Submission No 99

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: Australian Sustainable Built Environment Council

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AUSTRALIAN SUSTAINABLE BUILT ENVIRONMENT COUNCIL
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The Chair
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To Whom It May Concern

INQUIRY INTO SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

The Australian Sustainable Built Environment Council (ASBEC) welcomes the consideration of the Legislative Assembly Committee on Environment and Planning of the capacity and economic opportunities of renewable energy. We are grateful for the opportunity to provide a submission.

ASBEC is a body of peak organisations committed to a sustainable built environment in Australia, with membership consisting 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. Collectively, ASBEC's membership has direct reach to more 350,000 professionals in the built environment sector and represents an industry worth more than $700 billion in value.

Renewables and Energy Management

ASBEC members are supportive of the delivery of clean, affordable, secure, reliable and sustainable energy supply. We have a particular interest in enabling onsite and precinct-scale renewable energy. The capacity of installed small-scale solar photovoltaic (PV) systems has grown strongly since 2010, driven primarily by steadily reducing prices.

Energy management is a fundamental enabler for new energy technologies, ensuring energy is used most efficiently and avoiding the need for additional generation.

The Energy Efficiency Council's report *The World's First Fuel: How Energy Efficiency is Reshaping Global Energy Systems* notes that global leaders treat energy management as a core strategy for meeting the energy needs of homes and businesses. The report states:

> *"Energy management provides real capacity to energy markets, as every unit of energy that isn't used is energy that doesn't need to be generated. …*
>
> *Energy management is going to become more, not less, important as the proportion of generation coming from renewable energy rises. Reducing our demand for energy and better aligning when we generate and use energy will dramatically reduce the cost of generation, storage and network infrastructure."*

Building Energy Efficiency

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.

The building sector presents a profound and cost-effective opportunity energy productivity and also emissions reduction. *Low Carbon, High Performance*, authored for ASBEC by ClimateWorks in 2016, provides a policy roadmap for realising this opportunity. This report shows 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 deliver almost $20 billion in energy savings, as well as other benefits.

Strong policies are critical to address existing barriers and accelerate actions. ASBEC has identified five key policy solutions which could support a transition to high performance buildings:

1. **Establish 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.
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.
4. **Reform the energy market** - Support the implementation of cost-effective energy efficiency and distributed energy improvements by removing energy market barriers and distortions.
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.

The *Draft Plan to Save NSW Energy and* Money, released in 2016, aimed to delivering over 1300 gigawatt hours of electricity savings a year in 2020, and around $17 billion in bill savings by 2050. This *Draft Plan* aligned closely with the recommendations in *Low Carbon, High Performance*, reflecting the longstanding collaboration between industry and the NSW government in setting the policy foundations for better performing buildings.

Unfortunately, this *Draft Plan* has not been formalised in NSW. However, the measures are still relevant and we continue to await advice on its progress.

National Construction Code

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 $7 billion in NSW and $29 billion nationally;
- Deliver at least 20 billion tonnes of cumulative emissions savings in NSW and 78 million tonnes across Australia; and
- Cut energy network costs by up to $13 billion nationally.

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.

There is also a growing community coalition calling for healthy and affordable homes, calling for higher energy efficiency requirements for new homes.

We have been very pleased to see these measures reflected in the COAG Energy Council's *Trajectory for Low Energy Buildings*, which has informed the Australian Building Code Board's recently released Energy efficiency - NCC 2022 and beyond scoping study. We understand that the NSW Government supported these measures.

We encourage the NSW Government to continue to promote strong ambition as a member of the Australian Building Codes Board to commit to significantly higher energy efficiency standards for new homes in the 2022 National Construction Code.

▾ Onsite Renewable Energy

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.

We would be pleased to present our work, including the findings of *Built to Perform* to the Committee.

Yours Sincerely

Suzanne Toumbourou
Executive Director