# Incorporating sustainability criteria in commercial workplace fit-out guidelines for a banking operation

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### Background

- Leading organisations are demonstrating that corporate social responsibility starts at 'home', using their workplaces as practical exemplars of their commitment.
- This study investigated the key performance areas and priorities of a major international banking organisation in developing and incorporating sustainability criteria into the design and decisionmaking processes that govern the commercial workplace fit-outs.
- The purpose of the Guide is to direct and complement the structured fit-out planning, design and construction process provided by design professionals. It facilitates the material specification for sustainable fit-out design and on-going ecologically sustainable development (ESD) solutions and initiatives outcomes.















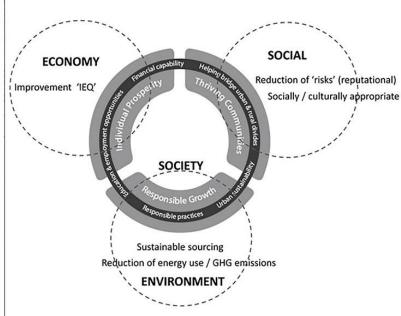




# Sustainability Commitment – Financial Services Industry



Corporate responsibility framework and priorities (CRF)



**Integration of CRF and Triple Bottom Line** 

To address the organisation's commitment towards sustainability in economy, the industry, society and the environment - achieving a carbon neutral footprint across its portfolio globally















## Sustainability Guidelines

#### **Sustainability Guidelines**

Commercial Workplace Fit-out (new + upgrade)

Environmental principles

Effective practices

Green Star and NABERS (Australia), LEED (US), BREEAM (UK), BCA Green Mark (Singapore)

- Guidelines were presented within a framework that provided explanation and rationale
- Achieving sustainability by informing the options and their potential impacts and being able to make design decisions that will maintain the integrity of the design
- The theoretical framework of life cycle thinking (LCT)













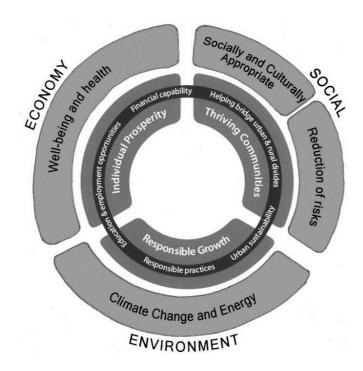








#### Development of the Guidelines



Integration between key principles from the 5 reference green building rating systems and the 4 overarching key performance areas and priorities: climate change and resource use (CRU), well-being and health (WH), socially and culturally appropriate (SC), and reduction of risks (RR)

















#### Development of the Guidelines

Climate and Resource Use (CRU)			
CRU 1-1	Lighting power density		
CRU 1-2	Lighting zones and controls		
CRU 1-3	Energy efficiency (equipment and appliances)		
CRU 1-4	Energy monitoring (energy sub-metering)		
CRU 1-5	Water efficiency (fittings)		
Well-being and Heath (WH)			
WH 2-1	Visual comfort		
WH 2-2	Indoor air quality – low-emitting materials		
WH 2-3	Thermal comfort		
WH 2-4	External view and daylight		
WH 2-5	Internal noise levels		
WH 2-6	Water quality		
Socially / Culturally Appropriate (SC)			
SC 3-1	Reduction of waste		
Reduction of risks (RR)			
RR 4-1	Responsible sourcing		
RR 4-2	Regional materials		
RR 4-3	PVC Use		

15 standards were identified and provided a framework for reducing environmental impacts and contain information on strategies and opportunities relating to key performance benchmarks

Organisers:

















#### Development of the Guidelines

Sustainability standard	Target	Beyond compliance
CRU 1-1: Lighting power density		
[a] Efficient light fitting, electronic ballasts	9 W/m <sup>2</sup> LPD	7 W/m <sup>2</sup> LPD
[b] Low standby power not greater than 0.001		
watts per watt of lighting power		
[c] Fixture uniformity – maintain uniform lumen		
levels through group relamping		
CRU 1-2: Lighting zoning and controls		
[a] Maximum lighting zones	to be 100m <sup>2</sup>	
[b] Individual lighting controls	for 90% (min) of office space	
[c] Occupancy sensors	75% (min) of the connected lighting load.	
[d] Daylight controls for daylit areas		
[e] Daylight controls for 50% of the lighting load		

The **Intent** – a summary statement of the key performance principles or practices, the performance **Target** which indicates the requirements, the rationale and benchmark for the standard, and a range of **Potential Technologies and Strategies** to be used in achieving the requirements. The **Beyond Compliance** which outlines the potential performance targets beyond the mandatory requirements. Information on Reference Protocols with achievable scores as required by the selected building rating tools is provided for each of the standards

















#### Conclusion

- The Guide applies to the fit-out of all the bank's commercial workplace projects, including new facilities and changes to existing facilities.
- It provides a framework of considerations for reducing environmental impacts and contains information on opportunities and strategies to illustrate achievement of key performance benchmarks.
- Office fit-outs designed for energy-efficient performance have very attractive economic returns.

Example: An efficient lighting design and well-managed lighting system can contribute to significant improvements in energy efficiency in office tenancies. Lighting can typically account for 30% of a commercial office tenancy's power consumption. Depending on the installation and usage patterns, energy savings on lighting in the range of 20-70% can be achieved in a typical office with a 3 to 5 year-payback of investment.



















# Thank you

















