



30 June 2023

Mr. Brad Archer  
 Chief Executive Officer  
 Climate Change Authority  
 Email: [consultation@climatechangeauthority.gov.au](mailto:consultation@climatechangeauthority.gov.au)

Dear Mr. Archer,

**Built Environment peak bodies submission to Climate Change Authority: Setting, tracking and achieving Australia’s emissions reduction targets**

Our organisations represent the full spectrum of Australia’s built environment from property and infrastructure owners and developers to builders, designers, planners, product manufacturers, engineers, service providers and industry associations. We welcome the Australian Government’s commitment to seek advice from the Climate Change Authority (CCA) on strategic frameworks for climate action across the economy and thank you for the opportunity to provide a response to the issues paper, *Setting, tracking and achieving Australia’s emission reduction targets*.

**The purpose of this submission is to strongly urge the CCA to consider the built environment as a distinct and critical sector that merits its own long-term strategy and sectoral pathway with respect to Australia’s climate mitigation and adaptation efforts.**

In delivering the Australian Government’s first Annual Climate Change Statement in December 2022, Climate Change and Energy Minister Chris Bowen noted, “the Authority recommends that the Government begin work on a plan to guide the nation’s efforts towards achieving net zero, which we agree with and will prepare... We need a comprehensive national plan for adaptation and climate risk assessment.”

We consider the CCA’s current consultation and issues paper a crucial input to shape the overarching design and approach to an economy-wide plan for achieving Australia’s interim and 2050 emissions reduction targets, as well as the design of a national plan for climate adaptation.

We note the CCA’s intended approach to begin its analysis on sectoral pathways is confined to the sectors as set out in Australia’s National Greenhouse Gas Inventory, that is: electricity, stationary energy, transport, fugitive emissions, industrial processes and product use, agriculture, waste, and land use, land use change and forestry. **This fails to account for and consider the enormous opportunities presented in the buildings sector through energy efficiency, demand management,**

**electrification, distributed energy generation and storage. All of these require targeted policies and programs directed towards end users of energy and other stakeholders who cannot be targeted by gearing policies only towards the upstream sources of emissions associated with buildings.**

### ***Buildings present enormous, shovel-ready emission abatement opportunities***

The potential of Australia's built environment to reduce emissions should not be underestimated: buildings account for half of Australia's electricity use and almost a quarter of Australia's greenhouse gas emissions through their operations<sup>1</sup>. Implementing a comprehensive suite of energy efficiency policy measures could deliver \$20 billion in financial savings by 2030, and 64MT of avoided CO<sub>2-e</sub> emissions by 2050<sup>2</sup>. Further, electrifying the built environment could deliver 199MT avoided CO<sub>2-e</sub> emissions and \$49 billion in energy savings by 2050 compared to business as usual<sup>3</sup>.

The technology already exists today to decarbonise built environment operations – but we must do this at speed and at scale to smooth the way for other hard-to-abate sectors.

Australia's transition to a low emissions built environment will be smoother if governments set a clear plan and a steady trajectory that provides confidence and the ability to plan and transition with certainty.

Over the last two decades, market leading property companies have demonstrated the potential for increased energy performance and have reduced their emissions intensity by 61% compared to a 2005 baseline<sup>4</sup>. These companies consistently top international sustainability benchmarks like the Global Real Estate Sustainability Benchmark and Dow Jones Sustainability Index and many have committed to achieving net zero emissions for scopes 1 and 2 by 2030 or sooner<sup>5</sup>.

The challenge remains for policy makers to extend the substantial progress made by market leaders across the sector as a whole. Over the past decade, an increase in Australia's building stock, driven by population and economic growth, has resulted in higher energy use in both residential and commercial buildings. This growth, combined with modest reductions in energy intensity and emissions reduction in the electricity sector have seen buildings sector emissions plateau.<sup>6</sup>

There are persistent barriers to the uptake of energy efficiency, electrification and distributed generation. Decision makers in the built environment are extremely diverse; building owners and tenants who are fragmented across many different jurisdictions and levels of government decision making. Experience from Australia and overseas has shown that addressing these barriers requires strong, long term and targeted policy and programs from Government. These include a combination of mandatory measures ('sticks'), incentives and other measures to motivate and support higher performance ('carrots') and enabling measures to provide the right conditions for least-cost, large-scale action ('tambourines').

### ***International frameworks recognise the role of the built environment***

Emissions from buildings are recognised as a key component of global scenarios that limit global warming to 1.5°C in accordance with the Paris Agreement. The Intergovernmental Panel on Climate Change (IPCC) finalised its Sixth Assessment Report in early 2023, comprising the latest advice for

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<sup>1</sup> Australian Government Department of Climate Change, Energy, the Environment and Water, 2023; Australian Government, Department of Industry, Science, Energy and Resources, National Energy and Emissions Audit 2020.

<sup>2</sup> ASBEC, *Low Carbon, High Performance*, May 2016

<sup>3</sup> ASBEC, *Unlocking the Pathway: Why Electrification is the Key to Net Zero Buildings*, December 2022

<sup>4</sup> Better Buildings Partnership, *Annual Report FY2022*, June 2023

<sup>5</sup> ClimateWorks Australia, *Net Zero Momentum Tracker*, March 2022

<sup>6</sup> ClimateWorks Australia, *Decarbonisation Futures*, March 2020

policy makers from global scientific experts. Buildings was included as a key sectoral focus as Working Group III’s report on the mitigation of climate change explained:

*“When indirect emissions (mainly from electricity, heat and other energy conversions) are included, the four main consumption (end-use) drivers are industry, AFOLU [Agriculture Forestry and Other Land Use], buildings and transport... These – together with the energy and urban systems which feed and shape end-use sectors – define the sectoral chapters in this AR6 WGIII report.”*

Many national governments around the world have followed the IPCC’s approach to defining sectoral pathways when setting their climate change frameworks and strategies. Among these are the European Union and its member states who have identified the buildings sector as a key contributor to both short term and long-term emissions reduction ambitions. Like Australia, the EU is committed to net zero emissions by 2050 and has also committed to ambitious medium-term targets.

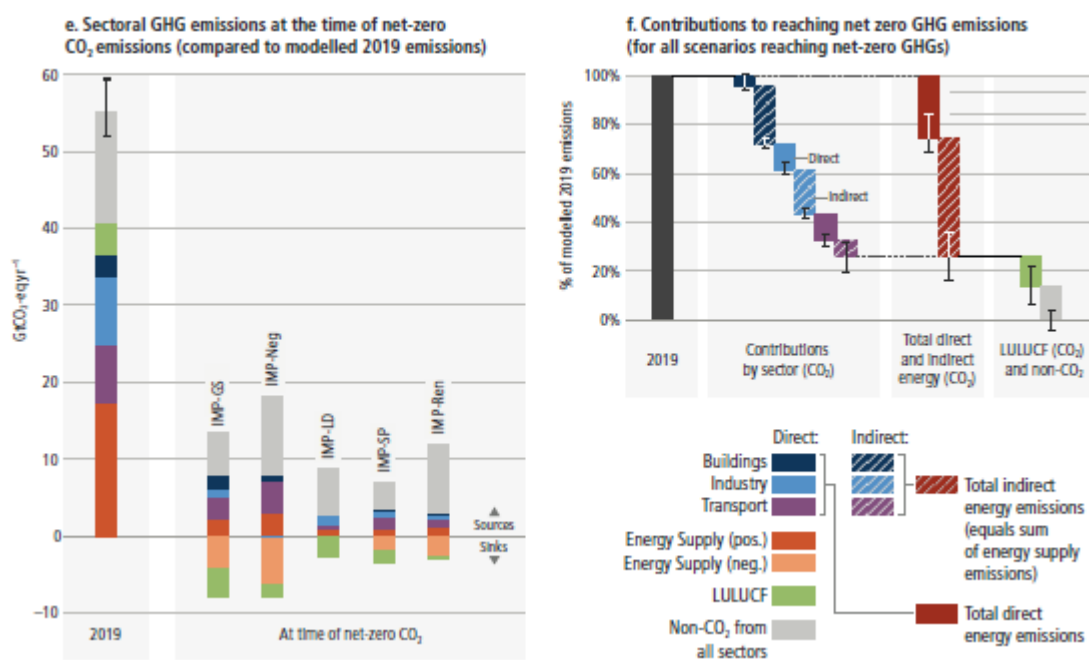


Figure 1: IPCC AR6 WGIII sectoral GHG emissions and contributions to reaching net zero

The EU has also, as part of the European Green Deal and the ‘Fit for 55’ package included legislated commitments to achieve a 55% reduction in emissions by 2030 on 1990 levels. Within this suite of reforms is the Energy Performance of Buildings Directive which contains comprehensive measures to introduce minimum energy performance standards to trigger the renovation of the worst performing buildings, introduce ambitious standards for new buildings, drive long term renovation strategies, disclosure requirements and equipment upgrades within commercial and residential buildings.

As a member state of the EU, Germany has translated EU climate law into its own national framework for action. Germany’s climate targets are enshrined in the Federal Climate Change Act (*Bundes-Klimaschutzgesetz*) and include an economy-wide emissions reduction target of at least 65% by 2030 and at least 88% by 2040, compared to 1990 levels<sup>8</sup>. The Act also defines quantified, annual emissions reduction targets for six individual sectors: energy, industry, buildings, transport, agriculture, and waste and others. The targets are set in line with the EU framework, following a linear trajectory, although the pace of emissions reductions varies by sector.

<sup>7</sup> IPCC, Sixth Assessment Report, Working Group III, *Mitigation of Climate Change*, 2022

<sup>8</sup> Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, *Federal Climate Change Act* (Bundes-Klimaschutzgesetz), 2021

## Development of greenhouse gas emissions in Germany

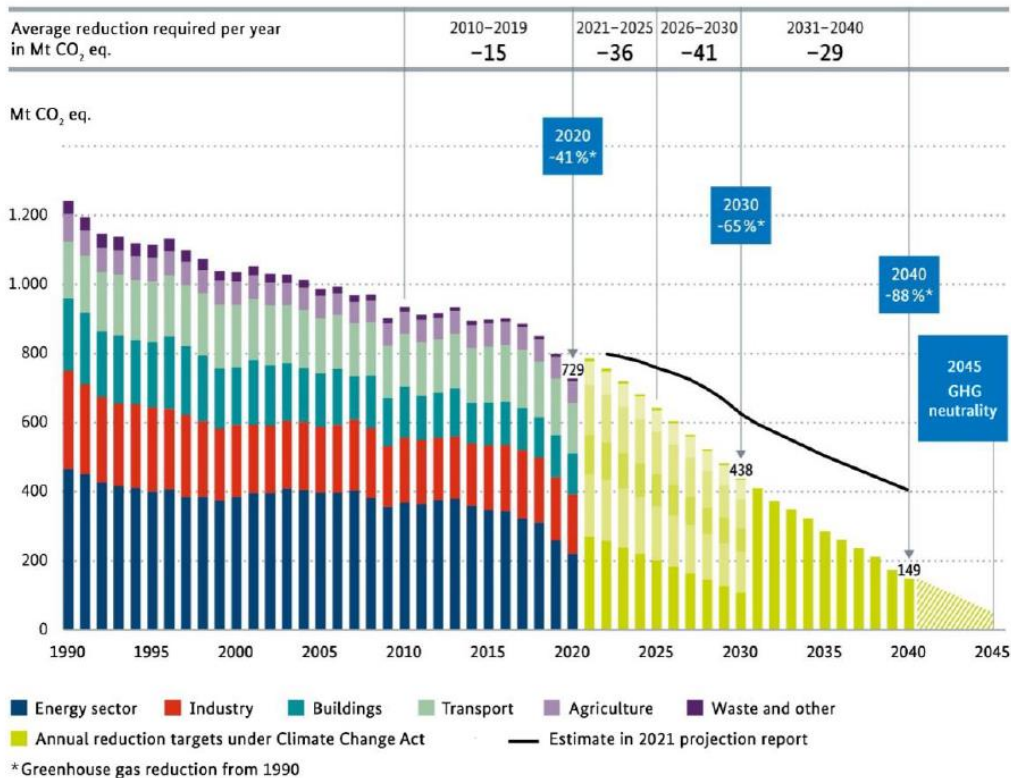


Figure 2: Greenhouse gas emissions trajectory for Germany, including sectoral contributions

### **Australia has the policy foundations in place to deliver a comprehensive sectoral strategy for buildings**

In 2019, the former Council of Australian Governments (COAG) Energy Council (now the Energy and Climate Change Ministerial Council), a Ministerial forum for national, state and territory governments to work together in the pursuit of national energy reforms, agreed to the Trajectory for Low Energy Buildings<sup>9</sup>.

The Trajectory outlines a national plan towards zero energy and carbon-ready residential and commercial buildings. It is a key initiative to address Australia's existing 40% energy productivity improvement target by 2030 under the National Energy Productivity Plan, which will shortly be superseded by the National Energy Performance Strategy, currently under development. The Trajectory comprises two main documents:

- the Trajectory for Low Energy Buildings, which is focused on new buildings and was agreed to by the former COAG Energy Council in early 2019, and
- the Addendum to the Trajectory for Low Energy Buildings—Existing Buildings which is focused on existing buildings and was agreed by the former COAG Energy Council in late 2019.

Both Trajectory documents are frameworks for policy collaboration, and emerged in response to calls from consumer groups and the built environment sector to improve the energy performance and affordability of buildings.

In the years since the Trajectory was agreed, the buildings sector has continued its collaborative focus to build on the suite of policies needed to achieve zero-carbon-ready buildings through frameworks

<sup>9</sup> Department of Climate Change, Energy, the Environment and Water, [Trajectory for Low Energy Buildings](#), 2019

like *Every Building Counts*,<sup>10</sup> which calls for a comprehensive national plan, in conjunction with state and territory governments, towards zero-carbon-ready buildings out to 2050.

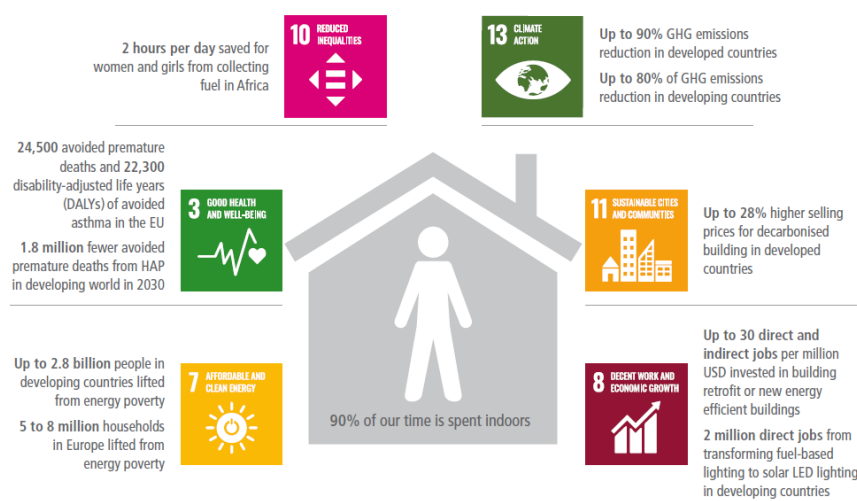
A sectoral strategy for decarbonising the buildings sector can build on the foundations of the Trajectory for Low Energy Buildings and incorporate a more comprehensive range of policies from industry frameworks like *Every Building Counts* and the latest international best practice as described above. There is broad support across the Australian buildings sector for coordinated action across different levels of government and industry to accelerate decarbonisation of buildings with staged interim science-based targets aligned with Australia’s international commitments.

### **Australia’s buildings must be at the heart of climate adaptation efforts**

Australia is already experiencing the impacts of climate change and is increasingly exposed to disasters caused by natural hazards that impact infrastructure, essential services and communities. Our buildings are not currently equipped to withstand future climate conditions that are already ‘baked in,’ leading to heightened risks for buildings and occupants.

Population density within Australia is increasing generally, with concentrations emerging in areas prone to natural hazards, particularly coastal areas. Around 80% of Australia’s population lives within 50km of the coast and 25% of Australia’s population growth is within 3km of the coastline. These population centres are exposed to some of the most damaging extreme weather events, such as tropical cyclones, storm surges, hailstorms, and coastal river flooding. More property in these areas means a higher cost of damage from natural hazard-triggered disasters as the effects of climate change increase and intensify over time.

**We spend 90% of our time indoors** so the built environment has a crucial role to play in protecting the health and comfort of all Australians in the context of a changing climate. Many of the actions required to make Australia’s buildings more climate resilient are intrinsically linked to emissions reduction efforts and achieving broader sustainability objectives like the Sustainable Development Goals (see Figure 3).



*Figure 3: Achieving SDG targets requires ambitious climate mitigation and adaptation policies.*

<sup>10</sup> Property Council of Australia, Green Building Council of Australia, Australian Sustainable Built Environment Council, Energy Efficiency Council, *Every Building Counts for the Australian Government*, April 2023.

The absence of a comprehensive national policy framework and supporting actions to mitigate and adapt to the impacts of climate change has manifested in many ways across Australia's built environment:

- a lack of national, comprehensive data and mapping has undermined understanding of natural hazard risk by governments and the community. This has contributed to poor planning decisions leading to property development in areas of significant risk
- inappropriate building design and construction in the past has been widespread, leading to a built environment susceptible to damage, and
- local, state and territory and federal governments have not invested adequately in strategic disaster mitigation initiatives and infrastructure.

Buildings constructed today will remain in use for decades and must therefore be designed to deliver increased resilience to more frequent and severe extreme weather and preserve the safety of occupants. Further, efforts must be made to retrofit existing buildings to be more resilient to climate change.

As part of the Australian Government's commitment to deliver a national framework for climate change mitigation and adaptation across the economy, a national plan for a climate resilient built environment is essential. The plan should encompass a range of measures that establish best practice technical requirements for building construction to ensure occupant safety and preserve buildings (where appropriate and cost effective) in the face of our changing climate. Initially, a nationally agreed set of future climate scenario data is required to determine structural and resilience requirements in new buildings. This dataset should be used to underpin a comprehensive framework of scheduled updates to regulation, targeted retrofits and land-use planning requirements.

We would appreciate the chance to discuss our submission with you further and request a meeting at a time of your convenience. Please do not hesitate to get in touch with Frankie Muskovic, National Policy Director at the Property Council of Australia at [fmuskovic@propertycouncil.com.au](mailto:fmuskovic@propertycouncil.com.au) or 0413 587 898, to arrange a meeting with our organisations.

Regards,



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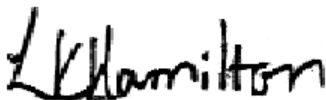
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