Initiative 1: Towards Carbon Positive Buildings
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What is the issue?
To meet our national obligations under the Paris Agreement, the Australian Government should work with and across all levels of government to realise the potential for emissions reduction across the buildings sector.

What is the opportunity?
Buildings are a major energy consumer, and their operation contributes almost a quarter of our national greenhouse gas emissions. However, they also represent one of the biggest and most cost-effective opportunities to reduce emissions and improve energy productivity. With the right policies and incentives, the built environment sector can help meet over half of Australia’s national energy productivity target, and more than a quarter of the national emissions target whilst delivering almost $20 billion in financial savings. Unlocking these opportunities is crucial to achieving a smooth transition over the longer term to zero net emissions by 2050 for Australia.

The Australian Government has an important opportunity to improve the energy performance of new buildings and fitouts in Australia, by lifting standards in the National Construction Code (the NCC). Increased minimum energy requirements in the NCC are important in addressing persistent market failures that prevent the broader uptake of better practices across the built environment sector, and to reduce the widening gap between industry leaders and minimum Code requirements. Since buildings are long lived assets, a delay in upgrading Code requirements locks in higher energy use and emissions. An estimated 1.1 million homes and 42 million square metres of commercial floor space are expected to be built between 2022 and 2025. These buildings will remain standing for decades to come, and without expensive retrofits, they will be using more energy than they should. Just three years delay in implementing energy efficiency improvements in the NCC could lock in, between now and 2030, $2 billion in residential energy bills, $620 million in non-residential energy bills and $720 million of additional network investments.

Government can also remove barriers to improved performance in distinct areas of the built environment. In the mid-tier office building sector where the uptake of energy efficiency improvements has slowed due to barriers to accessing capital and information, split incentives and the lack of skills and expertise, the Australian Government has an opportunity to develop targeted approaches that address the challenges particular to that market. The potential to leverage savings is significant – mid-tier offices are estimated to make up 52 million square meters of office space in Australia, with an estimated 80,000 buildings.

Why is this important for industry?
Demonstrating a commitment to keep global warming below 1.5°C is becoming a competitive advantage for Australian property companies, who recognise their responsibilities in light of the Paris Agreement, Australia’s endorsement of the UN Sustainable Development Goals and investor expectations around disclosing climate change resilience. Many companies are now committing to net zero emissions targets for their asset portfolios and business operations and boards are also increasingly conscious of reporting on carbon trajectories in line with international guidelines, legal opinion and good risk management. Government support for these efforts through policy will continue to ensure Australia’s competitiveness and attractiveness for investment. It will also reduce carbon related risks as they continue to come to the forefront of investment.
**Recommendation**

In line with the high level outcomes, actions and targets expressed in the GBCA’s Carbon Positive Roadmap, establish a plan for net zero emissions buildings by 2050, including interim targets for emissions and energy performance and a process for reporting on progress.
1.2 A trajectory for future increases to minimum performance standards in the National Construction Code

By 2050, buildings constructed after 2019 will likely make up more than half of Australia’s building stock. As energy costs rise and increased demand places ever growing pressures on our energy infrastructure, buildings can provide some of the fastest and most affordable solutions to our energy problems. At the same time, more efficient buildings also have the potential to keep costs manageable for households and businesses.

Australia is fortunate to have a National Construction Code (NCC), which allows for the consistent and nation approach to standard setting for new construction and major fitouts, including standards for energy performance.

However, there is currently a significant gap between existing minimum standards for commercial and residential buildings in the NCC and industry best practice. Lifting minimum standards for energy efficiency in the NCC will ensure that new buildings in Australia do not miss opportunities for emissions reduction, as well as creating opportunities to reduce running costs over the life of buildings.

The GBCA is a proud supporter and member of the Australian Sustainable Built Environment Council, which earlier this year with ClimateWorks Australia released Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code, outlining an evidence base for cost-effective long-term improvements to the energy requirements of the NCC.

Built to Perform shows that:

- Building Code improvements from 2022 onwards could cut household energy bills by $20.9 billion and non-residential energy bills by $8.4 billion by 2050, whilst also cutting $12.6 billion needed for investments in electricity networks by 2050. These benefits outweigh the upfront costs of the improvements.
- Updating the Building Code from 2022 could reduce Australia’s cumulative emissions between now and 2050 by 78 MtCO2-e
- A three-year delay would lock in $2.6 billion of wasted energy expenditure, plus 9 MtCO2-e of emissions to 2030 and 22 MtCO2-e to 2050.

The GBCA has welcomed the COAG Energy Council and the Building Ministers Forum’s support for advancing energy efficiency measures for non-residential buildings, and looked forward to the implementation of this policy in the 2019 National Construction Code.

Going forward, it is important that targets and a forward trajectory are set for future updates, with a clear and transparent process for implementation and adjustment over time.

The GBCA encourage the Australian Government, along with the members of the COAG Energy Council and the Building Ministers Forum to:

- Commit to a Zero Carbon Ready Building Code, as part of a transition to net zero carbon new buildings by 2030. This would mean setting a forward plan for energy efficiency targets, and introducing net energy targets over and above the energy efficiency targets that encourage increased take-up of renewable energy.
- Deliver a step change in the energy requirements in the 2022 Code, with a strong focus on residential, and a further incremental increase in non-residential requirements.
- Expand the scope of the Code and progress complementary measures, to prepare for future sustainability challenges and opportunities, including health, peak demand, maintainability, electric vehicles and embodied carbon.

Recommendation

Provide industry with the certainty to innovate and invest in higher performing buildings by strengthening energy efficiency requirements for the National Construction Code in line with Built to Perform and supporting a rapid and least cost national transition to net zero.

1.3 Accelerate energy efficiency for mid-tier buildings

Mid-tier buildings—those classed as non-A Grade or non-Premium Grade—account for around 80 per cent of Australia’s office buildings and 50 per cent of floor space. The sector is highly fragmented, and characterised by varied ownership structures that contribute to market failures including split incentives between owners and tenants, and a lack of information and awareness amongst building owners and operators.

In anticipation of the Australian Government’s upcoming review of the Commercial Building Disclosure program, the GBCA, together with AIREE, the Property Council of Australia, ASBEC, City of Sydney, CitySwitch, Energy
Recommendation

Accelerate improvements to mid-tier office buildings sector by building on the success of the Commercial Building Disclosure program, incentivising building upgrades through targeted tax incentives, setting leadership standards for government tenancies and investing in research to improve our national understanding of this distinct sector.

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