

GREEN INVESTMENTS MAKE SENSE

Investors should not underestimate the benefits of going green

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Many people, not just Malaysians, do not have a clear perception about what green building is all about. The reality is that green building is beneficial in many ways, and that it isn't only morally right to go green. It makes sense on an economic, productivity, well-being, and lifestyle perspective.

"The problem we have in Malaysia is that a lot of people think going green is expensive. Is it true? Where do they get the numbers from?" GreenRE executive director James Chua said.

"People assume it is expensive to build a green building. This is a misconception. For example, a developer built a new residential development in Rawang. In order to get one point in getting a green certificate, he must build bus stops outside the development, but there are no bus services there! What is the point of building a bus stop, and spend thousands of Ringgit on it? The tools are good, the bus stops are good, but that is provided there is a bus service."

Citing a world survey, Chua said, "The perception is that to build green buildings, it will cost 0.9% to almost 29%, on top of their gross development cost. These are estimates that were worked out during the design stage, but is it true? The truth is, when such buildings are actually built, it is minus 0.4% to 12.5%."

"The Building & Construction Authority in Singapore published a report, stating that if you want to build a platinum-rated green building, it would actually cost you 2% to 8% (above the gross development cost). If you want to build a normal-rated green building, it actually costs you 0.3% to 1.0% (above the gross development cost). However, the misperception is that people think that green building must be expensive."

"If you design properly with a good passive design, then your cost would be very much lower. What is a good passive design? In Malaysia, if we look at our own kampong (village) houses, they are very comfortable. Our kampong house is environmentally-friendly and cool. Why are our architects not designing based on what our forefathers had designed before?"

Malaysian Institute of Architects immediate past president Ar Chan Seong Aun commented, "If you measure it in dollars and cents, and a lot of time, effort, and the extra cost that we put in, depending on the component, we can recover the capital cost within two to five years. This is very fast. It is already proven."

"Looking at our completed projects, which have seen one to five years of electricity usage, water usage, and waste management, we measured with actual numbers from existing buildings. When they send in (the numbers) for verification and assessment at the final stage, we actually measure and track all these, and the results actually shows that there are savings."

"What we are concerned about is the way the economy is developing right now. We keep continuing to increase our energy demand, polluting our environment, and expanding our urban space. When we look at our industries, if we don't control them, they will pollute. This is where, we try to encourage them to reduce pollution, reduce energy usage, and improve the working environment. This is the key thing we are looking at. It creates value with a little bit more effort."

However, Social Responsibility Monitor principal consultant Michael Chiam cited that when new townships are built, all the trees are cut off from the start, and then replanted when the township is completed. "Are there efficient ways to build homes and at the same time, leave the trees alone?"

"People are doing things selectively, which is wrong, because they focus on what benefits them. The awareness must be raised to make people aware of what a green building looks like, and not just on saving on the electricity bill on lighting. He questioned whether green building really helps people a lot, or it is beneficial to certain people."

RESIDENTIAL NEW CONSTRUCTION (RNC)

The GBI Residential New Construction (RNC) Rating Tool evaluates the sustainable aspects of residential buildings. This includes linked houses, apartments, condominiums, townhouses, semi-detached and bungalows.

This tool places more emphasis on Sustainable Site Planning & Management (SM), followed by Energy Efficiency (EE). This serves to encourage developers and home owners to consider the environmental quality of homes and their inhabitants through better site selection, provisions of public transport access, increased community services and connectivity, as well as improved infrastructure.

Such achievements will help reduce the negative impact to the environment and create a better and safer place for residents and the community as a whole.

GBI RNC POINTS ALLOCATION CHART



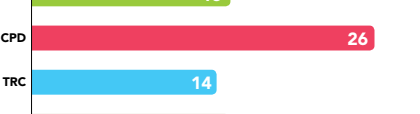
TOWNSHIP

Sustainable Townships are livable places that meet the diverse needs of the community, both now and in the future. They are places that are well planned and designed, safe and secure, and enhances the surrounding environment, thus providing a high quality of life for the people who live, work and play there.

The GBI Township Tool sets out a vision for sustainability within the built environment and provides guidance to assist end users to deliver sustainable townships.

Please refer to the Sustainable Townships section (page 8) for more details.

GBI TOWNSHIP POINTS ALLOCATION CHART



THE GBI RATING SYSTEM

BUILDING WILL BE AWARDED THE GBI RATING BASED ON 6 KEY CRITERIA:

1 ENERGY EFFICIENCY (EE)

Improve energy consumption by optimising building orientation, minimizing solar heat gain through the building envelope, harvesting natural lighting, adopting the best practices in building services including use of renewable energy, and ensuring proper testing, commissioning and sustainable regular maintenance.

2 INDOOR ENVIRONMENTAL QUALITY (EQ)

Achieve good indoor environmental performance in indoor air quality, acoustic, visual and thermal comfort. These will involve the use of low volatile organic compound materials, application of quality air filtration, proper control of air temperature, movement and humidity.

3 SUSTAINABLE SITE PLANNING & MANAGEMENT (SM)

Selecting appropriate sites with planned access to public transportation, community services, open spaces and landscaping. Avoiding and conserving environmentally sensitive areas through the redevelopment of existing sites and brownfields. Implementing proper construction management, storm water management and reducing the strain on existing infrastructure capacity.

4 MATERIALS & RESOURCES (MR)

Promote the use of environmental-friendly materials sourced from sustainable sources and recycling. Implement proper construction waste management with storage, collection and re-use of recyclables and construction formwork and waste.

5 WATER EFFICIENCY

Rainwater harvesting, water recycling and water-efficient fittings.

6 INNOVATION (IN)

Innovative design and initiatives that meet the objectives of the GBI.

Achieving points in these targeted areas will mean that the building will likely be more environment-friendly than those that do not address the issues.

GBI CLASSIFICATION

POINTS	GBI RATING
86 to 100 points	Platinum
76 to 85 points	Gold
66 to 75 points	Silver
50 to 65 points	Certified

WHY GREEN BUILDINGS?

- Green buildings are designed to save energy and resources, recycle materials and minimise the emission of toxic substances throughout its life cycle.
- Green buildings harmonise with the local climate, traditions, culture and the surrounding environment.
- Green buildings are able to sustain and improve the quality of human life whilst maintaining the capacity of the ecosystem at local and global levels.
- Green buildings make efficient use of resources, have significant operational savings and increases workplace productivity.
- Building green sends the right message about a company or organisation – that it is well run, responsible, and committed to the future.



“Even if you are a house buyer, you wouldn't want to buy something that doesn't appreciate in value, wouldn't you? Green saves you money. Good corporate image, good branding.”

- Chan

Defining green building

A green building focuses on increasing the efficiency of resource use, such as energy, water, and materials, while reducing building impact on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal. Green buildings should be designed and operated to reduce the overall impact of the built environment on its surroundings.

Chua shared that green buildings are buildings that promote sustainability in the built environment, and raises awareness among developers, architects, engineers, planners, and the public about environmental issues and the responsibility to the future generation. "Sustainable development is something that is defined as development that meets the needs of today, without compromising the ability of our future generations to meet their needs."

There are many established green rating tools providers, such as Building and Construction Authority GreenMark (Singapore), Green Building Index (Malaysia), Leadership in Energy & Environmental Design (USA), Building Research Establishment Environmental Assessment Methodology (UK), Green Star (Australia) and more.

In Malaysia, GREENRE, a non-profit organisation that is owned by the Real Estate and Housing Developers' Association (REHDA), has been promoting green yet affordable efforts among property developers. GreenRE's tools come from Singapore's Building and Construction Authority (BCA). The significance of such tools is that they comply with Singapore's Green Mark standards, which is among the highest in the world, where environmental conservation is concerned.

Chua said, "GreenRE is more user-friendly, more affordable, and is not-for-profit. GreenRE is adapting Green Mark from Singapore. Green Mark has assessed more than 40 million square metres of buildings and developments in 15 over countries."

In the case of GBI, it is Malaysia's green rating tool for buildings and towns, created to promote sustainability in the built-environment. The GBI rating tool provides an opportunity for developers and building owners to design and construct green, sustainable buildings that can provide energy savings, water savings, a healthier indoor environment, better connectivity to public transport, the adoption of recycling and greenery for their projects, and reduce our impact on the environment.

Chan said, "If property buyers do not have technical knowledge for them to access the building on their own, they should look for the Green Building Index certification, because most of the buildings, if the developer, they are proud of what they have done, they would normally go for a rating. They normally put a plaque at their entrance and display it in front of their sales brochure. We don't allow anyone to post this up without proper certification. It helps to keep our environment clean, and ensures our buildings are of high standard and cooler."

"These are all the key things that architects and engineers are trained to be GBI designers or facilitators. They will apply that to all their designs. Whether or not buildings are rated, they gained the knowledge, and will start to apply it to the buildings to make them better. Under our GBI scheme, we are coming close to three thousand facilitators. Not only do we do it for Malaysia, we also help our ASEAN neighbours."

INCENTIVES FOR BUILDINGS OBTAINING GBI CERTIFICATE

A) TAX EXEMPTION

- Any person who incurs Qualifying Expenditure (QE) to obtain GBI certification for a building used for his business qualifies for tax exemption. This tax incentive provides exemption on the statutory income which is equivalent to 100% of that expenditure.

- Qualifying Expenditure means an additional expenditure (known as the Green Building Cost Sum) incurred in relation to construction of a building, alteration, renovation, extension or improvement of an existing building. The exemption can be up to 100% of statutory income for each year of assessment.

- Any unutilised QE can be carried forward to subsequent years of assessment until the amount is fully exempted. This tax exemption only applies once for each building certified from 24 October 2009 until 31 December 2014.

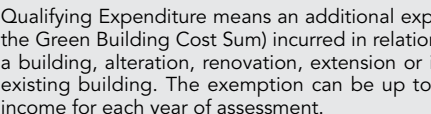
- The types of tax incentive mutually exclusive by this tax exemption are addressed in the guidelines issued by Lembaga Hasil Dalam Negeri Malaysia (LHDNM).

B) STAMP DUTY EXEMPTION

- The stamp duty exemption provides exemption on instruments of transfer of ownership of buildings and residential properties acquired from property developers and awarded GBI certificate. The exemption is on the additional cost of the property incurred to obtain the GBI certificate. The exemption is only given for the first transfer of ownership of the building and for sales and purchase agreements executed from 24 October 2009 until 31 December 2014.

Once certified, applicants can claim for the tax exemption or stamp duty exemption in their annual Income Tax return Forms. The GBI Certificate has to be kept for audit purposes by LHDNM.

Please note that a complete set of guidelines on the tax and stamp duty exemption can be obtained from www.hasil.gov.my.



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- Chiam

More than Ringgit and cents

There are clear benefits in going green. In recent years, the government had introduced incentives to encourage environmental conservation and resource management.

In Prime Minister Dato' Sri Mohd Najib Tun Abdul Razak's Budget 2014 speech, he stated that the government was committed to providing a clean, safe, and healthy environment for the present and future generations.

Among the programmes that were implemented were the National Carbon Reporting Programme (MyCarbon) by the corporate sector, establishment of a National Conservation Trust Fund for conservation of degraded areas and permanent forest reserves, as well as natural resource management.

To strengthen the development of green technology, the government had provided investment tax allowances for the purchase of green technology equipment and income tax exemption on the use of green technology services and systems.

The Malaysian Green Foundation was also established to promote and enhance the use of green technology by the corporate sector and the general public. A launching grant of RM15million was provided to the Foundation.

Malaysian Institute of Architects immediate past president Ar Chan Seong Aun said, "If you buy a green-rated property, there are a few things that are certified by outside parties. The first is the living environment will be cooler, brighter, and healthier."

Chan added, "Whereas if you buy from a non-rated building, you could end up with a dingy office, not enough daylight, paint that is not rated, smelly, and unhealthy, and buildings that have a lot of glass and is not properly shaded, and the right type of glass is not selected, then the building will become very hot. The only way to counter the heat would be to put on a lot of air-conditioning."

"Green buildings are cooler, in terms of appearance, inside environment, and uses less air-conditioning. This is where the technicalities come in. Modern buildings have a lot of glassy areas. The glass areas are very good, because they let in all the daylight, so you don't have to switch on the artificial lighting."

"When it is brighter, you have a better feeling about the place, but at the same time, when you design it correctly, it blocks out all the heat. It lets the daylight in, but it blocks the heat. It is either shaded, or has the right type of glass where it reflects out all the heat as well, does not allow the heat to come directly into the building. On the inside, inside out all the areas where you don't need the glass, but on the outside, it looks nice, with all the glass."

Chua stated that according to international research, if you build a building with a lot of good design, a lot of good windows that allows you to look outside, you actually can help yourself to think better, and mental memory can improve by 10% to 25%. Today's hospitals are designed with windows to allow patients to look outside, because it helps them to shorten their stay in the hospital.

Chua cited, "According to our Malaysian Standard MS1525, I need at least 300-400 lumens luxes (a measurement for light) for a worker to work efficiently or a student to study effectively. According to research, if a student, if you ask him to study under the shade in the daylight, you are actually helping them to learn faster, by 20-26%. If you worked in an office with good daylight, you will be more productive, at least 18% more productive. If you have good ventilation, you will work at least 11% better."

"If I am going to open a retail shop, I am going to sell clothing, if my clothing has good daylight, and people can see the real colour, your sales will improve by 15% to 40%. All these are statistics from the world."

Chan cited, "We have a clear understanding of what water usage is like in Malaysian homes and offices. So typically, Malaysian homes average use is about 300 litres per person per day, compared to the United Nations standard, which is 150 litres. We almost double. So that means we are not very efficient in the use of our water. Not only should we be reducing that amount, we should use it more efficiently."

"In green building, we encourage the owners to collect the rain water from their roofs, use that rain water that is not drinkable to water their plants, wash their cars. You can save about 50% of your water usage. Although it is not a big item in terms of dollars and cents, it is actually saving the environment."

However, Chiam advised, "You must take the whole thing holistically when going green due to climate change. Don't just think of the glass wall that will provide lighting, as you may pump up the air-conditioner. Whatever benefit has gone to the electricity bill for air-conditioning. You also look at the water element. Look at things like the roofing and solar energy. It is a very good idea to have these green things but better design is required."

"If a person was buying a unit in a green building, is there a rainwater harvesting system? Do they have any benefit in terms of water supply? Can energy be tapped from the roof by using solar panels? The only benefit in green building is coming from the windows."

Greenbuildingindex general manager Dr. Herman Tao said, "The occupants benefit from it. Energy efficiency would be a long-term thing. If you save energy, you save costs. The other thing that is important for the occupant is the indoor environmental quality."

Tao commented, "I feel this is a win-win hand. By doing corporate social responsibility roles, it enhances the developers' reputation. On the other hand, the end-user is buying a valued property. It is higher in value. Even in the long run, it saves energy and it is a better environment for its occupants."

Chan added, "Even if you are a house buyer, you wouldn't want to buy something that doesn't appreciate in value, wouldn't you? Green saves you money. Good corporate image, good branding."

Citing an experience in a green hotel in Copenhagen, Chiam shared, "They had open declaration, that they are doing charity work by adopting two schools for children and one old folks home. The hotelier contributes to those organisations from the savings that they generate from green practices. Any food that is not thrown away is not wasted and is given to charity homes. Don't just think about energy saving. They use recycled wood for their furniture, and they declare this."

In conclusion, given the benefits of being environmentally responsible, investing in green buildings and adopting green practices makes sense, not just for real estate investors, but also for everyone else.