

Green Building Council of Australia

SB07 – Auckland – NZ GBC

A brief look at sustainability, Green Star Australia
and the rating tools already available today,
and the 'cost' of green



Structure of the session

- You and the market – how things are changing
- Introduction to the GBCA
- The core categories and credits within Green Star
- Case studies from the Australian market
- The ‘cost’ of sustainability
- Questions



You and the market

- New phase in how the market addresses sustainability
- Time of increasing demands, but increased opportunities
- Supply of greener new buildings, supply of greener existing buildings, tenant demand for green
- Another step in the evolution of the office building
- Move from environmental qualities as ‘brand differentiation’ to minimum market requisites.

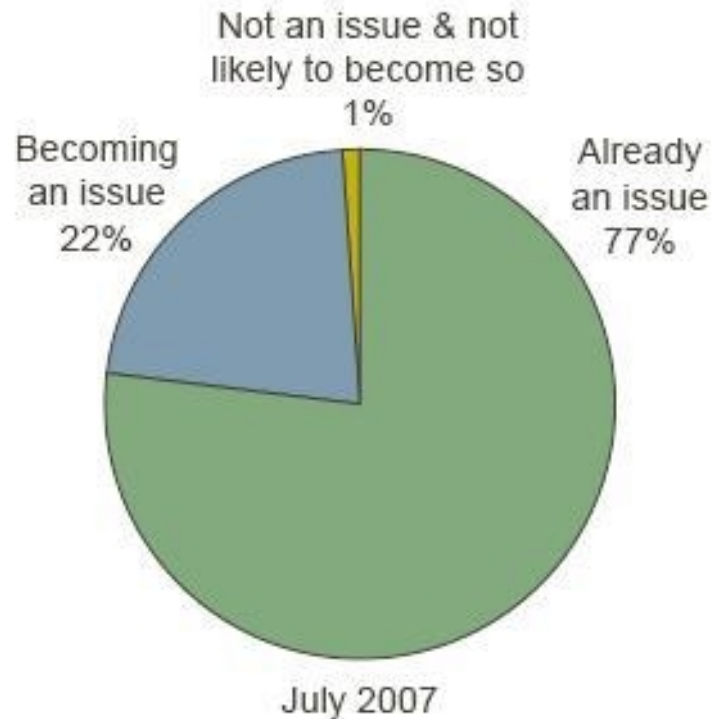


The GBCA

- History of the GBCA and World GBC
- Mission
- Work – MEM, Advocacy, Education, Technical
- Membership
- Registered and Certified projects
- ‘Constant dialogue’ with stakeholders and the industry



Market feeling for 'green'



Source: Davis
Langdon Sentiment
Monitor, July 2007

Market feeling for 'green'

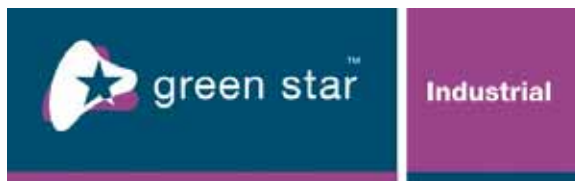
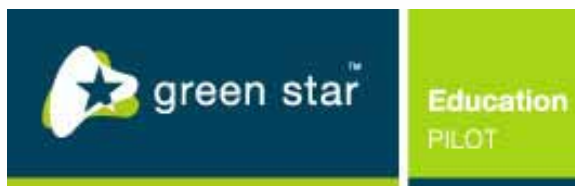
What is the cost of NOT building green?


- Loss of rental income
- Longer let-out periods
- Loss of a position in the market
- Less productive workforce / occupants
- Less attractive investment / greater risk



Green Star rating tools





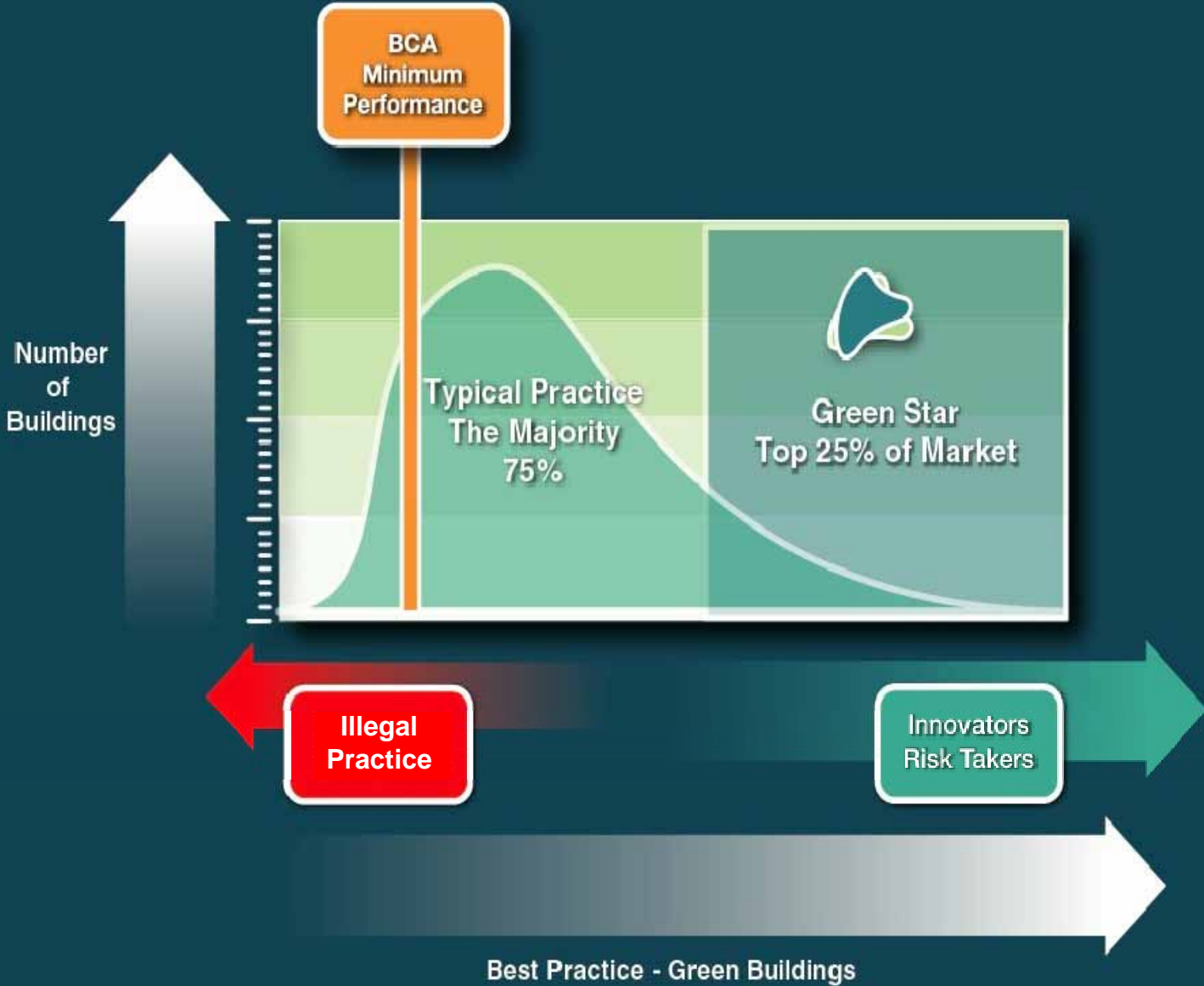


“A market-based tool must find a pragmatic middle ground between ease of use and scientific rigour.”

Che Wall, World GBC



Green Building Markets



Core Categories

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



Management: RAAF Base Richmond, NSW

5 star rating



green star™ Office Design v1

This rating represents Australian Excellence

5 star rating



green star™ Office As Built v1

This rating represents Australian Excellence

5 star rating



green star™ Office Interiors v1

This rating represents Australian Excellence





The Leightons team at
Green Square, Brisbane

IEQ: 500 Collins

Melbourne



5 star rating



This rating represents Australian Excellence

Energy: CH2
Melbourne



6 star rating



green star™ Office Design v1

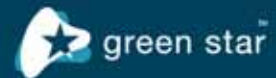
This rating represents World Leadership

Transport: 8 Brindabella Circuit

Canberra



5 star rating



Office
Design
v1

This rating represents Australian Excellence

Water: Metropolitan Fire Brigade

Burnley VIC



5 star rating



green star

Office
Design
v2

This rating represents Australian Excellence



110,000 litre water tanks being installed at the University of Queensland

6 star rating



This rating represents World Leadership



40 Albert Road
Melbourne

Before . . .



. . . and After





Interior of 40 Albert Road,
Melbourne

5 star rating



green star™

Office
As Built
v1

This rating represents Australian Excellence

Ecology: 30 The Bond

Sydney NSW

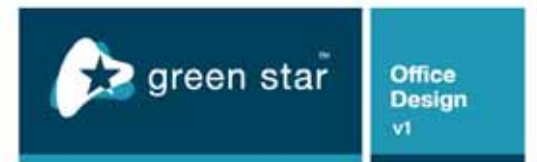
Photo: John Gollings

Emissions: Bordo International Headquarters

Scoresby



5 star rating




This rating represents Australian Excellence



Geo Street Courthouse	
4	Floors 4 - 5 Consultation Room Table 4.100/1000 4.10
3	Floors 3 - 4 Examination/Forum Case Room Table 3.100/1000 3.10
2	Floors 2 - 3 Consultation Room Bulb Institute Table 2.100/1000 2.10
1	Floors 1 - 2 Consultation Room Examination Room Table 1.100/1000 1.10

Innovation: Costs of chilled beam cooling devices



We will never develop another office building that isn't as green as possible; quite simply it would be commercial suicide.

Jon McCormick, Multiplex



Cost of Certification

Project size (NLA)	Members	Non-Members
< 5,000m ²	\$5,500 + GST	\$6,325 + GST
5,000 - 10,000m ²	\$6,500 + GST	\$7,475 + GST
10,000 - 20,000m ²	\$8,500 + GST	\$9,775 + GST
20,000 - 40,000m ²	\$11,500 + GST	\$13,225 + GST
greater than 40,000m ²	\$15,500 + GST	\$17,825 + GST
Office Interiors < 2,000m²	\$4,000 + GST	\$4,600 + GST
Office Existing Building Management Efficiency	\$500 + GST	\$800 + GST

The 'cost of green'

- How much extra will this cost me?
- Is it true this could be 20-30% more expensive?
- We may save on energy but will we lose on benefits?
- Why spend the extra?
- Who's going to cycle to the airport?
- What's the payback period on these measures?



The 'cost of green'

What is being aimed for in this development?

- Six star – World Leadership
- Five Star – Australian Excellence
- Four Star – Best practice
- Cost neutral? Slight increase?

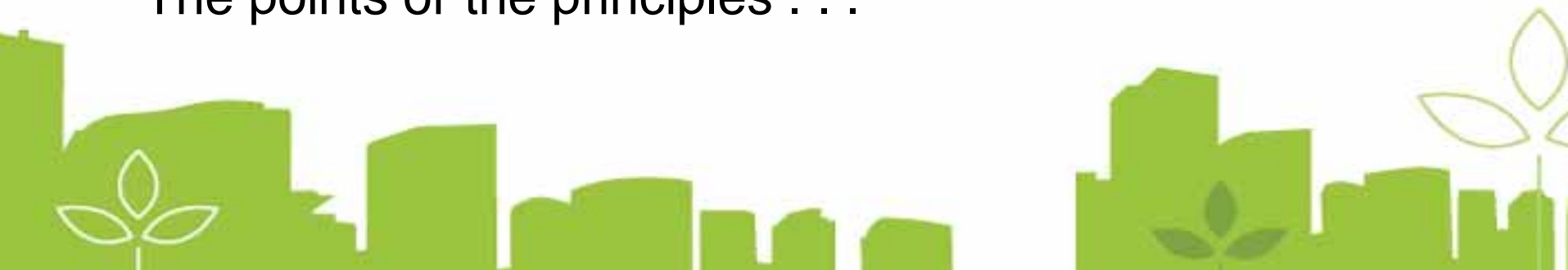


The 'cost of green'

What is being aimed for in this development?

- Six star – World Leadership; yes, additional costs
- Five Star – Australian Excellence; yes, perhaps 1-6%
- Four Star – Best practice; no, suggesting cost neutral
- It all depends on what you are chasing;

The points or the principles . . .



Questions?



Green Building Council of Australia

SB07 – Auckland – NZ GBC

A brief look at sustainability, Green Star Australia
and the rating tools which are in development today,
and the ‘value’ of green



Structure of the session

- Questions we are being asked about 'value'
- Core categories which can help create value
- Rating tools being developed now and in the future
- The valuation report and case studies
- Issues of the valuation approach
- Questions



The 'value of green'

- Will my building be worth any more in the end?
- What research is being produced at the moment?
- How can I put a value to these green measures?
- How does this affect valuation methods?
- Will it increase the value or just reduce running costs?
- Where do I find evidence to show the bean counters?




The 'value of green'

What do you mean by 'value'?

- Social value?
- Economic value?
- Environmental value?
- What someone is prepared to pay?
- Short-term, medium-term or long-term value?

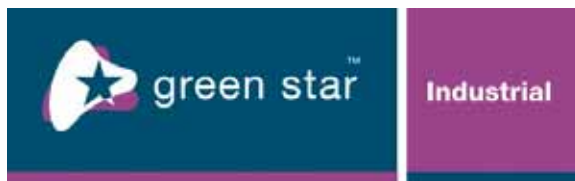
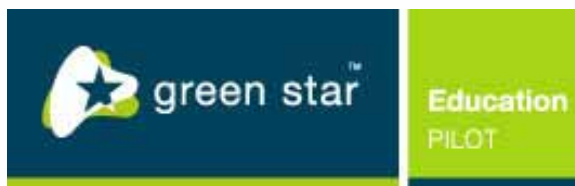
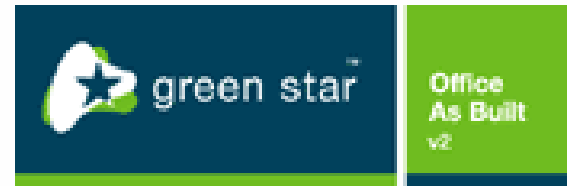




Private firms and public agencies often do not recognise the full financial value of green buildings; they acknowledge some benefits from lower energy and water use but ignore or undervalue other financial benefits during the design and construction decision-making process

Che Wall, World GBC





Core Categories

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



Education

- Maintainability
- Using the school buildings as a 'learning resource'
- Storage of hazardous materials
- Stairs
- Unoccupied areas
- Pedestrian routes



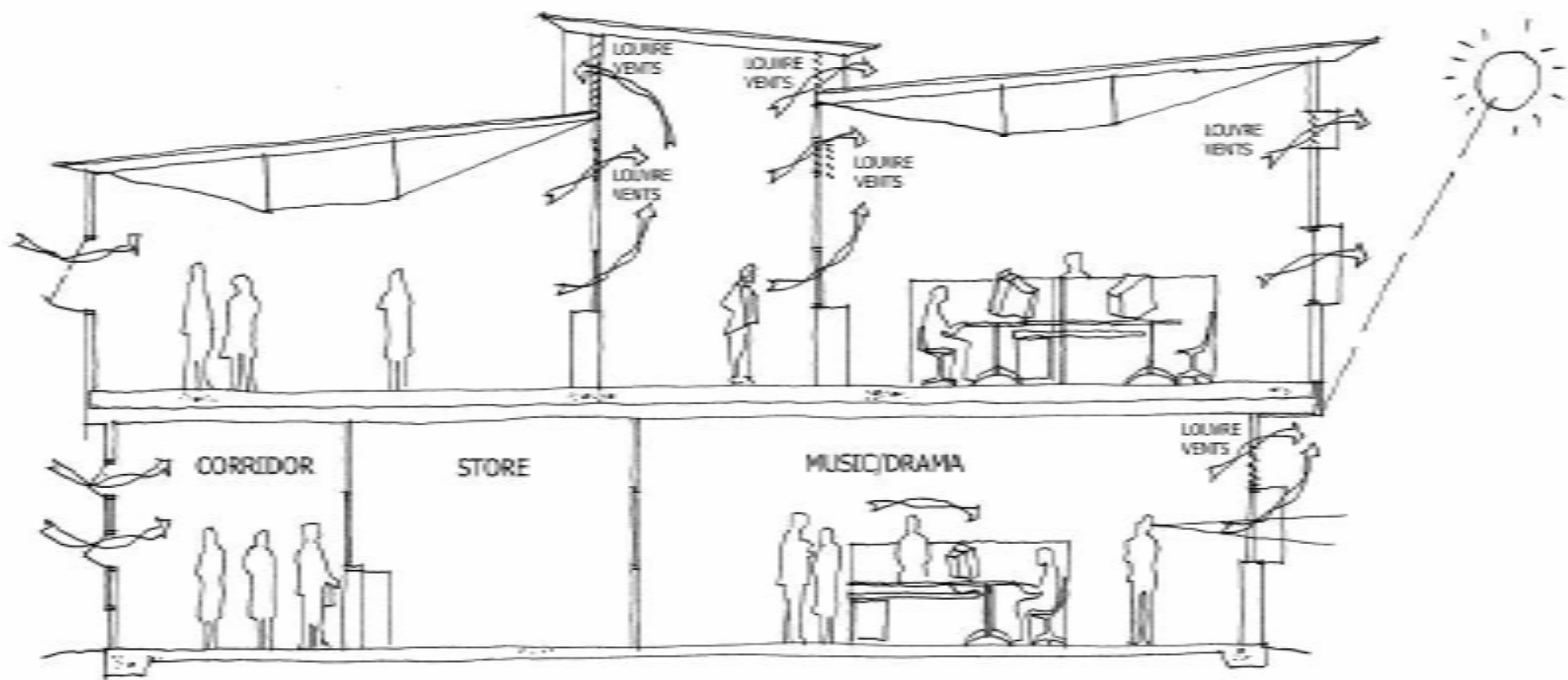


From this . . .

. . . to this.



Williamstown High
School
Bayview Campus
Architect: Spowers
Photo: Dianna Snape



Williamstown High
School
Bayview Campus
Architect: Spowers

- Natural ventilation and night time purging
- Louvres and thermal chimneys
- Sun shading devices on the northern façade
- Minimal east / west glazing



5 star rating



This rating represents Australian Excellence

Kangan Batman TAFE AEC

Docklands

Healthcare

- Healthcare Building Management Systems (BMSs)
- Airway distribution systems
- Places of respite
- Medical equipment efficiency
- Stairs



Shopping Centre Design

- Waste management – operations plan
- Trip reduction – mixed use
- Disassembly and adaptability
- PILOT projects currently at assessment stage which will be combined with public review to help rating tool development and evolution



Industrial

- Central systems for larger developments
- Rainwater harvesting opportunities
- Centralised energy systems and energy production
- Transport systems and trip minimisation
- Materials selection and integration
- Emissions – attributes v. performance questions



Public Building...and beyond

- Melbourne Convention Centre
- Public Building rating tool
- Precinct, Masterplan, Community issues
- Childcare facility issues
- Hotel and resort issues





The property market in Australia is facing a revolution; the market is ‘going green’, driven largely by tenants and investors.

Romilly Madew, GBCA



Incentives

- What is being offered? Financial incentives, expedited planning, minimum tenant requirements
- What is being experienced? Greater productivity, lower 'churn' rates, shorter let-out periods, green leases
- What is being counted? Lower energy bills, lower water bills, lower waste management bills
- What is being valued? How do we value 'green', how do we compare, and what evidence is there?



Green Leases

- Green Lease guides available
- Tenant demand and Owner supply
- International comparison
- Still a lack of understanding about Green Leases
- Lease clauses which push towards greater sustainability are beginning to be included more easily



Value of 'green' to owners

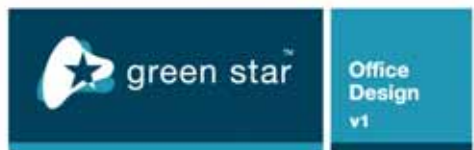
- Will meet Tenant's brief
- Faster rate of take-up upon refurbishment
- Greater interest from long term tenants – longer tenancies
- Potential to capitalise on green incentives
- Will appeal to socially responsible investors – public opinion
- Faster rate of take up upon refurbishment
- Higher occupancy rates with higher lease rates
- Higher future capital value / less risk of obsolescence
- Less need for refurbishment in the future



CH2

Melbourne

6 star rating



This rating represents World Leadership



5 star rating



green star™

Office
As Built
v1

This rating represents Australian Excellence

30 The Bond

Sydney NSW

Photo: John Gollings

6 star rating



This rating represents World Leadership



40 Albert Road
Melbourne

GBCA's Valuation Report

I'm just teasing you . . .



Sources used



Sources used

- Literature reviews, such as 'The Dollars & Sense of Green Building', 'The Sustainable Building Pathway', 'Green Value: Green buildings, growing assets', 'Green Property: Does it Pay?' and 'Assessing the Value of Sustainability' (all 2005/6)



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- Case studies from the Australian market, including the Flinders Link Building (SA), City Central Tower 2 (SA) and Bendigo Bank HQ (VIC)



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- Case studies from the Australian market, including the Flinders Link Building (SA), City Central Tower 2 (SA) and Bendigo Bank HQ (VIC)
- Industry surveys of some of Australia's largest property investment firms, fund managers, directors and business managers representing over 31% of Australia's property fund sector (and approximately \$85 billion in assets)

What was done with that?

- All three sources were cross-referenced to extract and verify the key findings overall
- Findings were built into two 20,000m² hypothetical commercial office buildings – one built ‘green’, one built more traditionally
- Resulting in an assessment of the ‘green’ building which was 10-20% higher than the other



Case Study: Flinders Link

- The Flinders Link, Adelaide, SA
- Five Star Green Star (Design) Certified Rating achieved
- Sold in July 2006 for AU\$156 million
- Achieved the lowest yield rate in Australian history at that time: 6.47%
- Shows amazing income stream confidence



Flinders Link Stage 5 Office Development Adelaide

5 star rating



This rating represents Australian Excellence



Case Study: CCentral T2

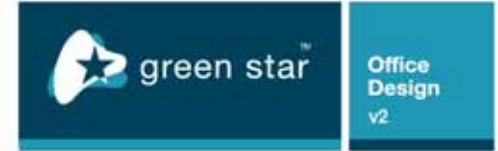
- City Central Tower Two, Adelaide, SA
- Five Star Green Star (Design) Certified Rating achieved
- Sold in May 2007 for AU\$78.5 million
- Achieved an even lower yield rate of 6.37%
- Shows income stream confidence, especially since at time of sale there was no tenant secured



City Central Tower

Adelaide

5 star rating



This rating represents Australian Excellence



Case Study: Bendigo Bank

- Bendigo Bank Headquarters, Bendigo, Victoria
- Five Star Green Star (Design) Certified Rating achieved
- Initial stages completed in 2007
- First staff moved in during June 2007 as part of AU\$100 million redevelopment programme
- Showing significant triple bottom line returns



Bendigo Bank Headquarters

Bendigo, VIC



5 star rating



This rating represents Australian Excellence

Other market factors

- An environmental study undertaken early in 2007, of 250 of the world's largest organisations, showed that those seen to have a higher respect for the environment have values around 5-10% higher than their competitors





'The Advertiser' building, Adelaide

Other market factors

- The green / sustainability movement in property includes a drive towards 'carbon neutral', greater incentives being offered, minimum ratings and standards being set, and environmentally-friendly investment strategies on offer



The value drivers

Green building investment / cash flows will out-perform traditional over the medium- to long-term because of . . .

- Lease provisions, type, and gross / net rents
- Lease terms and rental growth rates
- Outgoings and capital expenditure
- Tenant retention and let-up periods
- Lifecycle and risk management factors




Five categories

Five categories to be used to incorporate the key value drivers into a traditional DCF approach . . .

- Market rental growth
- Renew / release probability
- Other income / miscellaneous
- Capital expenditure
- Terminal yields





We wouldn't consider not building a Green Star rating building, not because we're altruistic but because it's what the market wants

George Ochata, Hindmarsh



GBCA Publications

- Dollars and Sense – PDF
- Sustainable Building Pathway – PDF
- Green Building Market Report 2006
- GBCA Yearbook 2006
- Jones Lang LaSalle's Property and Sustainability reports
- GBCA Valuation Report 2007 – PDF (watch this space!)



Ask yourself . . .

- What are your clients doing about sustainability issues?
- What do you think your clients will be doing in one year's time; what do they have planned?
- Do you have a personal commitment to addressing environmental sustainability?
- Which of your clients has a personal commitment to addressing environmental sustainability?
- What can you offer your clients which is different?





GREEN

CITIES 08

Questions?

