



PRODUCT CERTIFICATION PROJECT

- BACKGROUND AND OUTCOMES

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1.0 EXECUTIVE SUMMARY

The Green Building Council of Australia (GBCA) is committed to continuously improving and ensuring transparency of the Green Star environmental rating system for buildings (Green Star).

In late 2007, the GBCA commenced the Product Certification Project (PCP) to establish the terms and conditions under which Green Star would recognise third-party product certification schemes. The PCP was a result of ongoing dialogue with Green Star stakeholders and feedback from manufacturers and building industry professionals.

The PCP involved the engagement of an independent Expert Reference Panel (ERP). This panel helped to develop the following key project outcomes:

1. The Assessment Framework for Product Certification Schemes (Framework), which enables the GBCA to assess third-party product certification schemes for appropriate recognition within Green Star against 22 criteria that address best practice in governance, transparency, standards development and content of standards. The Framework provides:
 - a fair and transparent pathway for all schemes seeking recognition in Green Star;
 - greater access to the 'deemed to satisfy' compliance status within the Green Star Material Calculators for products and materials certified by GBCA-recognised schemes; and
 - assurance that product certification schemes recognised by the GBCA can demonstrate that the products which they certify meet best practice environmental performance throughout the products' lifecycles.
2. A new Green Star Material Calculator and User Guide are being developed with input from the ERP. This new Material Calculator will link some of the best practice criteria detailed in the Framework directly into Green Star materials credits. The new calculator will be released for public comment by 30 November 2009 following approval by the GBCA Board.

There will be a 12 month transition period before the new Framework and Material Calculator are fully implemented. The Framework and Material Calculator will raise the Green Star best practice benchmark expectations both for manufacturers and suppliers of fitout products, as well as product certification schemes.

This document provides information on the background, process and outcomes of the PCP. It is intended to be read in conjunction with the following four supporting documents which can be accessed on the Product Certification Project page of the GBCA website:

- Part I – Criteria for Evaluating Product Certification Schemes;
- Part II – Assessment Process for Product Certification Schemes;
- Part III – Assessment Tool for Product Certification Schemes; and
- Part IV – Assessment Tool Users Guide.

Product certification schemes are invited to apply formally for assessment against the *Criteria for Evaluating Product Certification Schemes* from 15 July 2009, in accordance with the steps provided in the document Part II - *Assessment Process for Product Certification Schemes*.

2.0 DEFINITIONS

The following terms are used throughout this and all supporting documents (Part I, II, III, and IV):

Assessment Criteria (Criteria) – is the suite of best practice benchmarks and guidelines that comprise the requirements of Part I and underpin the GBCA Priority Areas of Concern in Part II of the Framework. These benchmarks and guidelines address the governance and transparency of product certification schemes, as well as the content and rigour of the standards that they operate. Refer to *Part I – Criteria for Evaluating Product Certification*.

Assessment Process – refers to all of the stages involved in the assessment of product certification schemes. It is similar in principle and process to the way that the GBCA assesses applications for Green Star certification of buildings. Refer to *Part II – Assessment Process for Product Certification Schemes*.

Assessment Tool for Product Certification Schemes (Assessment Tool) – is the spreadsheet tool that product certification schemes must use to provide the GBCA with evidence of compliance with the Criteria. Refer to *Part III – Assessment Tool for Product Certification Schemes*.

Assessment Tool User Guide (User Guide) – is a guidance document that provides detailed explanations of the sections and content of Part I and Part II in the Assessment Tool. It is intended to assist applicant product certification schemes in the task of completing the Assessment Tool. Refer to *Part IV – Assessment Tool User Guide*.

Framework – refers to the GBCA Assessment Framework for Product Certification Schemes. It encompasses the Assessment Process, Assessment Criteria and Assessment Tool that have all been developed through the PCP.

Independent Assessment Panel (IAP) – refers to an independent panel, external to the GBCA, which is contracted by the GBCA to undertake the assessment of a product certification scheme's Assessment Tool submission and supporting documentation against the Criteria. The IAP usually comprises of two assessors and an independent chair. Participants from the PCP Expert Reference Panel serve as assessors on the IAP. Independent chairs will be selected from the same pool contracted by the GBCA to oversee meetings for the assessment of Green Star submissions for buildings.

Performance-Based Criteria – refers to criteria which can definitively validate claims that a certain level of environmental (and/or other) performance has been achieved.

Performance-Based Standard – is a standard comprised of performance-based criteria.

Priority Areas of Concern (PAC) – refers to the eight key issues identified in Part II of the Criteria for content of standards. Refer to *Part I – Criteria for Evaluating Product Certification*.

Product Certification (Certification) – is a voluntary process by which an independent third party certifies that a product is manufactured and/or supplied to an agreed standard.

Product Certification Scheme (Scheme) – is a voluntary third-party scheme that provides a framework for product certification by developing or administering a product certification standard(s). This process requires the use of suitably qualified third-party auditors, which are independent of the certification scheme, to assess products against an agreed standard(s); and awards a licence that indicates environmental preference of a product within a particular product category.

Product Certification Standard (Standard) – for the purposes of Green Star, refers to a set of voluntary, multi-criteria life cycle-focused environmental and social performance requirements against which products or materials that are applicable to the Material Calculator credits can be audited.

3.0 BACKGROUND TO THE PRODUCT CERTIFICATION PROJECT

In late 2007, the GBCA commenced the PCP to establish the terms and conditions under which Green Star recognises third-party product certification schemes. The PCP was a result of ongoing dialogue with Green Star stakeholders (including stakeholders in New Zealand and South Africa) and feedback from manufacturers and building industry professionals to address the following matters:

- Users of Green Star rating tools needs for simple ways to document fitout and loose furniture products such as floors, ceilings, walls, workstations, chairs, tables, etc. that comply with Green Star credit criteria.
- Third-party product certification schemes requests to be recognised by the GBCA, to confirm that the products they certify either meet or contribute to the fulfilment of Green Star credit criteria, thereby assisting project teams to achieve Green Star credit points.
- The GBCA does not wish to be directly involved in the assessment of fitout or loose furniture products and prefers to recognise product certification schemes to certify products' environmental performance.

- GBCA's objectives to provide a robust, transparent and easy to use methodology to assess product certification schemes that may seek recognition within Material Calculator credits in Green Star rating tools.

As the PCP evolved, several key issues related to product certification and its relevance to Green Star rating tools became apparent. The sections below provide background information on the following key issues:

- the relationship between Green Star Material Calculators, Green Star Materials credits and product certification schemes;
- life cycle assessment-based, multi-criteria third-party certification as a means of product differentiation; and
- GBCA recognition of life cycle assessment tools.

3.1 GREEN STAR MATERIAL CALCULATORS AND GREEN STAR MATERIALS CREDITS

Several Green Star rating tools, most notably Green Star – Office Interiors v1.1, include Materials credits that involve the use of Material Calculators (calculators) which enable the assessment of interior fitout and loose furniture products such as workstations, joinery, flooring, chairs, walls, etc. that are specified in a Green Star project.

The calculators assign a product score based on the environmental merits of the different fitout items specified. There are various methods of providing supporting documentation for the data entered into the calculators. By far the most-used method has been the option that recognises products which are certified by a GBCA-approved product certification scheme as deemed-to-satisfy the compliance requirements of the calculators. This option is referred to as the 'Environmentally Innovative' classification within the calculators. When it is selected, the Material Calculators will award 100% of the available percentage points for that specific product. For detailed information on how to use the calculators, refer to the *Green Star Material Calculator Guide* document which can be accessed on the GBCA website.

3.2 LIFE CYCLE ASSESSMENT-BASED MULTI-CRITERIA THIRD-PARTY CERTIFICATION

At present, there is a variety of environmental performance-based labels and declarations available in the marketplace. Many of these certify products directly relevant to the calculators. This includes flooring, furniture and interior assemblies such as walls and ceilings. These labels and declarations seek to communicate verifiable information regarding a product's environmental performance.

Certification schemes which assess products against a robust set of environmental performance standards, also referred to as simplified Life Cycle Assessment (LCA) standards, can provide Green Star rating tools with an established mechanism with which to differentiate between products. They also encourage environmental best practice improvements in manufacturing by establishing clear parameters for competition, and assist environmentally conscious consumers to distinguish misleading 'green wash' marketing campaigns from legitimate environmentally-preferable products. Third-party product certification based on simplified LCA standards is therefore the GBCA's preferred pathway for product suppliers to assist Green Star users in complying with Green Star Material Calculator credits pertaining to building and fitout products.

The GBCA recognises that schemes may be privately- or publicly-operated, for profit or not-for-profit, and may vary greatly in their approach to scheme governance, standard-setting procedures, and the substance and scientific rigour of standards. As a result, it was necessary for the GBCA to define what is required from a scheme, in terms of governance, standards development processes and technical content of the standards, for it to be recognised in Green Star. In this document, *Section 4 – Process for the Product Certification Project* and *Section 5 – Outcomes of the Product Certification Project* introduces how these issues were addressed by the GBCA and how schemes can qualify for recognition within Green Star rating tools.

3.3 GBCA RECOGNITION OF LIFE CYCLE ASSESSMENT TOOLS

The GBCA recognises that Life Cycle Assessment tools (LCA tools) are available in the market. LCA tools are decision-making resources for designers that can compare different building materials, assemblies, and even fitout products, within a project-specific context. The user is typically provided with a point score for each of the materials, building assemblies, or products under consideration. This gives project teams an understanding of which materials (or combination of materials) will deliver the least environmental impact. LCA tools are based on comprehensive life cycle inventory (LCI) data which is collected across different materials sectors (e.g. concrete, steel, timber, aluminium, textiles). The LCI data provides the foundation for comparison of environmental impacts associated with all major stages in a material's life cycle (e.g. from material extraction to production, to the end of the product's useful life).

LCA tools present an option for offering fair and accurate comparisons between products based on scientific environmental impact data. However, there are challenges that must be overcome before the market is transformed and LCA tools are incorporated into early design decisions. The first challenge is to generate sufficient Australian-specific LCI data to support the LCA tools. For example, LCA reporting in accordance with an agreed national methodology must become common practice for all industries involved in the manufacture of building and fitout materials, as is already happening in many European countries. The second challenge is that this data must then be fed into an Australian LCI database which can be readily accessed by the developers of LCA tools. The Australian Life Cycle Inventory (Aus LCI) project is currently underway and aims to develop agreed national methodologies and manage a national LCI database to meet the above challenges. The GBCA is a stakeholder in this project.

The GBCA recognises that detailed product LCA tools are becoming more popular with designers and specifiers in Australia and overseas. As these tools increase in commercial availability, the GBCA may consider how they might be recognised within relevant Material category credit requirements of Green Star rating tools. However, for this to occur, equitable transparent and accurate assessment methodologies, as well as robust Australian-specific LCI data, must be demonstrated to underpin LCA tools. In the meantime LCA tools and full life cycle assessments of specific products will not be considered by the GBCA to be a better alternative to product certification.

4.0 PROCESS FOR THE PRODUCT CERTIFICATION PROJECT

The process for the PCP began in 2007 with a literature review commissioned by the GBCA and conducted by the RMIT Centre for Design. The GBCA then consulted with several Australian-based product certification schemes to learn more about their services and the market sectors that they operate in. Following review of the RMIT report and initial consultations with certification schemes, the GBCA convened a Green Star Materials Advisory Group comprised of several members of the GBCA Board of Directors and senior staff. This advisory group provided the strategic direction to formally initiate the PCP. Part of the strategy was to appoint and convene an independent Expert Reference Panel that represented a diverse range of expertise in fields relevant to product certification and Green Star.

4.1 PRODUCT CERTIFICATION PROJECT EXPERT REFERENCE PANEL

The Product Certification Project Expert Reference Panel comprised eight participants, and an independent chair, representing a diverse range of expertise relevant to the topics under review. Refer to *Section 6.0, Appendix A – Expert Reference Panel Participants List* for more information on the composition of the panel. Nominations for appointment to the panel were sought from GBCA members and other stakeholders.

ERP participants were selected based on their expertise in the following areas:

- standards development;
- life cycle assessment of fitout products and building materials;
- standards compliance auditing;
- sustainable procurement policy;
- expertise in specifying environmentally preferable products and materials; and
- research in environmentally preferable materials.

The panel was appointed in October 2008 and a total of three ERP meetings were held on 6 November, 3 December 2008, and 26 January 2009.

The ERP was engaged to undertake the following activities:

- Review and prepare comments on the first draft of the GBCA's proposed methodology to assess third-party certification schemes.
- Further develop assessment criteria proposed by the GBCA and develop criteria weightings for an assessment framework for product certification schemes.
- Make recommendations on how recognition of GBCA-approved certification schemes will translate into the award of Green Star credit points in the relevant Materials category credits of Green Star rating tools.
- Examine the existing Green Star Material Calculators and make recommendations for a revised approach to the calculators to ensure the related Green Star materials credits deliver the environmental sustainability outcomes intended by the credit aims.

At the end of the ERP engagement process, a series of recommendations were presented to the GBCA Board, and subsequently adopted by the GBCA. These recommendations form the bases for the credit review outcomes presented in this document as well as the supporting documents (Part I, II, III and IV).

5.0 OUTCOMES OF THE PRODUCT CERTIFICATION PROJECT

The two fundamental outcomes of the PCP are the development of the GBCA Assessment Framework for Product Certification Schemes (Framework), and a new Green Star Material Calculator format.

Additional outcomes associated with the Framework and new calculator can be summarised as follows:

- **Methodology** – The Framework represents an equitable method of assessing product certification schemes against 22 international best practice criteria that address governance, transparency, standards development and content of standards.
- **Justification** – The Framework allows the GBCA to justify the recognition of specific product certification schemes, as well as the differences between these schemes, on an environmental best practice performance basis.

- **Guidance** – The Framework provides clear guidance to stakeholders about what is required of product certification standards in order to receive Green Star recognition and why these requirements have been established.
- **Assurance** – The Framework provides assurance to Green Star users that the product certification schemes recognised by the GBCA can demonstrate that the products which they certify meet best practice environmental performance throughout the products' lifecycles.
- **Accessibility** – The Framework provides manufacturers and suppliers of fitout products with greater access to the 'deemed to satisfy' compliance status within the Green Star Material Calculators for products and materials which are certified by GBCA-recognised schemes. The new calculator format will provide manufacturers and suppliers with simple options for achieving full points within the calculators, even if their products are not certified by a GBCA-recognised scheme.
- **Less documentation** – The new calculator will require less documentation from manufacturers and suppliers of fitout products when demonstrating compliance with the requirements of the calculator. It will therefore require less documentation to be provided by project teams in their Green Star submissions.
- **Engagement** – The GBCA will continue to draw on the expertise of qualified experts (including members of the ERP) for ongoing advice relating to future developments in environmental performance product standards and product certification practices.

5.1 ASSESSMENT FRAMEWORK FOR PRODUCT CERTIFICATION SCHEMES

The Assessment Framework for Product Certification Schemes encompasses the Assessment Process, Assessment Criteria; Assessment Tool and Assessment Tool User Guide. These have been developed through the PCP to enable product certification schemes to be assessed for recognition within Green Star rating tools.

Under the Framework, for a scheme to be eligible to apply for GBCA recognition it must:

- Be a voluntary, third-party scheme conducting product-focused environmental and social assessment of fitout products that are directly applicable to the various Material Calculators;
- Base product assessments on multi-criteria, performance-based standards that require a product life cycle approach;
- Award a licence that authorises the use of a label on products; and
- Award a licence and label that is representative of overall environmental preference of a product within a particular product category.

Full details of the various components of the Framework are provided in the following four supporting documents which are accessible from the Product Certification Project page of the GBCA website:

Part I – Criteria for Evaluating Product Certification Schemes – provides the compliance requirements and guidance for the Criteria that are applied to the assessment of product certification schemes and their standards. The criteria are divided into two parts: Part I assesses the governance, transparency and standards development procedures of product certification schemes, whereas Part II assesses the content and rigour of the standards that schemes operate against eight Priority Areas of Concern (PAC).

Part II – Assessment Process for Product Certification Schemes – describes the process by which product certification schemes will be assessed by the GBCA against the Criteria.

Part III – Assessment Tool for Product Certification Schemes – is the spreadsheet tool that product certification schemes must use to provide the GBCA with evidence of compliance with the Assessment Criteria. It enables applicant product certification schemes to enter data into a calculator-like matrix which produces point scores that will inform the user of the performance of a product certification scheme and standard against the Assessment Criteria.

Part IV – Assessment Tool Users Guide – is a guidance document that provides detailed explanation of the various parts, sections and content of the Assessment Tool. It is intended to assist applicant product certification schemes in the task of completing the Assessment Tool.

5.2 TRANSLATION OF ASSESSMENT RESULTS TO GBCA RECOGNITION AND GREEN STAR POINTS

The Assessment Criteria represent true international best practice in product certification and environmental and social performance product standards. As a result, some of the criteria are aspirational initiatives that may not have been fully adopted by currently operating product certification schemes. This may result in situations where no existing schemes comply with the full scope of all criteria. However, full compliance with all criteria is not required nor expected of a scheme for the scheme to be recognised in Green Star.

Most Assessment Criteria contain distinct components. The Assessment Tool that the applicant scheme completes as part of its submission clearly separates each of these components. These components are interpreted as separate

requirements within each criterion during the assessment of a scheme's submission thereby enabling the Independent Assessment Panel to specifically assess compliance with each aspect of a criterion.

Three levels of GBCA recognition may be awarded to a product certification scheme according to the following corresponding compliance benchmark requirements:

Level C – A scheme categorised as 'Level C' shall:

- Achieve full points under the requirements of Part I; and
- Achieve a minimum score of 35 out of 100 under Part II.
- Products certified by a Level C-recognised scheme will achieve a product score of 45%* in the Material Calculators.

Level B – A scheme categorised as 'Level B' shall:

- Achieve full points under the requirements of Part I; and
- Achieve a minimum score of 45 out of 100 under Part II.
- Products certified by a Level B-recognised scheme will achieve a product score of 65%* in the Material Calculators.

Level A – A scheme categorised as 'Level A' shall:

- Achieve full points under the requirements of Part I; and
- Achieve a minimum score of 65 out of 100 under Part II.
- Products certified by a Level A-recognised scheme will achieve a product score of 100%* in the Material Calculators.

* **Note:** The percentage of available points for product scores within the Material Calculators attributed to products that are certified by Level C, Level B and Level A recognised schemes are subject to change during the transition period. The forthcoming public release and comment period for the new Material Calculator format will address this issue in more detail.

5.3 TRANSITION PERIOD

The GBCA recognises the importance of a transition period to enable schemes as well as manufacturers and suppliers to consider the requirements of the Framework and take appropriate steps towards compliance.

Consequently, while the Framework is being released on 30 June 2009, it will not be fully implemented in Green Star rating tools until 1 July 2010.

What does this mean for GECA?

Currently, the GBCA recognises Good Environmental Choice Australia (GECA) certified products as having deemed-to-satisfy (DTS) the requirements of the material calculator credits in existing Green Star rating tools. The GBCA will continue to recognise GECA-certified products during the transition period. However, at the end of the 12 month transition period, DTS recognition of all current GECA standards will cease.

During the transition period GECA, and the standards it operates, will be invited to undergo assessment against the full scope of the Framework. The results of these assessments will determine which GECA standards will be recognised in Green Star following the end of the transition period.

What does this mean for other schemes?

Applicant schemes can make a submission against the full scope of the Framework at any time from 15 July 2009 by following the steps in Part II – *Assessment Process for Product Certification Schemes*. Only schemes and standards that are relevant to the fitout product applications referenced in the Green Star Material Calculators (Furniture, Flooring, Joinery, Walls, etc.) are eligible for assessment.

Submissions must document schemes' performance against Part I ('Governance, Transparency and Standards Setting') and Part II ('Content of Standards'). Compliance with Parts I and II will be benchmarked as follows, and all mandatory requirements stipulated in the Assessment Criteria apply:

- Full compliance with Part I; and
- A score of at least 35 in Part II.

The tiered levels (A, B and C) described in the Framework will not be activated or recognised during the transition period. All applicant schemes that meet or exceed Level C benchmarks will be equally classified under the 'Environmentally Innovative' category of the Material Calculators in existing Green Star rating tools during the transition period.

The GBCA will, however, maintain a list on its website of the schemes that have successfully demonstrated compliance with the Framework. This information will include confirmation of assessed schemes' status as a Level A, B, or C standard.

At the end of the transition period, the GBCA will only recognise certification schemes and standards that have undergone assessment according to the full scope of the Framework and achieved the status of Levels A, B or C.

Product certification schemes that are assessed and found compliant with the full scope of the Framework during the transition period will not be required to undergo further assessment for Green Star recognition at the end of the transition

period. They will be immediately recognised for their respective status as a Level A, B or C and awarded accordingly in the new Material Calculators.

5.4 NEW MATERIAL CALCULATOR

A new Green Star Material Calculator and Material Calculator User Guide are being developed with the input of the ERP. The new calculator will complement the Framework and ensure that key aspects of the best practice requirements from the Assessment Criteria in Part II (i.e. the PACs) are required of all non-certified fitout products and materials specified in Green Star projects. The new calculator format will be released for public comment by 30 November 2009 following approval by the GBCA Board.

APPENDIX A. PRODUCT CERTIFICATION PROJECT EXPERT REFERENCE PANEL PARTICIPANTS

Name	Title, Organisation	Experience
Genevieve Scarfe	Sustainable Development Manager, Bovis Lend Lease	Specification advisor for fitout materials; sustainable development consultant on more than a dozen Green Star registered projects; architect and developer representative
Robert Schiller	Senior Consultant - CETEC Foray	Indoor Environmental Quality expert; extensive knowledge of environmentally preferable products, materials and standards; Green Star and NABERS Accredited Professional (GSAP)
Murray Hall	Environmental Scientist- Life Cycle Assessment, CSIRO Sustainable Ecosystems	Nationally and internationally recognised for expertise in urban systems, particularly in the areas of life cycle assessment (LCA) and sustainable building design
John Edwards	Director - Certification Services National Leader, Davis Langdon	Extensive experience in compliance auditing for construction industry and related industries in areas pertaining to quality management, design, project and contract management, strategic planning and business development

Brett Abraham	Manager - Business Development and Technical Services, JAS-ANZ	Extensive experience with JAS-ANZ (Joint Accreditation System of Australia and New Zealand) the Government appointed accreditation body for third-party product schemes in Australia and New Zealand.
Kirsty Máté	Senior Lecturer and Program Head: Interior Architecture, the University of NSW	Over 15 years' experience in design for the environment in the fields of architecture, interior design and exhibition design
Tim Grant	Director, Life Cycle Strategies	Over 12 years' experience working in LCA applications; development and training in Australia and Asia; waste management consulting; hands on process engineering research at CSIRO and Comalco Ltd.; Sustainability researcher and lecturer at RMIT
Andrew Walker-Morison	Director - Sustainovation	Sustainability researcher, architect and former Manager of the Sustainable Materials Programme at RMIT Centre for Design; Former program developer of Life Cycle Assessment courses and environmental conferences with focus on materials streams at RMIT
Independent Chair		
Siobhan Spoljaric	Senior Manager, Corporate Responsibility and Environment Group, NRMA	Former DECC sustainability program manager for waste management