MEDIA RELEASE

Australia’s buildings must be built for a zero carbon future

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Energy standards in Australia’s National Construction Code must be urgently upgraded if new buildings are to be fit for a zero carbon future, according to a new report released today.

Built to Perform, prepared by the Australian Sustainable Built Environment Council (ASBEC) and ClimateWorks Australia, shows setting stronger energy standards for new buildings in the Code could, between now and 2050, reduce energy bills by up to $27 billion, cut energy network costs by up to $7 billion and deliver at least 78 million tonnes of cumulative emissions savings.

“Australia needs to transition to a net zero emissions economy by 2050 to meet our commitment to the Paris Climate Agreement. But new analysis by the American Council for an Energy Efficient Economy shows Australia scores the lowest in energy efficiency amongst all developing countries. Although market-leading Australian companies are demonstrating world-class commitment to a sustainable built environment, the market alone cannot fix this problem,” said ASBEC Executive Director Suzanne Toumbourou.

“All of the buildings being built today will still be operating in 2050, at a time when we will need to be at or near net zero emissions. Our Building Code needs to be ‘zero carbon ready’, ensuring that today’s new builds are prepared to operate in a zero carbon future.”

“We welcome proposed improvements to the 2019 National Construction Code to advance energy performance in commercial buildings and adjust the requirements for residential buildings,” said Ms Toumbourou. “However, to meet the full potential of the Code, we need to shift away from ad-hoc, periodic updates. Governments must agree to a longer-term plan with targets and a clear, regulated and transparent process for Code updates out to 2030, starting with a step-change in residential standards in 2022.”

“If developers and manufacturers know how the Code requirements will evolve over the next 15 years, this will provide the regulatory certainty industry needs to plan and invest in new technologies, delivering higher building energy performance at lower cost.” said Professor Tony Arnel, Chair of ASBEC’s Building Code Task Group and President of the Energy Efficiency Council.

“Even this conservative analysis shows that, by 2030, improvement in Code energy requirements could reduce energy consumption of new buildings by up to 56 per cent. This could be achieved through simple, cost-effective energy efficiency measures such as improved air tightness, double glazed windows, increased insulation, outdoor shading, and more efficient air conditioners, hot water systems and lighting,” said ClimateWorks Project Manager Michael Li. “With the costs of solar PV and battery storage rapidly reducing, adding on-site renewable energy into the Code could deliver significant additional gains.”

Although there are upfront costs associated with these improvements, these are small (less than 4% for detached homes) relative to overall construction costs and land prices.

“While the Code is important, it can only take us part way to net zero,” said Ms Toumbourou. “Improving compliance and enforcement with Code requirements is paramount, as well as improving appliance energy standards, retrofitting existing buildings, providing building owners and occupants with better information, and driving faster decarbonisation of the electricity grid. The Code should be seen as one part of an integrated strategy to deliver a zero carbon building sector by 2050.”

“Delaying action will mean that many of these opportunities are lost,” said Mr Li. “A three-year delay in further upgrades to building energy performance standards could lead to a further $2.6 billion in wasted energy expenditure and lock in an additional 9 million tonnes of emissions by 2030, increasing to 22 million tonnes by 2050.”
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About the Report

*Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code* can be downloaded here.

This report presents the results of the Building Code Energy Performance Trajectory project, which quantifies the opportunities of establishing a clear, consistent and ambitious long-term plan for the energy requirements in the National Construction Code. The report modelled eight different building types across four climate zones. It investigated the costs and benefits to society of simple energy efficiency and on-site renewable energy opportunities. The analysis assessed upfront costs associated with improvements, as well as benefits from reduced energy bills, downsizing of heating, cooling and ventilation equipment, and reduced network costs.

This report was produced with the generous support of the Cooperative Research Centre for Low Carbon Living, the RACV and dozens of building industry and government partners. The project has been delivered in partnership with CSIRO, Energy Action (EA), Strategy. Policy. Research. (SPR) and the Sustainable Buildings Research Centre at the University of Wollongong (UOW).

About ASBEC

The Australian Sustainable Built Environment Council (ASBEC) is a collective of leading industry organisations committed to a sustainable built environment in Australia. ASBEC’s membership consists of a range of key industry government and academic organisations who are involved in the planning, design, delivery and operation of our built environment and who are concerned with the economic, social and environmental performance of the sector.

ASBEC’s activities, including research and policy development on built environment issues, are an example of a collaborative, co-ordinated approach undertaken across all segments of the built environment. ASBEC works actively to develop and promote leading practice in the design, planning and operation of our cities, at a buildings, precincts and citywide scale.

About ClimateWorks

ClimateWorks Australia is an expert, independent adviser, acting as a bridge between research and action to enable new approaches and solutions that accelerate Australia’s transition to net zero emissions by 2050. It was co-founded in 2009 by The Myer Foundation and Monash University and works within the Monash Sustainable Development Institute.

In the pursuit of its mission, ClimateWorks looks for innovative opportunities to reduce emissions, analysing their potential then building an evidence-based case through a combination of robust analysis and research, and clear and targeted engagement. They support decision makers with tailored information and the tools they need, as well as work with key stakeholders to remove obstacles and help facilitate conditions that encourage and support Australia’s transition to a prosperous, net zero emissions future.