



green building council australia

STATUS: VERSION 1 (V1) RELEASED AUGUST 2008

About the Rating Tool

The Green Star – Retail Centre v1 rating tool assesses the environmental attributes of new and refurbished retail centres in every State across Australia.

The tool can assign a Green Star rating to the base building and its services on the basis of design potential. Tenancy fitouts are not rated under this tool. The tool can also be used to rate the environmental merits of a retail centre at the post-construction phase (known as As Built).

The tool is designed to be used by owners, developers and consultants (architects, engineers, quantity surveyors, project managers, ESD consultants etc.) to influence the design of retail centres.

The tool enables these parties to minimise the environmental impacts of their developments and to capitalise on and receive recognition for their design initiatives.

Tool Development Process

The Green Star - Retail Centre v1 rating tool is the result of collaboration between the Green Building Council of Australia (GBCA) staff and a Technical Working Group (TWG), a voluntary group of environmental and retail sector industry professionals, with specific advice from industry experts.

The TWG was convened for an intensive three month period of 2006 during which time the environmental impacts of retail centres were discussed. The structure and contents of credits to address these issues were developed and calculators were assembled to be included in the Energy and Water categories.

The tool was then launched in its PILOT form in 2006 allowing industry to test it and provide feedback to the GBCA.

At the start of the PILOT period, sponsors, GBCA members and the industry had the opportunity to nominate projects to go through Green Star assessment and receive a PILOT certified rating. The PILOT projects provided valuable feedback to inform the final version of the tool. (For more information about certified PILOT projects, please visit the GBCA website: www@gbca. org.au)

Version 1 of the tool is influenced by the volume and type of feedback received during the PILOT phase; not only from PILOT projects but also from other industry stakeholders.

After the PILOT period closed, the GBCA collated stakeholder feedback. This process is now complete and the rating tool has evolved in to Version 1. Stakeholder feedback, and GBCA responses, can be viewed at the GBCA website.

Based on industry feedback, the GBCA and TWG agreed to change the name of the tool from Green Star - Shopping Centre Design, to Green Star – Retail Centre v1. This was chosen to better describe the scope of the tool, recognising that there is the potential to achieve a Green Star Design or Green Star As Built rating under this tool.

Key Attributes

The Green Star – Retail Centre v1 rating tool has many credits in common with the other Green Star tools available, but has also been made unique to the retail centre sector.

The following is a list of the key 'sector specific' credits that differentiate the Green Star - Retail Centre v1 rating tool from other Green Star tools:

- Waste and Recycling Management Plan;
- Building Management System;
- Car Park Ventilation; and
- Trip reduction Mixed Use;

Another major difference is a customised energy calculator for the retail centre sector. While the Green Star – Office suite of rating tools incorporates the NABERS Energy rating, an equivalent does not exist for the retail centre sector.

The GBCA worked with the tool sponsors and other industry representatives on a survey of existing retail centres. The findings of this survey, along with data from other sources relevant to the retail centre construction sector, provided the information needed to establish the Standard Practice Energy Benchmark for retail centres and provided the base for producing the Green Star – Retail Centre v1 Energy Calculator.

The Green Star – Retail Centre v1 Energy

Calculator assesses all retail centres equitably, independent of size or location, on their predicted greenhouse gas emissions during operation.

Ongoing Feedback

The GBCA encourages industry to provide feedback on the Green Star rating tools at any stage of the tool, to assist us in continuously monitoring and updating the rating tools to ensure they remain relevant and robust.

Certification

As with all Green Star rating tools, only eligible projects can be certified. The Green Star - Retail Centre v1 rating tool will award certified ratings as follows:

4 Star Green Star Certified Rating

Weighted score of 45-59 Signifies 'Best Practice' 5 Star Green Star Certified Rating Weighted score of 60-74 Signifies 'Australian Excellence' 6 Star Green Star Certified Rating Weighted score of 75-100 Signifies 'World Leadership'

The rating tools have been developed to be equitable across building sectors. In other words, a 5 Star Green Star – Retail Centre project will exhibit a degree of industry leadership comparable to that of a 5 Star Green Star – Office v3 project.

Environmental Impact Categories

Green Star rating tools consist of eight environmental impact categories and an innovation category (see list over). Credits are awarded within each of the categories based on the building's potential to minimise its environmental impact in a range of key areas.

Please note that the Green Star - Retail Centre v1 rating tool takes into consideration the unique development requirements and impacts of the retail centre sector. As such, the number of credits within categories and the category weightings vary from other Green Star rating tools.

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green star

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Retail Centre

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The table below outlines each category within the Green Star - Retail Centre v1 rating tool.

Management

- Green Star Accredited Professional
- **Commissioning Clauses**
- . **Building Tuning**
- Independent Commissioning . Agent
- **Building Guides** .
- Environmental Management .
- Waste Management .
- . Waste and Recycling Management Plan
- **Building Management System** .

Indoor Environment Quality

- Ventilation Rates
- Air Change Effectiveness
- Carbon Dioxide Monitoring and . Control
- Daylight .
- Thermal Comfort
- . Hazardous Materials

Category Weightings

Management

IEQ

Energy

Water

Transport

Materials

Emissions

TOTAL:

Land Use & Ecology

Internal Noise Levels

- Volatile Organic Compounds
- Formaldehyde Minimisation
- Mould Prevention

- Greenhouse Gas Emissions
- Energy Sub-metering •
- Peak Energy Demand Reduction
- . Car Park Ventilation

Transport

Energy

- Provision of Car Parking
- Fuel Efficient Transport .
- **Cyclist Facilities** .
- . Commuting Mass Transport
- Trip Reduction Mixed Use .

10%

12%

24%

8%

19%

10%

9%

8%

100%

- Water Occupant Amenity Water
- Water Meters

Landscape Irrigation

- Fire System Water

Materials

- Recycling Waste Storage
- Building Reuse
- Recycled Content & Reused Products and Materials
- . Concrete
- Steel •
- **PVC** Minimisation . Sustainable Timber
- Design for disassembly .
- Dematerialisation

- Land Use & Ecology Ecology – Conditional Requirement
- Topsoil
- . Reuse of Land
- Sponsors:

Mirvac	Platinum
Sustainability Victoria (Vic Govt.)	Platinum
Westfield	Platinum
AMP Capital	Gold
Colonial First State (Gandel.)	Gold
Dept. Environment & Conservation (NSW Govt.)	Silver
EPA Queensland (QLD Govt.)	Silver
ING Real Estate Retail	Silver
Stockland	Silver
Lend Lease	Silver



- Heat Rejection Water
- Emissions
 - Refrigerant ODP
 - Refrigerant GWP .
 - . **Refrigerant Leaks**
 - Insulant ODP .
 - Watercourse Pollution

• Reclaimed Contaminated Land

• Ecological Value of Site

- . Discharge to Sewer
- Light Pollution .
- Legionella

Innovation

- Innovative Strategies & Technologies
- Exceeding Green Star Benchmarks
- Exceeding Green Star Scope