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To Whom It May Concern

CLIMATE CHANGE IN WESTERN AUSTRALIA – ISSUES PAPER

The Australian Sustainable Built Environment Council (ASBEC) welcomes the release of the *Climate Change in Western Australia – Issues Paper* and commends the Western Australia Government on their commitment to net zero emissions by 2050.

ASBEC is a body of peak organisations committed to a sustainable built environment in Australia. ASBEC's membership consists of industry and professional associations, non-government organisations and government observers who are involved in the planning, design, delivery and operation of our built environment. Collectively, ASBEC's membership has direct reach to more 300,000 professionals in the built environment and represents an industry worth more than \$700 billion in value.

Our industry members include the Property Council of Australia, Planning Institute of Australia, Australian Institute of Architects, Energy Efficiency Council, Consult Australia, Water Services Association of Australia, Engineers Australia, Australian Institute of Refrigeration Airconditioning and Heating, Green Building Council of Australia and Infrastructure Sustainability Council of Australia. We are pleased that the WA Department of Finance has been an observer member of ASBEC for the last ten years.

ASBEC's members are committed to contributing significantly towards Australia's obligations within the Paris Climate Change Agreement through a net zero emissions built environment by 2050 and we are pleased to provide this submission to inform Western Australia's transition to a resilient, low-carbon economy.

We commend the Western Australia Government's adoption of an aspirational emissions reduction target of net zero emissions by 2050. Energy efficiency is a vital enabler towards reaching this target. There is an opportunity to broaden and strengthen the Government's energy efficiency initiatives to most effectively meet this target.

Built environment is key to carbon abatement

Buildings are responsible for more than half of Australia's electricity consumption, and almost a quarter of our total greenhouse gas emissions, through their operation.

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 have the potential to keep costs manageable for households and businesses.

Whilst much attention is paid to supply-side elements of the energy market, it is vital that a better balance is found in energy policy, relating to potential on the demand-side, including the energy performance of buildings.



ASBEC is very supportive of low-carbon economic growth underpinned by the growth of a renewable energy industry. The capacity of installed small-scale solar photovoltaic (PV) systems has grown strongly since 2010 and the pace of rooftop solar PV installations has accelerated, with the rate of growth in installations having increased by a record 60 per cent in 2018.

Energy efficiency is a fundamental enabler for renewable technologies, ensuring energy is used most productively and avoiding the need for additional generation.

Several key reports released by ASBEC over the last three years illustrate how the building sector presents a significant and cost-effective opportunity for energy productivity and emissions reduction.

- [*Low Carbon, High Performance*](#), authored for ASBEC by ClimateWorks in 2016, provides a policy roadmap for realising this opportunity. This report highlights how Australia's built environment sector is uniquely placed to become a global market leader in energy and sustainability, with buildings presenting low cost opportunities that deliver almost \$20 billion in energy savings, as well as other benefits, including improved health and resilience outcomes for households and businesses.
- [*Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code*](#), released 2018 by ASBEC and ClimateWorks, which shows that setting strong energy standards for new buildings in the National Construction Code could, between now and 2050: reduce energy bills in Western Australia by up to \$4 billion and deliver at least 10 million tonnes of cumulative emissions savings in Western Australia, whilst cutting national energy network costs by up to \$13 billion.
- [*Growing the market for sustainable homes*](#), published in 2019 by ASBEC and the CRC for Low Carbon Living. *Growing the market* shows that an accelerated transition to sustainable housing could deliver more than half a billion dollars of additional investment in Australia's construction industry by 2030 and create over 7,000 new jobs.

Best practice policy for the built environment

ASBEC has supported the development of a best practice policy toolkit for net zero buildings, authored by the Property Council of Australia and Green Building Council of Australia: [*Every Building Counts: A practical plan for emissions reduction in the built environment*](#).

Every Building Counts concisely outlines a series of smart, targeted practical policies across residential, commercial and public buildings that should be implemented by federal, state and territory and local governments to drive emissions reduction in line with Australia's Paris Agreement commitments.

Key recommendations for [state and territory governments](#) include:

1. Expand the mandate of the Energy Security Board to drive energy productivity across the economy;
2. Accelerate the shift to high performance buildings with planning incentives;
3. Accelerate the shift to high performance buildings with targeted financial incentives;
4. Unlock the potential of distributed energy; and
5. Invest in the best mix of demand-side and supply-side measures.

Immediate opportunities for Western Australia's buildings

There is an immediate opportunity for Western Australia to advance action in the built environment. These include:

- **Advance minimum energy efficiency standards for new residential buildings from 2022**, by supporting an ambitious approach by the Australian Building Codes Board, as identified in the [*Energy efficiency - NCC 2022 and beyond scoping study*](#). ASBEC and ClimateWorks' [*Built to Perform*](#), along with addendum report [*Built to Perform in Northern Australia*](#) demonstrate the benefit of higher energy efficiency standards across the various climate zones of Western Australia.
- **Commit to the outcomes of the [*Trajectory for Low Energy Existing Buildings*](#)** approved by the COAG Energy Council earlier this month, which include rental energy efficiency standards and home energy ratings.

- **Demonstrate Government leadership through procurement** of government owned and occupied buildings as well as social and economic infrastructure, including public housing, schools, hospitals and transport. The [NSW Government Resource Efficiency Policy](#) provides a good example for such a policy.
- **Incentivise high performing buildings** through energy efficiency schemes, stamp duty discounts and differentiated rates. Energy efficiency schemes exist in NSW, Victoria, South Australia and the ACT; serving as examples of what can be practically applied in Western Australia.

Renewables in the National Construction Code

Built to Perform showed that there is significant, cost-effective potential for additional onsite renewables through the incorporation of net energy requirements into the National Construction Code. This would accelerate the uptake of distributed renewable energy systems, including rooftop solar PV; and make a major additional contribution towards the broad economy as well as decarbonisation of the built environment.

One significant advantage of incorporating onsite renewables in the National Construction Code is that it could provide greater certainty about the likely speed of distributed renewable energy uptake, which would support planning for future electricity network upgrades. In addition, distributed renewable energy paired with battery storage may help address grid stability issues, reduce transmission and distribution losses, increasing the resilience of the grid during power outages and assist with the broader transition to a zero carbon electricity sector.

An alternative approach to accelerate uptake of distributed renewables could be to rely on policy mechanisms outside the Code, such as energy emissions policies or direct financial incentives.

Low Carbon and Resilient Infrastructure

Infrastructure assets are long term investments which operate for decades. Infrastructure built today will likely still be in use in 2050, at a time when Australia will need to be at or near net zero emissions in line with our commitment under the Paris Agreement. In order for this to happen, there should be clear consistent, formalised processes for incorporating net zero emissions principles into infrastructure decisions.

ASBEC has partnered with the Infrastructure Sustainability Council of Australia (ISCA) and ClimateWorks Australia to explore and define the role Australia's infrastructure can play in a net zero emissions future. This initiative seeks to provide guidance on how infrastructure advisors and decision-makers can consider net zero emissions in planning, designing, building and operating infrastructure. As part of this initiative, we will be releasing an Issues Paper *Reshaping Infrastructure for a net zero emissions future* in early 2020.

Infrastructure has a significant, lasting influence on Australia's greenhouse gas emissions. Analysis to be presented in *Reshaping Infrastructure* shows that around 70% of Australia's annual emissions are associated with infrastructure assets in three ways:

- Embodied emissions result from the production of materials used in the construction of infrastructure, as well as from the construction process itself.
- Operating emissions result from the ongoing operations of infrastructure assets.
- Enabled emissions result from the activities of infrastructure's end-users.

Net zero emissions principles can be embedded in key phases, frameworks, priorities and decisions common across the diverse types of infrastructure projects. Infrastructure Australia's forthcoming Australian Infrastructure Plan, and Infrastructure Priority List provide key opportunities to embed net zero emissions principles into infrastructure plans, assessment frameworks and priorities.

We look forward to engaging with Infrastructure WA as this work evolves, to further inform considerations of opportunities to deliver resilient and low carbon infrastructure.

Further engagement opportunities

ASBEC recommends establishing regular consultation for with key organisations to ensure policy reform reflects industry expertise and maximises opportunities early. ASBEC's membership consists of twenty-seven industry and professional associations, along with government and academic observers, involved in planning, design, delivery and operation of our built environment. We are uniquely placed to facilitate this type of consultation and would be very happy to do so.

We look forward to working with the Western Australia Government to advance an ambitious new State Climate Policy.

Yours Sincerely

A black rectangular redaction box covering the signature of Suzanne Toumbourou.

Suzanne Toumbourou
Executive Director