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Dear Ben

UPDATING THE CLIMATE CHANGE AUTHORITY'S ADVICE ON MEETING AUSTRALIA'S PARIS AGREEMENT COMMITMENTS

The Australian Sustainable Built Environment Council (ASBEC) welcomes the opportunity to provide input to the Climate Change Authority's policy toolkit required to meet the Paris Agreement.

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. ASBEC has twenty-seven industry members, including the Property Council of Australia, Green Building Council of Australia, Engineers Australia, Building Designers Association of Australia, Australian Institute of Refrigeration, Air Conditioning and Heating, Energy Efficiency Council and Facilities Management Association of Australia.

▼ Key ASBEC Reports

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.

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

Low Carbon, High Performance

[*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.

Low Carbon, High Performance showed that:

The building sector can reach zero carbon emissions by 2050 using technologies available today

- Energy efficiency can more than halve emissions from Australia's buildings by 2050.
- After switching non-electric appliances (mostly gas) to electric alternatives, remaining emissions could be eliminated by installing solar panels on buildings, resulting in a zero carbon building sector.
- Reducing emissions in buildings could help Australia meet over half our energy productivity target and more than one quarter of our 2030 national emissions target.



Buildings represent low cost opportunities to reduce emissions and deliver significant energy savings

- Reducing emissions in the building sector will help Australia reach its emissions reduction targets and deliver other financial and health benefits.
- Improving the quality and performance of buildings will make our offices and homes healthier places, leading to improved productivity and quality of life.
- After covering capital costs, if all energy efficiency opportunities highlighted in the report were to be implemented, these measures would result in almost \$20 billion in energy savings, equalling a return-on-investment of around \$2 for every \$1 invested.

Australia's built environment sector can become a global market leader in energy and sustainability

- Over the past decade, market leaders in Australia have demonstrated that rapid improvements in building energy performance are possible. New Green Star rated buildings emit less than half the amount of greenhouse gases emitted by the average ten-year-old building.
- Leading Australian property companies are now recognised in international benchmarks as global leaders in energy and sustainability: Australia and New Zealand have ranked first in the Global Real Estate Sustainability Benchmarks for the last eight years running.

Market barriers need to be addressed

- While market leaders have shown that substantial improvements can be achieved in the design and construction of high performance buildings, to date, energy intensity has improved by only 2% across the commercial sector and 5% across the residential sector since 2005. This is a result of a range of interconnected financial and non-financial barriers.
- Capturing high performance building potential across the whole sector will require policy that removes barriers and allows leading companies to continue to innovate.

Every year of delay locks in higher energy costs and lost opportunities for low cost emissions reductions

- Delaying action means locking in emissions intensive buildings and equipment rather than using the most energy efficient designs and models.
- These assets exist for decades: the average home stands for around 50 years, but can last much longer.
- Just five years' delay in implementing opportunities in buildings could lead to \$24 billion in unnecessary energy costs and over 170 megatonnes of lost emission reduction opportunities.

Business-as-usual not an option

- Australia has signed the Paris Climate Agreement, which commits the world to limiting global warming to less than 2 degrees Celsius and sets it on a path towards net zero emissions.
- Without further actions, buildings would emit 4,600 megatonnes of greenhouse gases by 2050 - almost half of Australia's carbon budget.
- This would leave only half our carbon budget for all other sectors of the economy. At current rates, other sectors would use up that carbon budget in just 13 years.
- If all opportunities in *Low Carbon, High Performance* are implemented, building emissions could be halved.
- Buildings would be consuming only 20% of the national carbon budget, roughly equivalent to their current share of annual national emissions. This would extend the available budget for other sectors to the equivalent of 19 years at current rates, which is necessary to allow other sectors more room to resolve technological barriers to reducing their own emissions.

Strong policies are critical to address existing barriers and accelerate actions.

ASBEC identified five key policy solutions which could support a transition to high performance buildings:

1. **Establish a national plan towards zero carbon buildings by 2050** - This includes supporting policy frameworks, governance arrangements with interim and long-term targets, clear responsibility at Ministerial level, co-ordination across different spheres of government and public reporting requirements.

2. **Set strong mandatory minimum standards** - Creation of strong minimum standards for buildings, equipment and appliances, and establishment of a forward trajectory for future standards, including:
 - National Construction Code minimum energy performance standards
 - Minimum standards for appliances
 - Standards for rental properties
3. **Create targeted incentives and programs** - Support higher performance in the short-to-medium term through incentives and programs including the use of government market power and a range of financial incentives for building owners and tenants, including:
 - Targets and programs for government procurement, construction and government-owned & occupied buildings
 - Introduce and harmonise Existing Energy Efficiency Obligation schemes across all States and Territories.
 - Incentives for the replacement of non-electric appliances
 - The establishment of sectoral leadership groups in retail, health and industrial sectors
 - Minimum standards for public housing
4. **Reform the energy market** - Support the implementation of cost-effective energy efficiency and distributed energy improvements by removing energy market barriers.
5. **Resource appropriate energy data, information, research and education measures** - Enable informed consumer choice and support the innovation, commercialisation and deployment of new technologies and business models for delivery of energy efficiency and distributed energy solutions, including:
 - Develop a national built environment data and information strategy
 - Improve access to energy consumption data
 - Expand mandatory disclosure to smaller offices & other building types
 - Mandatory disclosure of energy performance to residential buildings
 - Develop a national built environment energy efficiency and emissions research agenda
 - Develop a national built environment energy efficiency and emissions education and training agenda

Built to Perform

In 2018, ASBEC and ClimateWorks released [*Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code*](#), which shows that setting strong energy standards for new buildings in the National Construction Code could, between now and 2050:

- Reduce energy bills by up to \$29 billion'
- Cut energy network costs by up to \$13 billion; and
- Deliver at least 78 million tonnes of cumulative emissions savings across Australia.

Built to Perform recommended the following actions:

1. **Commit to a Zero Carbon Ready Building Code** by setting energy efficiency targets in the National Construction Code, introducing net energy targets, and establishing a clear set of rules and processes for implementation and adjustment of the targets in the Code.
2. **Deliver a step change in the energy requirements in the 2022 Code**, with a strong focus on residential standards and a further incremental increase in non-residential standards.
3. **Expand the scope of the Code and progress complementary measures**, to prepare for future sustainability challenges and opportunities, including health, peak demand, design for maintainability, provision for electric vehicles and embodied carbon. Measures should also be progressed to complement the Code and drive towards zero carbon new and existing buildings.

We have been very pleased to work with a growing community coalition calling for [*healthy and affordable homes*](#), which has contributed constructively to our efforts to advance energy efficiency standards in the National Construction Code.

Growing the market for sustainable homes: Industry Roadmap

In July this year, ASBEC and the CRC for Low Carbon Living released [Growing the market for sustainable homes](#), a roadmap of voluntary measures which showed 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.

The report identifies the major barriers to the uptake of sustainable homes: *“Consumers are unclear of their choices – and are baffled by the terminology that describes sustainable features and technologies. Home builders are locked into business models and supply chains that limit innovation. And financiers don't value sustainable homes.”*

The report's 'Sustainable Homes Transition Roadmap' identifies four vital steps to address these barriers and catalyse growth in this market:

1. Identify and differentiate the product
2. Train and reward the construction industry
3. Build awareness and social norms
4. Provide financial value proposition

Growing the market calls for the following actions:

1. **National commitment to a voluntary pathway for sustainable homes:** Governments to prioritise a voluntary pathway for sustainable homes and work together to establish and resource an entity to oversee activities outlined in the Roadmap. This entity would work in partnership with Australia's property and construction industry to deliver the actions outlined below to:
 - Establish an agreed definition for sustainable housing that resonates with consumers
 - Improve coordination of initiatives to avoid consumer confusion, duplication and fragmentation
 - Facilitate commercially-focused activities.
2. **Certification and training:** Create benchmarks that support the new definition of sustainable homes and upskill the building sector to implement these benchmarks. Steps would include:
 - Establish a standard for new best practice sustainable homes
 - Develop a certification program and training for the home building sector
 - Work with relevant state and territory agencies to establish an energy efficiency disclosure scheme for existing homes
 - Support training for real estate agents, volume builders and land developers to deliver a sales narrative that underscores the benefits of sustainable homes.
3. **Pilot program:** Spearhead a 1,000-home pilot program that incentivises volume builders to deliver sustainable homes. The results of the pilot program would be used to:
 - Validate the sustainable home standard
 - Support training and accreditation of early industry adopters
 - Uncover the personal stories of homeowners and tradespeople participating in the pilot program, and deliver media collateral to support mass media consumer engagement
 - Assess the need for any subsequent government program for ongoing incentives to complete the market transformation.
4. **Consumer engagement campaign:** Develop and deliver a longitudinal consumer engagement campaign – including programming in mainstream broadcast media, social media and commercial product placement – to accelerate the adoption of sustainable homes and support early adopters to enter the market at scale.
5. **Finance: Engage with the finance sector to:**
 - Enforce basic quality standards and seek disclosure of ratings for loan approvals
 - Embed sustainability features into property valuation methods and concomitant lending limits
 - Deliver lower cost finance for high performing homes.

▼ Key Government Processes

We have been extremely pleased to see the strong alignment between ASBEC’s work and government priorities, policies and programs. The Climate Change Authority has outlined several of these programs in their report on [Industry action on climate change mitigation and low-emissions technologies](#).

The Government’s [Climate Solution Package](#) reflects the importance of energy efficiency, with the aim of achieving almost 20% of the 2030 greenhouse gas reduction target through measures including energy ratings for appliances and equipment, improving energy efficiency of commercial and residential buildings, and the Energy Efficient Communities Program.

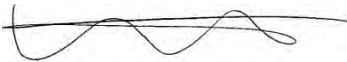
These measures – outlined in more detail in the COAG Energy Council’s [National Energy Productivity Plan](#) and [Trajectory for Low Energy Buildings](#), and the Australian Building Code Board’s [Energy efficiency - NCC 2022 and beyond scoping study](#) – reflect the longstanding collaboration between industry and government in setting the policy foundations for better performing buildings.

As noted above, ASBEC has called for Australian Governments to “Establish a national plan towards 2050 zero carbon buildings”. The *Trajectory for Low Energy Buildings* provides an outstanding platform to advance this objective.

We are currently working with key members, including the Property Council of Australia and Green Building Council of Australia, to deliver an updated best practice policy energy efficiency toolkit that can help to inform the policies prioritised by the Climate Change Authority. This should be released later this year.

We would be pleased to engage further with the Climate Change Authority as you explore the potential of the built environment to meaningfully contribute towards emissions reduction.

Yours Sincerely



Suzanne Toumbourou
Executive Director