

**Innovative Benchmarks for Built Asset Performance – The Triple Bottom Line Approach**

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**Introduction**

We structured a sophisticated cash flow model to determine the financial performance of existing office buildings, but....

forward looking, responsible owners want more,

they want an evaluation of the **financial, environmental and social performance** of the asset

**Is a cash flow model useful?**

WOULD IT BE WRONG TO MARRY A MAN FOR HIS HOME MAKING SKILLS?

DO A PRESENT-VALUE CASH-FLOW COMPARISON OF MARRIAGE VERSUS THE EQUIVALENT SERVICE FROM TRAINED MONKEYS.

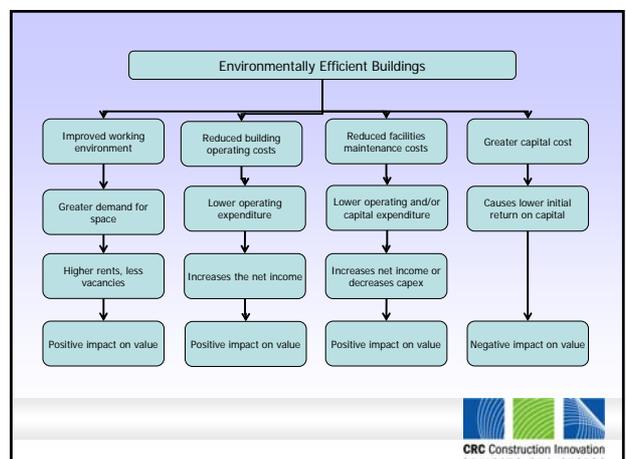
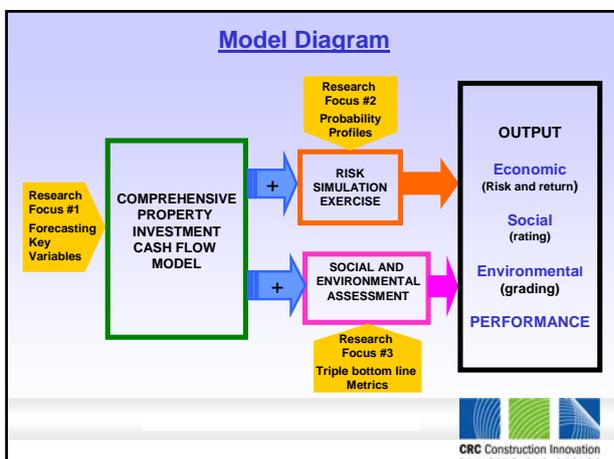
IT'S NOT YOU... IT'S ME... AND A WORLD-WIDE OVERSUPPLY OF MONKEYS.

**Progress**

- Examined existing research on Triple Bottom Line
- Noted progress on environmental indicators
- Found limited development on social indicators

But -

**what is the impact of environmental and social factors on commercial building performance?**



### Environmental Benchmark Research

In Australia:

- Green Building Council of Australia  
green star rating system (design emphasis)

In UK:

- Upstream Group  
examined environmental criteria for valuers
- Kingston University  
Sustainable property appraisal project



### Proposed Environmental Benchmarks Existing Buildings

#### **Resource Consumption**

- Energy
- Air-conditioning
- Water

#### **Design and Use**

- Transport
- Building fabric
- Interior
- Environment

#### **Governance**

- Awareness
- Disclosure



### Proposed Social Benchmarks

- Health and safety
- Stakeholder relations
- Community engagement
- Accessibility
- Occupier satisfaction and productivity
- Cultural issues
- Local impacts

(will expand on each benchmark)



### Health and Safety

- compliance with H & S regulations and appropriate signage
- adequate public liability and service provider insurance
- awareness and training of emergency evacuation and accident first aid procedures for all floor wardens
- a first aid station accessible to all building users



### Stakeholder Relations

- monitoring of stakeholder concerns, views and provisions
- transparency and disclosure of landlord/tenant contracts and marketing agreements
- supportive use and occupation guidelines for tenants
- appropriate training for security and public relations personnel



### Community Engagement

- encouragement of employment of local residents within the building
- provision of accessible public facilities (seating, toilets)
- promotion of and linkage to local service providers
- accessible communication channels with building stakeholders



### Accessibility

- connections to designated green spaces
- proximity to urban spaces (town centres, malls, etc)
- availability and efficiency of public transport
- wheelchair access
- proximity to childminding facilities



### Occupier Satisfaction and Productivity

- quality of communal service areas e.g. toilets, kitchen facilities
- complementary usage of building (compatible tenants)
- occupant productivity in terms of satisfaction and physical wellbeing
- Smart technology design provisions



### Cultural Issues

- recognition of indigenous people through allocation of cultural space
- communication of site or community history
- consideration of gender equity and minority group requirements
- preservation of heritage values
- value of artwork as percentage of fit out



### Local Impacts

- aesthetic implications (compliance with precinct theme, building scale, etc.)
- practical implications (traffic generation, off-street emergency parking and pedestrian management)
- nature of tenant businesses and naming rights
- community linkages and sponsorship of local neighbourhood activities



### Evaluating the Social Characteristics

Surveys of buildings suggest that the factors require weighting and total score achieved is classified as:

1. Not socially responsible
2. Social responsibility required of a private corporation
3. Social responsibility required of a public body



### Combining the impact of financial, environmental and social factors

Cash flow study must be adjusted for changes in:

- cost of improvements/alterations
- ongoing operating expenses
- depreciation allowances
- rent

Thereafter the resultant return (IRR) or value (NPV) requires examination (example below)



### Evaluation Example

Hypothetical Office Building	IRR return on financial evaluation only	IRR return on triple bottom line evaluation
<b>Building A</b> (socially good, environmentally good)	10.2%	10.4%
<b>Building B</b> (socially poor, environmentally good)	10.8%	10.3%
<b>Building C</b> (socially poor, environmentally poor)	11.5%	9.5%



### Conclusions

- Triple bottom line evaluation means examining the market's demand for sustainability features
- Limited evidence of increased income achievable from sustainable buildings
- No clear standards on what is a socially responsible property entity

**Future activity should be:**

- **initially agree on the benchmarks and standards**
- **thereafter research their effects on rents and sale prices**

