

FACT SHEET

GREEN STAR AND AUSTRALIAN BUILDING GREENHOUSE RATING SCHEME (ABGR)

GREEN STAR

The Green Building Council of Australia (GBCA) has developed a national environmental rating tool for buildings called the 'Green Star' rating system. The tool rates a building in relation to its management, the health and wellbeing of its occupants, accessibility to public transport, water use, energy consumption, the embodied energy of its materials, land use and pollution.

Green Star aims to assist the building industry in its transition to sustainable development. The Green Star environmental rating system for buildings was created for the property industry in order to:

- establish a common language;
- set a standard of measurement for green buildings;
- promote integrated, whole-building design;
- recognise environmental leadership;
- identify building life-cycle impacts; and
- raise awareness of green building benefits.

There is a suite of Green Star rating tools for commercial offices at all phases of development - design, construction, and operations. Projects are evaluated against eight environmental impact categories, plus innovation. Within each category, points are awarded for initiatives that demonstrate that a project has met the overall objectives of Green Star and the specific criteria of the relevant rating tool credits. Points are then weighted and an overall score is calculated, determining the project's Green Star rating.

Green Star rating tools use Stars to rate performance:

4 Star Green Star Certified Rating signifies 'Best Practice'

5 Star Green Star Certified Rating signifies 'Australian Excellence'

6 Star Green Star Certified Rating signifies 'World Leadership'

The City of Melbourne's Environmentally Sustainable Office Buildings (ESOB) Policy (Melbourne Planning Scheme Clause 22.19) requires a 4 Star Green Star Certified Rating for office developments with a gross floor area of more than 5,000m². In achieving this 4 Star Green Star Rating the City of Melbourne's ESOB policy also specifies minimum energy rating and maximum water consumption requirements which must be achieved.

The Green Star rating system looks at the following aspects of the building and process:

Management	Addresses the adoption of sustainable development principles from project conception through design, construction, commissioning, tuning and operation.
Indoor Environment Quality (IEQ)	Targets environmental impact along with occupant wellbeing and performance by addressing the HVAC system, lighting, occupant comfort and pollutants.
Energy	Targets reduction of greenhouse emissions from building operation by addressing energy demand reduction, use efficiency, and generation from alternative sources. Energy is assessed using the ABGR scheme.

Transport	Rewards the reduction of demand for individual cars by both discouraging car commuting and encouraging use of alternative transportation.
Water	Addresses reduction of potable water through efficient design of building services, water reuse and substitution with other water sources (specifically rainwater).
Materials	Targets resource consumption through material selection, reuse initiatives and efficient management practices.
Land use and ecology	Addresses a project's impact on its immediate ecosystem, by discouraging degradation and encouraging restoration of flora and fauna.
Emissions	Address point source pollution from buildings and building services to the atmosphere, watercourse, and local ecosystems.
Innovation	Rewards marketplace innovation that fosters the industry's transition to sustainable building.

AUSTRALIAN BUILDING GREENHOUSE RATING (ABGR)

The Green Star rating system uses the ABGR scheme in the calculation of the **Energy** assessment. The ABGR is a computer software tool which enables office buildings to measure their relative impact on the environment through the production of greenhouse gases. The ratings are based on energy-related greenhouse gas emissions, adjusted to account for how the building is used.

The ABGR scheme can benchmark commercial office spaces, which have a comparatively large greenhouse impact and good scope for improvement. It cannot currently be applied to any other building type although the scheme may expand to cover different building types in the future. It can be used for the base building (central services), whole building or individual tenancies.

The scheme benchmarks a building's greenhouse performance on a scale of one to five, one having the worst greenhouse performance and five the best. The scheme assists building owners and tenants to promote their greenhouse performance and gain a competitive advantage.

ABGR scheme uses Stars to rate performance:

3 Star ABGR Rating signifies 'Current Market Best Practice'

4 Star ABGR Rating signifies 'Strong Performance'

5 Star ABGR Rating signifies 'Best Building Performance'

The City of Melbourne's Environmentally Sustainable Office Buildings Policy (Melbourne Planning Scheme Clause 22.19) requires a minimum 4.5 Star ABGR Base Building Rating for office developments with a gross floor area of 2,500m² and greater.

The star rating is derived from the actual amount of energy (electricity, gas, coal or oil) a building/tenancy consumes in a year. This means the rating reflects the way energy is managed as well as how efficiently the building is designed. The benchmark allows comparison with the greenhouse performance of other buildings.

In addition to the actual performance rating applicable to operational buildings, a "Commitment Agreement" applies in the design of new office buildings. Through the Commitment Agreement, the ABGR scheme allows developers and building owners to promote and market excellent greenhouse performance of new and refurbished office buildings from the outset. A Commitment Agreement states the developer and owner's commitment to design, build and commission the premises to the selected star level.

Both Green Star rating system and the ABGR scheme require rating or assessment by accredited/certified assessors. Further information about these tools, including details of accredited/certified assessors and the current costs associated with assessment are available on the Green Star and ABGR websites.

Relevant Websites

Green Star Website - www.gbcaus.org

Australian Building Greenhouse Rating - www.abgr.com.au/new/default.asp