

Department of Housing and Public Works
Queensland Building Plan
GPO Box 2457
BRISBANE QLD 4001

Via email: qldbbuildingplan@hpw.qld.gov.au

1 March 2017

Dear Sir/ Madam,

RE: QUEENSLAND BUILDING PLAN DISCUSSION PAPER

The Green Building Council of Australia (GBCA) welcomes the opportunity to make this submission to the Department of Housing and Public Works on the *Queensland Building Plan Discussion Paper (Discussion Paper)*.

About the GBCA

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 has extended and evolved beyond green buildings to also address the broader challenge of catalysing a sustainable cities movement.

The GBCA has more than 700 member organisations, including major developers, professional services firms, major banks, super funds, product manufacturers and suppliers, as well as universities, local councils, state and federal government departments and agencies.

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. The GBCA is proud to be a member of the Australian Sustainable Built Environment Council (ASBEC) and supports the *Low Carbon High Performance (2016)*, the report published by ASBEC and authored by ClimateWorks and which is referenced within the *Discussion Paper*.

The GBCA is pleased to provide comment on the following components of the *Discussion Paper*:

1. Non-conforming building products
2. Sustainable buildings

About Green Star

The GBCA recommends for Government to reference Green Star as the preferred metric for sustainability and resilience outcomes for buildings and communities. Launched in 2003 as Australia's only national, voluntary and holistic rating system for sustainable buildings and communities. The Green Star rating tool has been developed by the Australian development industry and locally adapted to suit the Australian market. Furthermore, leading sustainability indices such as the Global Real Estate Sustainability Benchmark (GRESB) – which has ranked Australia's real estate market as the global green leader for five years straight – recognises Green Star ratings as the best measure of sustainability outcomes in our property industry.

The Green Star rating system for buildings covers nine categories (Energy, Water, Management, Transport, Land Use and Ecology, Emissions, Indoor Environment Quality, Materials plus Innovation). The outcomes of a certified Green Star – Design & As Built rating may be as follows: Best Practice (4 Star rating), Australian Excellence (5 Star rating) and World Leadership (6 Star rating). All Green Star certified projects produce sustainability outcomes that are typically much better than minimum legislative requirements. For instance, a 4 Star Green Star rating will always be at least 10 per cent better than a building that simply meets code requirements from an energy perspective.

The *Discussion Paper* refers to Green Star providing both Design certification as well as As Built certification - this is no longer correct. Feedback from industry and government 2014 identified that for Green Star – Design & As Built and Green Star – Interiors only As Built certification would be awarded. Project teams can still choose to pursue an optional 'design review' to ensure they are on track to achieve the 'As Built' rating being targeted.

Non-conforming building products

Government has a responsibility to provide visionary leadership, in particular by setting contemporary benchmarks and rigorous standards. Third party certification, such as that offered by Green Star, ensures that Governments across Australia can meet community expectations and demonstrate long-term fiscal responsibility and accountability for the buildings they own, occupy and develop and assist in eliminating non-conforming building products. The GBCA applauds the leadership by the Queensland government to pursue Green Star certification for government buildings. There are currently over 1430 certified Green Star projects in Australia with over 270 of these in Queensland.

The GBCA supports the proposed recommendations to non-conforming building products. It is important to note here that the GBCA is working closely with the Australian Building Codes Board and other industry associations on the proposed updates to the National Construction Code (NCC) for 2019 and a proposed trajectory moving forward for future revisions. The National Construction Code (NCC) – which sets the minimum necessary requirements for new buildings and new building work in existing buildings – is updated every three years.

The Green Star – Design & As Built rating tool guides the sustainable design and construction of a range of building types including schools, hospitals, offices, public buildings, aquatic centres, social and affordable housing and multi-unit residential buildings. The 'Materials' category within the rating tool aims to address the consumption of resources within a building construction context, by encouraging the selection of lower-impact materials. The category also encourages absolute reductions in the amount of waste generated or the recycling of as much of the waste generated as possible. The 'Materials' category rewards projects that achieve the following outcomes:

Use of products and materials with lower impact

- Addressing life cycle impacts of construction materials and products
- The selection of furniture, assemblies and flooring materials that are certified or reused
- The use of products and materials that are subject to chain of custody agreements.

Reduction in waste to landfill

- The minimisation of waste through efficient design and material selections
- The consideration of waste minimisation across the entire project life cycle
- The use of materials with high levels of recycled content, or the selection of reused products and materials.

Locally, 180 Brisbane is a shining example of practical sustainable design, innovative thinking and at the time Queensland's first 6 Star Green Star - Office Design v3 building and achieved 6 Star Green Star – Public Building v3 certification. Natural light, fresh air and city views, as well as control over individual workspace temperature and lighting, maximises workplace productivity and minimise the fixed operating costs to tenants. As stated earlier in this submission, Green Star-certification provides the independent verification that projects have met leading sustainability benchmarks, which Green Star is known for. I have enclosed a copy of this case study for further information.

Sustainable buildings

The lack of transparent information on the costs and benefits of sustainable building practices has reduced the uptake of these practices by some sectors. Increasing this knowledge will demystify the costs, and, when combined with the benefits of sustainable building practices, provide clear information to the building industry and government on the value proposition of sustainable buildings, fitouts and communities.

In 2014, the GBCA launched the Green Star Financial Transparency Innovation Challenge, with the aim of increasing the information available to industry on the costs and benefits of sustainable building. The initial research report released in July 2016 finds that on average, developers / building owners are achieving Green Star ratings with three per cent of their overall project budgets.

The data shows that Green Star projects can be delivered for less than one per cent of the overall project budget. On average, projects are spending an additional:

- 1.5% per square metre to achieve a 4 Star Green Star rating
- 2.7% per square metre to achieve a 5 Star Green Star rating
- 3.2% per square metre to achieve a 6 Star Green Star rating

Furthermore, the GBCA acknowledges that business as usual will not assist Government's in achieving ambitious environmental targets. The Value of Green Star report (2013), looked to quantify the overall impact of the Green Star rating system on greenhouse gas emissions, operational energy usage, operational water consumption and construction and demolition waste. The study compared data from 428 Green Star-certified projects with buildings that just met average or minimum practice standards. I have enclosed a copy of the Value of Green Star: A Decade of Environmental Benefits, Research Key Findings (2013) report for further information.

The report found that on average, Green Star-certified buildings:

- Produce 62 per cent fewer greenhouse gas emissions than average Australian buildings
- Use 66 per cent electricity than average Australian buildings
- Use 51 per cent less potable water than if they had been built to minimum industry requirements.

The higher the Green Star rating, the greater the environmental savings across all key areas – greenhouse gas emissions, energy use, water consumption and construction and demolition waste. Within the sustainable building section of the *Discussion Paper*, the GBCA supports:

- Improving sustainability performance to provide ongoing savings an amenity for commercial buildings
- Improving the environmental performance of government buildings.

Green Star – Performance can provide a useful resource for Government and commercial buildings to assess operational performance, and take practical action to improve their environmental and financial sustainability overtime. The versatility of Green Star – Performance means that it can rate buildings beyond commercial office buildings to include schools, public buildings, hospitals, shopping centres, and industrial buildings, with over 410 Green Star – Performance certified projects across Australia. A prime example that showcases the sustainability benefits of Green Star – Performance is the Council Administration Building of Wollongong City Council in New South Wales which achieved a 5 Star Green Star – Performance rating. The upgrades and improved practices have resulted in energy efficiency gains of 55 per cent and water efficiency gains of 85 per cent. As Wollongong Council's Lord Mayor, Gordon Bradbury OAM stated, 'Council has demonstrated to the local industry and to the community that you can gain Green Star ratings with an ageing building if you use the right methods and programs'. I have enclosed a copy of the case study for further information.

Green Star – Interiors is also a useful rating to achieve the desired outcomes under sustainable buildings within the *Discussion Paper*, as it provides best practice benchmarks for the development of interior fitouts. Green Star – Interiors aims to assist clients and project teams to achieve and rate their sustainability goals for their project, encourage a new approach to designing and constructing fitouts by rewarding sustainability best practice and excellence, and provide consistent and clear guidance in an easy to use manner, with over 20 Green Star – Interiors certified projects across the country. The South Australian Department of Environment, Water and Natural Resources (DEWNR) are leading by example and highlighting mid-tier commercial buildings can be transformed into more efficient and sustainable buildings. DEWNR recently achieved 6 Star Green Star – Interiors certification representing 'World Leadership' for their fitout at 81 Waymouth Street. Locally, the Gold Coast Commonwealth Games Corporation recently achieved 4 Star Green Star – Interiors certification representing 'best practice' for the GOLDOC headquarters. I have enclosed a copy of this case study for further information.

I encourage the Queensland government to look upon the GBCA as the primary sustainable building and communities resource to assist in achieving the objectives of *Queensland Building Plan Discussion Paper*. Please do not hesitate to contact me on 02 8239 6200, or via email at luke.farr@gbca.org.au for further information.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Luke Farr', with a long horizontal flourish extending to the right.

Luke Farr
Manager – Advocacy