

2

1200 BUILDINGS PROJECT ADVICE SHEET

Using ratings tools in a retrofit

There are two important ratings tools in Australia against which to measure your building's environmental performance:

- NABERS
- Green Star

They are important because they provide a measure of building performance and an effective way to promote your building retrofit.

Tenants are increasingly attracted to buildings are energy /water efficient - "green" or "sustainable". Ratings will be used in the near future in much the same way as electrical appliance ratings are used now: to compare one similar building with another, from an energy / water efficiency point of view.

So, how do the ratings systems work, what do they measure and how do you get a rating for your building?

NABERS

What is it?

NABERS rates a building on the basis of its measured operational impacts on the environment, and provides a simple indication of how well you are managing these environmental impacts compared with other similar buildings.

The NABERS rating is based on actual building performance, not design or modelling.

NABERS uses a star rating system:

- **5 stars:** Excellent – best building performance
- **4 stars:** Very good – strong performance
- **2.5 stars:** Market average performance
- **0 - 2.0 stars:** Under performing.

There is a different NABERS rating tool for energy, water, waste and indoor environment. Buildings are also classified and measured differently: offices, retail, hotels, schools, hospitals.

Download the document NABERS Energy and Water Rules (3.2 Mb) from nabers.com.au

You can conduct your own self-assessment using the NABERS tool. Note, you cannot use this rating in any promotional materials.

How does it work?

NABERS uses a structured methodology to make the assessment. A set of rules is applied, a spreadsheet used for recording the data and an electronic tool calculates the assessment based on data collected.

The building is defined by its primary use, net lettable area (NLA), hours of occupancy and service. Both the number of computers and number of occupants is factored into the calculations. The building's performance is measured on data across a 12-month period and the building has to be occupied during this time. The energy /water use of the whole building, the tenancy or the base building, will be used in the calculations. The percentage of green power sourced will also have a bearing on performance results.

To conduct a NABERS assessment, there are at least 150 NABERS Accredited Assessors in Victoria to choose from.

An assessment may take between 10 and 50 hours to conduct, depending on the size of the building. The cost of the assessment will also vary depending on the size of the building and the quality of documentation provided and may cost anywhere between \$4,000 and \$10,000. As the process becomes more routine (annual), the cost of conducting the assessment will be less as the documentation required will be up-to-date.

When is it used?

In a retrofit, it is necessary to conduct a NABERS rating:

- before the retrofit project begins, so that you have a benchmark against which to measure how successful the retrofit has been. Twelve months of energy /water data prior to retrofit will be needed for this assessment.
- One year after the retrofit is complete. You will need to collect 12 months of energy / water data for the assessment to be conducted.
- In order to maintain your NABERS rating, you will be required to conduct an assessment every 12 months and make this information publicly available.

How do I find a reputable NABERS assessor?

There are many accredited assessors who can conduct a rating. Locate them through NABERS (nabers.com.au) or CitySwitch. (cityswitch.net.au)

How do I get a rating for my building?

For a rating to be accredited by NABERS, the assessment on which it is based must be performed by a NABERS Accredited Assessor and comply with a quality standard that sets out principles and rules for gathering, interpreting and using data.

nabers.com.au

GREENSTAR

What is it?

Green Star is a comprehensive, national, voluntary environmental rating system that evaluates the environmental design and construction of buildings.

There are two types of office ratings:

- **Design:** evaluates the environmental potential of the design of commercial offices (base buildings), for both new and refurbishment projects.
- **As-Built:** assesses the same design criteria as Design, but at completion of construction.

Green Star uses a star rating system:

- **4 Star Green Star Certified Rating** (score 45-59): 'Best Practice' in environmentally sustainable design and/or construction
- **5 Star Green Star Certified Rating** (score 60-74): 'Australian Excellence' in environmentally sustainable design and/or construction
- **6 Star Green Star Certified Rating** (score 75-100): 'World Leadership' in environmentally sustainable design and/or construction

Visit the Green Star website: www.gbca.org.au

How does it work?

Green Star is a whole of building rating. It uses nine categories to measure the building's overall rating: management, indoor environment quality, energy, transport, water, materials, land use & ecology, emissions and innovation. Each category is assessed, a percentage score is calculated and Green Star environmental weighting factors are then applied.

You cannot publicly claim or promote a Green Star rating or use the Green Star rating logo for the design, project or building unless the GBCA has validated the project's achievement through a formal assessment.

The GBCA applies a fee based on the gross floor area (GFA) of the building for a Green Star certification. This varies from \$22,000 - \$33,000 (discounts apply for members).

There are more than 750 accredited Green Star professionals in Victoria who can assist with the Green Star certification process. Their fees typically range from \$60,000 - \$200,000 depending on the size of the building and complexity of the process.

How do I get a rating for my building?

You need to register your project with GBCA, and then submit documentation to Green Star as proof of your achievement.

A Green Star panel meets twice yearly to assess your information and provide a certified rating.

Because of the fees involved, get help from a Green Star accredited professional.

www.gbca.org.au/green-star

When is it used?

There are two opportunities to achieve a Green Star rating:

- at the design phase
- at the end of the construction.