

The mission of GBCM is to facilitate and to promote a sustainable approach to planning, design, construction and utilisation of the built environment, mitigating their overall impact on human health and the environment.

# GREEN BUILDING NEWS



Issue 5, May 2015

## LETTER FROM THE BOARD

Greetings dear colleagues and friends,

I trust that you are well despite the complicated economic landscape.

It was with great pleasure to hear the announcement of the promotion of the "Smart Cities" concept in the national budget. Although there have been many questions asked and a lot of uncertainty in the industry, I think this is a great opportunity for a more sustainable Mauritius.

As human beings we have a tendency to resist change and to fear what we do not know. We need be aware of this, and be open enough to see how we can embrace this opportunity. We need to understand that ultimately "Smart Cities" will benefit us. It is perhaps worth the effort to say to oneself – let me do things differently for once. We might not agree totally, but let us strive to see the silver lining.

Unfortunately most of us, are in our comfort zone, and happy to carry on doing business as usual. Even if it has been proven that business as usual will destroy us, like the snake eating its own tail.

To pen off, I invite you to have a conscious pause, asking yourself, what can I do differently to create a better world around me.

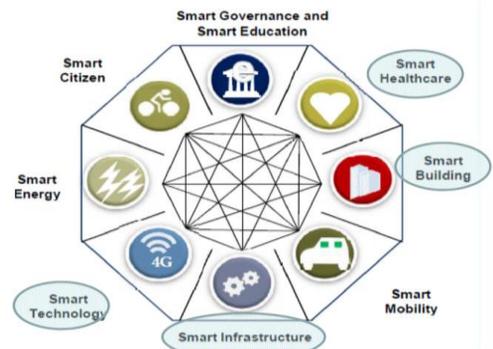
Be generous in your thoughts.

Best wishes,

Tony LEE LUEN LEN

## SMART CITY

The new government policy aims to create eight smart cities around the island as mentioned in the recent budget. The framework proposed by Frost and Sullivan(2012) has been chosen to describes eight key elements forming part of a smart city:



The meaning of smart in the smart city context aims at enhancing the performance and wellbeing of its citizens by reducing costs and optimizing the use of resources so that the community takes engagement to act effectively, efficiently and in a sustainable way.

It is important to highlight that a Smart City is not only about technological trends, infrastructure and resources. Key aspects of Smart City revolve around Smart governance and Smart citizenship. Smart Governance provides solutions that enable efficiencies, transparency and engagement for Smart Cities. This is about catering for the future of the public services and is about using technology to facilitate and support better planning and decision making. The smart citizen's concept comprises various factors like affinity to lifelong learning, social and ethnic plurality, flexibility, creativity, open-mindedness, and participation in public life. Problems associated with urban agglomerations can be solved by means of creativity, human capital, cooperation among relevant stakeholders, and their bright scientific ideas.



PLATINUM SPONSOR





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### SUSTAINABLE CITIES INITIATIVE (SCI)

A Green City study tour is being held in Vancouver, Canada from the 2-5 June 2015. The yearly tours is organized by the SCI of the World GBC.

Vancouver is a bright example of excellence in a sustainable urban development. This study tour will aim at educating people towards sustainable approach.

Vancouver is aiming to also implement its [Greenest City action plan 2020](#) and is working close with the government, residents, private sectors and organizations. This action plan has 10 goals namely :

- |   |                   |    |                      |
|---|-------------------|----|----------------------|
| 1 | Green Economy     | 2  | Climate Leadership   |
| 3 | Green Buildings   | 4  | Green Transportation |
| 5 | Zero Waste        | 6  | Access to Nature     |
| 7 | Lighter Footprint | 8  | Clean Water          |
| 9 | Clean Air         | 10 | Local Food           |

The kind of change needed for all of us to succeed in healthy and flourishing communities requires a world full of Greenest Cities. This green city study tour will provide inspiration for making other cities more sustainable cities around the world.

Within our 'Regenerating Port Louis' project (refer to Issue 4), we have organised that the current mayor of Port Louis, Lord Mayor A.J. Seedoo was personally invited by the mayor of Vancouver. Unfortunately with the coming municipal elections, the trip was not possible.



### GREEN STAR SA ACCREDITED PROFESSIONAL COURSE

GBCM will be holding its next GREEN STAR SA training course in June.

Green Star SA green building rating tools were developed by GBCSA (Green Building Council of South Africa) based on the Australian rating. The Africa Regional Network of the World GBC has chosen GREEN STAR SA as the preferred rating tool to be used in African countries. Local context reports have already been produced to contextualize the tools from Mauritius.

3 Accredited Professional courses will be offered, namely:

1. [Existing Buildings \(15 June 2015\)](#)
2. [New Buildings \(16 June 2015\)](#)
3. [Interiors \(17 June 2015\)](#)

The courses will be delivered by the education and training manager of GBCSA, 3 faculty members/industry experts (2 from South Africa).

The courses' format is that of a fluid interaction between lecture, Q&A, case study examples and in-depth exploration of each category and credit in the Green Star SA system, all in a multidisciplinary group of progressive professionals.

Participants attending the course will be eligible to take the examination to become a certified Accredited Professional. Accredited Professionals are promoted by the Green Building Council of SA and the GBCM on the online directory of the GBCSA and GBCM websites.

The first 30 attendees will receive a free copy of the Green Star SA office technical manual worth Rs3000.

### GBCM ON FACEBOOK and TWITTER

Follow us on [twitter](#) and [facebook](#) to stay up to date about GBCM and green building topics  
[@gbcmauriti](#)



### PRODUCT: GREEN ROADS MADE OF ALGAE

With an aim to become less dependent on petroleum-based products, a group of French researchers came up with a proof of concept for bio-asphalt from algae.

Micro-algae has already been utilized for some time now as colorants in the cosmetics industry and as food supplements. Lately scientists have been interested in the potential for refining micro-algae and they are emerging as a feasible substitute to petroleum-based products. The development of efficient and scalable refining processes will make algae an increasingly smart alternative.

The Algoroute project used bi-products from algae used in the cosmetics industry to create the bio-asphalt. Using hydrothermal liquefaction (pressurized water) the researchers turned the waste algae into a black, viscous, hydrophobic water repellent material. Although its chemical composition is very different from petroleum based asphalt, it exhibits similar performance properties.

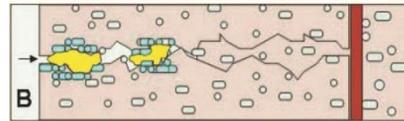
The researchers are currently investigating the product's performance over time and its potential for large scale production. The researchers believe that the use of algae not only negates the need for petroleum based products but also other oils derived from agricultural processes, which utilize land that would otherwise be used for food production.



Read More: [www.technology4change.com](http://www.technology4change.com)

### PRODUCT: BIO-CONCRETE, SELF-HEALLING CONCRETE

Self-healing is one of nature's most extraordinary talents. Researchers at Delft University have invented a revolutionary type of concrete that eradicates cracks by patching them up itself. The concrete mix consist of bacteria that, when exposed to water, produces limestone, filling in any unwanted fissures. The self-healing material contains granules of bacterial spores and calcium lactate, the nutrient the bacteria needs to survive. The spores lie dormant until they're activated by rainwater that makes its way through the concrete's cracks. Once the rainwater sets the mix in motion, the bacteria begins to feed on the nutrients to produce calcite, a primary component of limestone, subsequently filling in the concrete's gaps. The researchers have been able to heal cracks with a width of 0.5 mm in the lab and will soon begin testing their mix outside in real-life conditions. If all goes well, the regenerative concrete could be on the market in as soon as two to three years.



Read more: [www.citg.tudelft.nl](http://www.citg.tudelft.nl)

### MEMBERSHIP

The GBCM is a membership-based organisation, drawing its members from the entire spectrum of the property and construction industry. We are always looking forward to welcome new members.

If you would like to join GBCM visit our [website](#). Here you can determine your organization's category as well as annual fees and download the registration form

### UPCOMING INTERNATIONAL CONFERENCES AND EXHIBITIONS

#### World GBC Congress 2015- Hong Kong

The [world GBC annual congress 2015](#) will be held in Hong Kong from 27-31 October. The event will bring together the experience and insights of government policy setters, renowned experts and professionals to stimulate knowledge and ambition for a more sustainable future.

#### World Green Building Week

Join the movement! Organise or take part in a [World Green Building Week](#) event in your area between 21 and 27 September 2015. It's the biggest and best opportunity each year for us to shine the spotlight on our global movement and our collective mission – to create sustainable built environments.