: https://www.infrastructure.gov.au/territories-regions-cities/cities/smart-cities-and-suburbs



design.

However other City Deals such as Adelaide, Townsville, Geelong and Hobart currently plan no significant focus on the environment.

Cities Deals are a important way in which the Australian Government can promote thriving economies with stronger international trade and employment opportunities, create centres of excellence and knowledge hubs and nurture vibrant and attractive cultural and tourism experiences. However, the Australian Government has an important and clear opportunity to address plummeting housing affordability (and resulting homelessness) and also creating more sustainable and liveable Australian cities for future generations.

Affordable housing supply and the environment could be more comprehensively addressed through ensuring affordable housing and environment outcomes are a core requirement in all Cities Deals. The very nature of Cities Deals with co-investment of governments at all levels as well as non-government investors can help ensure the delivery of these initiatives.

→ RECOMMENDATION 2: \$12 million over the next four years to Bureau of Infrastructure and Transport Research Economics (BITRE) to develop long term indicators to compare the performance of Australian cities and to measure the full impact of Cities and Regions Deals.

Strengthening research on Australian cities.

The Cities Deals program requires a firm evidence base to gain a better understanding of the benefits, risks, gaps and areas for targetted investment. Research from the Australian Housing and Urban Research Institute demonstrates that there is no consistent approach to evaluating the impact of Cities Deals and for the status, performance and progress of Australian cities to be compared<sup>4 5</sup>.

In 2022, on a recommendation of a review undertaken by the Department of Transport, Infrastructure, Regional Development and Communications' Bureau of Infrastructure and Transport Research Economics (BITRE)<sup>6,7</sup>, the National Cities Performance Framework indicators will be decommissioned. BITRE advised that alternate departmental data and research products will better meet the needs of stakeholders. The review also noted the need for:

<sup>&</sup>lt;sup>4</sup> Roggenbuck, C., Gorter, T. (2019) <u>Making Sense of 'Cities': A thematic analysis of Australian cities policy from 1991 onwards.</u> Australian Housing and Urban Research Institute) Presentation given at Australasian Cities Research Network 9th State of Australian Cities National Conference, 30 November - 5 December 2019, Perth, Australia. Sourced from: <a href="https://apo.org.au/node/306340">https://apo.org.au/node/306340</a>

<sup>&</sup>lt;sup>5</sup> Pill, M, Gurran, M., Gilbert, C., Phibbs, P. (2020) <u>Strategic planning. 'city deals' and affordable housing.</u> (<u>Executive Summary</u>). <u>Final Report No. 331.</u> Australian Housing and Urban Research Institute Limited Melbourne, Australia. Sourced from: <a href="https://www.ahuri.edu.au/research/final-reports/331">https://www.ahuri.edu.au/research/final-reports/331</a>

<sup>&</sup>lt;sup>6</sup> The Bureau of Infrastructure and Transport Research Economics (2021) <u>Review of the National Cities</u> <u>Performance Framework – Final Report September 2021.</u> Australian Government Department of Transport, Infrastructure, Regional Development and Communications. Sourced from: <a href="https://www.bitre.gov.au/publications/2021/review-national-cities-performance-framework-final-paper">https://www.bitre.gov.au/publications/2021/review-national-cities-performance-framework-final-paper</a>

<sup>&</sup>lt;sup>7</sup> The consultation process yielded responses from 25 unique stakeholders including local and state governments, industry bodies and universities. The Australian Institute of Architects was one of these 25 stakeholders who made a submission.



- data at the sub-city level of resolution,
- trend data to be able to demonstrate change over time.
- Benchmarking with overseas cities
- greater attention to measuring levels of sustainability and liveability

BITRE's report stated that the discontinuation of the NCPF will allow BITRE to produce targeted research products. The Institute's recommendation would enable BITRE to undertake the production of these targeted research products.

→ RECOMMENDATION 3: \$14 million over the next four years to establish an Australian Government Architect's office to advise the Australian Government and statutory agencies on best ways to achieve great designs and outcomes from government owned or government funded buildings

#### An Australian government architects' office

Australian and international research provides evidence that good design and architecture leads to improved liveability. Almost all Australians (97 per cent) believe that cities and towns are better to live in when public buildings and public spaces are well designed<sup>8</sup>.

Governments are a central influence in delivering on community expectations of how the built environment will support Australian society and economy. In part, this is because governments across Australia are a large procurer of buildings accounting for one third of non-residential buildings<sup>9</sup>. In turn, well-designed, liveable places become centres of social and economic activity creating sustainable, long-term returns on initial tax-payer funded investments.

Most Australian states and territories<sup>10</sup>, maintain the position of a "Government Architect" to provide leadership and independent strategic advice to government in relation to architecture and urban design and a range of specific built environment projects. Government Architects also publish or endorse guidance to ensure that governments are able to maximise the opportunity and outcome from the procurement of design services<sup>11,12,13,14,15,16</sup> State and local governments are also using government

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<sup>&</sup>lt;sup>8</sup> The Benefit of Design, prepared for Architects Accreditation Council of Australia, Galaxy Research, June 2015

<sup>&</sup>lt;sup>9</sup> A total of \$55.2 billion of non-residential building projects were granted building approvals across Australia in the 12 months to November 2021 with public sector works representing 34% of this total. Building Approvals, Australia November 2021. Sourced from:

https://www.abs.gov.au/statistics/industry/building-and-construction/building-approvals-australia/latest-release

<sup>&</sup>lt;sup>10</sup> Except Tasmania

<sup>11</sup> https://www.ovga.vic.gov.au/about-OVGA

<sup>&</sup>lt;sup>12</sup> https://www.wa.gov.au/organisation/department-of-planning-lands-and-heritage/office-of-the-government-architect

<sup>13</sup> https://www.odasa.sa.gov.au/

<sup>14</sup> https://www.governmentarchitect.nsw.gov.au/

<sup>15</sup> https://www.planning.act.gov.au/about-us/act-government-architect

https://www.epw.qld.gov.au/about/department/business-areas/building-policy-asset-management/architect



architects to advise on the establishment and operation of design review panels.

In the United States there is an entire branch in their Federal Government's General Services

Administration for Architecture and Engineering that also has responsibility for more than five hundred historic buildings. Many are still being used today for their originally commissioned purposes.

The relatively recent re-establishment of a Head of Architecture in the UK government in 2019, had evolved from their role as advisor to Ministry for Housing Communities and Local Government (MHCLG). From that role, a broader whole of government role remit was developed to look at how they make MHCLG the centre for design advice to all other areas of government.

#### Immediate benefits for taxpayers.

An Australian government architect's office could act as an advisor to the long-standing Parliamentary Standing Committee on Public Works which reports to the Parliament on each public work referred to it 17 about the need, purpose and suitability of proposed works, and their cost-effectiveness, value and revenue returns.

It similarly could play an important advisory role to departments such as the Department of Infrastructure, Transport Regional Development and Communications in relation to Cities Deals, both in respect of master planning and specific building projects.

Statutory agencies such as the National Housing Finance Investment Corporation might also benefit from the advice provided in relation to design responses and procurement that maximises affordable housing and housing supply outcomes within its remit.

Similarly, the advisory role may also benefit other agencies such as Defence Housing Australia or Infrastructure Australia in relation to specific projects or overarching approaches to design processes and procurement including design competitions, expressions of interest and tender and design review for projects of a particular type.

An Australian government architects' office could develop resources, guidelines and policies that maximise built environment returns on broad parameters such as:

- economic investment
- social and cultural benefit
- environmental sustainability
- supply chain certainty

→ **RECOMMENDATION 4: \$50 million** to fund the Australian Climate Service to further develop national datasets and detailed maps of natural disaster and climate related events risks across Australia to be *freely and publicly available* to local governments, designers, planners and developers so that resilience is able to be built into the design and location our buildings using the best available data.

Understanding risks from natural disasters and events.

<sup>&</sup>lt;sup>17</sup> Works sponsored by Commonwealth departments and major statutory authorities greater than \$15 million must be referred to the Committee and works of \$2 million to \$15 million must be notified to the Committee prior to tenders being called.



Australia must also enhance the resilience of our built environment to extreme weather events and predicted climate change impacts. Growth in our urban and rural cities means increasing pressures on our natural environment and the crucial ecosystem services they provide (e.g. clean air, cooler urban areas).

These impacts have a great economic cost. As one conservative measure of direct costs, arising as losses from damaging impacts, the Insurance Council of Australia (ICA) had estimated that up to the end of April 2020, the total insured loss from the 2019–20 Black Summers fires to be over \$2.2 billion<sup>18,19</sup> including the losses resulting from the destruction of 5,900 buildings of which 2,779 were people's homes.

The ICA has also estimated the cost of rebuilding communities following disasters, between November 2019 and April 2020, arising from over 252,000 insurance claims from natural disasters in Australia to be more than \$4.6 billion.

As an indicator of business losses from the shutdown to economic activity brought about by the fires, the Australian Tourism Industry Council had reported<sup>20</sup> these to be almost \$1.0 billion by mid-January 2020 alone<sup>21</sup>.

The 2020 Royal Commission into National Natural Disaster Arrangements had noted key evidence that would save lives and deliver a more resilient built environment that is better equipped to face future challenges.

In March 2020, the Council of Australian Governments (COAG) tasked the Building Ministers Forum to consider 'how to adapt the built environment to future climate and hazard conditions'.

In late 2021 the Australian Building Codes Board agreed to commence a long-term project to review current provisions of the NCC relating to bushfires, cyclones, flooding and heat stress to determine their fitness for purpose having regard to future climate projections and modelling.

How Australia builds and uses land needs to be re-appraised and informed by the best quality evidence that has considered the most recent data about our rapidly changing climate conditions and risks such as fuel loads across Australia. Examples include maps resolved to very local geographic areas<sup>22</sup> for whole of Australia (where permanent habitation occurs) that can better inform current or future recommended local specifications for designing buildings to resist cyclones, terrestrial flooding and rain inundation, wind gusts, extreme heat and bushfire attack as well as the specifications and recommended deployment of personal and community bushfire refuges.

The Australian Climate Service was established in 2021 by the Australian Government with partners including:

The Bureau of Meteorology (the coordinating partner

<sup>&</sup>lt;sup>18</sup> With the caveat that this was likely to be an under-estimate of the total eventual loss.

<sup>&</sup>lt;sup>19</sup> Insurance Council of Australia (2020) <u>Submission to Royal Commission into National Natural Disaster Arrangements. 28 April 2020.</u>

 $https://www.insurancecouncil.com. au/assets/submission/2020/2020\_04\_28\_SUB\_RC\_NNDA\%20Consolidated.pdf$ 

<sup>&</sup>lt;sup>20</sup> iv <a href="https://www.reuters.com/article/us-australia-bushfires-idUSKBN1ZFO27">https://www.reuters.com/article/us-australia-bushfires-idUSKBN1ZFO27</a>

<sup>&</sup>lt;sup>21</sup> Though this played out over a much longer time notwithstanding that Covid-19 followed closely at heels of the bushfires.

<sup>&</sup>lt;sup>22</sup> E.g Statistical Area SA1 See: https://link.fsdf.org.au/dataset/asgs-statistical-area-level-1



- Geoscience Australia
- The Australian Bureau of Statistics
- CSIRO

They will provide a service,

to work with customers to provide data and intelligence to support each phase of the natural disaster continuum; Prevention, Preparedness, Response, Recovery, Relief and Resilience.

which will,

improve the range and quality of information available to decision-makers, including:

- better access to natural hazard, exposure and vulnerability information
- geospatial and location data
- a wide range of past, present and future weather and climate data
- improved impact modelling and information.<sup>23</sup>

It is critical that this information is made available publicly and freely, especially to local governments as well as designers, planners and developers working with all clients so that resilience is able to be built into the design and location our buildings using the best available data.

- → RECOMMENDATION 5: \$6 million over three years to fund the Australian Building Codes Board to make provisions in the National Construction Code (2025) that require all residential dwellings to operate with net-zero regulated energy.
- → RECOMMENDATION 6: \$1 billion additional financing over four years through the Clean Energy Corporation for cleaner construction of energy efficient, low carbon Australian buildings and infrastructure.
- → RECOMMENDATION 7: Increase funding to \$20 million per annum for the delivery of the Trajectory for Low Energy Buildings. This will enable the Australian Government to bring forward milestones and enable timely delivery of the Trajectory for Low Energy Buildings. The Trajectory has been agreed upon by Australia's energy and building ministers in 2019 to achieve zero energy and carbon-ready commercial and residential buildings in Australia. To support the delivery of the Trajectory, ongoing funding for the Nationwide Home Energy Rating Scheme (Nathers) and the National Australian Built Environment Rating System (NABERS) programs needs to be guaranteed.

Designing and building energy efficient Australian homes and buildings

The Trajectory for Low Energy Buildings<sup>24</sup> and its Addendum (the Trajectory) were agreed by all

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<sup>&</sup>lt;sup>23</sup> Australian Climate Service - Services. <a href="https://www.acs.gov.au/pages/services">https://www.acs.gov.au/pages/services</a>

<sup>&</sup>lt;sup>24</sup> COAG Energy Council (2018) <u>Trajectory for low energy buildings. December 2018.</u> Commonwealth of Australia. <a href="https://www.energy.gov.au/government-priorities/energy-ministers/energy-ministers-publications/trajectory-low-energy-buildings">https://www.energy.gov.au/government-priorities/energy-ministers/energy-ministers-publications/trajectory-low-energy-buildings</a>



Commonwealth, state and territory energy ministers in 2019<sup>25</sup> and also referred to the Australian Building Codes Board by the Building Minister's Forum in February 2019<sup>26</sup>.

The Trajectory is a national plan that aims to achieve zero energy and carbon-ready commercial and residential buildings in Australia. It is a key initiative to address Australia's 40% energy productivity improvement target by 2030 under the National Energy Productivity Plan.

As a signatory to the Paris Climate Change Agreement, Australia has committed to reducing economywide greenhouse gas (GHG) emissions by 26 to 28 per cent below 2005 levels by 2030 and reach net zero emissions by around 2050. Australia's built environment contributes almost a quarter of Australia's emissions<sup>27</sup>, offering a significant opportunity for emissions reduction.

The Australian Sustainable Built Environment Council's (ASBEC) Low Carbon, High Performance roadmap<sup>28</sup> found that actions to reduce emissions from the building sector (including new and existing buildings), could deliver 28 per cent of Australia's 2030 emissions reduction target. Setting strong energy standards for new buildings between now and 2050 could reduce energy bills by up to \$27 billion, cut energy network costs by up to \$12.6 billion and deliver at least 78 million tonnes of cumulative emissions savings<sup>29</sup>.

Improved energy performance of buildings reduces stress on the electricity network, offers bill savings, supports a least-cost pathway to a zero-carbon built environment, and improves health and resilience outcomes for households and businesses.

In late 2021, the Australian Building Codes Board (ABCB), as directed by Australia's building ministers Building Ministers' Forum (BMF)<sup>30</sup>, has consulted on possible changes to the NCC's energy efficiency provisions, with an emphasis on residential buildings in the revised National Construction Code<sup>31</sup>.

ACIL Allen's extensive report<sup>32</sup> which informs the consultation from a regulatory and economic perspective notes that:

The residential building sector is a major source of energy demand and use. It currently accounts

 $<sup>^{25} \ \</sup>underline{\text{https://www.energy.gov.au/government-priorities/buildings/trajectory-low-energy-buildings}}$ 

<sup>&</sup>lt;sup>26</sup> Building Ministers' Forum Communique - 8 February 2019.

https://www.industry.gov.au/sites/default/files/bmf-communique-8-february-2019.pdf

<sup>&</sup>lt;sup>27</sup> Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code. Australian Built Environment Sustainability Council and Climate Works, July 2018

<sup>&</sup>lt;sup>28</sup> Australian Sustainable Built Environment Council (2016) <u>Low Carbon, High Performance How buildings</u> <u>can make a major contribution to Australia's emissions and productivity goals</u>

https://www.asbec.asn.au/wordpress//wp-content/uploads/2016/05/160509-ASBEC-Low-Carbon-High-Performance-Summary-Report.pdf

<sup>&</sup>lt;sup>29</sup> Australian Sustainable Built Environment Council (2018) <u>Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code.</u> https://www.asbec.asn.au/research-items/built-perform/

<sup>&</sup>lt;sup>30</sup> The COAG Building Ministers' Forum which is now the Building Ministers Meeting following the October 2020 Conran Review of COAG Councils and Ministerial Forums.

<sup>&</sup>lt;sup>31</sup> https://consultation.abcb.gov.au/engagement/ncc-2022-public-comment-draft-stage-2/consult\_view/

<sup>&</sup>lt;sup>32</sup> ACIL Allen (2021) <u>National Construction Code 2022 Consultation Regulation Impact Statement for a proposal to increase residential building energy efficiency requirements Report to Australian Building Codes Board September 2021 See: https://consultation.abcb.gov.au/engagement/consultation-ris-proposed-ncc-2022-residential/</u>



for approximately 7.4 per cent of Australia's energy use (across all fuels), around 29 per cent of electricity use and is responsible for around 11 per cent of Australia's greenhouse gas emissions. (p. vii)

The stated intended benefits of the new provisions<sup>33</sup> include:

- less energy use
- lower energy bills
- more comfortable homes
- less greenhouse gas emissions
- fuel / technology neutral
- less peak load on energy network

The Public Consultation Draft (PCD) of the NCC 2022 Energy Efficiency provisions, however, falls short of the task.

While ACIL Allen's modelling considers the societal costs out to 2060 of increased greenhouse gas emissions, the summary of changes to the NCC 2022 public consultation draft limits the consideration of costs to.

a whole-of-home approach with an annual energy use budget for the regulated equipment in the home (i.e. space conditioning, heated water, lighting and swimming pool & spa pumps).

That is to say, the proposed changes to the National Construction Code have only focussed on the direct operational costs to the end users rather than the societal costs.

In its submission to the NCC 2022 Public Comment Draft on the energy efficiency (and condensation) provisions<sup>34</sup> the Institute has highlighted the inadequacy of a small incremental move to NaTHERS 7-Star when the immediate goal should be net-zero building. We have particularly noted that,

The original option 1 set out in both the 2019 scoping study and the 2019 outcomes report<sup>35</sup> should be re-instated for consideration. The original Option 1 incorporated on-site renewable energy (generation and storage) to the extent that the energy use of all regulated elements would be offset. Effectively, this would produce buildings that have net zero regulated energy. (p. 3)

Furthermore, the Institute is opposed to the draft NCC 2022 provisions to continue allowing for gas appliances. The need for gas is recognised for certain high temperature processes which are not generally related to buildings. NCC 2022 must mandate all-electric powered buildings as this will enable and further speed development towards achieving net zero emissions. The proposed NCC 2022 must

<sup>&</sup>lt;sup>33</sup> Australian Building Codes Board (2021) <u>NCC 2022 residential energy efficiency – Overview of proposed changes.</u> See: <a href="https://consultation.abcb.gov.au/engagement/ncc-2022-public-comment-draft-stage-">https://consultation.abcb.gov.au/engagement/ncc-2022-public-comment-draft-stage-</a>

<sup>2/</sup>supporting\_documents/Infographic%20%20Overview%20of%20proposed%20changes.PDF

34 Australian Institute of Architects (2021) Submission -National Construction Code (NCC) 2022 Public Comment Draft <a href="https://www.architecture.com.au/wp-content/uploads/Response-to-NCC-changes-Oct-2021-final-1.pdf">https://www.architecture.com.au/wp-content/uploads/Response-to-NCC-changes-Oct-2021-final-1.pdf</a>

<sup>&</sup>lt;sup>35</sup> Australian Building Codes Board (2019) <u>Scoping Study: Energy Efficiency NCC 2022 and Beyond, July 2019.</u> See: <a href="https://consultation.abcb.gov.au/engagement/energy-efficiency-scoping-study-2019/supporting\_documents/Scoping%2OstudyEnergy%2Oefficiency%2ONCC%2O2022%2Oand%2Obeyond.pdf">https://consultation.abcb.gov.au/engagement/energy-efficiency-scoping-study-2019/supporting\_documents/Scoping%2OstudyEnergy%2Oefficiency%2ONCC%2O2022%2Oand%2Obeyond.pdf</a>



remove references to the use of instantaneous gas water heaters and move towards solar heat pump or electric hot water systems.

→ RECOMMENDATION 8: \$4 billion over four years to 2026 to fund a co-designed national housing deal with Aboriginal and /or Torres Strait Islander communities delivering 8,000 new indigenous social housing dwellings to increase dwelling numbers by 25% from 32,000 to 40,000. The deal will also address issues of overcrowding, quality, user-requirements, environmental sustainability and long-term maintenance.

Australia is faced with a major housing problem in terms of availability, affordability and accessibility. There is a major shortfall of social housing available for those on low incomes who need housing, especially those who have recently experienced homelessness, family violence or have other special needs. Affordability affects our overall productivity as a nation and the ability of all citizens to participate effectively in the economy<sup>36</sup>.

All levels of government in Australia will need to coordinate approaches to support housing diversity because:

- Australia will need to build more than one million social and affordable houses over the next 20 years to combat the housing affordability crisis, many of these will need to be located in regional Australia.
- By 2036, Australia will need 728,600 social housing properties for those on social security, and 295,000 affordable rental homes for low-income earners.
- Mortgage stress, rental stress and homelessness are all on the rise. Private renters in the lowest two income quartiles spend 29–47 percent of their disposable income on housing<sup>37</sup>.

This is a situation that has become even more pronounced since Covid-19. It has also accelerated in locations away from most capital cities, where housing has generally been considered more affordable.

Older Australian's Homelessness risk has increased over recent years, in a cohort of people who have worked all of their adult lives and have not been among the more conventionally identified "homelessness" group. Moreover, in recent years, the plight of single women who, on reaching retirement, find themselves at risk of homelessness has been identified in government and non-government reports<sup>38</sup>.

Indigenous housing - the first priority.

The Australian Institute of Health and Welfare (AIHW)'s Housing assistance in Australia 2021<sup>39</sup> report shows

 <sup>&</sup>lt;sup>37</sup> City Futures Research Centre (2019) <u>Estimating need and costs of social and affordable housing delivery. March 2019.</u> <a href="https://cityfutures.be.unsw.edu.au/research/projects/filling-the-gap/">https://cityfutures.be.unsw.edu.au/research/projects/filling-the-gap///38 Housing for the Aged Action Group and Social Ventures Australia (2020) <u>At Risk: 405,000 older women risk homelessness without urgent policy reform.</u> Housing for the Aged Action Group.
 <a href="https://www.oldertenants.org.au/news/national-forum-fans-flames-for-action-older-womens-homelessness">https://www.oldertenants.org.au/news/national-forum-fans-flames-for-action-older-womens-homelessness</a>

<sup>&</sup>lt;sup>39</sup> Supplementary data tables: Social housing dwellings. <a href="https://www.aihw.gov.au/reports/housing-assistance-in-australia/data">https://www.aihw.gov.au/reports/housing-assistance-in-australia/data</a>



that from 2006 to 2020 total social housing dwellings<sup>40</sup> for indigenous Australians fell from 35,085 to 32,035.

In September 2021 AIHW<sup>41</sup>, also reported that in 2018–19:

- 1 in 5 (20%) Indigenous households were living in dwellings that did not meet an acceptable standard<sup>42</sup>
- 46% of indigenous households in remote areas and 31% of those in non-remote areas were living in dwellings with at least 1 major structural problem.
- 9.1% of Indigenous households had no access to working facilities for food preparation, 4.5% had no access to working facilities to wash clothes and bedding and 2.8% had no access to working facilities to wash household residents.

While the AIHW reported that indigenous Australians living in overcrowded conditions fell from 27% in 2004-05 to 18% in 2018-19, the gap has not been closed when compared to the 5% of non-indigenous Australians who live in overcrowded conditions.

The 2018 National Housing Survey<sup>43</sup> showed that indigenous housing programs are struggling to deliver acceptable housing. The proportion of indigenous households in indigenous social housing programs<sup>44</sup> who considered their dwelling to be of an acceptable standard was 70.1% compared to 83.3% who resided in non-indigenous social housing programs. The difference was even more marked for those who specifically resided in public housing with only 67% who live in indigenous public housing who considered their dwelling to be of an acceptable standard compared to 82% of indigenous households who residing in non-indigenous public housing.

Culturally appropriate housing for Indigenous (Aboriginal and/or Torres Strait Islander) communities is also vitally important to create healthier, more stable, secure and socially cohesive communities. The use of co-design process and agreed outcomes should support those communities to build and maintain their own housing maximising the use of the local workforce in those communities who choose to do. In this way, these remote communities are not continually reliant on external capacity and skills to develop and maintain their housing.

At an estimated cost of \$500,000 per dwelling, \$4.0 billion dollars could fund 8,000 dwellings to increase current numbers by 8,000 or 25% from 32,000 dwellings to 40,000 dwellings.

 $<sup>^{</sup>m 40}$  The sum of State Owned and Managed Indigenous Housing and Indigenous Community Housing.

<sup>&</sup>lt;sup>41</sup> Australian Institute of Health and Welfare (2021) <u>Australia's welfare 2021 - Indigenous housing snapshot. Release date 16 Sept 2021.</u> See: <a href="https://www.aihw.gov.au/reports/australias-welfare/indigenous-housing">https://www.aihw.gov.au/reports/australias-welfare/indigenous-housing</a>

<sup>&</sup>lt;sup>42</sup> Defined in the National Aboriginal and Torres Strait Islander Health Survey as having at least 1 basic household facility that was unavailable or having more than 2 major structural problems

<sup>&</sup>lt;sup>43</sup> Australian Institute of Health and Welfare (2019) <u>Aboriginal and Torres Strait Islander people: a focus report on housing and homelessness. Web report Last updated: 29 Mar 2019 Supplementary tables.</u> See: <a href="https://www.aihw.gov.au/reports/housing-assistance/indigenous-people-focus-housing-homelessness/contents/at-a-glance">https://www.aihw.gov.au/reports/housing-assistance/indigenous-people-focus-housing-homelessness/contents/at-a-glance</a>

<sup>&</sup>lt;sup>44</sup> Comprising public housing, state owned and managed indigenous housing and community housing.



→ RECOMMENDATION 9: Commit funding of \$150 million over three years for a national upgrade program to retrofit existing public buildings to be accessible by people with disabilities

Ensuring accessibility for more Australian buildings.

A previous approach recommended in this submission is the powerful effect of embodying design and construction requirements in the National Construction Code (NCC) to improve building quality.

To further ensure that the quality of buildings is improved for all users, there is a need, as considered previously, to regulate through the NCC for the construction of new buildings that are easy to access and adaptable. This would enhance quality of life for occupants of new homes and social and economic inclusion for users of all commercial and public buildings.

In policy terms this is of national significance. In 2010 all States and Territories in Australia, together with the Federal Government, were signatories to the National Disability Strategy 2010-20. This Strategy has seen the creation of the National Disability Insurance Scheme (NDIS).

The National Disability Strategy has six outcomes areas. Outcome 1 – Inclusive and accessible community brought about the creation of the Disability (Access to Premises – Buildings) Standards 2010 as subordinate legislation to the Disability Discrimination Act 1992.

We note that aligned to the recommendation in the Australian Institute of Architects' 2021 Federal Budget priorities, that the Australian Government Department of Industry, Science, Energy and Resources undertook a review of the Disability (Access to Premises – Buildings) Standards 2010 in 2021. The Institute made a detailed submission<sup>45</sup> to this review.

Therefore, as the NCC is strengthened, *new buildings* will be better placed to deliver the inclusivity and accessibility outcomes that had been envisaged by the National Disability Strategy. At the same time, Specialist Disability Accommodation (SDA) funding is now paid to eligible NDIS participants through their NDIS funding plan. SDA funding is paid if a participant has extreme functional impairment and/or very high support needs and therefore requires specialist housing solutions for construction and/or modifications,

However, neither of these improvements addresses the issues of other existing *non-residential dwelling* buildings in the community that people with disabilities may need to access regularly for work, recreation, civic participation, shopping or business. The National Disability Strategy, while identifying the need to create accessible housing, also sought to apply the principle of a Universal Design approach.,

Taking a universal design approach to programs, services and facilities is an effective way to remove barriers that exclude people with disability. Universal design allows everyone, to the greatest extent possible, and regardless of age or disability, to use buildings, transport, products and services without the need for specialised or adapted features. (p30, ibid)

There are government schemes to subsidise the retro-fitting of measures to improve energy and water efficiency (and production/ harvesting) for Australian homes and businesses. However there does not appear to be a similar subsidy scheme for retrofitting improvements to the accessibility of buildings, in particular, non-residential buildings, and non-government buildings, consistent with a universal design approach. A nationally led subsidy scheme to retrofit buildings is needed to ensure access to all buildings

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<sup>&</sup>lt;sup>45</sup> https://www.architecture.com.au/wp-content/uploads/Australian-Institute-of-Architects-Submission-to-DISER-on-DDA-Access-to-Premises\_May\_2021\_FINAL.pdf



for all Australians.

→ RECOMMENDATION 10: \$80million over 2 years to trial an employer wages subsidy to ensure that our Australian universities' architect graduates are able to gain a supervised graduate position in a practice and attain their registration.

Throughout the Covid-19 pandemic, architecture graduates, not yet eligible for registration, have struggled to gain an opportunity to join the architecture profession as supervised 'graduate' employees across many Australian practice.. There is a risk of losing an entire cohort of Australian Architects to economic downturn, as well as the investment made by the Australian taxpayer in their five years of university education.

In broad terms, a person in Australia seeking to become a registered architect is required to complete a three-year architecture undergraduate bachelor's degree and undertake a further two-year architecture Master's degree.

Moving from university graduate to registered architect involves demonstrating application of knowledge in skills in architectural practice as specified in the National Standard of Competency for Architects (NSCA)<sup>46</sup> which are governed by the Architects Accreditation Council of Australia. Part of this process requires the completion of a minimum of 2 years supervised practice experience (giving rise to 3,300 log-book recorded hours) across a range of architectural practice areas while working for an architect practice.

After this, the graduate is also required to sit oral and written exams conducted by the Architects Registration Board of the relevant State/ Territory.

This model, which combines learning, on the job and formal education, is analogous to apprenticeship or traineeship programs in other areas of the construction industry, where formal learning and practice are both prerequisite for practitioner registration or licensing.

Supporting first year employment of higher education trained building practitioners.

A laudable measure introduced announced in the 2020 Federal Budget were the Boosting Apprenticeship Commencements wage subsidies expansion to support employers and Group Training Organisations to take on new apprentices and trainees. The measure delivered a wages subsidy to employers, of up to \$28,000 per annum, as an important economic stimulus measure to help get young people into jobs and keep them as JobKeeper payments were gradually wound back.

A similar program could assist young Australian Architecture graduates leaving university, after five years of education to also get a job.

The award wages of architecture graduates in this supervised paid employment are similar to their construction trades counterparts indicating the feasibility of using a similar level of subsidy to the Boosting Apprenticeship Commencements wage subsidies.

<sup>&</sup>lt;sup>46</sup> See: https://www.aaca.org.au/the-national-standard-of-competency-for-architects/



The Australian Institute of Architects has developed a detailed proposal <sup>47</sup> for a subsidy to be paid to the employer of new graduates. The Institute has developed a full proposal with financial modelling. The maximum outlay for one year would be \$40 million<sup>48</sup> if the initiative were to be taken up at maximum scale with all 1,300 masters graduates from the annual graduating cohort seeking immediate employment in a practice.

Our modelling demonstrates that this outlay would generate a return on investment, by the end of the first full fiscal year, of 132%<sup>49</sup> not including imputed savings to government from the avoidance of unemployment.

Women have overall low representation in the construction trades. However, they are found in much greater proportion in Architecture. As such, targeted subsidies assistance to employ graduates also creates an opportunity to promote women's participation in the combined design and construction sectors. This would represent an effective measure for the Australian Government to improve the economic participation of women in the construction sector. Data to support this is to be found in our original proposal.

<sup>&</sup>lt;sup>47</sup> Australian Institute of Architects (2020) <u>Wages Subsidisation for Architect Registration</u>

<u>Candidates - Programme Proposal and Background Briefing Australian Government Department of Education, Skills And Employment.</u> See: <a href="https://www.architecture.com.au/wp-content/uploads/Institute\_briefing\_-to-DESE\_on\_graduate\_employment-subsidy\_FINAL\_20201120.pdf">https://www.architecture.com.au/wp-content/uploads/Institute\_briefing\_-to-DESE\_on\_graduate\_employment-subsidy\_FINAL\_20201120.pdf</a>

<sup>&</sup>lt;sup>48</sup> The original proposal calculated in November 2020 noted to be \$36.4mi

<sup>&</sup>lt;sup>49</sup> This is based on the employer outlay for wages at award rates and the combined income tax and Medicare levy paid by the employed graduates.