MEDIA RELEASE

Expert report: Improve home energy standards or risk bigger bills, more emissions

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Australia can cost-effectively strengthen residential energy efficiency standards in the Building Code and cut heating and cooling energy use by up to 51 per cent, according to a new report released today by the Australian Sustainable Built Environment Council (ASBEC) and ClimateWorks Australia.

Implementing these changes now could deliver Australians savings of up to $150 per household per year on energy bills, with savings more than offsetting additional capital costs. It could also deliver more comfortable homes, reduce stress on the electricity grid, and cut emissions by around 10.8 million tonnes to 2050 – more than the amount emitted annually by Victoria’s Loy Yang B coal-fired power station.

The Bottom Line – household impacts of delaying improved energy requirements in the Building Code report shows these savings could come from simple energy efficiency improvements such as air tightness, ceiling fans, and roof insulation.

The houses we build in coming years will be in use for decades, well beyond 2050 when Australia will need to be near net zero emissions. Buildings account for almost a quarter of national emissions, and more than half of electricity use. With half a million homes projected to be built between 2019 and 2022, delaying improved energy standards by just three years would lock in an estimated $1.1 billion in unnecessary household energy bills, and 3 million tonnes of additional emissions by 2050.

Looking further ahead, the benefits of an improved Code will add up fast. An estimated 58 per cent of Australia’s expected building stock in 2050 will be built after 2019. With buildings accounting for almost a quarter of national emissions and more than half of national electricity consumption, this makes the Code an indispensable policy tool to transition to zero emissions in line with Australia’s commitments under the Paris Climate Change Agreement.

The Australian Building Codes Board has today released a proposal to update the Code energy requirements for 2019. This includes improvements to the requirements for housing, but there is no proposal to strengthen the required level of energy efficiency for homes.

“We welcome the proposed improvements in the non-residential energy requirements”, said Tony Arnel, President of the Energy Efficiency Council and Chair of ASBEC’s National Construction Code Working Group. “If implemented, these changes could deliver significant energy and emissions benefits in the non-residential sector. The draft changes for residential buildings are also a good start. However, our report demonstrates that greater opportunities exists to improve residential performance.”

“At a time when many families are struggling to cope with rising living costs, low standards for energy efficiency mean higher bills for Australian households. Low income households, who spend a higher proportion of their income on energy bills, stand to benefit the most.” said Suzanne Toumbourou, ASBEC’s Executive Director.

“Low energy homes put less stress on the electricity grid. If just one household makes efficiency improvements and cuts their peak demand by one kilowatt (kW) – the power used to run a small oil heater – this would save almost $1,000 in electricity system infrastructure, reducing electricity prices for everyone.” said Tony Arnel. “In total, the proposed changes could save an estimated $1.2 billion to 2050 through avoided and deferred network investments”.

“We already know that improving Australia’s built environment provides some of the most ‘shovel-ready’ opportunities to meet our Paris Climate Change Agreement obligations. If we miss this opportunity, other sectors of Australia’s economy will need to cut emissions more. That may not be as fast or cost-effective, making Australia’s emissions reduction task more expensive overall.” said ClimateWorks Program Manager, Eli Court.
“With the threat of 50 degree days in Sydney and Melbourne, we need to consider whether our homes are ready to provide safe indoor temperatures. Air conditioning may not be enough if our homes are not built to strong energy standards.” said Suzanne Toumbourou.

“The energy requirements in the Building Code were last updated in 2010 and are next due to be updated in 2019. There is currently no plan to strengthen standards for residential buildings in this Code update. Further delay means that we will be building to 2010 standards all the way to 2022, locking in higher emissions and energy costs.” said Tony Arnel.

“This study considered only simple, ‘lowest common denominator’ energy efficiency improvements. As leading building practitioners have shown us, with best practice design for energy efficiency, such as attention to building orientation and window sizing and placement, further low-cost improvements in energy efficiency are possible.” said Eli Court.

Available for comment
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About the Report
The Bottom Line – household impacts of delaying improved energy requirements in the Building Code can be downloaded here.

This report presents the preliminary results of a broader project that quantifies the opportunities of establishing a clear, consistent and ambitious long-term plan for the Code energy requirements. 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 full report will be released in June 2018.

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.