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16 January 2020

Building Advisory Services

Department of Infrastructure, Planning and Logistics

Floor 1, Energy House, 18-20 Cavenagh Street, Darwin NT

Submitted via email: BAS.Policy@nt.gov.au

To Whom It May Concern,

RE: ClimateWorks Australia submission to consultation on *Building energy efficiency in new commercial buildings in the Northern Territory*

ClimateWorks Australia welcomes the opportunity to provide input on the Northern Territory (NT) Government consultation into the adoption of minimum energy requirements for new commercial buildings. We applaud the NT Government for demonstrating leadership in considering the introduction of National Construction Code (NCC) Section J minimum energy efficiency requirements for new commercial buildings in the NT.

ClimateWorks Australia develops expert, independent solutions to assist the transition to net zero emissions for Australia, South-east Asia and the Pacific. A non-profit organisation, it was co-founded in 2009 by The Myer Foundation and Monash University and works within Monash Sustainable Development Institute. In 2018 ClimateWorks released two reports in partnership with the Australian Sustainable Built Environment Council (ASBEC) - *Built to Perform*¹ and *Built to Perform in Northern Australia*² - which set out a series of industry-led feasible forward pathways for NCC energy requirements covering a range of building types and climates across Australia. The reports showed that a forward trajectory for energy standards in the NCC, for both residential and commercial buildings, could deliver up to \$29 billion in reduced energy bills and 78 million tonnes of cumulative emissions savings across Australia by 2050.

¹ Available at <https://www.climateworksaustralia.org/resource/built-to-perform/>

² Available at <https://www.climateworksaustralia.org/resource/built-to-perform-in-northern-australia/>



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Since ClimateWorks' launch in 2009 through a partnership between The Myer Foundation and Monash University, philanthropic support has been key to achieving our mission of catalysing Australia's transition to a prosperous, net zero emissions future. This support continues to allow us to remain truly independent, evidence-based and non-partisan.

Minimum energy standards are essential to address market failures for new buildings

Improved energy performance of buildings presents a win-win-win opportunity, by reducing stress on the electricity network and offering bill savings; supporting a least-cost pathway to a zero emissions built environment; and improving health and resilience outcomes for households and businesses. The NCC is a ready-made policy instrument to influence the operational energy use of new buildings and major renovations. While it does not apply to existing buildings, the NCC can have a significant impact over time because more than half the buildings expected to be standing in 2050 will have been built since 2019³.

Minimum energy requirements in the NCC are essential to address market failures in the delivery of higher performance buildings that have seen a widening gap between industry leaders and minimum practice. For example, a ClimateWorks review of the progress being made in the building sector towards a low carbon economy, released in 2013, found that new commercial office buildings with a Green Star rating had, on average, half the emissions intensity of new office buildings built to minimum NCC energy requirements⁴.

Adopting NCC Section J energy requirements in the NT, which apply consistently to all new commercial building developments, may help address the following market failures:

- **Capability:** Home buyers, tenants and businesses often lack appropriate data, information and skills, which can undermine their ability to fully realise the benefits of low energy use buildings when making decisions to buy or rent a property
- **Motivation:** Internal and external factors can have a strong influence on the motivation of home buyers, tenants and businesses to consider investing in a high-performance buildings, regardless of financial attractiveness and capability. These include 'split incentives' between tenants and landlords, and a lack of awareness of the non-energy benefits of energy efficiency.

The NCC is the primary policy and regulatory lever already used by all other Australian jurisdictions to ensure minimum energy efficiency standards are met for all new commercial buildings and major renovations, and there is a national strategy to continue strengthening the NCC from current standards⁵. Adopting NCC Section J requirements will enable new commercial buildings in the NT to realise the financial, health and environmental benefits of

³ ASBEC and ClimateWorks Australia (2018) *Built to Perform*, p.7.

⁴ ClimateWorks Australia (2013) *Tracking Progress Towards a Low Carbon Economy: Buildings*, p.19. 'Emissions intensity' is defined as the annual greenhouse gas emissions divided by the building floor area

⁵ Refer to the COAG Energy Council's *Trajectory for Low Energy Buildings*, available at <http://www.coagenergycouncil.gov.au/publications/trajectory-low-energy-buildings>

higher energy performance in line with the rest of Australia.

Strong minimum energy requirements would help deliver net zero emissions

The draft NT Climate Change Response proposed a strategy to reduce greenhouse gas emissions across all sectors, in line with a long-term aspirational target of net zero emissions by 2050⁶. Reducing emissions from buildings is central to achieving this aspiration, as across Australia, commercial buildings contribute around 10% of national greenhouse gas emissions⁷.

According to global research on decarbonisation pathways to 2050, achieving net zero emissions requires action across three ‘pillars’⁸:

1. Ambitious energy efficiency
2. Low carbon electricity
3. Electrification and fuel switching.

Energy efficiency sits at the top of this hierarchy, and technology such as efficient heat pumps, LED lighting and building optimisation already exists today to set commercial buildings on the path towards net zero emissions⁹. Adopting NCC Section J requirements in the NT will contribute to cost-effective emissions reductions in line with the proposed net zero emissions aspiration.

NCC Section J requirements must be appropriate to the NT climate

NCC Section J requirements will need to be developed with the NT’s diverse and unique climate in mind, including the tropical Top End and arid Central Australia¹⁰. *Built to Perform in Northern Australia* recommends that in addition to NCC Section J adoption, the NT Government should progress measures that build capacity in the region to deliver higher performing buildings at lower cost, using design and construction practices appropriate to the climate. These may include increased shading and air movement to keep buildings cool, and comfortable outdoor areas where people can spend time rather than inside with the air conditioning on. Improving industry capacity to deliver comfortable, resilient and higher

⁶ Refer to <https://haveyoursay.nt.gov.au/climate-change-response>

⁷ From unpublished ClimateWorks Australia analysis drawing on National Greenhouse Gas Inventory data: <https://ageis.climatechange.gov.au/>

⁸ ClimateWorks Australia (2014) *Pathways to deep decarbonisation in 2050*. ClimateWorks research in the Australian context adds a fourth pillar, “Reducing non-energy emissions”, which covers industrial and land use emissions. Available at <https://www.climateworksaustralia.org/resource/pathways-to-deep-decarbonisation-in-2050-how-australia-can-prosper-in-a-low-carbon-world/>

⁹ ClimateWorks Australia (2018) *Decarbonisation Futures: Buildings*. Available at <https://www.climateworksaustralia.org/resource/decarbonisation-futures-buildings/>

¹⁰ A brief description of climate variations can be found in ASBEC and ClimateWorks Australia (2018) *Built to Perform in Northern Australia*, pp.23-24



energy performance commercial buildings would reduce the cost of meeting NCC Section J energy requirements.

On behalf of ClimateWorks, I thank you for the opportunity to provide input to the consultation. Please do not hesitate to contact me if you have any further questions.

Yours sincerely,

Michael Li
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ClimateWorks Australia