

Headline	Balancing aesthetics with sustainability		
MediaTitle	The Edge Financial Daily		
Date	06 Jul 2018	Color	Full Color
Section	TheEdgeProperty.com	Circulation	4,549
Page No	20	Readership	13,647
Language	English	ArticleSize	800 cm ²
Journalist	TAN AI LENG	AdValue	RM 8,769
Frequency	Daily	PR Value	RM 26,307



Balancing aesthetics with sustainability

There has been a long ongoing debate on form versus function but advancements in construction and green technology are allowing property developers to come up with buildings and structures that are both aesthetically pleasing and sustainable in the long-run.

BY TAN AI LENG

In the past, the idea of sustainable buildings was often associated with only energy efficiency, carbon emissions and material chemistry issues, while design elegance or style was placed on the backburner.

However, the industry has grown leaps and bounds and developers in this era are able to build not only aesthetically pleasing but also sustainable buildings, says Real Estate and Housing Developers' Association Malaysia (Rehda) president Datuk Seri FD Iskandar Mohamed Mansor.

"Buildings are built to serve the purpose of the community – as a dwelling, office space, recreational centre, and so forth. An aesthetically-pleasing design is an added necessity to a building and the purpose it serves," he tells EdgeProp.my.

He notes that elegant and visually attractive buildings that are also sustainable by global standards can be found in many parts of the world, including iconic ones such as the Bahrain World Trade Center, Taipei 101, Oasis Hotel in Singapore and Bank of America Tower in New York.

In Malaysia, such buildings include the upcoming PNB 118, which has received GreenRE's Platinum rating; the Etiqa Office Tower (Platinum rating by GreenRE); Energy Commission's Diamond Building (Platinum rating by Green Mark and Green Building Index (GBI)); and Digi Technology Operation Centre (Gold rating by GBI).

"We are living in an era where we do not have to make that choice between sustainability and beauty. Building sustainable and practical projects that are also good-looking is possible and has been done by many developers," he adds.

This is because developers realise the need to be cognizant of environmental and sustainability issues and do their part while remaining relevant with the times and industry.

Most importantly, FD Iskandar stresses,



FD Iskandar: Aesthetically-pleasing design is an added necessity to a building and the purpose it serves.

they are also realising that buildings must also be practical and allow for sustainable maintenance in the long-run.

"Rehda promotes the adoption of the maintenance culture among all Malaysians, not only for enhancement in a property's value, but also for enhanced quality of community living.

"Buildings are meant to serve a purpose. We won't be able to do much with buildings that are aesthetically pleasing but are not practical and not sustainable. There must be buy-in from everyone on the issue of sustainability and the culture of maintenance," he opines.

Wisma Rehda a leading example

Taking the lead, Rehda built its headquarters Wisma Rehda with sustainability features incorporated into its functionality. Located in Kelana Jaya, Petaling Jaya, Selangor, the building was completed in 2012 even before the association launched its GREEN rating certification – GreenRE – in 2013.

The 3-storey building with a built-up of 29,000 sq ft is purposeful, sustainable and visually pleasing.

According to FD Iskandar, the hot and humid environment is a major challenge for Malaysian developers, which have to find ways to design and build structures that could withstand the climate.

Wisma Rehda for instance, is designed to face south in order to avoid direct sunlight while its west-facing wall has a "double skin" that prevents heat from directly entering the

Headline	Balancing aesthetics with sustainability		
MediaTitle	The Edge Financial Daily		
Date	06 Jul 2018	Color	Full Color
Section	TheEdgeProperty.com	Circulation	4,549
Page No	20	Readership	13,647
Language	English	ArticleSize	800 cm ²
Journalist	TAN AI LENG	AdValue	RM 8,769
Frequency	Daily	PR Value	RM 26,307

building. All its office spaces are located at the north and east part of the building, well shaded from direct heat.

Unlike most office buildings, not many air-conditioning systems are used in Wisma Rehda's common areas, yet it does not feel stuffy or warm inside as its two side facades face the prevailing wind direction (north and south).

"14 of the 22 rooms or 63.6% of the space have natural ventilation from prevailing winds. On top of that, the adoption of the Air Conditioning and Mechanical Ventilation (ACMV) System also helps in reducing heat in the building," says FD Iskandar.

Water features at the entrance of Wisma Rehda also help to cool the air while creating a nice landscape. Water metres and water-efficient fittings are also installed at various locations to monitor usage and to detect leaks.

Meanwhile, the usage of tempered glass ceilings in the centre of the building allows sufficient amount of daylight into the building, thus reducing the use of electricity for lights.

Besides this, the building has a photovoltaic system to harness solar energy and rainwater harvesting system to collect water for cleaning purposes.

Retrofitting existing buildings for better efficiency

For existing buildings that do not have sustainable features, FD Iskandar says owners, joint management bodies or management corporations could consider retrofitting the building for better energy and water efficiency.

"First of all, it must be noted that getting a majority of the occupants or owners to agree to a very significant change involving substantial

cost would be a challenge. Hence, it is essential to get it right from the very beginning at the planning and design stage," he says.

Although it involves a high cost at the initial stage, existing buildings can benefit from retrofitting for sustainability and to reduce wastage. For instance, one could replace fluorescent lights with LED lights, install timers for pumps, use lift inverters and motion sensors.

However, he adds that a careful analysis to weigh the cost against the savings has to be conducted first to ensure that retrofitting is a viable option. It usually makes economic sense to retrofit existing buildings to incorporate energy consumption, operation and lifecycle cost, he explains.

"Energy efficiency is a big component of sustainable design and upgrading a building's air conditioning and lighting systems for instance, will reduce energy bills, thereby offering a payback element to offset the additional capital expenditure.

"Lower electricity consumption will also have a knock-on effect of reducing our use of natural resources. Currently 90% of electricity in Malaysia is generated from non-renewable resources," notes FD Iskandar.

Be a responsible buyer

A responsible homebuyer looking for a property with sustainability features should have a checklist in hand. Homebuyers can check with the developer if a project has been certified by green rating tools. A development that uses the Industrialised Building System (IBS) could also have adopted sustainability requirements within its design, construction, operation and maintenance.

One could also find out if the development utilises equipment or fittings that have energy-saving and energy-efficient labels. Besides this, a well-designed building has good natural ventilation to reduce indoor heat.

Headline	Balancing aesthetics with sustainability		
MediaTitle	The Edge Financial Daily		
Date	06 Jul 2018	Color	Full Color
Section	TheEdgeProperty.com	Circulation	4,549
Page No	20	Readership	13,647
Language	English	ArticleSize	800 cm ²
Journalist	TAN AI LENG	AdValue	RM 8,769
Frequency	Daily	PR Value	RM 26,307



Wisma Rehda is designed with sustainable features for better energy and water efficiency.



Benefits of retrofitting existing buildings with sustainable features

- Cost reduction in operations
- Increased comfort for occupants
- Prolonged lifecycle of the building
- Higher capital value for a well-maintained building

How to spot a sustainable building

- Certified green standard
- The use of IBS
- A north-south orientation
- Use of energy- and water-efficient fittings and applications