

# Executive Directions



## Developing intelligence in Green Building Solutions

Leading the way to increase and embed eco knowledge  
in project design and construction in your organisation



# The imperative for Green Building Solutions...



## Ensuring a healthy relationship between buildings and environment

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Progress in the innovation and production of eco-and health preferable materials and technologies is accelerating. However, the uptake and application of this knowledge within a green focused building industry lags behind. Last year's Green Building Market Report conducted by Green Building Council Australia (GBMR 2006) highlights the problem.

While 'triggers of green building' are escalating such as rising energy costs, client demand and government regulations, the GBMR 2006 reveals that 74% of architects/designers, building contractors and building owners sampled in the report knew little about 'green' products available.

Significantly, 91 % of respondents in the Green Building Market Report identified a lack of informational resources to fulfill green building needs. Also, a 'lack of education' after the perception of higher up front costs, was considered to be the second largest obstacle to green building in Australia.

We know that visions for a greener built environment are there.

However, materials and technological literacy has become an imperative medium to fulfill these visions. The resolution of the finer detail - including learning how to specify green products, understanding payback benefits and building knowledge about green manufacturers – are **all** necessary to empower contemporary practitioners to more efficiently and effectively bring their ideas to fruition.

Green Building Solutions is a specialisation that we can introduce to your organisation that will turn your project design methodology into an effective strategy for delivering value enhanced projects.

Working with your principals, directors and project leaders through our 'Practical Sustainability program, we can help you to create the type of realistic, sustainable outcomes that you are endeavoring to achieve, delivering new standards in ecologically sustainable design and exemplary projects to clients.

# Providing Information on Green Building

The challenges for ongoing development of sustainable architectural technology and solutions can best be met through accessing the top levels of experience in the profession.

Implementation of this knowledge of Green Building Solutions at senior levels is critical for current and future projects - to pass down to emerging leaders, support new graduates and to embed within the culture of the organisation.

## A call by the Green Building Council Australia

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The Green Building Market Report 2006 defines three critical areas of information that is lacking for green building to flourish in Australia.

### **How**

**95%** want to know more about how to build green

### **What**

**94%** want more information on green products available

### **Where**

**91%** want access to more benchmark examples of green projects

# Providing Information on Green Building

Our Practical Sustainability education program provides grounded, advanced information and strategies for practical application in most of the following areas defined by this area of the Green Building Market Report 2006

## Information needs on green building

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Green products	74%
Environment and economics	63%
Green building emerging trends	60%
Green projects	53%
How to design a green building	51%
Reviews and profiles of Green Star buildings	42%
Engineering or scientific information	43%
How to market a green building	35%
Green star accreditation course	29%
How to manage a green building	30%
Green players	14%
Green Star players	11%
Business management information	11%
Curriculum for senior executives	10%
Curriculum for line staff	8%

GBMR 2006, Information Needs and Regulatory Standpoints, Empirical Study, p.8., published by BCI Australia Pty Ltd for Green Building Council Australia

“Apart from designing a building with sustainability and minimal environmental impact in mind, specifying green products is the most common green building activity ... yet few if any architects were able to recall a ‘green manufacturer’”

GBMR 2006, Information needs and regulatory standpoints, empirical study, p. 36., published by BCI Australia Pty Ltd for green building council Australia

## Green product specification and selection

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The reliance on the word **specification** suggests green product and materials selection can be put off until spec writing time—traditionally and erroneously relegated towards the end of the detail documentation stage.

However, ESD design as a strategic process can be undermined by this term. Indeed, firms might believe that they can access green materials themselves and not require a research based selection.

Green Building Solutions as provided by our Practical Sustainability program is outlined on the following pages and deals rigorously with this area of green product specification and selection.

Accredited as Formal Training by the NSW Architects Registration Board, the program makes accessible to the executive level of the profession, the current status of sustainable design, providing a strategic process for project delivery from design, through documentation and to completion and operation.



Buildings make up an artificial landscape, they are the new players in the biosphere. Depending on how well they have been designed, they will either cause significant degradation of our biosphere or will help either to sustain it or, as the science evolves, help heal the environment.

## Practical Sustainability

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*Optimising sustainability outcomes in residential and commercial projects ... a seminar series that explores the horizons of Green Building Solutions and what this means in action.*

Our **Practical Sustainability** program is accredited by the NSW Architects Board of Registration as Formal Training. Designed by David Baggs, Technical Director of **ecospecifier**, the program constitutes four key and self contained areas of knowledge that can be tailored to suit the needs of individuals within the organisation.

1. ESD Compliance & Solutions
2. Building Rating & Materials Issues Solutions
3. Green Building & Materials Procurement
4. Life Cycle Assessment & Embodied Energy in Practice

## Program Outcomes

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Participants of our Practical Sustainability Program will emerge with an advanced level of knowledge and solutions for:

**Minimising project and practice costs**

In delivering optimized sustainability outcomes

**Short cuts to compliance**

Understanding the relationship and context of BCA Section J, 5 Star-Homes, BASIX, ACTHERS and Green Building Rating – Green Star, NABERS/ABGR, Green Globe, etc.

**Materials implications**

In building compliance and sustainability ratings

**Using Life Cycle thinking**

In practical decision making

**How to specify green products and buildings**

To get what you ask for

**Priority setting**

The role of embodied energy in materials selection and a 'starter-base' of embodied energy materials data

**Ecological and health priority & context guides**

For a variety of key building elements, including detailed embodied energy profiles of element materials options (where possible)

**Efficient**

Use of ecospecifier as a resource tool in the cost efficient specification of green building materials & technologies

## DAY 1: ESD COMPLIANCE & SOLUTIONS

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**Introduction to Sustainability** – what is sustainability? A new perspective and how it relates to us

**Introduction to Integrated Design Process** – A rundown on Compliance tools relevant to your residential projects (BCA Section J and/or Section 3.12 including BASIX, ACTHERS relevant to each local presentation as well as getting the best out of the 2<sup>nd</sup> Generation Building Thermal Performance Simulation Tool and the increased impact of materials)

**Delivering Streamlined Sustainability Compliance** – Simplifying approvals

**Finding Leading Edge ESD products** – using **ecospecifier** efficiently

**A Designers Guide to Eco-rating Part 1** –A key design resource in comparative materials selection that assists in choosing eco and healthy residential products

**Priority Setting Guides & Winning Products** – To assist in selections of key building elements in residential and commercial projects, including detailed Embodied Energy data on options

- Insulation
- Paints
- Windows
- Water tanks
- Flooring

**Case Study Eco-Buildings & Interiors** – integrating **ecospecifier** from the ground up

## DAY 2: BUILDING RATING & MATERIALS ISSUES SOLUTIONS

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### **‘Restorative Sustainability’ and its role securing our future**

**Building Sustainability Rating** – run down on compliance and rating tools relevant to your commercial projects including, ABGR/NABERS

**The Green Stars Suite of Tools** – Explaining the maze and understanding the tools

**Sustainability Materials & Building Sustainability Rating** – Where materials fit in and practical, leading edge product solutions, in particular a focus on Green Star

**A Designers Guide to Eco-rating Part 2** – A key design resource in comparative materials selection that assists in choosing eco and healthy commercial products

**Priority Setting Guides & Winning Products** – To assist in selections of key building elements in residential and commercial projects, including detailed Embodied Energy data on options

- Roofs
- Load bearing wall materials
- Non load bearing wall materials
- Ceilings
- Floor coverings
- Greenhouse efficient hot water

**Case Study Eco-Buildings & Interiors** – integrating ecospecifier from the ground up

## DAY 3: GREEN BUILDING & MATERIALS PROCUREMENT

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**Integrated Sustainable Design Process in Detail** – Benefits and behaviour before tools and products

**Selecting the Right Design Team** – Finding your S(EE)<sup>2</sup>R consultants and how they help optimize sustainability at minimum cost

**Contracts for Green Procurement** – Including performance contracting for new and retrofit projects

**Greening the Tender Process** – Contracts and performance implications and solutions in products and buildings

**A Designers Guide to Eco-rating Part 3** – A key design resource in comparative materials selection that assists in choosing eco and healthy infrastructure products & technologies

**Priority Setting Guides & Winning Products** – To assist in selections of key building elements in residential and commercial projects, including detailed Embodied Energy data on options

- Internal Wall facings
- Renewable Energy Systems – including next generation combined heat and power systems for residential to major commercial
- New Generation HVAC
- High Performance glazing
- External Shading Devices
- Internal Glare Control

**Case Study Eco-Buildings & Interiors** – integrating ecospecifier from the ground up

## DAY 4: LIFE CYCLE ASSESSMENT IN PRACTICE

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**Simplifying LCA** – Life Cycle thinking in practice using LCA to understand what's important

**Embodied Energy** – Understanding what it is and its impact in decision making, including a 'starter-base' of embodied energy data

**Transport Energy** – The surprising impact of different modes of transport

**Practical use of embodied energy in projects** – Now and in the future

**Understanding Ecolabels and Environmental Standards** – Fact from Fashion

**Priority Setting Guides & Winning Products** – To assist in selections of key building elements in residential and commercial projects, including detailed Embodied Energy data on options

- Greywater Re-Use Systems (residential and commercial)
- Chairs
- Water Disinfection Systems
- High Performance Lighting
- Sustainable Timber

**Case Study Eco-Buildings & Interiors** – integrating ecospecifier from the ground up

To assist you in the process of embedding Green Building Solutions within the daily practice of your organisation, we also provide in-house consultancy and work with individuals and teams on specific projects.

## Flexible Professional Development Options

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The Practical Sustainability program comprises 24 hours of Formal Training.

The program may be conducted sequentially in a 4 x 1 day format or stand-alone seminars, as each part of the Practical Sustainability series is linked yet self-contained.

However, other options can certainly be negotiated to tailor to the needs of the business. Following are some suggestions for full program delivery.

### 4 Full Days

*Seminar Format, 6 hourly sessions. 9.00am – 3.00pm*

This option may be scheduled for a group of your people to attend each of the Practical Sustainability seminars over a period of time (for example, one month apart and possibly in tandem with monthly executive meetings to ensure business as usual is not disrupted too much and that participants are gathered already in one location).

**BENEFITS** – Switching off from being in the business for an extended period of time will enable participants to engage with the course content and presenter at a deeper level, allowing for content to be discussed in relation to current company projects that are dealing with sustainability issues and exploring solutions.

## 8 Half Days

*Seminar Format – 3 hourly sessions. 9.00am – 12.00pm OR  
2.00pm – 5.00pm*

This option allows for participants to still attend to daily business in a working day.

**BENEFITS** – Receiving the information contained in the Practical Sustainability program in smaller doses over multiple sessions will allow participants to more easily manage the input of new knowledge and more confidently apply it.

The added value of this delivery is that groups will form more collegial relationships if joining together for these sessions; thus the reflection and understanding of new knowledge will become a shared, collaborative process of learning that blends into the work environment to benefit current projects as well.

## Feedback Dimension

Offering discreet packages for the Practical Sustainability series presents benefits for the firm both in time management and for operationally derived feedback to be raised during each subsequent session of the series.

We can provide formal feedback documentation to capture and facilitate emerging questions and issues to feed into current projects and strengthen integration of the program as a whole within the organisation.

## Program Kit

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### Program Manual

Participants of our Practical Sustainability program are provided with a copy of our Green Building Solutions and Sustainable Materials Manual (in 4 parts, one provided at each session).



### Executive Directions Newsletter

A year long subscription to a bi monthly newsletter, which provide program participants with up-to-date knowledge on new case studies, areas of research and legislation in relation to Green Building Solutions.

## Program Extra

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### Consulting Service

*To integrate the Practical Sustainability training*

As an optional extra to integrate the Practical Sustainability training, an ecospecifier consultant can be commissioned to work side by side with your design teams for an agreed framework of time to consult on specific projects during design & procurement stages. Participants are facilitated by the consultant to take a lead role in developing their own green building solutions.

Knowledge from the Practical Sustainability program is explored experientially on a real-time project, enabling participants to be hands-on active learners, creating their own sustainability benchmark project and documenting an exemplary case study for future projects undertaken by the business.

# Practical Sustainability

Program Writer & Facilitator



## David Baggs

CA FRAIA ABSA, AGSP, MRoySocAS



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David Baggs is the Technical Director of **ecospecifier**, an eco-research, education and industry resource, which enables industry professionals to access and utilise critical eco knowledge and third party verification on more than 3000 Australian manufactured building materials, technologies and fit out products.

An award winning chartered architect, David has been specialising in Green Building Solutions for more than 25 years. He has been responsible for the design of over 350 eco-homes as well as 40 earth covered and green roof buildings, numerous major residential, commercial, eco-tourism and other eco-projects.

An accredited Green Stars Assessor with over 25 year experience, David was sustainability, energy and eco-product and materials consultant to 10 Olympic projects, including the Olympic Village and Sydney Super Dome. He also consulted on the fit out of the new headquarters for Brisbane City Council, Sydney's Green Square Town Centre and AMP's Global Headquarters. In addition, David wrote the National Building Thermal Performance Accredited Assessors Course for the Australian Greenhouse Office and ABSA, which includes the thermal characteristics and impacts of materials on buildings. He has written and delivered training on ESD and Sustainable Materials for over 100 seminars and conferences and is co-author of the book, *Australian Earth Covered Buildings* and Contributing Editor to the 2nd Edition of *The Healthy House* book.

## Program Cost

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The professional fees to present each one-day seminar of the Practical Sustainability program is \$5,000 plus GST.

Our half-day presentation rate is \$3,000 plus GST.

All costs associated with venue would be organised and paid for by the client. Other billable expenses to the client include materials (and if interstate travel is required) all expenses are billable for accommodation, travel and transport.

Payment terms are 50% of total fees on commissioning of the program with the balance payable on completion.

## Testimonial

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“This is a very broad and complex topic and your depth of knowledge and ability to tailor the content to our industry and our specific product lines was invaluable”

David Brooker, Operations Manager,  
Gunnensen, Melbourne

## Testimonial

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“ I attended Seminar # 2 of the Practical Sustainability program and found it to be particularly valuable for senior practitioners ... to maintain a level of working familiarity with the wave front of this expanding subject (of designing for ESD).

Rapid developments such as public awareness, government policy development, regulations, rating tools, research, and technology progress ensure that ESD will remain an evolving field of knowledge for some years to come... the Practical Sustainability program has been particularly effective as an efficient forum for focusing issues.”

Richard Mann, Chartered Architect, Senior Project Architect,  
Hitchcock, Irwin Architects, Sydney

# Contact Details

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