



A Future Focus consultation paper

National Strategic Partners



Future Focus Partner



Partners

We extend our gratitude to our National Strategic Partners, our Future Focus Partners and our Carbon Positive Partners for their ongoing support in the development of the new rating tool

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Executive summary

In 2003, the Green Building Council of Australia threw down the gauntlet to the property industry with a rating system that set new benchmarks for sustainable building

At the time, the industry had no agreed metrics or methodology to measure green building practices, few assessment tools and few benchmarks for best practice. There was no organised approach to knowledge-sharing or collaboration. Nor was there any way for the industry to promote or profit from green building leadership.

Since then, Green Star has transformed Australia's real estate landscape and more than 2,250 projects have achieved Green Star ratings in Australia. More than 400 international projects have also achieved Green Star ratings.

Green Star has evolved from a single rating tool for building design to a system that also influences construction, interiors, operations and entire communities.

Today, 38 per cent of Australia's office space is Green Star-rated, half a million people are moving into Green Star-rated communities, and 1.3 million people visit a Green Star-rated shopping centre each day. The Australian property industry market has been recognised as the world's most sustainable by GRESB for eight consecutive years.

These are laudable achievements – but we can't afford to rest on our laurels. Decisions that we make today will shape the future of our planet.

This is why the next evolution of Green Star is future focused.





Executive summary continued...

We want your support as we redefine world leadership and best practice, expand Green Star's scope to encompass more social sustainability issues, and ramp up our requirements in line with the 1.5°C Paris Agreement trajectory.

Future Focus is our broad vision for Australia's built environment. Through Future Focus, we will deliver new rating tools for industry, and Green Star for New Buildings is the first rating tool to help us get there.

Green Star for New Buildings reimagines the existing rating tools to deliver a better, more accessible and relevant experience that meets today's challenges.

Green Star for New Buildings:

- ◆ Introduces a new set of categories and credits reflecting issues relevant to the market now and in the future
- ◆ Prioritises the elimination of carbon emissions from the built environment
- ◆ Establishes a clear, well-defined entry point for best practice Green Star ratings
- ◆ Caters to distinct sectors through the introduction of sector specific credits
- ◆ Sets new levels of achievement for project teams with the highest of ambitions.

We've undertaken significant consultation with industry and taken on board your feedback. Our 10 Expert Reference Panels guided us through the development process. Now, this consultation paper seeks further input on the proposed framework for Green Star for New Buildings.

Your feedback is fundamental to the success of Green Star. The consultation period will be open for two months, from **10 April to 10 June**. We will also hold briefings during this time. More information is available on our website.

The GBCA invites everyone to play their part in building a better future.

Join us.

Foreword from the GBCA



Tanya Cox

**Board member and
Green Star Advisory Committee chair**

Global trends are reshaping our industry and the built environment. Investors, governments and entire communities are prizing assets that address climate change while improving our health, our cities and our natural environment.

We need our built environment to function at the highest level for us to prosper as a society. The next decade will determine whether this happens.

As the premier rating system for the built environment, Green Star has moved us closer to this goal. The opportunity now exists to look forward even further.

Last year, GBCA began a process with industry to evolve Green Star to meet these needs. The proposed changes aim to reshape Green Star to capitalise on opportunities and meet future expectations.

The work undertaken as part of the Green Star Future Focus project reflects both the views of industry and global trends. The changes to the rating system are designed to drive innovation and extract more value from the built environment.

I look forward to hearing from industry as we continue on this journey.



Jorge Chapa

**Head of Market Transformation,
GBCA**

Last year we introduced Green Star Future Focus, a program developed to drive the next evolution of the rating system. It began with the launch of a scoping paper, which outlined a vision of the future for the built environment.

You responded positively to this vision.

We have now translated this vision into a new framework for Green Star. This framework sets a new standard to strive for in the built environment. So, in 2020, we will update and introduce rating tools for buildings, fitouts and precincts, both new and in operation.

Green Star for New Buildings is the first rating tool to be released. Green Star for New Buildings moves beyond its environmental roots to drive urban and social outcomes as well. It also drives comprehensive reductions in carbon emissions in line with our Carbon Positive Roadmap.

This is the biggest change to Green Star since its launch in 2003. We are laying the foundations for Green Star's success over the next decade. This is a unique opportunity to influence Australia's most widely used holistic rating system.

It is also your chance to help us ensure its success.

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What you need to know

This is a proposal
and we will make
changes based on
your feedback
to this paper

This paper
addresses the
rating tool for
new buildings

Green Star
for New Buildings
is an evolution of
Green Star –
Design & As Built

There are five
key changes
you should
know about
(pg 16)

Our Early Access
Program is for those
looking to be the first in
securing a Green Star
for New Buildings
rating (pg 31)

We are looking
for sponsors to help
us ensure success
in delivering this
ambitious new rating
tool (pg 35)

Green Star
for New Buildings
is set for release in
June 2020,
with a transition
period of 18 months

Feedback on
this paper is due
10 June 2019
through this paper or
at an official event



Providing feedback



Please provide your feedback by filling in the text box that is provided after each question

Some additional text boxes will be provided where you can make general comments or suggestions about the issues covered in that section. We'd encourage you to tell us what you like, and what you don't like. Once you finish providing feedback, please click the 'submit form' button. This will send us an email with your comments.

Please note that for the GBCA to capture your feedback formally, comments must be provided through this official channel or by writing to us at futurefocus@gbca.org.au

Name

Company

Position

State

Email address

Is this response on behalf of your company?

Profession

Sector

The Future Focus program



Green Star Future Focus is our program redefining Green Star for the next decade

Green Star Future Focus represents our broad vision for the future. We're focused on delivering a rating system that will enable you to deliver better outcomes for your buildings, fitouts and communities, and accelerate our industry's trajectory towards a positive built environment.

We aim to deliver the following four new rating tools to market:

- ◆ Green Star for New Buildings
- ◆ Green Star for New Fitouts
- ◆ Green Star for New Communities
- ◆ Green Star for Building Operations

We are also exploring whether there is appetite from industry for rating tools for existing communities and fitout operations.

The first rating tool under development, explored in this paper, is Green Star for New Buildings¹. Following this, in July 2019 we will release a similar consultation paper for Green Star for New Communities. A paper for Green Star for Building Operations will be issued in early 2020.

The development phase of Green Star Future Focus will run until early 2021. The release phase concludes one year later².



Paolo Bevilacqua

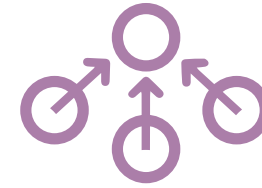
**General Manager,
Real Utilities – Frasers Property**

"GBCA should be commended on the process to date. They've listened to what we have to say, and are proposing changes to Green Star that should meet our needs."

¹Many of the issues discussed within are applicable to fitouts. As a result, feedback we receive for Green Star for New Buildings will also be considered for a new fitout rating tool.

²Please see page 30 for more details on the transition period.

Our drivers and influences



Global and domestic drivers

We recognise and respond to significant movements and initiatives influencing our industry and the built environment. We consult closely with our members and wider industry to understand their business drivers, and to ensure Green Star helps them to achieve their goals. Each of these helped influence the development of Green Star for New Buildings³



United Nations Sustainable Development Goals

A call to action of 17 goals and 169 targets covering environmental, social and economic issues. Governments and private organisations report against the goals and targets to demonstrate their commitment to a better world.



Special Report on Global Warming of 1.5°C

This report, created on request of the UN as a response to the Paris Agreement, outlines the need for urgent and deep emissions reductions. It includes several recommendations relevant to the built environment.



Task-Force for Climate Related Financial Disclosures

A market-driven initiative, the TCFD was established to develop a set of recommendations for voluntary and consistent climate-related financial risk disclosures in mainstream filings.



The Lancet Countdown

An international research collaboration dedicated to tracking the world's response to climate change, the latest report highlights the health benefits associated with this transition.



The Global Risks Report 2019

A global survey of 1,000 decision-makers from the public and private sectors, this report presents the top 10 risks based on likelihood and impact. Climate-change, biodiversity loss and water crises are among the greatest threats.



100 Resilient Cities

Pioneered by The Rockefeller Foundation, 100RC is dedicated to helping cities adopt a holistic view of resilience, for both shocks – earthquakes, fires and floods among them – and stresses that weaken the fabric of a city.



GRESB

An investor driven organisation assessing the sustainability performance of real asset sector portfolios and assets. GRESB is driving investors to seek more sustainable assets.



The National Cities Performance Framework

This framework provides a snapshot of the productivity and progress of Australia's cities across: Jobs and Skills; Infrastructure and Investment; Liveability and Sustainability; Innovation and Digital Opportunities; Governance, Planning and Regulation; and Housing.

³An analysis against some of these drivers and influences is available in the Appendix.

Our vision for the future



The development of Green Star for New Buildings is closely aligned with the GBCA's vision and strategic priorities. For the past few years we have been working with industry on key topics and issues, including health, resilience, carbon and biodiversity. Many of the proposals in this paper are a direct result of these strategic goals.



GBCA Strategic Plan

The GBCA's Strategic Plan sets the overarching direction for the organisation. The Plan focuses on four key areas: carbon, homes, social infrastructure and our members.



Carbon Positive Roadmap

The Roadmap clearly outlines the high-level outcomes, actions, targets and policy positions required to decarbonise our cities. Green Star for New Buildings responds to these actions.



Building with Nature

The paper reviews policy frameworks, recent research and related work, and establishes guiding principles for the redesign of the Nature category.

Your feedback

To our Future Focus vision



The changes proposed in this paper are industry-driven and representative of the consensus we've reached during our scoping phase. Close to 600 of you participated in interviews, industry events, member briefings and our expert reference panels. We have listened to your feedback, and are confident that the proposed Green Star for New Buildings responds to your needs.



Green Star for New Buildings is the working title for our new rating tool for new buildings and major refurbishments

An evolution of Green Star – Design & As Built, this universal rating tool is designed to address most building types, with the exception of single-family residential dwellings.

Green Star for New Buildings aims to meet the demands of the next decade and beyond with aspirational benchmarks for design, construction and operational performance. It also provides a pathway for building owners to address carbon emissions over time.

Green Star for New Buildings is underpinned by a framework that takes a much broader view than the environmental roots of its predecessors. This rating tool responds to global movements and initiatives – such as the Paris Agreement, 100 Resilient Cities and the United Nations' Sustainable Development Goals – that are increasingly on the radar of investors, governments and communities.

It will deliver certification that gives owners, occupiers and investors confidence that theirs is a high-quality and future-proofed asset.

The language of Green Star for New Buildings is focused on outcomes, rather than processes. New criteria align expectations across each star ratings. We've maintained the previous entry point for a 4 Star rating, which enhances Green Star's accessibility. We are also proud to say we are challenging top performers to go above and beyond.

While this paper outlines our vision for Green Star for New Buildings, many of the issues discussed within are applicable to fitouts. As a result, feedback we receive for Green Star for New Buildings will also be considered for Green Star for New Fitouts⁴.



Rowan Griffin
Head of Sustainability –
Property, Lendlease

"Green Star for New Buildings brings significant and expanded opportunities to deliver a better built environment over the next decade, looking at outcomes for people in a carbon constrained economy. We are excited by its introduction, and expect it to contribute to a more resilient Australia."

⁴This rating tool will be the evolution of Green Star – Interiors.

The features

With your input, Green Star for New Buildings has been designed to meet the challenges of the next decade. We propose several new features that we believe will drive innovation and value

These features will inspire and challenge the top end of the market while also making Green Star accessible to new users.

Broadened scope to address contemporary issues

We will continue to challenge the industry to consider issues that will impact assets in the future. Some of the trends facing our industry are outside the current scope of Green Star. But not for long, as Green Star for New Buildings brings these issues – from modern slavery to health and wellbeing, and from resilience to place-making – into focus.

Promote exceptional achievements in specific areas

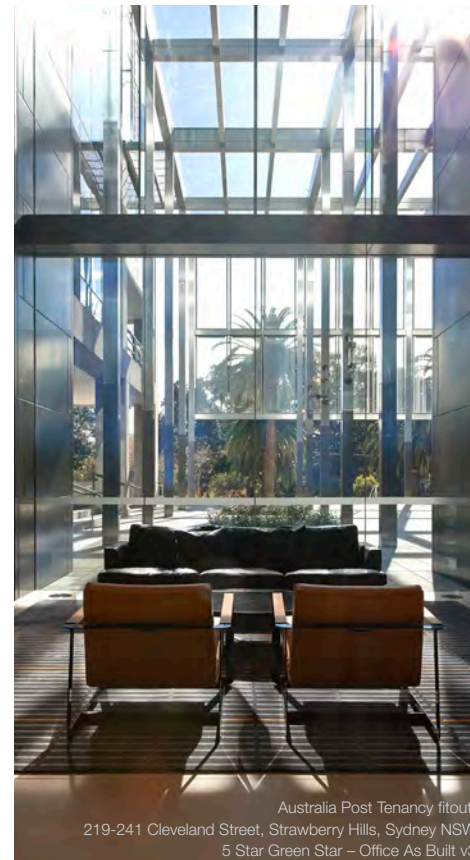
We want to celebrate and recognise exceptional achievements. We're proposing two key options to help drive higher levels of ambitions. The first, a new system to recognise achievements in specific issues, such as delivering a carbon positive building. The second, a new rating benchmark designed to push boundaries even further. This new level of achievement will be the ultimate expression of sustainability, demonstrating the possibilities when human ingenuity, innovation, world-leading design and dedication come together.

An accessible entry point and a clear definition of best practice

Every building that achieves a Green Star rating takes us one step closer to total transformation. Therefore, unlike in other revisions, we will retain the current level of difficulty for a 4 Star Best Practice rating. We will also set expanded and clear mandatory requirements, delivering a clear definition of what a best practice building means for the built environment.

Improved language and communications

Green Star may tackle some highly technical issues, but that doesn't mean it needs complex communication. Green Star for New Buildings will clearly communicate outcomes achieved rather than issues faced. And we will use language that our users understand. This will help us – and you – reach more people and broaden Green Star's appeal.



Davina Rooney
General Manager Sustainability,
Stockland & incoming CEO,
Green Building Council of Australia

"Green Star has been rethought from the ground up to deliver a relevant, accessible, and more valuable rating tool."

The features continued...

Higher level of sustainability leadership

Claiming world leadership in sustainability will get more challenging, as we ramp up the requirements. Green Star for New Buildings will drive the top one percent of buildings to do better – because we know the market leaders will rise to the challenge. Continuing to expand the frontiers of world leadership not only recognises extraordinary achievement but also gives you opportunities to create innovative ways of leading our built environment to a better future.

Stronger focus on carbon

The GBCA Strategic Plan emphasises carbon emissions reduction in the built environment, and our Carbon Positive Roadmap sets the overarching framework for Green Star's future trajectory. As a result, carbon benchmarks outlined in the current Green Star rating tools must be recalibrated. Market expectations have evolved too, with world leading buildings now expected to be at least net zero carbon. Green Star for New Buildings will deliver on these expectations.

Drive operational performance

Operational performance plays a central role in any sustainable building, particularly when it comes to addressing climate change. For this reason, we are taking further steps to reward projects that continue their efforts past practical completion. We're consciously designing Green Star for New Buildings to seamlessly flow into our updated Green Star for Building Operations rating tool, which will be tackled as part of Future Focus. However, we won't be mandating an operational rating as part of Green Star for New Buildings.

Improve the certification and assessment process

We're reviewing our certification and assessment process to find ways of streamlining the Green Star experience. Our goal is to simplify the process while maintaining rigour and credibility. This means bringing Green Star online, and making better use of technology to reduce costs. We are also aiming to reduce documentation costs, as the easier we make it to verify to Green Star, the more we can transform the built environment.



123 Albert Street, Brisbane QLD
6 Star Green Star – Office As Built v2



David Clark
Partner, Cundall

"The big challenges of the next decade – such as curbing carbon emissions – demand tougher benchmarks and stronger action. Green Star for New Buildings will deliver on these, providing industry with the clarity and direction needed."

The five things you should know

- A new definition of a sustainable building 17
- Meeting the Paris Agreement Targets 21
- Redefining best practice 24
- A rating tool for a diverse built environment 27
- Showcasing outstanding achievements 28



1 A new definition of a sustainable building

Green Star for New Buildings addresses the issues that you've told us will impact your business and the built environment in the future

We responded to that feedback by bringing these issues – and opportunities – into the new rating tool. And we've taken the opportunity to rethink what a sustainable building should look like now and in the future, and the language we use to communicate it.

Green Star for New Buildings is more relevant, ambitious and extends beyond the environmental roots of its predecessors. It is also easier to understand, has a positive outlook, and will help a broader cross-section of the community to connect with Green Star's objectives.

Green Star for New Buildings features eight categories, which will be aligned across the other new rating tools. The eight categories are outlined below, with credits and outcomes detailed further in this document.



RESPONSIBLE



HEALTHY



RESILIENT



POSITIVE



PLACES



PEOPLE



NATURE



LEADERSHIP



Ruben Langbroek

Head of Asia Pacific, GRESB

"The new framework for Green Star addresses what institutional investors consider to be the most material issues over the next decade. It is a powerful guide of what needs to be done to future-proof tomorrow's built environment."

1 A new definition of a sustainable building:

The eight categories

Green Star for New Buildings features eight new categories representing the issues that will define the next decade of the built environment. From a continued focus on eliminating carbon emissions, to issues related to improving the lives of people, the new categories represent opportunity to showcase value that is relevant⁵ to you and your stakeholders.



RESPONSIBLE

Recognises activities that ensure the building is designed, procured, built and handed over in a responsible manner.



PLACES

Supports the creation of safe, enjoyable, inclusive and comfortable places that are integrated into the broader urban fabric and enable communities to connect and thrive.



HEALTHY

Promotes actions and solutions that improve the physical and mental health of occupants.



PEOPLE

Encourages solutions that address the social health of the community.



RESILIENT

Encourages design, collaboration and engagement solutions that address short-term shocks and long-term stresses by improving the capacity of communities, businesses and assets to adjust, respond and thrive in the face of adversity.



NATURE

Encourages active connections between people and nature and creates opportunities to work with planners to deliver new natural corridors and green spaces in cities.



POSITIVE

Makes a positive contribution towards better buildings by focusing on key environmental issues of carbon, water consumption and the impact of materials.



LEADERSHIP

Recognises projects that set a strategic direction, build a vision for industry or enhance the industry's capacity to innovate.

⁵An analysis of these categories against a number of international frameworks is included in the Appendix.

1 A new definition of a sustainable building:

Categories & credits

We have developed credits concepts to match the new categories, each driving relevant and material outcomes for the built environment over the next decade. The list presented below provides an indication of the issues and outcomes that the new rating tool is considering. The appendix in this document provides more information and seeks your feedback on what outcome each credit is looking to achieve.



RESPONSIBLE

- Collaborative design and construction
- Sustainable procurement
- Sustainable products
- Responsible construction practices
- Verification and monitoring
- Handover and tenant engagement



HEALTHY

- Clean air
- Light quality
- Exposure to toxins
- Noise levels
- Amenity and comfort
- Mobility



RESILIENT

- Climate change resilience
- Infrastructure dependency
- Resilience to other impacts
- Stakeholder engagement
- Community resilience
- Resilience communication and review



POSITIVE

- Energy and peak demand
- Energy source and fossil fuels
- Other carbon sources
- Using water sustainably
- Carbon in materials
- Impacts from resources



PLACES

- People movement
- Enjoyable places
- Access to amenity
- Contribution to place
- Goods movement



PEOPLE

- Community engagement
- Culture and heritage
- Design for diversity
- Aesthetics
- Privacy



NATURE

- Impacts to nature
- Human connection to nature
- Water pollution and runoff
- Habitat creation
- Nature connectivity
- Offsite restoration



LEADERSHIP

- Exceptional performance
- Leadership in sustainability
- Innovation Challenges

1 A new definition of a sustainable building:

The eight categories

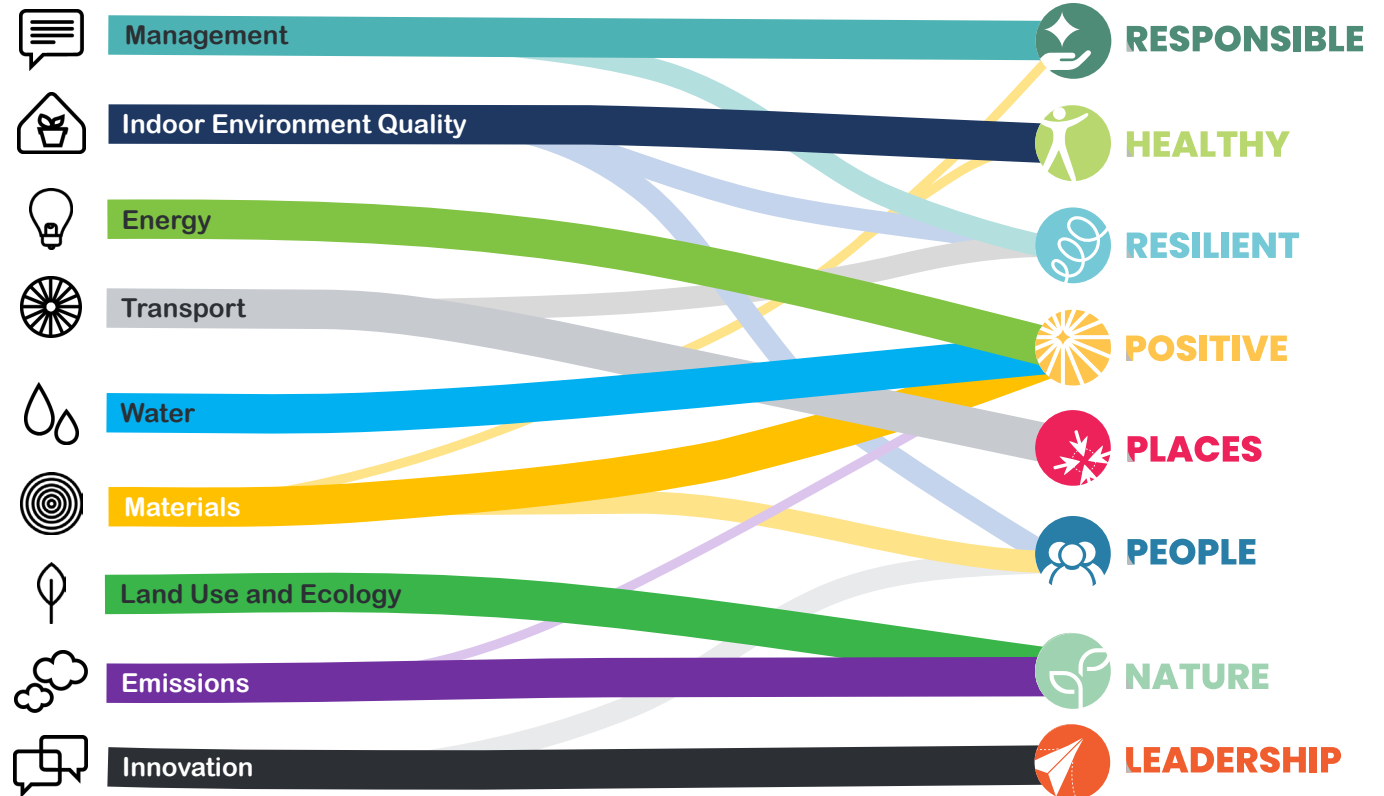
We believe in learning from our past. The categories found in our current rating tools have delivered exceptional buildings and provided the backbone for some of Australia's most globally-admired buildings. The new categories and credits build on this solid foundation. To support those familiar with the current rating tools we have developed materials on our website showing how we expect the current crop of credits to transition into the new rating tools.



Graham Agar

Director, Full Circle Design

"GBCA has led the way for sustainable design in Australia for more than 15 years. This next stage in the evolution of Green Star will once again raise benchmarks and inspire creative, innovative and excellent design solutions. As a long-time practitioner I am thrilled and looking forward to the chance to put it in practice."



Do you support the new framework? ☐ Yes ☐ No

Any comments?

② Meeting the Paris Agreement targets

Australia has signed on to the Paris Climate Change Agreement, committing to keep global warming below 2°C, and aiming for well below 1.5°C

The built environment's share of the emissions budget is around a quarter (23%) of Australia's greenhouse gas emissions⁶. Our industry has a central role to play in meeting the Paris Agreement goal of 1.5°C⁷. We outlined clear targets in our Carbon Positive Roadmap, which articulates what future Green Star projects must achieve and by when to meet this trajectory. Green Star for New Buildings responds to our roadmap by mandating that:

- ◆ 6 Star world leading buildings are **net zero carbon**.
- ◆ 5 Star Australian excellence buildings are **net zero ready**.
- ◆ 4 Star best practice buildings have a lower energy demand than a building built to the National Construction Code 2019.

We've worked closely with our expert reference panels to determine what this means for you. The requirements presented above are much-needed, but more importantly, are achievable. They realise the objectives outlined in our Carbon Positive Roadmap. A large focus of the expert reference panel over the past six months has been to answer this all-important question.

⁶Industrial energy use (23%), transport (17%) and waste (2%) are also areas that the building industry contributes to and influences.

⁷Please see the appendix for a comparison against the IPCC report.



Chris Nunn

**Head of Sustainability,
Real Estate, AMP Capital**

"The changes to Green Star for New Buildings are aligned with AMP Capital Real Estate's target to be Zero Net Carbon by 2030 and will help ensure Green Star ratings continue to drive world's best practice."

2 Meeting the Paris Agreement targets:

Definitions and requirements

Nearly net zero, net zero and carbon positive are terms that are used widely, and the definitions vary from organisation to organisation⁸. When it comes to 'net zero carbon', we base our definition on the Advancing Net Zero project led by the World Green Building Council of which we are an active participant. That definition is currently limited to operational carbon, so we've expanded to include a reduction of embodied carbon emissions. The actions noted here are also aligned with the recommendations in the IPCC report delineating recommendations to achieve a 1.5°C trajectory⁹.

Type	Emissions from:	Net zero ready	Net zero carbon
Direct emissions (scope 1)	Refrigerants	Transition plan to eliminate refrigerants	Transition plan + offset remaining emissions
	Fossil fuel use on site	Transition plan to eliminate fossil fuels on site.	No gas for electricity generation + Fossil fuel minimized ¹⁰ and transition plan + offset remainder emissions
Indirect emissions (scope 2)	Building and site infrastructure's electricity demand	Low demand ¹¹ + renewable energy production encouraged.	Low demand + 100% renewable electricity ¹²
Ancillary emissions (scope 3)	Tenants' energy use	Green leases setting tenancy energy use behaviours or targets.	Tenancy energy use targets + facility for procuring renewables
	Embodied carbon	10% embodied carbon reduction compared to a typical building.	20% embodied carbon reduction compared to a typical building.
	Water consumption and treatment	-	-
	Waste from consumption	-	-
	Transport	¹³	¹³

⁸ Other terms include net zero energy buildings, or carbon neutral. GBCA considers net zero energy buildings as one that is self-sufficient through on-site generation.

Carbon Neutral refers to an asset that complies with the Australian Government's National Carbon Offset Standard for buildings.

⁹ Appendix C shows an analysis of how Green Star for New Buildings aligns with the IPCC report.

¹⁰ This means no fossil fuels for space heating or water heating. Cooking, emergency gas is allowed at this stage.

¹¹ A separate modelling exercise will be undertaken to determine this percentage. The 10% improvement over NCC will remain.

¹² This can be achieved through on-site and off-site solutions.

¹³ Transport emissions reductions from location or vehicle emission reductions are addressed elsewhere in the rating tool and not considered for purpose of this definition.

* Our Carbon Positive Roadmap also defines carbon positive which will be relevant in the future for leading projects.

Do you agree with the net zero carbon definition? **Yes** **No**

Comments

Do you support 6 Stars being net zero carbon? **Yes** **No**

Comments

Do you support the net zero ready definition? **Yes** **No**

Comments

3 A clear definition of best practice

With the release of Green Star for New Buildings we are positioned to help every building achieve at least best practice. We know what best practice buildings look like: energy and water efficient with good indoor environment and designed to address future climatic conditions. We know this because we've seen hundreds of 4 Star Green Star-rated buildings achieve these outcomes.

This is why, in Green Star for New Buildings, we propose that all buildings targeting a Green Star rating meet these minimum levels of best practice expectations. The list below outlines the 10 standard criteria to be met to achieve a Green Star rating:

- ◆ Designed to withstand climate-related risks.
- ◆ 10% more energy efficient than the 2019 National Construction Code Section J requirements¹⁴.
- ◆ Water efficient fixtures and appliances installed.
- ◆ Commissioned and tuned to operate optimally over time.
- ◆ Environmental impacts from construction practices minimised.
- ◆ Energy and water use metered and monitored over time.
- ◆ Active transport facilities, such as bicycle racks, showers and changing rooms, installed.
- ◆ Sustainability-related information transferred to owners at handover.
- ◆ Air, light and noise quality in regularly occupied spaces enhanced.
- ◆ Toxic chemicals minimised or eliminated.



Jennifer Saiz
Executive General Manager,
Group Property and Security,
Commonwealth Bank

"As a tenant, it is important that we have energy efficient, comfortable, well-built buildings. Having Green Star assist with this provides a huge benefit to us."

¹⁴ Due to the NCC 2019 update, the building will need to be more energy efficient than those subject to NCC 2016.

3 A clear definition of best practice:

Meeting expectations

Best practice buildings will be required to meet our newly-set minimum expectations, and will be encouraged to meet several optional but highly-recommended deliverables.

But importantly, no minimum requirement is outside your sphere of influence¹⁵. And each minimum requirement is achievable. In fact, more than 75 percent of 4 Star Green Star-rated buildings already achieve these targets¹⁶.

We also know that achieving these benchmarks are a stretch for some project teams and asset owners starting on their journey to improve the built environment.

By setting these expectations we are positioned to deliver guidance, documents, specifications and other information to help those with limited budgets deliver a Green Star-rated building. Our goal is to make the entry-level Green Star certification as cost-effective as delivering a typical building.

These are important stepping stones from which to achieve other sustainable outcomes. This is why we are proposing to make them a mandatory component of a Green Star rating. This way, you'll know exactly what to expect at a minimum of your Green Star building.

Our purpose is to lead the sustainable transformation of the built environment. Every Green Star rated building takes us one step closer to achieving this goal.

¹⁵ For example, we have not stipulated access to public transport as a minimum requirement, as there are various factors outside a building owner's control which influence this outcome.

¹⁶ The GBCA undertook an analysis of 500 Green Star buildings to determine these numbers.



Parag Shinde
Senior Manager –
Energy and Sustainability,
Property NSW

"Green Star is a holistic framework for delivering proven sustainable outcomes in the built environment. Ensuring it continues to be accessible is critical if we want to go beyond what is delivered today."

Do you agree with these ten items being minimum requirements?

Yes No

If not, why?

What else would you suggest be a minimum requirement?

4 A rating tool for a diverse built environment

Green Star has rated everything from hospitals to libraries, office buildings to industrial warehouses. We've seen incredible innovation in distinct sectors and learned valuable insights from these developments along the way. We now want to go further and provide more flexibility for the application of Green Star by introducing sector-specific credits¹⁷.

The sector-specific credits enable you to select initiatives that will deliver added value and better buildings in a wider range of sectors.

We aim to have a 'pool' of credits developed for each sector or building type. Once the building has met the minimum requirements of the rating tool, you will have the option to substitute credits depending on their applicability. The sector-specific credits will be updated from time to time.

Examples of sector specific credits for distinct sectors include:



Healthcare

- Low toxic furniture
- Trade waste disposal
- Places of respite



Schools

- Learning opportunities
- Food gardens



Apartments

- Community spaces
- Non-smoking apartments



Industrial

- Vehicle emission reduction
- Tenancy energy reduction programs



Margot Black
Head of Sustainability
and Community, Charter Hall

"Operating a property portfolio which spans the office, industrial, retail and social infrastructure sectors presents us with unique challenges. Having a Green Star cater for each distinct sector means that we can use it to drive our sustainability strategy across all of them."

Do you support this concept? Yes No

Any ideas for sector-specific credits?

¹⁷Sector-specific also includes different building typologies.

5 Showcasing exceptional achievements

Recognising and promoting your exceptional achievements remains a key goal of the GBCA. Two options under consideration build on this

The first is a new system that recognises projects that excel in specific issues. An example of this would be delivering a carbon positive building or comprehensively addressing resilience¹⁸. These 'badges' would signify your building's exceptional performance in an area of your choice.

This option allows Green Star to respond to emerging issues, as we could introduce new badges without waiting for major revisions to Green Star. By doing so, we can help you respond – in real-time – to the most important and emerging issues of our day.

The second option is a new rating level designed to push boundaries even further than the current 6 Star World Leadership rating. This new level of achievement would be the ultimate expression of sustainability, demonstrating the possibilities when human ingenuity, innovation, world-leading design and dedication come together.

We must also consider how ratings under Green Star for New Buildings are represented when compared against ratings in legacy rating tools (e.g. 6 Star). A separate marketing review exercise is being undertaken to determine this, and information will be provided at a later date.



Richard Palmer
Principal, Integral

"Innovation in how we govern and reward performance is necessary to help accelerate the transition of the built environment to a sustainable future."

¹⁸ Please see the Appendix for an example of how a project could achieve a Resilience badge.

5 Showcasing exceptional achievements

Badges



**RESILIENCE
CHAMPION**



**CARBON POSITIVE
CHAMPION**

Do you support the concept of badges?

Yes

No

What badges would you like to see?

New rating

4 Star

5 Star

6 Star

**New
rating**

Do you support a new rating?

Yes

No

Why?

Introducing Future Focus into the market

We know introducing a new version of Green Star has an impact on our market, our stakeholders and individual projects. We are committed to making the transition as smooth as we can.

Towards the end of 2019, we'll release our comprehensive Green Star Transition Plan in which we'll explain how it will work in detail.

For now, here are some high-level principles around the transition:

- ◆ There will be a transition period of at least 18 months from the release of the new rating tool to the closing of registrations for the current rating tool. This means that you will be able to register under Green Star – Design & As Built until the at least the end of 2021.
- ◆ As we get closer to release, we will update our foundation courses so that you'll be ready to deliver Green Star for New Building.
- ◆ We'll also communicate at every stage. You will be reminded of release dates, progress, and relevant updates through our regular newsletter and social media activities.
- ◆ We'll provide briefing opportunities for you, your clients and other stakeholders. We want to arm you with the information you need so you can understand the benefits of Green Star for New Buildings and the opportunities that exist for you.

Our goal is simple. Green Star for New Buildings will be the new benchmark for sustainable buildings in Australia. Joining us on this journey is at the heart of making this happen.



Nick Alsop

Senior Manager Market Engagement, GBCA

"We know industry needs time to learn and build its knowledge. We will work with you to ensure you are informed of what is going on, and have the time to adjust to the new rating tool."

2019

2020

2021

2022



Design & As Built

greenstar
For New Buildings

Do you agree with the transition period?

Yes No

Early Access Program

We're looking for ambitious projects to work with during the development phase, and we think you're up to the challenge

If you are a leader who wants to get a head start on Green Star for New Buildings, and wants to drive industry forward our Early Access program is for you. We're specifically looking for buildings in the early design stage, no matter which sector they are from. During the Early Access Program, you will obtain draft credits, dedicated technical support, promotion and case studies, and the opportunity to shape the future of the built environment.

What we'd ask in return is that you:

- ◆ Provide feedback on credits in development
- ◆ Participate in bi-weekly calls or forums to share your learnings with GBCA and other projects
- ◆ Provide costs (estimated and real) and recommendations on how to reduce them
- ◆ Help develop templates or provide examples that industry can learn from
- ◆ Pay a registration and participation fee.

The registration and participation fee will cover the additional technical support to help you deliver improved outcomes for your building.

While our aim is to make sure you are ready for a Green Star for New Buildings rating, we also want to help you manage your risk. As such, no matter what, we will work with you to ensure you are able to secure a Green Star - Design & As Built rating.

If you are interested in joining the Early Access Program, please fill out this form*. Buildings will be selected based on sector, size and complexity. You must nominate your building by 1 June 2019. We will inform successful projects by July 2019.

**I want to
participate**



Nicole Sullivan
Senior Manager Green Star Solutions, GBCA

"We are eager to work with you to develop and test the new rating tool. We know you can't wait to start, and we are here to make sure you are successful."

*This is a link - if you have printed this document out, please see the GBCA website.

Digital and data pathway

We're fortunate in that we have access to valuable data. Our goal is to convert this data into an asset, for both yourselves and us

One of the enablers in the GBCA's Strategic Plan is technology and data. To support our members and the objectives of our Strategic Plan, we're exploring a Digital and Data pathway. The objectives of this Pathway include:

- Optimising and streamlining our processes, to help improve your overall Green Star experience.
- Using the platform to collect data to generate analytical insights. This will help you build strong business cases via data-driven decision making.
- Partnering with organizations to assist with data sharing, with the goal of avoiding the duplication of reporting for different schemes.

We plan to use data to gain insights into our industry and identify the challenges or opportunities that you face. It will also afford us increased agility and the ability to make accurate decisions in a timely manner.

We'll be holding workshops and will communicate details via our website.



Stephen Thatcher

Head of Finance and Operations, GBCA

"The revision to Green Star opens up incredible opportunities to deliver digital solutions that will assist in streamlining the certification process and improve the built environment through greater transparency, reporting and benchmarking."

Get involved in Green Star for New Buildings

There are many ways you can contribute to the Future Focus project moving forward

- ◆ Provide your feedback to this consultation paper.
- ◆ Attend a briefing session or see the webinar and provide your feedback. Green Star for New Buildings briefing sessions are scheduled on Green Building Day in May and June 2019. We have also scheduled a webinar for you and will upload to our website. Keep an eye on the GBCA website for details and to book.
- ◆ Make sure you're signed up to receive our Green Building Voice newsletter and Inside Green Star newsletter for regular announcements on project consultation periods, progress updates and additional opportunities to get involved.
- ◆ Request a briefing for your staff. GBCA member organisations can request for a member of the Market Transformation team to present to you on Green Star for New Buildings. Contact FutureFocus@gbca.org.au to arrange.
- ◆ Follow our progress via our website. We're keen to share our work with you so we'll be providing regular updates, expert reference panel meeting minutes, surveys and more on the GBCA website.
- ◆ Nominate a project for the Early Access Program.
- ◆ Partner with us. We aim to redefine world leadership and best practice for the next decade. Partnership opportunities are available. If you are interested please let us know at: lucy.harris@gbca.org.au



The development process

Milestone	Timelines	Description
Future Focus Consultation Paper release	April to June 2019	The paper will be live for industry comment for two months.
Member briefings	March to May 2019	Members can request a briefing on Green Star for New Buildings from the GBCA.
Consultant briefs	April 2019	GBCA to develop briefs for specific topics. View the GBCA website to look for updates and calls for proposals.
Green Building Day	May & June 2019	<p>The following sessions will be held across all four states:</p> <ul style="list-style-type: none">• 20 minute presentation covering the changes at a high level.• 60 minute breakout session to cover the changes in detail and have a Q&A.
Release Communities Consultation Paper	July 2019	A separate discussion paper for industry comment focusing on the proposed changes to Green Star – Communities.
Release Certification discussion paper	October 2019	A paper for industry comment on proposed changes to the Green Star certification model and process.
Release Green Star Transition Plan	October 2019	The Transition Plan will present timelines for Green Star for New Buildings introduction.
Draft credits for industry comment (Green Star for New Buildings)	October 2019	Draft credits will be released, in batches, for industry comment. These will have details on the specific criteria and benchmarks.
Rating tool approval process begins	March 2020	The GBCA's governance process requires various industry groups to approve the final rating tool before being presented to the Board.
Rating tool approved by GBCA board	May 2020	Once approved, the rating tool will be officially released.

Become a Future Focus Partner

We are seeking like-minded organisations to partner with us for the next three years on this exciting evolution

Be a partner in establishing:

- A shared vision and principles, helping to build a sustainable future for the next generation.
- Development of training programs to help industry step up to the challenge and upskill in this space.
- Advocacy efforts and other engagement programs to ensure Green Star becomes adopted by governments throughout Australia.

In return, your organisation will be showcased as a leader both locally and internationally. Your organisation will receive exclusive briefings, putting you ahead of the competition, as well as unprecedented exposure over the next three years across GBCA communications, events, courses, webinars and podcasts.

Becoming a Future Focus Partner is your opportunity to associate your brand with Green Star, one of the world's leading rating tool, long established as a driving force in the transformation of the built environment.

We need your support in this exciting journey.



Lucy Harris

**Head of Industry Development
& Partnerships, GBCA**

"By becoming a Future Focus Partner your organisation will be part of a group of thought leaders transforming the built environment in Australia."

[Email Lucy](#)

Appendices

The following appendix is included in this paper.
The appendix details individual credits and outcomes within each category. Feedback is sought from industry on this information

- A** Credits within Green Star for New Buildings
- B** The process to date

On the GBCA website, you can also find the following appendices.
These are provided for information only:

- C** Analysis against global drivers - GRESB, IPCC, SDGs + TCFD Green
- D** Star for New Buildings' response to Carbon Positive Roadmap Green
- E** Star - Design & As Built credits in Green Star for New Buildings
- F** Badging Example: Resilience
- G** Summary of Future Focus Scoping Paper feedback report

Appendix A:

Credits within Green Star for New Buildings

This appendix presents the outcome sought by each credit in Green Star for New Buildings. The outcome sought will then be developed into the Aim of Credit, and more detailed criteria and requirements.

We are seeking your feedback on the proposed outcomes of each credit in the rating tool.

There will be further opportunity to comment on credits. The detailed credits will be released in draft form later in 2019.

We've included a feedback box on each proposed credit. If you do not support the inclusion of this issue in form of the proposed credit and outcome, please let us know in the comments box.





RESPONSIBLE



Esther Bailey

**Better Buildings Partnership Manager
and CitySwitch National Project Leader,
City of Sydney**

“Ensuring the responsible design,
procurement, and delivery of a building is the first
step all projects should take. We get this right,
everything else can be achieved.”

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
Collaborative design and construction	Drives the integration of sustainability in all considerations throughout the design and construction process by facilitating a collaborative effort amongst the project team.	Yes	No
Sustainable procurement	Ensures a robust procurement process in line with ISO 20400 to assess suppliers and products. The procurement process must address issues related to human rights, such as modern slavery, and environmental issues.	Yes	No
Sustainable products	Incentivises environmentally responsible selection of materials for major building components through the use of products with eco-labels, Environmental Product Declarations (EPDs), and responsible sourcing schemes. It also promotes other circular economy solutions.	Yes	No
Responsible construction practices	Improves the physical and mental wellbeing of site workers. Manages the environmental impacts of the site and neighbouring sites, and reduces the volume of construction waste.	Yes	No
Verification and monitoring	Promotes the installation, commissioning and tuning of buildings components and services. Metering and monitoring systems will also be installed to encourage the management of future ongoing operations.	Yes	No
Handover and tenant engagement	Results in the transfer of information between the organisations associated with the ownership and management of the building. For tenanted spaces, encourages agreements that enable tenancies to perform to a high standard.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



HEALTHY



Emma McMahon

**Director - Sustainability,
Pacific, CBRE**

"Health continues to be a driver in the built environment. Green Star for New Buildings provides a framework for clear, measurable, and valuable health outcomes that you can rely on."

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
Clean air	Provides clean and fresh air to the space.	Yes	No
Light quality	Promotes lighting solutions that have a positive influence on people's health and wellbeing, which aligns with their circadian rhythm and creates high quality spaces.	Yes	No
Exposure to Toxins	Manages the impacts to short- and long-term health of people through the reduction of toxins in the spaces by selecting relevant materials and finishes.	Yes	No
Noise levels	Creates spaces with appropriate and comfortable acoustic conditions for occupants and neighbours.	Yes	No
Amenity and Comfort	Encourages a variety of comfortable and ergonomically sound environments. Also provides spaces that address personal and professional needs and spaces that encourage social interaction.	Yes	No
Mobility	Supports solutions or designs that encourage occupants to move around the space.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



RESILIENT



Rebecca Miller

**Associate Director - Sustainability
and Resilience, AECOM**

"Understanding system interdependencies within the built environment and building resilience to acute shocks and chronic stresses is a goal we should all be aiming for. Green Star for New Buildings will help us achieve it."

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
Climate change resilience	Delivers physical and non-physical responses necessary to address direct and indirect climate change and weather related risks.	Yes	No
Infrastructure dependency	Identifies and manages the dependencies between the building and infrastructure and develops responses to disruption events.	Yes	No
Resilience to other impacts	Recognises physical and non-physical responses to other comprehensive shocks and stresses that impacts the asset and the occupants within it.	Yes	No
Stakeholder engagement	Engages with stakeholders, such as emergency services and local councils, to develop responses to man-made and natural shocks and stresses that will impact the building.	Yes	No
Community resilience	Demonstrates its capacity to respond to, support, and build the resilience of the community during times of shock or to address long-term stresses.	Yes	No
Resilience communication and review	Establishes a resilience management system to monitor, evaluate, and update resilience information to all stakeholders with transparency and accountability.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



POSITIVE



Paul Bannister

**Energy Consultant, Greenhouse
Gas Emissions Expert Reference Panel.**

"The challenge used to be to optimise building efficiency but to meet the challenges of the future we need to be creating buildings that are not only efficient but also zero or even net positive in terms of emissions through onsite and/or off-site renewable energy use. Green Star for New Buildings will provide industry with the guidance it needs to ensure the built environment is on the right path to achieve these demands."

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
Energy and peak demand	Drives reductions in overall energy demand. Also, introduces good design and smart solutions to support the reliability of the grid.	Yes	No
Energy source and fossil fuels	Promotes the use of on-site or off-site renewable energy. Fossil fuels are reduced and transition plans are developed to prepare for their phase out.	Yes	No
Other carbon sources	Addresses and eliminates other carbon sources in the building, such as through the use of low global warming potential (GWP) refrigerants, and offsets.	Yes	No
Using Water Sustainably	Features low potable water demand through efficiency measures and water reuse solutions within the building and/or precinct	Yes	No
Carbon in materials	Quantifies embodied carbon impacts, and takes measures to reduce them through design practices, the use of carbon neutral certified products and services, and offsets.	Yes	No
Impacts from resources	Encourages the use of life cycle assessment to identify and reduce the environmental impacts from key resources over the buildings life span.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



PLACES



Katherine Featherstone

Sustainable Projects Manager, Stockland

"Creating great buildings is one step to improving the places we live in. How the building fits with its neighbours and what kind of community it creates is just as important. I'm excited by the introduction of these issues in Green Star for New Buildings."

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
People movement	Prioritise sustainable forms of transport for occupants and visitors travelling to and from the building.	Yes	No
Enjoyable Places	Provides safe, enjoyable and inclusive places that foster cultural and social sustainability outcomes.	Yes	No
Access to amenity	Ensures the building is connected to and conveniently provides walkable access to a diverse set of services, opportunities, schools, shops, and facilities.	Yes	No
Contribution to place	Contributes to the place-making of the locality and the wider urban fabric, strengthening the connection between people and place to create shared value.	Yes	No
Goods movement	Reduces local congestion from the services and delivery needs of the building through efficient and sustainable supply chain practices and facilities.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



PEOPLE



Lauren Kajewski
Senior Manager of
Sustainability at Landcom

"Moving beyond health to focus on the economic, social and cultural impact to people and the community is a natural evolution for Green Star. We are looking forward to delivering projects that meet these new outcomes."

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
Community engagement	Ensures responsive and inclusive engagement with the community to build trust, increase social cohesion, and enable a sense of belonging in the place.	Yes	No
Culture and Heritage	Understands and reflects the local culture and heritage of the location. It will celebrate the story of its past or occupants.	Yes	No
Design for diversity	Promotes designs with all types of needs in mind to create a place anyone can enjoy. This includes people of different abilities, gender diversity and cultural impacts.	Yes	No
Aesthetics	Encourages a sense of community and increases civic pride through the creation of an aesthetically pleasing building.	Yes	No
Privacy	Considers the privacy implications related to the implementation of smart technologies within the building.	Yes	No

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



NATURE



Vicky Critchley

**Senior Project Manager –
Sustainability, Elton Consulting**

“We need to fundamentally transform our relationship with nature through integrating it into our building and city design. Green Star for New Buildings helps make this a reality.”

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
		Yes	No
Impacts to nature	Protects ecologically sensitive sites. Enhances the ecological value of all other sites.		
Human connection to nature	Encourages design solutions both within and outside the building that foster human contact with nature, both for occupants and visitors.		
Water pollution and runoff	Reduces the impact of water pollution and runoff on nature through integrated water management solutions.		
Habitat creation	Introduces landscaping and other design solutions that create habitats to enhance biodiversity in the area.		
Nature connectivity	Demonstrates a measurable improvement in ecological connectivity and promotes solutions that encourage wildlife movement.		
Offsite restoration	Recognises investments in solutions that promote the restoration and conservation of habitats in areas outside the site.		

Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments



Tower Two International Towers, Barangaroo NSW
6 Star Green Star – Design & As Built v1.1



LEADERSHIP

Credit	Outcome	Do you agree with having this outcome in the rating tool?	
		Yes	No
Exceptional Performance	Demonstrates that the quality and performance of building solutions, policies or practices are of an exceptional standard.		
Leadership in sustainability	Celebrates initiatives or outcomes that are deemed new and break barriers, and in turn inspire others to follow.		
Innovation Challenges	Promotes achievements in areas on the cusp of becoming leading practices in Australia that may be new or inspired by other schemes.		

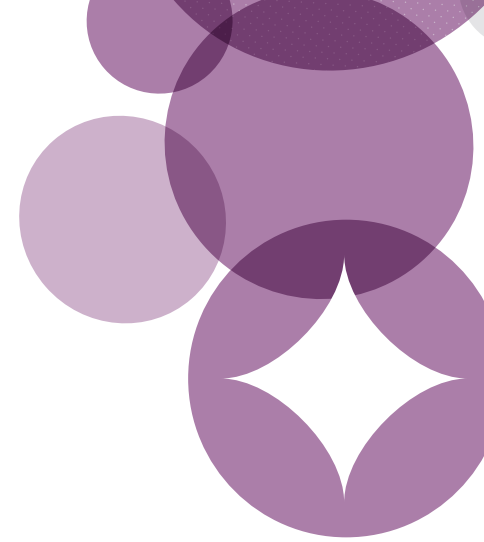
Do you have any comments on specific credits?

Is there anything else you'd like to see?

General comments

Appendix B:

The process to date



Future Focus Webinar

The webinar covered the proposed changes in detail. 100 listeners tuned in.

Expert Reference Panels created

Over 200 nominations were received. Ten groups, comprising of 140 experts, were created to guide the development of topics.

Future Focus Consultation Paper released

This paper was released and will be live until June 2019.

**April
2018**

**May
2018**

**July
2018**

**April
2019**

Future Focus Scoping Paper released

The Scoping Paper set out 10 key proposals for industry comment. The findings from this paper informed the next stage of development. 105 responses were received, with an average support rate of 96%.

Future Focus Workshops

130 participants attended the workshops across four states. The purpose was to begin exploring what world leadership looks like in new topics included in the scoping paper proposals.

Expert Reference Panels meetings

Between July 2018 and March 2019, 40 expert reference panel meetings were held to develop the structure and criteria in this paper.

THANK YOU

Thank you for participating and helping us create a better future.

The GBCA would like to thank all expert reference panels and members of the Technical Advisory Group, Industry Advisory Group, and Green Star Steering Committee for their support in the development of this paper.

Please see the GBCA website for a list of all individuals across these groups.

For any further enquiries, please email
futurefocus@gbca.org.au