

Australian Energy Market Commission
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Submitted via online portal

23 May 2017

Dear Committee Secretariat,

RE: REVIEW OF REGULATORY ARRANGEMENTS FOR EMBEDDED NETWORKS

The Green Building Council of Australia (GBCA) welcomes the opportunity to make this submission to the Australian Energy Market Commission on the Review of regulatory arrangements for embedded networks.

The GBCA is the industry association committed to developing buildings, cities and communities that are productive, liveable, healthy, resilient and sustainable:

- **We rate** the sustainability of buildings and communities through Australia's only national, voluntary, holistic rating system – Green Star.
- **We educate** industry and government practitioners and decision-makers and promote green building programs, technologies, design practices and operations.
- **We advocate** for the sustainable transformation of the built environment.

Since its inception in 2002, the GBCA has worked towards inspiring, influencing and empowering the property and construction industry by driving the adoption of sustainable building and community practices. To effectively respond to rapid changes facing our cities and towns in the context of globalisation, resilience and adaptation, technological advances and shifting social demands, the mandate of the GBCA also addresses the broader challenge of catalysing a sustainable cities movement.

The GBCA represents 650-plus individual companies with a collective annual turnover of more than \$40 billion. Our membership reflects the diversity of Australian business with over 500 small-to-medium enterprises through to 75 companies with annual turnover of more than \$100 million and 24 companies now listed in the ASX200, with a combined market capitalisation of more than \$620 billion. Members include major developers, professional services firms, banks, superannuation funds, product manufacturers, retailers and suppliers.

Throughout this year the GBCA has provided a number of submissions to government considering the challenges now facing the Australian Energy Market. It is imperative that this Review (which for the GBCA provides similar commentary) considers the findings and recommendations being progressed through:

- The Independent Review into the Future Security of the National Electricity Market (Finkel Review)
- The Australian Energy Regulator on Demand Management Incentive Scheme and Innovation Allowance Mechanism

- The Department of Environment and Energy consultation on a draft standard for Carbon Neutral Buildings and Precincts
- The Australian Government Department of Environment and Energy Federal Climate Change Policy Review
- The House of Representatives Standing Committee on the Environment and Energy Inquiry into Modernising Australia's Electricity Grid.

This submission focusses on one element of the Review; which aims to *ensure regulatory frameworks are fit for purpose and sufficiently flexible to cope with the effects of emerging technologies and market innovation*. This submission advocates for the importance of any future regulatory framework and legislation providing flexibility across the market that encourages innovation and supports consumer choice.

Following Australia's commitments in Paris to reduce our emissions to limit global warming to below 2°C there can be no delay to policies and programs that will help deliver that goal. In this context, the GBCA is committed to delivering a low carbon, high performing built environment. We note:

- Buildings currently account for almost 25 per cent of our national emissions.
- Using existing technologies, buildings could **contribute up to one tenth of our 2030 emissions target** through energy efficiency measures and **contribute more than a quarter of our 2030 emissions target** with high levels of uptake of distributed energy.
- Buildings could **contribute to meeting more than half of our energy productivity target**.

The GBCA is proud to be a member of the Australian Sustainable Built Environment Council (ASBEC). The *Low Carbon High Performance* (2016), report published by ASBEC and authorised by Climate Works, found that emissions reductions potential in Australia's built environment sector from installation of commercial and residential distributed solar generation could contribute a reduction of 50Mt CO₂e by 2030. This would deliver 18 per cent of Australia's current 2030 emissions reduction targets.

Many GBCA members with geographically diverse portfolios are delivering district based energy and water utilities, using emerging technologies including solar PV and battery storage. The most effective solutions and services for the end-user in this context can be limited by state legislation and regulation supporting existing distribution infrastructure, reducing the commercial viability of more innovative solutions and eroding the consumer experience. These requirements differ across states and distribution networks within states, imposing substantial costs on customers and delaying the uptake of new technologies. The GBCA recommends that this Review address these barriers to the connection of renewable distributed utilities, services and supporting technologies; this should include a more consistent approach to how standards for connections are set, governed, and applied. A wider uptake of distributed energy solutions would increase generation, reduce demand and improve energy security through increased resilience. These objectives have long been supported by the GBCA through our support for distributed energy solutions and renewables as reflected in the adoption of Green Star ratings across the built environment.

Green Star supporting innovation in energy and utilities

Launched in 2003 as Australia's only national, voluntary and holistic rating system for sustainable buildings and communities. The Green Star rating system is leading the way on a low emissions economy in Australia and has been developed by the Australian development industry and locally adapted to suit the Australian market. In this context, many world leading Green Star projects are currently encountering setbacks when it comes to world leadership because of regulatory restrictions imposed on embedded networks and district-based utilities.

Green Star encourages innovation and leadership, which is exemplified in many of the over 1460 Green Star certified projects across Australia. The Green Star – Design & As Built rating tool aims to encourage the reduction of peak demand load on the electricity network infrastructure, as well as encourage the reduction of Greenhouse Gas Emissions associated with the use of energy in building operations.

The University of Queensland's Global Change Institute achieved 6 Star Green Star – Design & As Built certification representing 'World Leadership' and is a prime example of the leadership demonstrated in the Australian building industry. The Global Change Institute is one of Australia's first net zero energy and carbon buildings. The building is naturally ventilated 88 per cent of the year, captures and stores its own power through one of the largest solar arrays in Queensland and meets its own power needs every day in all seasons as well as exporting power to the grid four days a week.

The Green Star – Communities rating tool, established in 2012 as the only holistic, voluntary rating tool for communities and precincts of its kind in Australia, now has a proven track record in delivering concrete outcomes and benefits across a range of projects. Developed in consultation with industry and all levels of government, the rating tool encourages and recognises projects that deliver sustainable buildings and energy efficient homes, designed and constructed to meet the changing needs of occupants across their lifetime.

Alkimos Beach in Western Australia, a residential master-planned project was awarded Australia's first 6 Star Green Star – Communities rating. Key sustainability innovations at Alkimos Beach include mandatory solar panels and gas-boosted solar hot water systems as well as other energy-efficient appliances. These features are supported by a financial incentive package from Alkimos Beach development partners to reduce home energy bills by up to 50 per cent. Alkimos Beach also represents Australia's first community energy storage trial that has more than 100 homes connected virtually to innovative solar energy storage as part of a development-wide initiative to reduce peak electricity demand. I have enclosed a copy of this case study for further information.

These examples reflect the need for this Review to ensure that regulatory frameworks are fit for purpose and sufficiently flexible to cope with the effects of emerging technologies and market innovation that is taking place across Australia. This would play a significant role in boosting generation capacity, increasing resilience and security, delivering new productivity benefits for businesses and improvements in quality of life for households.

The GBCA thanks the Australian Energy Market Commission for the opportunity to provide comment on this Review. Please do not hesitate to contact me by phone on (02) 8239 6200, or via email at jonathan.cartledge@gbca.org.au for further information.

Yours sincerely



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