

More buildings go green

Some 718 were GBI registered as at November compared to 659 last year



by Yvonne Young

WITH construction getting more complex, building facilities more intricate and end users more demanding, creating a green and sustainable built environment is a greater challenge

than before.

So how far has the nation progressed in pursuing its "green" agenda, and what more needs to be done?

Asia Green Buildings, an online platform focusing on green buildings in Asia, reveals that last year, the country had the fastest growth in green buildings within Asia as certified by the Green Building Index (GBI).

GBI, which started by learning from Singapore, Australia, US and UK, has grown from its introduction in 2009 to become a recognised rating tool that is copied by other countries.

To date, GBI has certified over 170 million sq ft of green building space.

"This shows the country is prepared and accepts the transition to green buildings," Malaysian Green Technology Corp group CEO Ahmad Hadri Haris tells *FocusM*.

"The number of green buildings has increased steadily with 718 GBI registrations as at November, compared to 659 last year.

"Many government buildings have been certified green, and reduced average energy consumption by as much as 10%," he says.

To ensure the continuous momentum of greening buildings, Hadri says new buildings should ideally be designed and constructed to be green-compliant.

Past success

Implementation of the Malaysian Building Integrated Photovoltaic (MBIPV) project - a five-year project initiated in 2005 - for instance, is successful, he says.

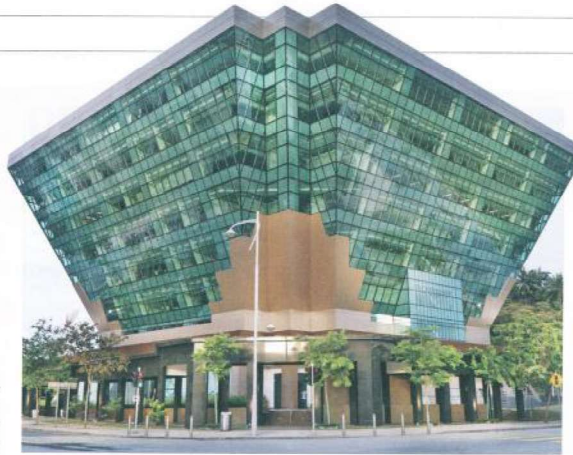
The application of this green technology helped encourage architects to integrate photovoltaic (PV) systems in the building designs and architecture of homes and townships.

"Today, the integration of solar PV in buildings is becoming a norm, encouraged by the introduction of Feed-in Tariff and Net Energy Metering Schemes," he says.

Hadri, who previously oversaw the MBIPV project, says compared to the 2005 baseline, the installed solar capacity rose 439%, while carbon dioxide emissions showed a 28% reduction.

There are now four core initiatives led by different organisations that drive Malaysia's green building movement.

The first was the GBI in 2009. Jointly formed by the Malaysian Institute of Architects and the Association of Consulting Engineers Malaysia, it is



The Energy Commission's Diamond Building is an example of an energy-efficient implementation

recognised by the World Green Building Council.

Apart from GBI, the Malaysia Green Building Confederation, a member of the World Green Building Council, has also been actively promoting green buildings via its global network, policymakers and industry professionals as it advocates for the sustainable built environment agenda.

Additionally, the Public Works Department (PWD) and Construction Industry Development Board (CIDB) jointly developed the Malaysian Carbon Reduction and Environmental Sustainability Tool this year.

It serves specifically to assess and certify government projects valued at RM50 mil and above, and focuses on energy efficiency and green building compliance.

The Real Estate and Housing Developers' Association Malaysia (Rehda) also initiated GreenRE in 2013. It encourages

the participation of industry professionals to design and build green and sustainable buildings in a more cohesive manner.

Way forward

Hadri says collaboration in the green movement will yield more positive results.

"There should be greater harmony and closer cooperation between MGBC members and GBI, Rehda, PWD and CIDB as well as with the Town and Country Planning Department, which has also been actively promoting sustainable development [in order] to streamline efforts and policies," he says.

Catherine Ridu, CEO of the Sustainable Energy Development Authority (Seda) Malaysia, says energy-efficiency constitutes part of the green building movement.

"Under the Green Technology Policy, the definition of green technology includes the energy-efficiency and

conservation element.

"Hence, lower energy consumption will contribute to lower carbon emissions when operating a building. So energy-efficient buildings are also low carbon buildings," she says.

Ridu says energy-efficient buildings are not new to the country, and many have been built or retrofitted with energy-efficient features.

The Department of Standards, she says, published the building energy code, MS1525 Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-Residential Buildings in 2001.

Under the code, the energy-efficiency of buildings is gauged by the reduction in consumption compared to its baseline, while sectorally, it is assessed by how much the average building energy index is reduced.

Ridu says the benchmark should not just be qualitative in its green certification but also achieve quantitative performance in terms of energy and carbon reduction.

The aim is for a 45% reduction in national carbon intensity emissions by 2030.

"Seda believes sustainable energy is a key solution to greening, as it reduces the impact of environmental degradation caused by carbon emissions and climate change," she says.

Incentives

There is a need to continuously promote energy-efficient programme incentives along with a strong policy direction and implementation.

"This will motivate public and private engagement and investment, and encourage building owners to go green.

Through the proper adoption of an energy-efficient strategy and installation of renewable energy via a net energy metering system, renewable energy offsets the balance of energy that's demanded.

Integrated energy-efficiency and renewable energy features have a high impact on net energy savings while energy-efficiency helps to reduce its consumption.

Seda adopted the CIS 20-GreenPass as the assessment tool for its low carbon building. The purpose of the assessment programme is to facilitate and encourage the green movement in the building sector.

In addition, Hadri says GreenTech Malaysia is working with local authorities to implement the Low Carbon Cities Framework and Assessment System (LCCF), which is a continuous monitoring and improvement programme jointly developed with the Ministry of Energy, Green Technology and Water.

Apart from buildings, LCCF also covers urban environment, transportation and infrastructure to holistically reduce carbon emissions in cities.

The LCCF framework identifies pertinent areas and recommends various strategies to effectively reduce overall carbon emissions.

Its assessment system utilises a carbon calculator which enables cities to monitor and track carbon emission levels.

"Through LCCF, we are encouraging local authorities to champion the development of low carbon cities within their purview. Our target is to have all 154 local authorities implement LCCF by 2020," says Hadri. [FocusM](#)



Ridu says lower energy consumption contributes to lower carbon emissions when operating a building



Hadri says the country is prepared and accepts the transition to going green buildings