Green Star Rating System

Jason Buch, GBCSA
Green Star Tools

- Based on other international rating systems
- Buildings not products
- Industry based
- Voluntary, aimed at leaders in the market

- Specific to market sectors and building life-cycle phases
  - Base building tools
  - Interior fitouts
  - Existing buildings
  - Operations in future
Green Star Tools

- Australia
  - Office
  - Retail Centre
  - Multi Unit Residential
  - Industrial
  - Education
  - Healthcare
  - Office Interiors
  - Pilot: Existing Building

- South Africa
  - Office
  - Retail Centre

- New Zealand
  - Office
  - Industrial
  - Education
  - Interiors
Tool Framework

- Management
- IEQ
- Energy
- Transport
- Water
- Materials
- Land Use & Ecology
- Emissions

Category scores

Environmental weightings

Single score

Innovation points

Rating
<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
<th>Represents</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Star</td>
<td>10</td>
<td>Minimum Practice</td>
</tr>
<tr>
<td>Two Star</td>
<td>20</td>
<td>Average Practice</td>
</tr>
<tr>
<td>Three Star</td>
<td>30</td>
<td>Good Practice</td>
</tr>
<tr>
<td>Four Star</td>
<td>45</td>
<td>Best Practice</td>
</tr>
<tr>
<td>Five Star</td>
<td>60</td>
<td>South African Excellence</td>
</tr>
<tr>
<td>Six Star</td>
<td>75</td>
<td>World Leadership</td>
</tr>
<tr>
<td>Ref No.</td>
<td>Title</td>
<td>Aim of Credit</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Wat - 1</td>
<td>Occupant Amenity Water</td>
<td>To encourage and recognize designs that reduce potable water consumption by building occupants.</td>
</tr>
</tbody>
</table>
| Wat - 2| Water Meters      | To encourage and recognize the design of systems that both monitor and manage water consumption. | Up to two points are awarded as follows: One point is awarded where:  
- Water meters are installed for all major water uses in the project.  
An additional point is awarded where  
- The above is achieved; AND  
- An automated effective mechanism for monitoring water consumption data is installed. | 2                     |                        |                        |          |
| Wat - 3| Landscape Irrigation | To encourage and recognize the design of systems that aim to reduce the consumption of potable water for landscape irrigation. | Up to three points are awarded as follows: One point is awarded where  
- potable water consumption for landscape irrigation has been reduced by 50%; Two points are awarded where  
- potable water consumption for landscape irrigation has been reduced by 90% OR  
- plants chosen require no additional watering once established (i.e. xeriscaping).  
If there is no landscaping, or the total landscaping represents less than 1% of the site area, these points are 'Not Applicable' and are excluded from the points available, used to calculate the Water Category Score. | 2                     |                        |                        |          |
| Wat - 4| Heat Rejection Water | To encourage and recognize design that reduces potable water consumption from heat rejection systems. | Up to four points are awarded as follows: Two points are awarded where:  
- Potable water consumption of water consuming heat rejection systems is reduced by 50%; Four points are awarded where:  
- Potable water consumption of water consuming heat rejection systems is reduced by 90%; OR  
- No water consuming heat rejection systems are provided. | 4                     |                        |                        |          |
| Wat - 5| Fire System Water  | To encourage and recognize design that reduces potable water consumption from fire systems. | One point is awarded where:  
- Fire systems are designed to utilize reclaimed water. |                        |                        |                        |          |
Tool Development Process

Tool Development Structure:

- Technical Working Group
- Consultants
- Sponsors

Timeline:

- Pilot tool development
- Pilot / feedback period
- Version 1 launch
- Future revisions
Green Star SA – Retail Centre PILOT

Technical Working Group

Developer/Owner
• Errol Taylor, Growthpoint
• Jonathan Yacht, Colliers International

Project Manager
• Donia Kamstra, Profica

Tenant
• Carel van Graan, Pick n’Pay

Facilities Manager
• Chris Davey, Old Mutual Investment Group
• Douw de Kock, Broll Property Group
• Freek Eefting, Liberty Properties

Architects
• Lee-Anne Fletcher, Bentel
• Johan de Wet, Boogertman & Partners
• Tinus van der Westhuizen, Stauch Voster Architects

Energy & Electrical Engineering
• Lisa Reynolds, Saint Gobain
• Francois Joubert, JoubertDekker Greenbuild Consultants
• Gary Abrahamson, Standard Electric

Mechanical Engineers
• Tom Esterhuizen, Tom Esterhuizen & Associates
• Imraan Baatjies, Triocon Consulting
• Paul Cosgrove, Arup

Contractor
• Grant Ramsay, Group 5

Ecology/Environmental
• Melisa Lachenicht, Ezendalo Environmental Solutions

Materials
• Michelle Ludwig, PJ Carew Consulting
• Andy Kopelowitz, Arup

Green Building Consulting
• Jeremy Gibberd/Sizo Sebake, CSIR
• Karen van Helsdingen, The A-Z Philosophy
• Greg Branfield, ERM

Transportation
• Gerrit Venter, Jeffares & Green
Certification process

- Register project
- Collect documentation
- Undergo assessment
- Receive Green Star SA Certified Rating
Customisation of Australian Green Star

- All intellectual property from GBCA
- Same tool development process
- Final approval by GBCA
SA Choice of Green Star

- Similar climate and issues, metric units
- Internationally recognised rating system
- Customisable
- GBCA support and intellectual property