



GBI Township Tool Framework

4th December 2010

Introduction

Green Rating tools are conceived to be able to assist architects, planners, designers, builders, property owners, government bodies, developers and end users to understand the impact of each design choice and solution towards being more environment-friendly.

The Malaysian Green Building Index was created to provide the building industry a common and verifiable mechanism to benchmark buildings within the Malaysian context.

The GBI Township Tool and this Framework takes it to another level and sets out a vision for sustainability within the built environment and provides guidance that will assist end users to deliver sustainable townships.



A message from

Ar. Boon Che Wee

Chairman, GBIAP
President, PAM

The building industry and the public are well acquainted with Green Building Index since the successful launch of the three rating tools for individual buildings. Now the time is right to introduce the Green Building Index Township Tool to widen the green transformation to our neighborhoods and communities.

This marks the culmination of over 18 months of public, industry and governmental consultation involving international peers and experts to establish a relevant local framework for Malaysia.

Achieving the Green Building Index certification for a township not only demonstrates the green commitment of a responsible developer but also establishes an environmental legacy and sustainability caveat for all future buildings in the township to match and outperform the community's expectations.

By outlining measures that are both environmentally and economically achievable and sound, we are confident that the tool will also dispel any misconceptions on the viability of sustainable development, and re-affirm our ability to provide for our needs with the most effective use of land and resources; without compromising the ability of future generations to provide for theirs.

As an enabling tool, the basic parameters set in place at the planning stage by the GBI Township Tool will pave the way for all new buildings in the township to achieve Green Building Index certification.

The launch of the GBI Township Tool at the threshold of a new decade is indeed a timely reminder for us to balance our national development agenda with our global environmental commitment as we strive towards developed nation status by 2020.

A stylized black ink signature of Ar. Boon Che Wee.

Ar. Boon Che Wee



A message from

Ed Cotter

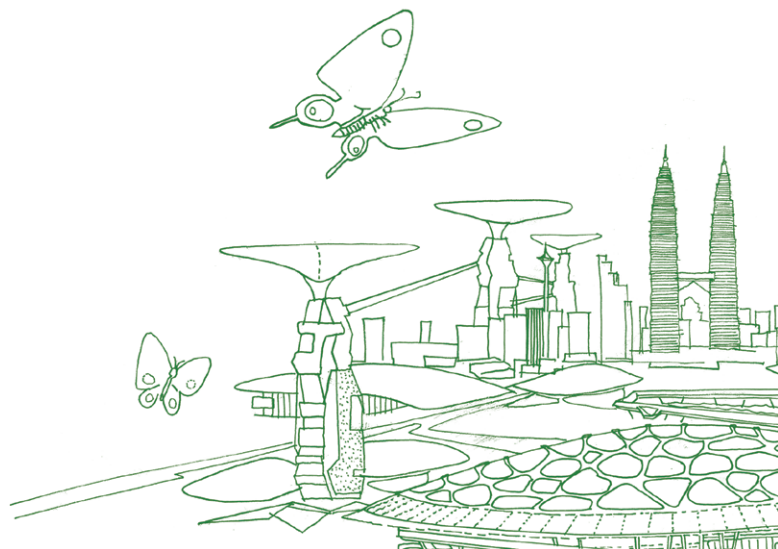
BREEAM Communities Tool

Sustainability is central to the long-term viability of our society. Green buildings are a key component of a sustainable society, but the construction of green buildings by themselves will never allow us to effectively address issues that sit outside of the scope of an individual building. Holistic sustainability within the built environment is about the relationship between the environmental, the social and the economic factors, and how it is then used by the community.

The GBI Township Tool will allow key stakeholders to take an integrated approach to addressing the environmental, social, economic and design factors associated with the delivery of a sustainable township. It provides an opportunity for the application of partnership based approach throughout the development process and will assist key stakeholders plan, design, build, manage and operate sustainable communities.

I applaud the Green Building Index and its partners for the initiative they have shown in developing the GBI Township Tool for Malaysia. It will play an integral role in the implementation and delivery of projects by the development industry that will assist Malaysia to achieve its core sustainability targets, as outlined in the Malaysian Government's Green Technology Policy.

Ed Cotter



What is a Sustainable 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.

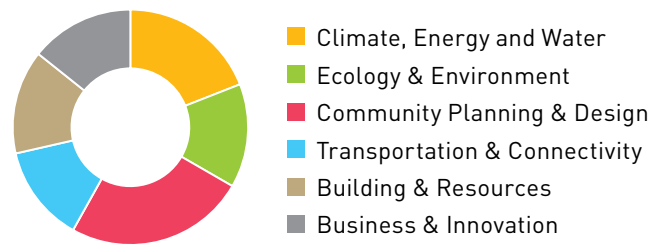
Purpose of Framework

The purpose of this framework is to facilitate discussion around how sustainable townships are planned, designed, built, operated and maintained.



The Triple Bottom Line Model

Core categories for the delivery of Sustainable Townships in Malaysia



1 Climate, Energy & Water



Sustainable Townships are balanced in their ongoing production and consumption of energy and water

They aim for zero net carbon emissions – by maximising passive design principles, minimising the impact of heat island effect, minimising energy consumption, adopting onsite energy generation, utilising renewable energy technologies such as co-generation and micro-generation.

They are water neutral – through the reduction of mains water consumption, rainwater harvesting and greywater recycling.

2 Ecology & Environment



Sustainable Townships respect their surrounding environment and native ecological systems

They are sensitive to the needs of the local ecology & biodiversity and aims to preserve and enhance the ecological value of the natural environment.

They assist in stabilising land – subsidence by reducing the impact of flooding and erosion.

3 Community Planning & Design



Sustainable Townships are planned and designed for the benefit of the community

They are created using an integrated approach to master planning and best practice urban design principles emphasising people priority and greenspaces.

Such goals help create a strong sense of place for communities – resulting in more livable and diverse neighbourhoods.

4 Transportation & Connectivity



Sustainable Townships are well-connected places that have a broad range of transportation options

They have excellent accessibility, connectivity and are well linked to surrounding districts.

They make good use of existing transport links and make priority and provision for future services – such as rail, bus and cycling networks.

5 Building & Resources



Sustainable Townships have a lower impact on resources – by applying the ‘more from less’ principle

They emphasise the need to minimise the use of highly resource intensive materials by using a life cycle approach.

They make effective use of local materials and resources for the construction of new communities.

6 Business & Innovation

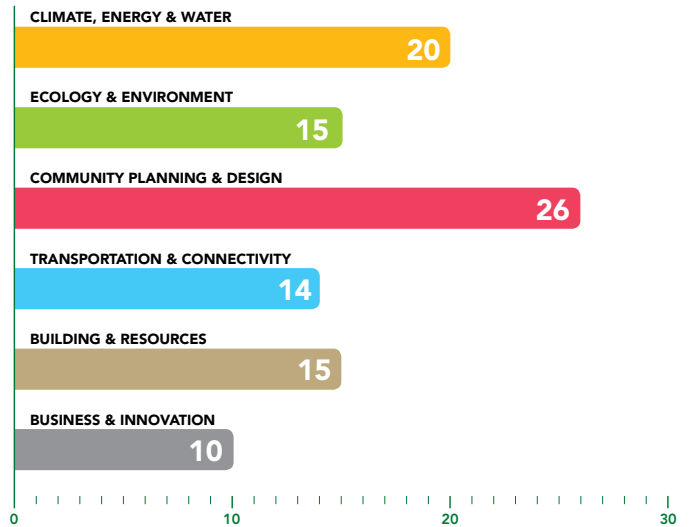


Sustainable Townships are tailored to respond to local needs in creating business and employment whilst incorporating innovative solutions

They provide employment opportunities for its residents to work closer to their homes and schools. They provide avenues for businesses to form and flourish.

They demonstrate best practices through the implementation of innovative technologies and solutions at many different levels of the township.

GBI Township Tool Points Allocation Chart



Application of the Township Framework

The framework can be used by a broad range of stakeholders; from central and local government agencies to architects, town planners, urban designers, contractors and developers.

The six core categories can be applied to all levels of township creation, management, operation and governance. The following are some possible areas of application and impact.

STAGES	POTENTIAL USERS	APPLICATION	EXPECTED RESULTS
Policy	Federal and Local Government Agencies	Framework used to inform the drafting of strategies and policies for development.	Resulting in policies that promote the delivery of best practice sustainable townships.
Planning	Local Government Planning Officers	Framework used to assess the sustainability of a potential township at the planning application stage.	Ensuring that developers have addressed key sustainability issues, including those specific to the local area.
Finance	Federal Government	Framework used as part of funding criteria for projects to ensure they deliver on the Government's Green Technology Policy targets.	Investment in projects that assist Malaysia meet key sustainability targets such as the reduction of carbon emissions.
Construction	Developers and Contractors	Framework used to identify skilled professionals and can be applied into the tendering process.	Ensures that 'delivery' professionals are trained and capable of building sustainable townships.
Regeneration	Private and Public Partnerships	Framework used to highlight areas within an existing township that need to be improved or addressed.	Enables existing township areas to be addressed and have additional sustainability measures introduced.

