



Go green, without the envy

> Small steps to greener homes and sustainable living

BY ALYSSA J. OON

THERE is a general misconception that living green is expensive. Truth is, there are quite a number of small and easy steps one can take to make the home “greener” yet not exhaustively deplete those green notes in your bank account.

FASHIONABLE YET SUSTAINABLE

Textiles play a huge role when it comes to homes deemed fashionable. However, when dealing with textiles and trying to keep to “sustainable” principles of living, a better option is to choose natural fibres as opposed to synthetic ones. Freshome writer Cynthia Bowman suggests swapping out the area rug with one made of jute, sisal or wool for an eco-friendly choice. Moreover, while the touch adds texture to the room, its natural form and visible feature take the “green” theme a notch higher.

Hemp is another great option as a “green” fabric that is ideal for upholstery. Not only is it produced free of chemical, but it is also known for its durability, hence, a great choice for furniture that is hardy enough to take a beating.

As for cotton and wool however, it is advisable to source for the organically-produced. Aim for cotton grown without the use of pesticides and chemicals and wool from sheep that are fed and treated well.

However, some homeowners still prefer synthetic fabrics due to its many perks and advantages. Those who abide by sustainable living practices should look for 100% recycled polyester made from bottles or plastic containers.

KNOCK ON WOOD

For furniture identified under the sustainable banner, it isn't just about how and what it is made of. Durability is an important criterion when deciding on sustainable furniture pieces.

Another point to consider is the simple notion of buying cheap, which usually encompasses items with a short lifespan. Things that do not last, breakdown frequently. Eventually, the item is chucked out as trash. Referred to these days as the throwaway culture; this mentality is not just bad for one's wallet, it leaves a negative impact on the environment.

Today, bamboo is fast gaining traction as one of many eco-friendly choices available for furniture. Not only does bamboo grow quickly, it is extremely durable. Rattan however, a palm byproduct, is made into wicker furniture and is another sustainable option. Like bamboo,



PHOTO: REMODELISTA.COM

your glass windows facing the east-west, this will pave way for better natural ventilation. So make sure to place your glass windows towards the north-side,” Lee said.

Practise cross-ventilation by opening windows or doors on both sides of the house. This creates high and low pressure areas, resulting in a cross breeze that will draw the heat out.

The simple act of choosing the right paints can also help maintain a comfortable indoor temperature as certain paints have been formulated to include “sunblock technology” that help reduce surface temperatures.

Painting the roof white or choosing tiles that are light in colour will reflect heat and give the home a modern futuristic vibe.

The type of window treatments used also play an important role in keeping the heat out. Although it sounds counter intuitive to use thick curtains, the US Department of Energy found that “medium-coloured draperies with white plastic backing can reduce heat gains by 33%. Draperies should also be hung as close to windows as possible and allowed to fall onto a windowsill or floor to reduce heat exchange.



PHOTO: SUBURBAN B'S.COM

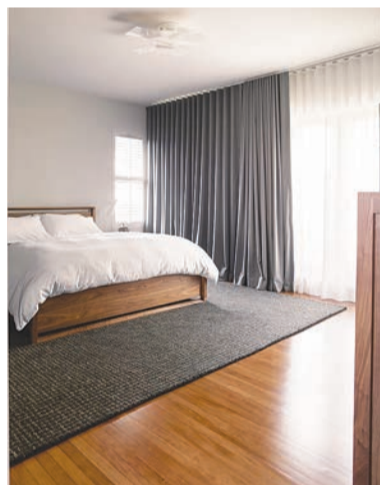


PHOTO: REMODELISTA.COM



PHOTO: FRENCH BY DESIGN.COM

BRIGHTER FUTURE

Unlike the traditional incandescent bulbs and compact fluorescent lamps (CFL), light emitting diode (LED) bulbs “use at least 75% less energy, and last 25 times longer, than incandescent lighting”, reports the US Department of Energy.

LEDs do not experience “burn out” or fail; instead, it goes through “lumen depreciation” where the brightness of the LED diminishes with use. Besides its energy-saving ability, LED bulbs are known to be a better choice for the environment as they are recyclable. Older bulbs contain mercury, poisonous material that affects the earth if not discarded properly.

Besides, the best part about LEDs is the wide spectrum of colours available. For homeowners who prefer the warm yellow of incandescent bulbs, there is an LED bulb for that! Look for warm white or soft white LED bulbs for that yellow hue that sends a sense of warmth and cosiness.

In all, before starting out on your “green” journey, do a little more research to see what will work for your home. Seek experts in the field if unsure. Tour other green homes to look and learn. Even if you decide to make minor green adjustments around the house, you have already helped the environment in some way, better than none.

rattan grows rapidly and can hold off wear and tear.

When choosing sustainable furniture, made from wood, look for ones with the Forest Stewardship Council (FSC) certification. This verifies that the wood used in its making was grown and harvested responsibly. Some examples of sustainable-sourced wood include teak, walnut and eucalyptus.

Another option is to use or buy furniture made from reclaimed wood. Buying locally-sourced furniture is another good step solution within the sustainable practising culture, it reduces the carbon footprint by shortening the manufacturing supply chain.

BREATHE DEEP

A green home also attributes to a healthy home. To keep the air healthy for inhabitants, one must be aware of the products used. Look out for those which pollute the air due to “off-gassing”. Off-gassing is explained as gas-releasing process that takes place in furniture pieces and other household goods, discharging volatile organic compounds (VOCs) into the air. These are said to take a toll on one's health.

House plants do more than just add character to a room. Certain plants have been proven by Nasa to be more effective in filtering out toxins for healthier air, reported a study conducted in 1989. Dutch researchers in a 2008 experiment also found that indoor plants effect lower stress levels.

Spider plants are among the list of Nasa-approved. They don't look spectacular in any way but are easy to maintain. The plant is known for its long, skinny leaves that point downward, resembling the legs of spiders. For maximum visual appeal, plant these in a hanging pot or on the top of a cupboard or shelf.

Another easy plant to care for, is the Snake plant. The unique colour and shape of the snake plant (also known as Mother In-Law's Tongue), also make it a great

addition to any part of the home. Stick it in a mid-century style four-legged planter and place it in the corner of the living room or keep it small and simple with a mini planter on your bedside table.

Besides having plants in the home, there are also other ways to ensure the air circulated within the home is clean and healthy, as in using an air purifier.

Paints are another huge VOC offender. The “fresh paint” smell is really off-gassing in motion and it can last anywhere from three to five years for it to fully “gas off”. Choosing low-VOC paint is not enough, instead look for zero-VOC and odour-free paints.

LET THE BREEZE IN

Ensuring there is proper ventilation in the home is important. It not only helps clear out the air indoors but also maintains a cool temperature, much needed in our hot and humid climate. When the home maintains a comfortable temperature, there is a less constant need for fans and air conditioners.

In an interview with Home & Decor Malaysia, New Bob Group managing director Dr Lee Ville dished out advice for natural ventilation. “If you orientate the building at the right orientation by not facing the sun and avoid placing



PHOTO: FRESHOME.COM

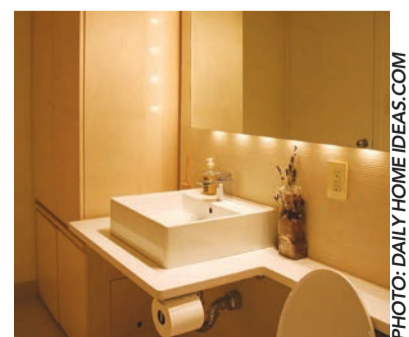


PHOTO: DAILY HOME IDEAS.COM

► Email your feedback and queries to: propertyqs@thesundaily.com

GREEN SERIES



Urban aids

> Urbanisation and its benefits on the environment

In line with the environmental sustaining goings-on around the nation during this month of October, our property section will run a series of articles in sync with the “green” theme. Having featured our “green-inspired” ID piece last week, today we share an article by Schneider Electric’s country president for Malaysia, Soo Pow Leong, on “urbanisation”.

For a start, we look over the definition of urbanisation – a social process whereby cities develop and grow while societies become more modern. Perhaps a more to-the-point, short and catchy term would be “cited”. While there are some who are of the mindset that modernisation and development have adverse effects on the environment, Soo begs to differ, provided ...

URBANISATION IN ASIA

Environmental sustainability must be addressed in order to build urban resilience, as well as mitigate and adapt to climate change. This is one of the most crucial concerns in Asia, being one of the world’s most climate vulnerable regions and a growing emitter of greenhouse gases in its own right, accounting for more than 40% of

the total. The region is urbanising at a more rapid rate, more than any other region in the world. By 2050, some 64% of Asia will become urban.

Meanwhile, with estimates suggesting that cities are responsible for 75% of global CO₂ emissions – transport and buildings being among the largest contributors – it is not surprising that many Asian governments and the private sector are coming together to rethink how the urbanisation megatrend can be leveraged to further, rather than to hinder, sustainable development.

To derive at environmental advantages from urbanisation, city planners and governments are considering running a city as a multinational company by gathering key data, utilising information effectively, and having a clear long-term strategy.

This is why the private sector is essential as it contributes its various industry expertise and by working with municipalities and partners, it ensures that city leaders have all of the necessities in place to run a city like an MNC. This might involve tracking, managing and forecasting sustainability metrics such as carbon, water and waste, optimising the

performance of building infrastructure, as well as developing long-term sustainability plans to address priorities, needs and issues.

Asian cities to-date are actively evolving and innovating in using smart technologies to achieve the goals of sustainability, liveability and responsiveness. Their efforts can be seen in three key areas – buildings, water and energy.

SMART BUILDINGS

According to the UN Environment Programme, energy consumed by buildings has escalated to around 40% of total consumption, worldwide.

At the same time, studies have shown that only a quarter of a building’s costs are associated with capital expenses. The remaining three-quarters go toward operating a building over its lifecycle. To make matters worse, the energy use in buildings is only going to rise as the International Energy Agency predicts energy demand to increase by 50% by 2050.

Integrated building management solutions are an excellent way to enable smart, sustainable ecosystems inside and outside buildings, regardless the age of the buildings.

SMART WATER

In many Asian cities, the combination of population growth and a sharp increase in demand for energy and manufacturing has major repercussions on water as a resource. The World Bank forecasts a global deficit of 40% between anticipated demand and available water resources by 2030.

Smart water solutions, such as improving water management systems and networks, preventing and reducing leaks, and optimising processing, are critical in addressing this challenge. When implemented in East Water’s water pipe network – Thailand’s most advanced, efficient and complete water pipeline at approximately 400km long – such solutions reduced water loss in the pipeline by 17% (from 20% to 3%), and reduced energy consumption by 5%.

SMART ENERGY

Demand for energy in Asia is expected to double within the next 15 years, largely expected in cities. As fossil fuels remain the main source to power Asian cities, generating electricity in a sustainable way will pose a great challenge. Thankfully, the growth in alternative sources of energy has created new opportunities for governments and companies in Asia to integrate renewable energy sources, using solar and wind, with smarter upgrade projects across the region.

One such example is the San Lorenzo Wind Farm in the Philippines. It adopted an end-to-end solution that protects the wind farm from many system faults and ensures reliable production all-year round. And is capable of generating over 120 GWh of electricity annually and can sustain the energy demands of 48,000

households.

Smart grid solutions are also transforming the power industry. By letting businesses know how much power they are using and calculating the costs in real-time, businesses have the necessary tools to measure and reduce energy consumption. Companies are leveraging on the “Internet of Things (IoT)” and smart grids to build more efficient energy infrastructure in cities. When electrical systems of buildings are connected to smart grids, the grids detect power usage and divert power to places where it is needed most.

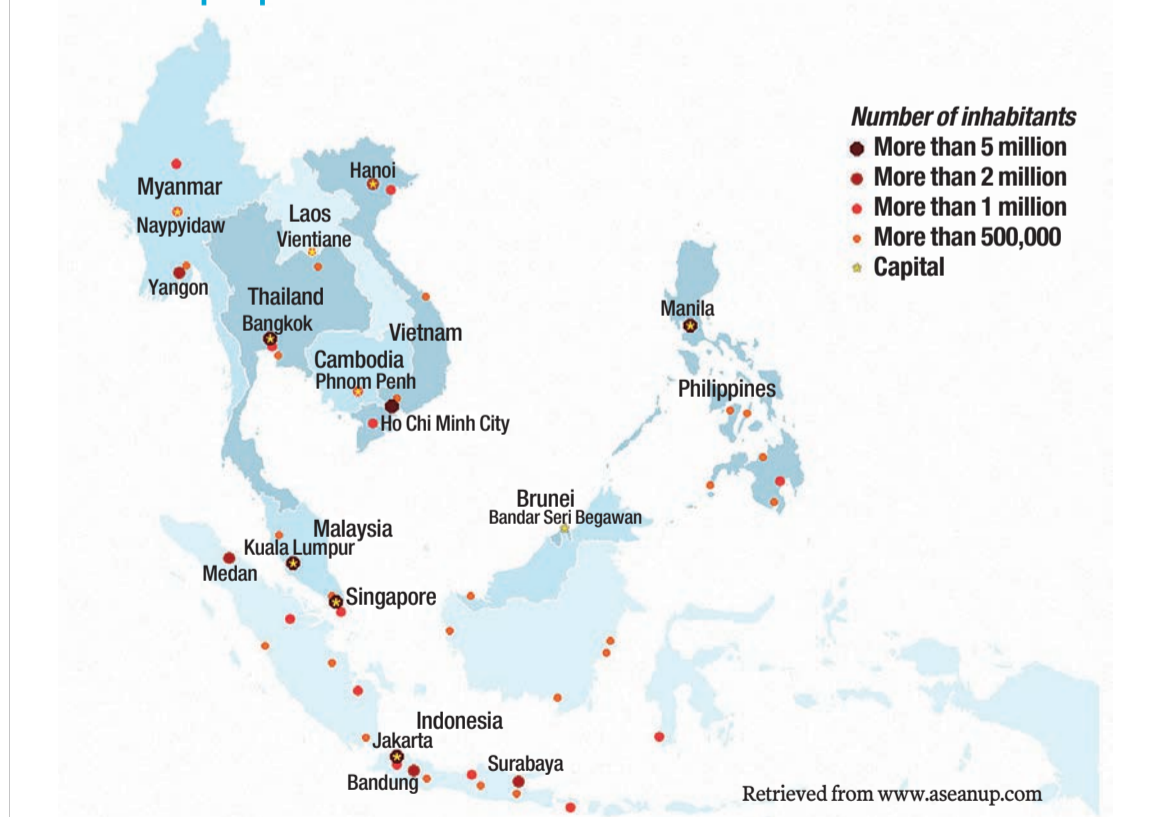
As urbanisation rapidly transforms the face of Asia and the lives of its people, everyone from policy makers to companies and residents have an important role to play in ensuring that the benefits that urban expansion brings is efficient, inclusive and sustainable, and life is “on” for everyone, everywhere at every moment.

The article by Soo was inspired by the report that the Prime Minister’s Office in Malaysia had saved 40% in energy after adopting Schneider Electric’s Building Automation and Energy Monitoring System. This retrofitting project also helps Malaysia meet its Copenhagen promise, to reduce 40% of carbon emissions by 2020.

With proper collaboration, the right use of data, creativity, science and the IoT, urbanisation is said to be the smart and sustainable way forward, a more progressive and constructive approach to a better future.

► Email your feedback and queries to: propertyqs@thesundaily.com

Most populated cities in Asean countries in 2015



Projected demographic growth of Asean countries

Population in millions	2015	2020	2030	2050
ASEAN	632	665	721	785
Brunei	0.43	0.45	0.50	0.55
Cambodia	16	17	19	23
Indonesia	256	269	293	321
Laos	7.02	7.65	8.81	10.6
Malaysia	31	33	37	42
Myanmar	54	56	59	59
Philippines	102	110	128	157
Singapore	5.62	6.05	6.58	7.06
Thailand	67	68	68	62
Vietnam	93	97	102	104

Retrieved from www.aseanup.com



Berjaya Group executive director Nerine Tan (left) and Tan receive the ‘ong lai’, symbolising prosperity during the official opening of the property gallery.

New B-Land property gallery in Penang

THE new phase of Jesselton Villas by Berjaya Land Development Berhad is expected to be launched in the second half of next year. Berjaya Land Berhad (B-Land) senior general manager (Properties Marketing Division) Tan Tee Ming said the next phase of Jesselton Villas will feature three-storey bungalows in the 13.78 acre plot of Parcel 3 and three and a half-storey super link houses in Parcel 4, spanning 11.74 acres. The

company’s focus for now, is on completing Kensington Gardens, Parcel 1 of Jesselton Villas which is expected to be fully completed by the first quarter of 2018 said Tan. “Our immediate plan is to finish Parcel 1 first and then we will proceed with Parcel 3 and 4,” he said during a press conference after the launch of the new property gallery at Jalan Masjid Negeri.

“The gross development value for the new phase is about RM1 billion,

and it will consist of 66 units of 3-storey bungalows in Parcel 3 and three and a half-storey super link houses in Parcel 4,” Tan added.

The gallery launch began with a lion dance performance and a tour of the new gallery which will serve customers looking for their ideal property in Penang. The grand opening saw a crowd of about 70 guests, comprising corporate clients, business associates and members of the media. – By **Imran Hilmy**



GREEN SERIES

Towards greener pastures

> Interview with KeTTHA secretary-general on Malaysia's green plans and the recently announced Green Technology Master Plan

At the International Urban Sustainability & Green Building Conference (USGBC) 2017, Datuk Seri Dr Zaini Ujang said in his opening speech that the urban population in Kuala Lumpur is expected to increase to 10 million by 2030 and that 60% of the world's population will be living in cosmopolitan cities; thus, living spaces will need to be cleaner and greener.

The Energy, Green technology and Water Ministry (KeTTHA) secretary-general also informed the audience that Malaysia is ranked 42 among the world's happiest nations and is fourth globally in terms of green cover. "Putrajaya is expected to become 'fully green' with 40% green cover by 2025. It can be a model for the world," Zaini said, sharing the good news before making known the arduous tasks that follow with the ministry's introduction of the Green Technology Master Plan (GTMP) on Oct 12.

The GTMP embodies the Eleventh Malaysia Plan (2016 - 2020) or 11MP, which had earmarked the need for green growth across six sectors. Its aim was to accelerate the course of the nation's growth and revolutionise its socio-economic development. The master plan focuses on six areas, building and property included; hence, we will be focusing on this area over the next few weeks.

IN THE BEGINNING

For decades, governments and world energy councils carried out scientific studies, experimenting and analysing various methodologies and techniques to generate energy. The reason was simply because it was a necessity in sustaining future generations, like oxygen is to life. While the world realised it needs to generate energy to meet societies' future needs, it also learnt of causal effects of greenhouse gasses (GHG), a "by-product" of energy consumption, which results in global warming and causes adverse



climate conditions; hence, the need to generate energy conscientiously and consume it cleverly.

The outcome: the adoption of Green Technology (GT) found to supply renewable energy (RE), but requires the use of green practices and sustainable methods of process across green building, green purchasing, green chemistry, green lifestyles, etc. This is why the National Green Technology Policy (NGTP) was formed and introduced in 2009, spearheaded by KeTTHA. It focused on energy, the environment, the economy and social aspects. 11MP emphasised the need to pursue GT. It basically campaigned for strengthening the enabling environment, promoting sustainable consumption, conserving natural resources, and strengthening

resilience against climate change and natural disasters.

DEEPER GREEN

Wanting to reinforce its "green stance", the government signed the Paris Agreement in 2015. The document called for nations to expedite global efforts to mitigate worsening climate conditions. In the agreement, Malaysia pledged to reduce its GHG emissions by 45% by 2030, spurring the establishment of a new gameplan to fulfil the pledge. Comprising 17 Sustainable Development Goals (SDGs) constituted under the Nationally Determined Contribution (NDC) banner; GT-pertinent issues deliberated included the pressing need for clean water and sanitation; affordable and clean energy;

sustainable cities and communities; responsible consumption and production; and climate action.

While many Malaysians would ask why the need to set up various policies and plans instead of focusing on one at a time, Zaini responds, justifying the need to constantly develop and grow to move forward as the rest of the world is, as more knowledge and information is attained in addressing the challenges to meet the SDGs.

In drafting the new GTMP, KeTTHA received full support. Twenty consultations were conducted with stakeholders involving over 300 representatives from the government, various industries, NGOs and the academia. The objective of the GTMP: "to drive further economic growth as the plan, once it succeeds, expects to bring in RM160 billion; garner a cleaner environment for better lifestyles for future generations; and enhance well-being for the people while at the same time protect nature, impede global warming and improve the environment on the whole," informs Zaini. "At the end of the day, we want to be a green player, not a green consumer," he adds.

The GTMP does not phase out the targets set for 2020 and 2030. Instead it acts as a catalyst to drive the green issues and step up efforts to achieve the objectives targeted for 2020 and 2030,



Datuk Seri Dr Zaini Ujang

which aims to bridge the gap and shorten the time taken to becoming a high-income nation driven by green growth.

Follow the second part of the interview with the KeTTHA secretary-general in next week's section.

► Email your feedback and queries to: propertyqs@thesundaily.com

Targets in building sector			
SECTORS / AREAS	2020	2025	2030
SUSTAINABLE CONSTRUCTION PRACTICE			
Active design - MEPS	<ul style="list-style-type: none"> MEPS law 11 appliances Upgrade current MEPS ratings 	<ul style="list-style-type: none"> 16 appliances Harmonise MEPS rating to ASEAN SHINE 	<ul style="list-style-type: none"> All appliances Universal MEPS rating
Number of certified buildings	• 550	-	• 1,750
Passive design - BEI	<ul style="list-style-type: none"> Building energy regulation BEI 120 	• Sectoral BEI 90	• Sectoral BEI <60
SUSTAINABLE CONSTRUCTION PRACTICE			
Construction method - IBS	<ul style="list-style-type: none"> Public projects score 70 - 100% Private projects score 50 - 100% 	• New technologies i.e. automated brick laying, etc.	
Construction waste	• To be determined		
GREEN BUILDING MATERIALS			
Raw materials	• To be determined.		
Recycle content	• % recycled content in concrete and other materials		



The headquarters of Energy Commission of Malaysia, which is known as the Diamond Building, in Putrajaya.



GREEN SERIES

Together, go for green

> Towards greener, cleaner and improved lifestyles

CONTINUING from last week's article on the interview with the Energy, Green Technology and Water Ministry (KeTTHA) Secretary-General Datuk Seri Dr Zaini Ujang on Malaysia's journey towards achieving its green pledges and becoming a green player instead of a green consumer.

ZERO IN ON GREEN

Briefly, the Green Technology Master Plan (GTMP) focuses on six sectors - energy, manufacturing, transport, waste, water and building. While these areas of concern will be monitored, just as important are the people, those working to succeed the plan and those who play a significant role in determining the success of the plan - the rakyat.

"The government can come up with many frameworks, policies and schemes, but we cannot succeed on our own. We cannot continuously be giving out subsidies and incentives either. The people must be aware, mindsets must be aligned, changed if need to; we all need to be working towards achieving the same goal for the betterment of all. After all, receiving high income nation status will benefit everyone as it is the nation which makes the country," Zaini expounds.

With that, the KeTTHA secretary-general urges the public to learn of the GTMP and understand its fundamentals. "It is not just important to adopt green technology (GT), it is vital in moving forward," Zaini says.

He then relates the importance of greener living by citing what Prophet Muhammad said: "In the Muslim context, those of this faith should remember what the prophet said; that if someone was going to die, they should go plant a tree. He did not ask them to donate all their money to charity or to pray incessantly, but simply plant a tree.

"It is a great virtue to plant a tree. If you look after a tree you will receive



Zaini

the fruits of your labour," Zaini shares.

While "going green" and planting trees are part and parcel of the big green plan, there are many ways the people can make changes to their current lifestyles and adopt more green choices and sustainable practices. Zaini, an avid cyclist, recommends cycling. "You could say I cycle almost daily. It keeps me trim and I am not contributing to green house gasses while at it."

SEA OF GREEN

In order to attain the goals set in the GTMP, the people are urged to inculcate greener methods of working throughout the six sectors being monitored. For those who need direction, awareness programmes on "greener lifestyles" have been on-going since Malaysia first took it upon itself to reduce its carbon footprint. From website and online portals, roadshows, advertisements, flyers, articles and announcements on social media; including the International Greentech & Eco Products Exhibition & Conference Malaysia (Igem) 2017, which recently came to a close and has been running for eight consecutive years; plus programmes and workshops by NGOs and green agencies; there is no excuse for the man on the street to be illiterate on the subject. (Google YaHijau Malaysia, established to promote and educate students and communities on GT.) Moreover, there is the comprehensive GTMP text, a publication by KeTTHA, available on its website.

Over the next five years, the government will be focusing on driving the adoption of GT while shifting its economic development plans towards green growth. These will be expedited via: government green procurement; green

financing; green incentives; green cities; and international collaborations. As this section focuses on property, we will discuss Green Cities and GT issues that relate to property development and aim to protect the ecosystem.

"In promoting the development of green cities, the government intends to promote sustainable developments and green practices among players in this industry. By using lower carbon emissions in its working processes, this can improve the quality of life for the community," Zaini adds.

HEADED TOWARDS GREENER DAYS

KeTTHA and Malaysia Green Technology Corporation (MGTC) launched the Low Carbon Cities Framework and Assessment System (LCCF) in 2011 to help local municipalities and developers achieve low carbon city status. It identifies potential target areas to reduce carbon emission via systemic analysis and review with periodic assessment on carbon emission via a carbon calculator. Green Cities will be established on this "design".

By and large, GT aims to boost the national economy. With green targets met and adopted across the five sectors, by 2020, GT is estimated to contribute about RM22.4 billion (1.2% of national GDP). Green investments and green jobs are estimated at around RM36 billion (creating 144,590 jobs). Towards 2030, GT is expected to contribute nearly three times as much.

The building sector is projected to be the third fastest growing sector contributing at least RM11.8 billion to GDP. This industry is estimated to increase CAGR (compound annual growth rate) by 16%, attracting some RM13.8 billion in cumulative investments. The sector is expected to be driven by:

- ▶ growth in new and existing private green buildings;
- ▶ export-oriented businesses for green building materials;
- ▶ energy-efficient building systems through heating, ventilation, air-conditioning and solar hot water systems, etc.
- ▶ Industrialised Building Systems and green building construction; and
- ▶ stronger local demand growth via full enforcement of Uniform Building By-Laws on energy efficient building systems.

Decoupling carbon emission from the nation's economic growth has the added benefit in ensuring that Malaysia remains competitive as an investment destination while keeping in pace with other green player economies. Looking ahead, the GTMP paves the way for Malaysia's

Transformasi National 2050 (TN50), which will position Malaysia among leading global economies.

"Together, the people and the government can create a greener and more sustainable Malaysia for future generations. But lifestyles must first change; mere planning and policies can't," Zaini asserts. Hence, the rakyat are urged to implement green practices and adopt sustainable

lifestyle habits for the GTMP goals to be met and benefit the nation.

Follow our section over the next few weeks on green concerns across the property development industry.

▶ Email your feedback and queries to: propertyqs@thesundaily.com



Iskandar Malaysia - envisioned a model as a 'sustainable and socially equitable city of the future'.

photos : www.inhabitat.com



SUPER SWANKY AND STYLISH ... The InterContinental Hanoi Landmark72 in the capital city of Hanoi, Vietnam opened its doors to guests recently. It offers 359 sophisticated and luxurious rooms perched between the 62nd and 71st floors of the Keangnam Landmark72 complex. Apart from panoramic views from "the highest hotel in Vietnam", guests get access to the Club InterContinental Lounge, one of the largest lounges in Southeast Asia, brimming over with perks, benefits, treats and luxuries. Check out the Stellar steakhouse and vibrant Q Bar - sterling F&B outfits said to cater to the discerning set. For more information, visit the InterContinental Hotels Group website.

