

# Promoting green buildings

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An index is now in place in Malaysia to rate such properties

By DR TING KIEN HWA

GREEN property development is currently in vogue. To help in rating these green buildings, the Malaysian Institute of Architects and the Association of Consulting Engineers Malaysia have jointly developed a rating system – the Green Building Index.

A preview of the Malaysian version of green building rating system was held in conjunction with the Green Design Forum on Jan 3 at the Kuala Lumpur Convention Centre.

Two different sets of Green Building Indices have been developed for commercial and residential properties.

The assessment criteria of the Green Building Index for commercial and residential buildings include energy efficiency, indoor environmental quality, sustainable site and management, materials and resources and water efficiency.

Based on these criteria, commercial buildings will be rated and certified silver, gold and platinum.

This is a new green rating system in addition to the current more than 100 types of environmental rating tools available globally.

Among the well-known rating systems are LEED (the United States and Canada), Energy Star (US), BREEAM (Britain), CASBEE (Japan), Green Star (Australia) and NABERS (Australia).

Most of these tools rate a building through its design and construction phase. Only Energy Star, NABERS and ABGR rate a completed building in operation. The Green Building Index is expected to be applied to new buildings.

The green building property trend is very much driven by developers to differentiate their new developments to add a marketing edge to their new projects.

This is evidenced by GTower and 11 Mont' Kiara which received a Green Mark Gold certification (provisional) Award and Green Mark Certified Award (provisional) respectively from



This office building is lit by natural lighting. The assessment criteria of the Green Building Index for commercial and residential buildings will include energy efficiency

the Building and Construction Authority of Singapore.

Such certification could potentially differentiate the properties from other competitive developments.

A newly developed green building is perceived to have lower development risk as it readily attracts and retain tenants.

There is willingness by occupiers and owners to occupy such sustainable buildings in the US and Australia. Such buildings are perceived to provide a better workplace which could enhance productivity, reduce energy costs, improve indoor environment quality and reduce carbon dioxide emissions.

With the introduction of the Green Building Index in Malaysia, it is expected that the initial ratings will focus mainly on office buildings and that most of the buildings to be rated will be new ones.

The effect of the rating will create a dichotomy of buildings i.e. green and non-green buildings.

While evidence is starting to emerge to confirm the performance benefits of green buildings in the US, there is relatively little quantitative

evidence in Australia and other countries where green buildings are newly introduced.

Green buildings in the US are found to outperform non-green buildings in occupancy rate, capital values and rental rates. Green buildings command a rent premium and have a higher occupancy rate.

However, there are debates in Australia on whether green buildings necessarily command a premium in capital values.

Theoretically, green buildings may have a lower level of obsolescence and operating costs, thereby offering better net operating income and lower capitalisation rate.

However, being new buildings, it is arguable whether an increase in rental or capital value can be attributable to the green building features rather than the properties just being new.

Specifically, would there be any significant differences in the returns from an existing prime office building and a similar green building?

Aren't new prime office buildings always designed with better specifications, equipped with the latest services and automation systems

## A comparison of green building assessment criteria

LEED (USA)	Green Star (Australia)	Green Mark (Singapore)	Green building index (Malaysia)
1. Sustainable site	1. Management	1. Energy efficiency	1. Energy efficiency
2. Water efficiency	2. Transport	2. Water efficiency	2. Indoor environmental quality
3. Energy & atmosphere	3. Ecology	3. Environmental protection	3. Sustainable site & management
4. Materials & resources	4. Emissions	4. Indoor environmental quality	4. Materials & resources
5. Indoor environmental quality	5. Water	5. Other green features	5. Water efficiency
6. Innovation design/ construction process	6. Energy		6. Innovation
	7. Materials		
	8. Indoor environmental quality		
	9. Innovation		

Source: PAM & ACEM Green Design Forum (2009)

## Weightage of assessment criteria

Rating systems	Country	Energy efficiency	Indoor environmental quality	Sustainable site
BREEAM 2008	UK	19%	13%*	37%
LEED v2	USA & Canada	25%	22%	20%
Green Mark v3	Singapore	62%	5%	20%*
Green Star	Australia	20%	19%	33%*
<b>Green Building Index</b>	<b>Malaysia</b>	<b>35%</b>	<b>21%</b>	<b>16%</b>

\* Denotes adjusted or amalgamated figure.  
Source: PAM & ACEM Green Design Forum (2009)

which are more energy efficient, water efficient and better indoor environmental quality?

When the dichotomy of green and non-green buildings is formed, there will be a profound effect on property investment.

There will be implications to property fund managers, particularly real estate investment trust managers, who may want to re-examine their property holdings in existing property portfolios, criteria for future new property acquisitions and property

portfolio strategies.

Non-green buildings are likely to continue to be the bigger stock of commercial spaces. To remain competitive, the challenge is for property owners to refurbish these buildings to turn them into green buildings.

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