Building a sustainable future

GREEN STAR - PERFORMANCE

DRAFT SCOPING PAPER

Date Issued: December 2010 (For public comment)

green building council australia

greenstar

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VERSION CONTROL

Version	Release Date	Description of Changes
1.0	December 2010	Release for public comment
1.1	February 2011	Additional page added to the scoping paper 'Sponsorship Opportunities' (page 14) and some minor adjustments to 'Providing Feedback' (page 13) also occured.

EXECUTIVE SUMMARY

This Scoping Paper has been prepared as a first step in the development of a Green Star assessment methodology to address the sustainability performance of existing buildings, known as Green Star – Performance. 'Existing buildings' in the context of this paper refer to many building types and uses, not only commercial office buildings.

This paper has been written based on feedback from stakeholders. A Stakeholder Reference Group (refer to Appendix A) was formed in July 2010 to provide advice and recommendations to the Green Building Council of Australia (GBCA) on the guiding principles of Green Star assessment methodology for existing buildings.

In addition to supporting the overall objectives of the GBCA, this project's key objective is to provide a holistic sustainability rating system for existing buildings in Australia - a gap in the market identified by stakeholders. More specifically, stakeholders have identified that a Green Star assessment methodology for existing buildings should:

(1) address holistic operational performance of buildings that currently have a Green Star rating; and

(2) allow buildings that don't currently have a Green Star rating to assess their sustainability performance holistically; and

(3) allow stakeholders to compare Green Star designed buildings with non-Green Star designed buildings in operation, providing better understanding of holistic sustainability performance in the market.

These objectives must also result in lower environmental impact, increasing sustainability outcomes for the property sector in Australia. Stakeholders have indicated that this project should focus on assessing existing buildings based on operational impacts. There will be no duplication of measurements or benchmarks where widely accepted market practices exist, such as NABERS Energy and NABERS Water in the commercial office market. Green Star-specific credits will be developed to address other operational environmental impacts not addressed by other tools.

The major features of the proposed assessment methodology are:

Assessment methodology outputs:

1. Individual building assessments –

(a) Non-certified assessments - self-assessments, allowing buildings to set sustainability performance targets, inform investment decisions, etc.

(b) Certified assessments - a certified Green Star rating. Buildings that currently have a Green Star rating (Design and/or As Built) AND buildings that currently do not will both be eligible for a certified assessment.

Certified ratings may be valid for 3 years. Annual 'desktop audits' of 'big ticket items' may be used to keep the certified rating current during years 2 and 3. This may be done with a NABERS Energy certificate, a NABERS Water certificate and some occupant satisfaction proxy. Certified assessments may be available for all star levels, from 1 to 6 stars.

2. Portfolio assessments –

self-assessments and certified ratings, following the individual assessment of buildings within a portfolio.

3. Guidance / diagnostics –

links to external resources on how to improve the sustainability performance of existing buildings would be referenced and presented as features.

Sustainability Categories & Impacts:

the assessment methodology will maintain a holistic approach by addressing all current Green Star categories: Management, Indoor Environment Quality, Energy, Transport, Water, Materials, Land Use & Ecology, Emissions and Innovation. Keeping all the Green Star categories also assists with maintaining the credibility associated with the other Green Star tools.

Target building types:

education facilities, healthcare facilities, industrial buildings, commercial offices, retail centres and public buildings. Supermarkets and 'big box' retailers are also to be explored.

Target users:

this assessment methodology would be of interest to a large stakeholder audience (institutional investors, building occupants and consultants); however the main target users are believed to be facilities managers, including maintenance professionals; building owners; portfolio managers; and government organisations.

Delivery mechanism and cost:

the assessment methodology for existing buildings would be delivered fully online, as an online platform would be user-friendly, cost effective and easy to update and upgrade. It may be too soon to have a proper sense of cost-benefit relating to the assessment methodology. Its 'perceived value' in the market, for instance, is a crucial question to be explored.

A number of 'further opportunities' have been indentified in section 5, particularly opportunities relating to training and education. These should be considered additional benefits to the assessment methodology.

The information provided in this paper should not be considered final and stakeholders are encouraged to consider additional information.

1.0 INTRODUCTION

This Scoping Paper has been prepared as a first step in the development of a Green Star assessment methodology that addresses the sustainability performance of existing buildings. Its purpose is to identify and scope issues associated with the development of such tool and to identify matters which should be considered in the next phases.

An 'existing building' in the context of this Scoping Paper, is any building that has been operating at 75% occupancy or greater for at least 24 months. 'Existing buildings' refer to many building types and uses, not only commercial office buildings.

> The Green Building Council of Australia invites feedback from stakeholders on the definition of the term 'existing building'.

This paper identifies a number of characteristics that a Green Star assessment methology for existing buildings may have and provides information about the way forward in the development process.

GREEN STAR PERFORMANCE

The Green Building Council of Australia (GBCA) has received extensive feedback from stakeholders on how 'existing buildings' could be addressed by Green Star. This feedback is the result of both formal and informal consultation, and was collected via industry discussions, presentations, meetings and stakeholder workshops.

A very insightful piece of feedback, related to the approach used in the now discontinued Green Star – Office Existing Building EXTENDED PILOT tool. This tool applied many of the requirements and design attributes of the Green Star – Office Design tool to existing buildings, not directly addressing operational issues. Feedback indicated that stakeholders involved in the EXTENDED PILOT process wanted a greatly streamlined tool, which addressed operational issues under the control of building owners, facilities managers and building occupants.

A Stakeholder Reference Group was formed in July 2010 to provide advice and recommendations to the GBCA on the benefits and guiding principles of a Green Star assessment methodology that addresses operations-related sustainability of existing buildings. This Stakeholder Reference Group met with the GBCA three times between July and October 2010, providing extensive feedback and comments. Appendix A outlines the members of the Stakeholder Reference Group up and the member organisations they represent.

Feedback from the Stakeholder Reference Group has been very useful in informing the content of this paper and its structure. The following consensus items were drawn from a workshop held with the Stakeholder Reference Group and they represent 'what industry wants' from a Green Star assessment methodology for existing buildings; this tool should:

- ensure Green Star remains a worthy and credible rating scheme;
- assess existing buildings in terms of holistic operational performance, including benchmarking and maintenance;
- allow stakeholders to compare buildings both with and without Green Star Design and/or As Built ratings;
- provide a pathway for improvement, and allow for and reward incremental improvements;
- focus on operational outcomes;
- be simple, user friendly and cost effective;
- reference existing reporting systems where possible, including NABERS Energy and Water;
- be applicable to 'bigger' and 'smaller' stakeholders;
- provide appropriate training and accreditation for building management;
- address all the current Green Star environmental impact categories;
- assess all building types currently addressed by the Green Star suite of rating tools.

3.0 OBJECTIVES

The objectives of a Green Star tool that addresses holistic operational performance of existing buildings are in alignment with the GBCA's mission and key objectives, as outlined below:

GREEN BUILDING COUNCIL OF AUSTRALIA'S KEY OBJECTIVES

To drive the transition of the Australian property industry towards:

- sustainability by promoting green building programs, technologies, **design practices and operation**;
- integration of green building initiatives into mainstream **design, construction and operations of buildings**.

Another objective of this project is to provide a holistic sustainability rating system for existing buildings in Australia, a gap in the market which has been identified by stakeholders. Feedback from the Stakeholder Reference Group and other stakeholders has identified more specific objectives for a Green Star assessment methodology for existing buildings. It should:

- address holistic operational performance of buildings that currently have a Green Star rating;
- allow buildings that don't currently have a Green Star rating to assess their sustainability performance, communicating the holistic impacts / benefits associated with Green Star for 'the other 95%' of buildings;
- allow stakeholders to compare 'Green Star designed' buildings with 'non-Green Star designed' buildings in operation, providing better understanding of holistic sustainability performance in the market.

4.0 MAJOR FEATURES

Stakeholders have indicated that in order to meet its objectives, this project should focus on assessing existing buildings based on operational issues, including performance benchmarking and maintenance. Since the major features of the assessment methodology will address these key aspects, it is useful to define them:

- Operations encompass the processes that take place within the building when in use, whether they are mechanical or human oriented.
- Performance examines the building's ability to achieve the task for which it was intended, when in use.
- Maintenance is concerned with the level of upkeep required to ensure the building operates and performs to expected levels.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the definition of the terms above, including 'operations', 'performance' and 'maintenance' in the context of the built environment.

4.1 ASSESSMENT METHODOLOGY OUTPUTS

The proposed outputs of the assessment methodology are based on feedback from industry stakeholders, including the Stakeholder Reference Group:

- Individual building assessments:
  - Non-certified assessments – as with other Green Star tools, 'self-assessments' will be possible, allowing buildings to set sustainability performance targets, inform investment decisions, etc. This would be a non-marketable assessment with no opportunity to use the Green Star trademark.
  - Certified assessments (a Green Star rating) - a certified assessment of the sustainability performance of existing buildings. Buildings that currently have a Green Star rating (Design and/or As Built) AND buildings that currently do not will both be eligible for a certified assessment.
- Portfolio assessments – both self-assessments and certified ratings would be outputs of the assessment

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the features of 'portfolio assessments' and how they would add the most value to their organisations.

- Guidance / diagnostics – links to external resources such as the Property Council of Australia's existing building survival strategies, detailed case studies and other resources on how to improve the sustainability performance of existing buildings would be referenced and presented as features of the assessment methodology.

It is proposed that certified ratings be valid for 3 years, allowing re-certification to be sought at the end of the 3 year period. Annual 'desktop audits' have been suggested as a possible method to keep the certified assessment current during years 2 and 3, perhaps by verifying the performance of three 'big ticket items'. This may be done with a NABERS Energy certificate, a NABERS Water certificate and some occupant satisfaction proxy.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the length of certification validity and related processes, as discussed above.

Feedback from the Stakeholder Reference Group and other stakeholders suggests that certified assessments should be available for all star levels, from 1 to 6 stars. This would allow stakeholders, for instance, to have a 3-Star Green Star certified rating and market their building as such.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the availability of Green Star certification for all levels, from 1 to 6 stars, within the operational performance assessment methodology.

4.2 SUSTAINABILITY CRITERIA AND IMPACTS

Stakeholders have identified that it is desired that a Green Star assessment methodology for existing buildings retains a holistic approach, as displayed in the other Green Star tools. As such, it is proposed that all the current Green Star categories are addressed as a starting point for the existing buildings assessment methodology.

These categories are: Management, Indoor Environment Quality, Energy, Transport, Water, Materials, Land Use & Ecology and Emissions (point source pollution). It has also been suggested that the Innovation category be kept, rewarding innovative operational performance improvement and maintenance. Keeping all the Green Star categories also assists with maintaining the credibility associated with the other Green Star tools.

Embodied energy has also been mentioned as something to be explored, perhaps within the materials category. Further investigations in the next phase of the project are required to more clearly define this approach.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders onthe range of environmental impact categories proposed for inclusion in the Green Star – Performance rating tool and details of particular credits that should be considered.

Stakeholder feedback has also strongly suggested that other reporting standards such as NABERS Energy and Water, be referenced into the proposed Green Star assessment methodology whenever possible. It has been suggested, for instance, that NABERS Energy and Water ratings be used as a 'plug-in' for the respective Categories (one of the 'credits') within the Green Star assessment methodology for existing buildings. Green Star-specific credits will be developed to address other operational environmental impacts not addressed by other tools.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the adoption of NABERS Energy, NABERS Water,NABERS Indoor Environment and NABERS Waste as 'industry practice' in the real estate market.

4.3 TARGET BUILDING TYPES

Initial feedback from the Stakeholder Reference Group and other stakeholders indicates that a Green Star assessment methodology for existing buildings should address all building types and uses which are currently addressed by Green Star Design and As Built tools. These include – education facilities, healthcare facilities, industrial buildings, commercial office buildings, retail centres, public buildings and multi-unit residential.

However, after discussions with the Stakeholder Reference Group, it is recommended that further investigations are carried out in regard to the demand for the proposed assessment methodology in the multi-unit residential market.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the need for a Green Star assessment methodology for existing buildings in the multi-unit residential market.

Other specific building uses, such as supermarkets and 'big box' retailers are also to be explored during the next phase of development.

The initial intention of the Green Star existing buildings project is to address 'base building' and 'whole building' holistic sustainability performance, depending on industry standards for a particular building type. However, feedback from stakeholders has indicated that a 'tenancy' holistic sustainability performance rating should also be explored. It has been suggested that the separation between 'base building' and 'tenancy' in this assessment methodology should follow the NABERS Energy approach, whenever this is available.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the need for a Green Star assessment framework for existing building occupiers or 'tenancies'.

4.4 TARGET USERS

It is understood that a Green Star assessment methodology for existing buildings would be of interest to a large stakeholder audience, such as institutional investors, building tenants and consultants; however the main target users of the assessment methodology are believed to be:

- Building owners
- Facilities managers, including maintenance professionals
- Portfolio managers
- Government organisations

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders onother uses of the Green Star assessment methodology for existing buildings and how those users might interact with the rating tool.

During the next phase of the development process, other specific users of the assessment methodology may be identified.

4.5 DELIVERY MECHANISM AND COSTS

Stakeholders have identified the need for the assessment methodology to be user-friendly, cost effective and easy to update and upgrade. These characteristics lend themselves to an online delivery mechanism. It is therefore proposed, that the Green Star assessment methdology for existing buildings be delivered fully online, as a response to stakeholder feedback. An online platform would:

- streamline the 'self-assessment' and rating processes, utilising simple questions to illicit the required input from stakeholders;
- streamline the certification process, utilising upload facilities to diminish the amount of documentation required for a certified rating;
- diminish the amount of time required for project certification, reducing costs;
- allow all the documentation related to the assessment methodology, such as manuals and guides to be easily accessible;
- allow other resources to be directly referenced within the assessment methodology, such as standards, case studies and other external resources;
- facilitate the management and upgrade of information.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the costs associated with building operations, such as 'annual operational budgets' or 'upgrade budgets'. Metrics based on lettable area of buildings would be of most use.

It has been suggested that a 'subscription service' could be used to deliver portfolio level assessments, allowing a fixed number of individual building assessments to be carried out for a reduced fee.

5.0 FURTHER OPPORTUNITIES

Stakeholders have suggested that there are a number of further opportunities associated with a Green Star assessment methodology for existing buildings. These opportunities require further development and should be considered as additional benefits to the assessment methodology.

Some of these opportunities relate to Green Star specific training and education. These suggestions include:

- specific Green Star training for facility managers within the context of existing buildings (working together with FMA Australia)
- specific Green Star training and educational resources for maintenance contractors;
- specific Green Star training and educational resources delivered in association with DECCW and the NABERS team.

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on any further opportunities relating to this project.

6.0 THE DEVELOPMENT PROCESS

The development process for Green Star - Performance will be broken down into two separate but integrated phases, as described below.

Phase 1 – current phase

The GBCA, in conjunction with other key stakeholders, has developed the concept of an assessment methodology that addresses the operational performance of existing buildings, Green Star - Performance. This Scoping Paper is one of the main outcomes of Phase 1 of the development process.

This Scoping Paper has been made available for public comment until 04 March 2011. Feedback collected during the public comment period will be incorporated into the final paper as appropriate. During the public comment period, 'Expressions of Interest' to participate in the process as part of a Technical Working Group will also be collected.

Phase 2

There will be a number of issues to be worked out during Phase 2, including:

- design the specific credits within the assessment methodology criteria (build the assessment methodology itself);
- build the online tool and related resources;
- define the certification process;
- develop Green Star training requirements;
- address other outstanding items.

During this phase of the development process, individual credits will be developed within the appropriate categories concentrating on operational issues, including performance benchmarking and maintenance related items. International precedents, such as 'LEED Existing Buildings: Operations and Maintenance' and 'BREEAM IN-USE' will be explored during the credit development phase of the project.

These issues, and others that emerge throughout Phase 2, will be addressed by GBCA staff and the Technical Working Group (TWG).

7. PROVIDING FEEDBACK

Stakeholders are encouraged to contact the Green Building Council of Australia for further information and to provide feedback.

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Green Star - Peformance, Scoping Paper Feedback

The Green Building Council of Australia (GBCA) has prepared the scoping paper as the first step in the development of a Green Star assessment methodology that addresses the sustainability performance of existing buildings. The GBCA is inviting feedback on the scoping paper, using this online survey. Thanks for taking the time to provide your feedback.

There are no mandatory questions. While the Green Building Council welcomes your feedback on every question, please feel free to limit your responses to the areas you are interested in if you prefer.

There is a SUBMIT button at the end of each page of the survey. Pressing SUBMIT will take you to the next page.

Definitions

The scoping paper defines some key terms. If you think these definitions can be improved please provide your suggestions below.

1 **Existing Building:** Any building that has been operating at 75% occupancy or greater for at least 24 months. *Page 4 of the Green Star - Performance Scoping paper*

PROVIDE YOUR FEEDBACK...

The Green Building Council of Australia invites feedback from industry stakeholders on the entire Green Star - Performance Scoping Paper.

8. SPONSORSHIP OPPORTUNITIES

Sponsoring the Green Star – Performance tool is a great way to get involved in the next generation of Green Star.

As a sponsor, you will have the opportunity to contribute to the development of the Green Star – Performance tool and receive recognition as a green building industry leader.

Some of the sponsorship benefits include:

- National and international recognition as a leader in sustainable building practices
- Provide input into the development phase and help guide the rating tool's direction
- Opportunity to submit a project to test the PILOT version of the tool
- Brand association with one of the world's leading environmental rating systems for buildings
- Achieve your organisation's environmental and corporate social responsibility objectives by contributing to a national Green Star project that seeks to address the existing building market

For more detailed information on sponsorship benefits, visit the Green Star - Performance page of the Green Building Council of Australia's website.

There are several different sponsorship levels to choose from – find one that's right for your company today.

Do you have questions? Let's talk:

Robert Milagre

Project Leader, Green Star – Performance

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Email: performance@gbca.org.au

APPENDIX A

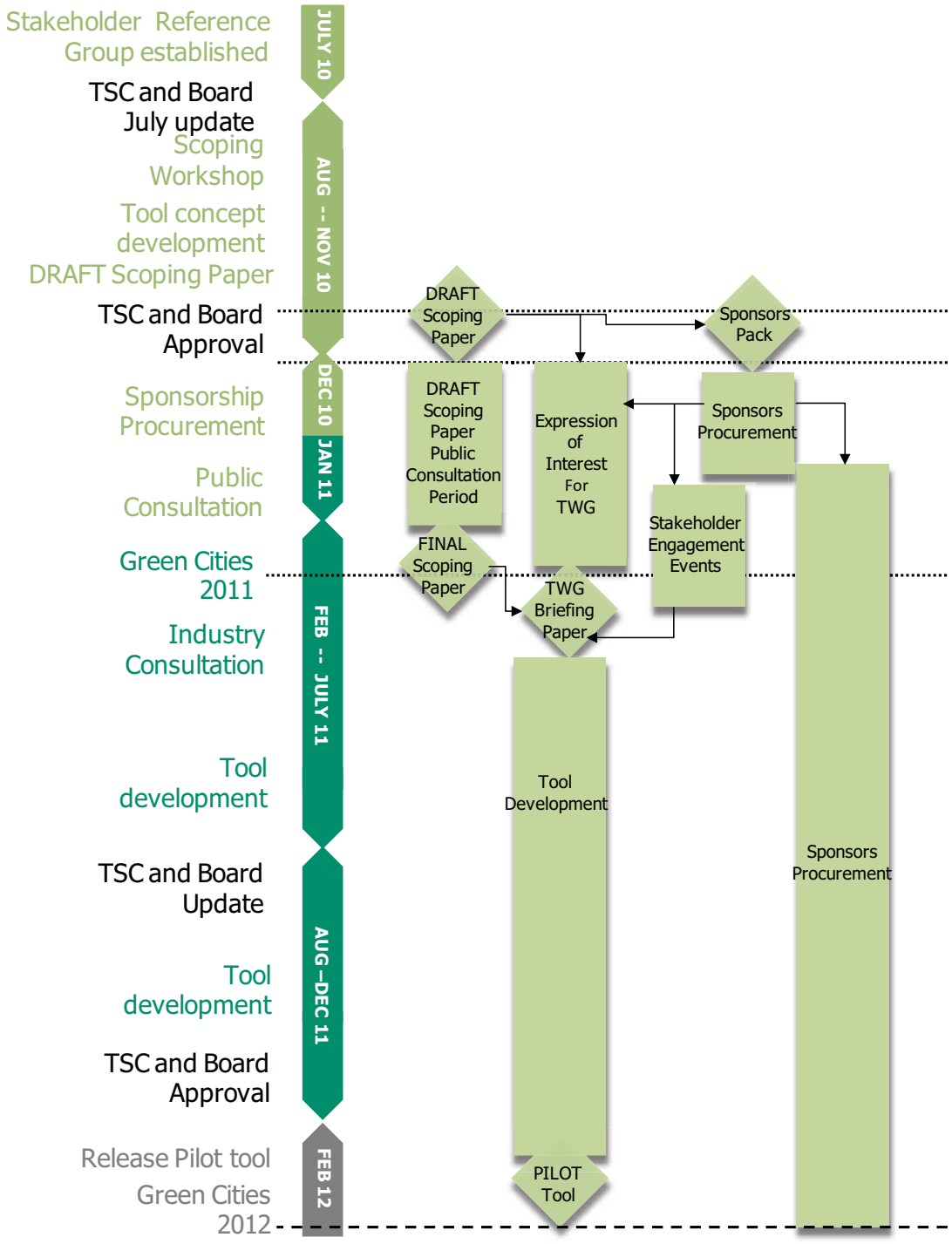
STAKEHOLDER REFERENCE GROUP MEMBERS

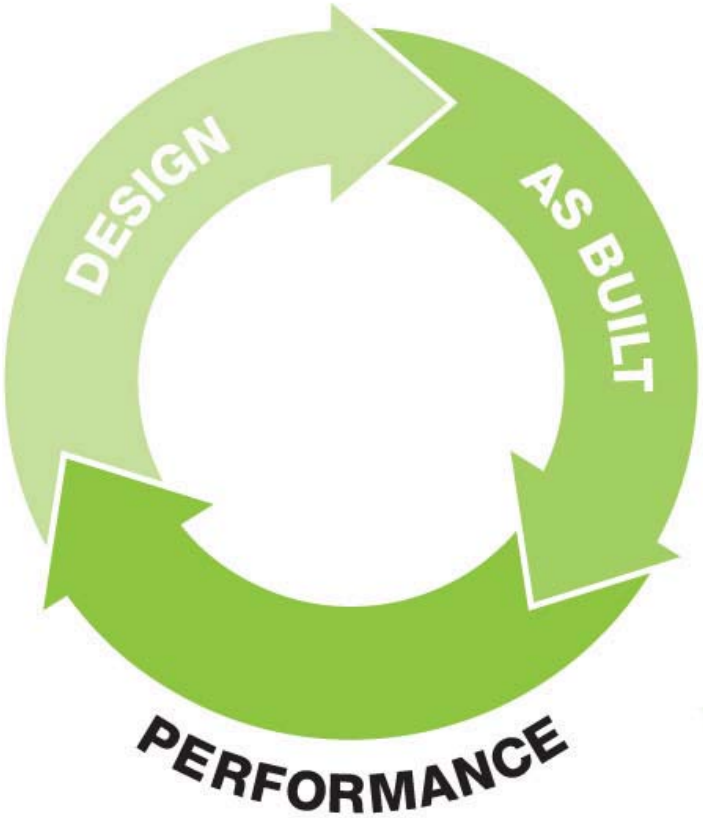
Stakeholders are encouraged to contact the Green Building Council of Australia for further information and to provide feedback.

Organisation	Name	Title
AMP Capital Investors	Dominic Ambriano	Environmental Performance Manager
Charter Hall	Matt Nolan	Head of Asset Services
Coles Property Group (Wesfarmer)	Nik Wallis	Development Manager
Coles Property Group (Wesfarmer)	Paul Lang	Environment Manager
Colonial First State Asset	Rowan Griffin	Head of Sustainability
Colliers International	Simon Cox	Head of Sustainability
Department of Environment, Climate Change & Water NSW	Matthew Clark	Manager - NABERS
Department of Climate Change & Energy Efficency	Mark Davis	(Acting) Manager - NABERS
FMA Australia	Matthew Trigg	National Policy Advisor
FMA Australia	Bryon Price	Non-executive Director
GPT Group	Bruce Precious (Chair)	Sustainability Manager
Investa Property Group	Craig Roussac	General Manager
Mirvac	Chris Luscombe	Director, Engineering & Operations
Property Council of Australia	Jane McNamara	National Policy Advisor
Property Council of Australia	Paul Waterhouse	Executive Director National Policy
RICS / J Goddard & Co	John Goddard	Chair of RICS Oceania Sustainable Group
Stockland	Greg Johnson	National Environment Manager
Tertiary Education FMA	Dominic Marafioti	TEFMA President (current)
Tertiary Education FMA	Bart Meehan	TEFMA President (incoming)

APPENDIX B

TIMELINE

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