



wsp

FUTURE  
READY®

Case Study

## GBCA GREEN STAR RATING REVIEW

### Project overview

WSP worked with the Green Building Council of Australia (GBCA), in an exclusive technical partnership, to develop the next generation of Green Star rating tools. Specifically, we have contributed to the development of new versions of two rating tools: Green Star for Buildings - launched in 2021, and Green Star for New Communities - currently under development.

This project was initiated to respond to global megatrends, including climate and demographic change, urbanisation, big data, artificial intelligence and technological innovation, driving an increased focus on our cities, health and wellbeing, human rights, equity and resilience.

Throughout the process, WSP supported the GBCA with a multidisciplinary team of experts from all facets of the built environment, with guidance on climate change, environmental impact, transport planning, electrical vehicle planning, and technological and digital considerations to help deliver the best sustainability outcomes for the property industry. Part of our role included conducting research into global best practice sustainability leadership for precinct delivery, with the aim to inform and position the Green Star for New Communities Rating Tool in alignment with globally leading precinct delivery trends.





Launched in 2003, the Green Star rating system set new benchmarks for sustainable buildings. Since then, it has transformed Australia's real estate landscape through 2,827 Green Star Certifications on over 2000 buildings.

Evolving from a single rating tool for building design, Green Star is now a system that influences building design, construction, interiors, operations and entire communities. Today, 44 per cent of Australia's CBD office space and 40 per cent of retail space is Green Star certified; 60,500+ people live in Green Star-rated apartments; 1.3 million people visit a Green Star-rated shopping centre each day; and 800,000 people visit and heal in Green Star certified hospitals each year. (source: [Green Star 2019/20](#)).

The transition to net zero is now challenging the property industry to move beyond solutions that focused on mitigating the carbon footprint added by a new building, to now demonstrate leadership through future ready solutions that can achieve carbon positive outcomes, whether immediately or in the short-term future.



## What future trends did we consider?

 Resources
 Circular Economy
 Renewables Reign
 Declining Biodiversity

## How did we consider these trends?

### Resources



- **Circular Economy** – a key focus of the next generation of Green Star rating tools will be to facilitate a carbon positive future for the property industry, which can deliver net positive outcomes across the triple bottom line – the social, environmental and economic aspects. An example of this is the new resilience category which will reward projects where it is demonstrated that the development and its supporting infrastructure provides climate change, community, heat and grid resilience. This now goes well beyond traditional climate change resilience to recognise other forms of chronic stresses and shocks, and the service the building can provide to address the community needs in these events.
- **Renewables Reign** – achieving a 6-Star Green Star rating will now require the operation of buildings to become electrified and powered 100 per cent by renewables. The timely release of these new tools is reflective of the broader changes across the industry – the benchmark has now been set to deliver carbon positive outcomes.
- **Declining Biodiversity** – the role of urban biodiversity and placemaking will play a key role as the revised tools work to facilitate the densification of our cities in a sustainable fashion, while decarbonisation of buildings will also be paramount in demonstrating industry leadership. The focus has now moved from not only reaching a net loss but to enhancing biodiversity. Considering traditional biodiversity and nature on the surface of the land (trees, plants and waterways), we also looked at what is underneath – soil disturbance, groundwater and hydrology – as they also are fundamental to maintaining ecology.



### *How was our approach better?*

As the sole Technical Partner on the project, WSP brought our local and global expertise of rating tools to provide advice and research to shape the new versions of the Green Star tools introduced in 2021.

We assessed and reviewed the existing tools developed in 2014, with consideration for significant changes that have occurred since then in regard to sustainability and in particular the ratification of the 2015 Paris Agreement. Our focus was to ensure that the revised tools are future ready and responsive to global megatrends such as climate and demographic changes in addition to continued innovation in technology.

Our approach was both pragmatic but also focused on being achievable by industry. It involved a comprehensive review including assessing community values on biodiversity and the embodied impact within supply chains.

As a founding Member of the GBCA, WSP has been one of the leading consultants supporting clients with Green Star certification services. Many of our people currently hold (or have held) numerous roles on Green Star related panels and committees. We are proud to be on the journey with the GBCA in setting one of the highest sustainability benchmarks in the world.

### *The outcomes*

Through this revised rating system there is more focus on carbon positive outcomes, rather than an improvement on minimum code compliance. This is also reflected in the science supported shift of language to carbon positive, rather than using minimum code compliance as a benchmark for improvement.

With the private and public sector's momentum towards achieving net zero by 2050, it's now a matter of necessity that business cases for new buildings include a transition strategy. This will ensure the sustainability across a building's lifecycle by considering the technical and spatial elements for designing an all-electric building – otherwise the risk is these become stranded assets in the future. In addition, all Green Star rated buildings, regardless of Star Rating, must be powered by 100% renewables by 2030, locking in a clear carbon positive roadmap and leadership position for Green Star rated assets.

Through our involvement on this project, WSP has helped to inform the new versions of the Green Star for Buildings and Green Star for New Communities rating tools to better meet the challenges of today and the next decade. Overall, we have broadened Green Star's scope to encourage buildings and precincts to be healthy, resilient, people centric, and responsive to the natural environment and mobility connections.



### *For More Information*

**Tim Parker**  
Director, Sustainability Manager

+61 2 8925 6712  
Tim.Parker@wsp.com

### *Find Us*

WSP Australia Pty Limited  
Level 27, 680 George Street  
Sydney, NSW 2000

[wsp.com](http://wsp.com)