green building council australia

Building a sustainable future

20 October 2011

Adaptation Consultation Team
Office of Climate Change
GPO Box 2454
Brisbane
QLD 4001

Dear Sir/Madam,

Re: Green Building Council of Australia submission to the Office of Climate Change on the *Climate Change: Adaptation for Queensland* Issues Paper, 2011

Acknowledgement
This submission is made by the Green Building Council of Australia (GBCA) in response to the Office of Climate Change, *Climate Change: Adaptation for Queensland – Issues Paper*.

Our submission acknowledges that the purpose of the consultation is to give an opportunity for stakeholders to provide input and ideas on further programs and policy to support adaptation to the impacts of climate change. In addition, the GBCA would like to respond to the sector-specific questions asked in the Issues Paper and acknowledges that comments may be used to shape the new programs under the updated adaptation strategy.

Whilst the Issues Paper has been written with a sectoral focus, it recognises that many issues associated with climate change are inter-woven between sectors and issues within sectors, a concept with which we would concur. Human Settlements is one sector described in the Paper and is the focus of our submission, in particular responding to some of the questions posed at the end of the chapter.

About the GBCA
The GBCA is Australia's leading authority on green buildings and communities, established in 2002 to develop a sustainable property industry in Australia and drive the adoption of green building practices. The GBCA promotes green building programs, technologies, design practices and processes, and operates Australia's only national voluntary comprehensive environmental rating system for buildings and communities - Green Star.

The GBCA has more than 900 member organisations, including government departments, which work together to support the Council and its activities. The GBCA is also a founding member of the World Green Building Council, which was established to provide a federated 'union' of national green building councils with a common goal to support the sustainable transformation of the global property industry; there are now 89 such councils worldwide.

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The Green Star rating tools
Green Star is a voluntary tool that encourages, recognises and rewards best practice and innovation. The first Green Star rating tool was released in 2003 in response to market demand for a rating tool that would evaluate the environmental design and construction of buildings as well as establishing a common language for green buildings.

There are currently nine Green Star rating tools which address a range of building types and more than 360 projects have achieved Green Star ratings, with a further 540 developments registered. The Green Star rating system is designed to take an holistic approach within each class and building sector, addressing nine categories in total: Management, Indoor Environment Quality (IEQ), Energy, Transport, Water, Materials, Land Use and Ecology, Emissions and Innovation.

The GBCA engages with all levels of government and advocates its 'green building agenda', which outlines the five priorities that it believes will place Australia on a clear, long-term pathway to sustainability.

These five green building priorities are to:

- Provide visionary government leadership
- Retrofit and improve existing buildings
- Green education and healthcare facilities
- Move beyond buildings to communities and cities
- Embed green skills across all industry training

The GBCA believes that these priorities, if addressed effectively, will help transition Australia's green building practices 'from voluntary to vital'.

Green Star – Communities
In 2009 the GBCA commenced work on the development of a rating tool for sustainable development projects on a community scale. The first step in developing the Green Star - Communities rating tool was to develop a national framework consisting of five best practice principles (a copy of the Green Star - Communities Framework is enclosed). This framework was published in 2010 and completed Stage 1 of the Green Star – Communities project.

Stage 2 of the project involves establishing best practice benchmarks for assessing and certifying sustainable communities. A set of draft credits has been developed and these are currently being tested on a number of projects across Australia (a summary of the draft credits is enclosed).

Extensive consultation has been undertaken with all levels of government and a wide range of industry stakeholders in the development of the Green Star - Communities tool. The project sponsors are diverse and include all three tiers of government, as well as private sector developers, academia, professional service providers and industry. The GBCA values the input and sponsorship provided by the Urban Land Development Authority.

Background to our submission
The GBCA, along with other key built environment industry players, has advocated for many years that the built environment is critical to the future of Australia's productive capacity, the wellbeing of communities and the health of natural ecosystems.

This has culminated in a shift in national policy that provides increasing recognition of the built environment's role and the need to respond to a range of significant challenges, such as population growth and demographic change, transport congestion, global competition, climate change, resource depletion, housing affordability, infrastructure deficit, access to services, biodiversity conservation, energy and water.

In our view, a key to progress will be the successful adaptation of our built environment to these and other key challenges, most of which have inter-dependencies and all of which have outcomes that can impact on social, economic, environmental and governance progress.

The GBCA is a member of the Australian Sustainable Built Environment Council (ASBEC) and, as Chief Executive of the GBCA, I am currently the Chair of the ASBEC Cities Task Group. ASBEC has recently commenced an adaptation research project in which the Office of Climate Change may be interested and we encourage you to make contact with ASBEC's Executive Officer, Jayne Paramor, on (02) 8252 6707.

Submission
The efforts of the Queensland Government are acknowledged in their actions to address climate risks through land use planning and policies, revised building standards and their commitment to investing in a better understanding of the climate science in Queensland.

The investment the Government has made in climate science at a regional level is critical to help planners, developers and the broader community understand and plan new developments with more certainty. The GBCA is supportive of the efforts to regionalise the climate science and provide useful policy which assists in planning for climate change such as the regional climate change projections (ClimateQ: Towards a Greener Queensland, 2009); Queensland Coastal Plan and coastal hazard maps; improved coastal mapping and the Inland Flooding Study.

As part of the context for adapting existing and planning new human settlements in Queensland, it is important to recognise that the state is very vulnerable to the projected impacts of climate change. From projections, these impacts may include inland flooding of settlements built on floodplains, higher sea levels impacting low lying coastal communities (noting that more than 80% of Queenslanders currently live on the coast) and more frequent storm surge events, including increased cyclone intensity in the north of the state and cyclones occurring further south. Existing and proposed urban environments are also vulnerable to heat island effects, with the number of days over $35^{O}C$ projected to increase, and the consequent increased risk of bushfires in peri-urban areas.

The Issues Paper poses the question, '*What tools, strategies and mechanisms are needed to facilitate adaptation to climate change despite of and considering the uncertainties about the timing and extent of impacts?*'

The GBCA supports the view, as expressed in the Issues Paper, that new settlements and buildings should be designed to avoid or mitigate the risks of climate change from the start. The Green Star - Communities rating tool can help to facilitate adaptation to climate change early in planning processes, in an integrated manner which seeks to deal with the uncertainties that are inherent in any adaptation assessment. The tool includes draft credits, which, in combination, lead planners and developers through a process intended to provide clear guidance on how to plan, design and deliver communities that embed best practice climate change adaptation and resilience.

The draft credits within the tool are designed to establish and reflect best practice benchmarks for assessing and certifying sustainable communities; benchmarks which can be used to manage uncertainty in planning and assessment of truly sustainable human settlements.

Some of the credits in the tool directly address the impacts of climate change. The *climate adaptation and resilience* credit, for example, has the objective 'to encourage and recognise projects that can adapt and are resilient to the impacts of a changing climate and natural disasters.' In addition, the *heat island reduction* credit encourages and recognises projects that reduce the impacts of heat island effect. We would welcome the opportunity to discuss these credits and their application in more detail.

Many other credits in the tool contribute to the objectives of adapting to climate change and building greater community resilience. These include credits for *local food production*, *stormwater*, *promoting public transport*, *affordability*, *smart project location*, *urban design*, *integrated infrastructure systems*, *site planning* and *sustainability education* to name but a few. In addition, mitigation is addressed by the *greenhouse gas emissions* credit which encourages and recognises projects that minimise their greenhouse gas emissions.

More specifically, the *climate adaptation and resilience* credit requires planners and developers to develop a Climate Adaptation Plan in line with best practice risk and adaptation standards and utilising robust science sourced from credible and well-known sources (which includes CSIRO and State Governments). It acknowledges the need to take into consideration aspects of science which are evolving. In addition, this part of the tool requires the preparation of a Disaster or Emergency Preparedness Plan in line with appropriate guidelines and in consultation with relevant stakeholders.

The GBCA awaits with interest the final outcomes of the Queensland Flood Inquiry in relation to the recommendations that may affect changes to land use planning, building standards and state planning instruments, particularly as such changes will likely reflect a new level of best practice to be considered in the planning of human settlements in climate-vulnerable areas. It would be our intention to reflect well-regarded best practice within the credits underpinning the Communities Tool. Over time, we also hope that best practice standards contained within the Green Star tools will influence government regulation, such as the Building Codes (i.e. Queensland Development Code). A recent example of this was the inclusion of mandatory end-of-trip facilities in the Queensland Development Code, which have been in the Green Star tools for eight years.

In response to the question '*How can we better empower local communities to plan for, live with and manage climate change risks to human settlements?*'

With respect to the development of new human settlements, the principle of involvement of stakeholders is seen as critical. The Green Star - Communities tool includes draft credits that encourage and recognise projects that develop and implement a comprehensive stakeholder engagement strategy specific to the project, that enhance the community's knowledge and understanding of sustainability, and that promote community development. We would also concur that early, broad and meaningful stakeholder engagement is vital to successful planning and implementation of sustainable settlements.

The preparation of a Disaster or Emergency Preparedness Plan (DEPP), in line with appropriate guidelines and in consultation with relevant stakeholders, is also a requirement of the draft *climate adaptation and resilience* credit. The purpose of the DEPP is to engage and empower the community and relevant authorities in understanding the potential risks climate change can pose and the responses available in the event of an emergency.

Conclusion
Failure to adapt to climate change has the potential to have a major impact upon communities now and in the future across Queensland and other parts of Australia. The GBCA supports the position that tackling climate change immediately will be easier and more cost-effective than delaying action indefinitely. We believe a consistent approach to adaptation in terms of planning, risk assessment, the use of science, evaluation processes, legislation, costing and integration with other sustainability issues will be the most effective and will reduce uncertainty and inertia.

Our submission therefore draws attention to the importance of developing an early, proactive response to the projected impacts of climate change as well as to the importance of integrated cross-sectoral and cross-issue policy and planning responses in the built environment. Through the uptake of the Green Star – Communities rating tool we anticipate that the policy intent of the Queensland Government with respect to climate adaption will be further supported and promoted.

We would welcome the opportunity to discuss, clarify and elaborate on this submission with the Office of Climate Change. Please let us know if we can provide further information on any aspects of the work of the GBCA, the Green Star rating tools or the Green Star – Communities rating tool in particular.

Yours faithfully,

Romilly Madew
Chief Executive