

SUSTAINABLE TOWNSHIPS

BUILDING BETTER GREEN COMMUNITIES



**UPDATED
JULY 2011**

GBI TOWNSHIP TOOL

Launched 29 March 2011

MESSAGES



MESSAGE FROM

YAB DATO' SRI MOHD NAJIB BIN TUN HAJI ABDUL RAZAK

PRIME MINISTER OF MALAYSIA

First and foremost, I take great pride to congratulate the professional Architects and Engineers of Green Building Index (GBI) for the launch of Green Building Index Township Tool and Residential New Construction Tool Version II on 29 March 2011.

The Green Building Index, first launch on 21 May 2009, was created to provide a common and verifiable building industry mechanism to benchmark buildings within the Malaysian context. As a follow-up, the introduction of this GBI Township Tool is significant and timely to widen the green transformation to the next level in line with the Government's New Economic Model to become a high-income nation and low-carbon economy that is both inclusive and sustainable by 2020.

The Green Building Index Township Tool, as an enabling tool, will set in place from the initial planning stage the objective to create sustainable Townships.

For the long term viability of our society, we must look beyond the construction of green buildings alone. The three (3) pillars of sustainability between the environmental, the social and the economic must be addressed holistically. With this Township tool, it will provide an opportunity for the application of public-private smart partnership approach throughout the development process and will facilitate the developers and the professional team to plan, design, build, manage and operate sustainable townships.

It is clear the worst scenarios of climate disasters due to the global effects of carbon emissions and climate change should not be taken lightly. The building and construction sector which accounts for as much as 40% world's energy consumption contributes significantly to climate change and global warming due to the increasing concentration of greenhouse gases. The Green Building Index Township Tool sets out a vision for sustainability within the built environment which provides guidance to assist State and Local authorities, developers, builders and professionals to deliver more environment-friendly and sustainable townships and communities.

The government is very serious in its effort to address the effects of climate change and global warming and the need to shift more towards green technology and products, as the key driver to achieve a high-income but low-carbon economy so as to enhance the quality of life and to ensure a better future for all Malaysians.

Once again, I congratulate and applaud the initiatives and efforts of Green Building Index who with the full support of the building, housing and property industry has developed these important and significant rating tools for township and residential developments in Malaysia. I support and wish you every success in its implementation.

"1 Malaysia" People First. Performance Now.

YAB DATO' SRI MOHD NAJIB BIN TUN HAJI ABDUL RAZAK
PRIME MINISTER OF MALAYSIA



MESSAGE FROM

YB DATO' WIRA CHOR CHEE HEUNG

MINISTER OF HOUSING & LOCAL GOVERNMENT

I am honoured to launch the Green Building Index Township Tool and Residential New Construction Version II. The introduction of these new tools to widen the green transformation to our neighbourhoods and communities is both significant and timely. It is significant as the Township Tool and its framework takes it to another level and sets out a vision for sustainability within the built environment and provides guidance to assist developers, professionals and construction teams to deliver sustainable townships. It is timely as we must look beyond the construction of green buildings alone for the long term viability of our society. Green buildings are a key component of a sustainable society, but the construction of green buildings alone will never allow us to effectively address issues that are outside the scope of an individual building.

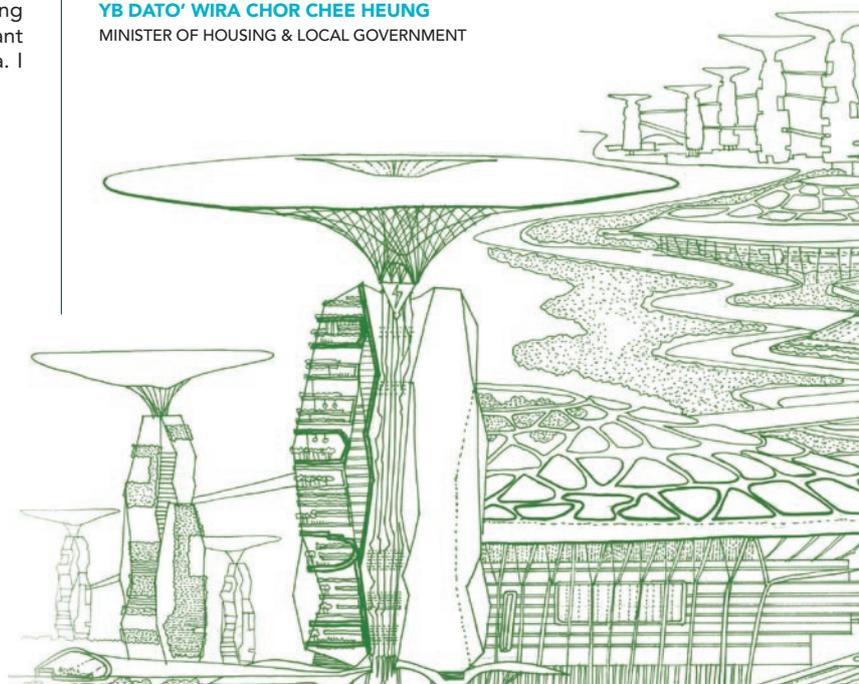
I am proud that the professional Architects and Engineers of Green Building Index have taken the pioneering initiative and so much effort to develop these tools. I am given to understand this marks the culmination of over 18 months of public consultation with stakeholders including Government Agencies, Local Authorities and international peers and expert groups to establish a relevant local framework for Malaysia.

With the introduction of this Township tool, it will provide an opportunity for the application of public-private smart partnership approach throughout the development process that will facilitate the Government Agencies and local Authorities, developers and the professional teams to work together to generate places that are well planned and designed, safe and secure, and enhance the surrounding environment.

As we transform to a high-income economy, we must be ready to change the old ways of doing things. The Green Building Index Township Tool now offers us an opportunity to develop neighbourhoods and communities in a more environment-friendly and sustainable way to enhance the quality of our lives.

The successful implementation of Green Building Index for sustainable townships and green buildings coupled with the people's will to change the way we have been living will help ensure a better future for all Malaysians.

YB DATO' WIRA CHOR CHEE HEUNG
MINISTER OF HOUSING & LOCAL GOVERNMENT





MESSAGE FROM

YB DATO' SRI PETER CHIN FAH KUI

MINISTER OF ENERGY, GREEN TECHNOLOGY AND WATER

Congratulations to Green Building Index for the launch of Green Building Index Township Tool and Residential New Construction Version II on 29 March 2011.

Burgeoning building, housing and property sectors are amongst the largest energy consumers. Escalating energy prices, better environmental awareness, stricter regulations and intense worldwide rivalry for green products and services call for innovative solutions that are able to transform budding economic and environmental pressures into sources of competitive advantage.

Energy efficiency is fundamental to reducing fossil fuel usage in the built environment and Green Building Index initiative is a strategic approach to improving the efficiency and sustainability of new Malaysian townships. The professional Architects and Engineers of the Green Building Index are leading the way in developing a framework for high-performance cities that minimise water consumption and waste production.

I commend the Green Building Index for fostering Corporate Social Responsibility among players in the energy, water and green technology segments via the inception of both the Township and Version II of the Residential New Construction Tools.

With the introduction of these tools, I hope that the building industry will find them useful in their effort to build more "Green Buildings" in the country.

YB DATO' SRI PETER CHIN FAH KUI

MINISTER OF ENERGY, GREEN TECHNOLOGY AND WATER



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.

AR. BOON CHEE WEE

CHAIRMAN, GBIAAP
PRESIDENT, PAM



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

FORMER HEAD OF BREEAM COMMUNITIES AND BREEAM INTERNATIONAL



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.



The Triple Bottom Line Model

Drivers for Sustainable Development

Climate change and the impacts of global warming, have forced both governments and industry to make substantial changes to the way that they operate and function – the old business-as-usual adage is no longer acceptable in anyone's language.

In recognition of this, the Malaysian Government has taken a significant step forward, especially as a developing nation, by committing to a minimum reduction of 40% of its carbon emissions by 2020 (based on 2005 carbon emission levels).

It must be noted, that the reduction of carbon emissions is only part of the solution, there is a clear need for a holistic approach to addressing sustainability issues, an approach that incorporates both mitigation and adaptation measures.

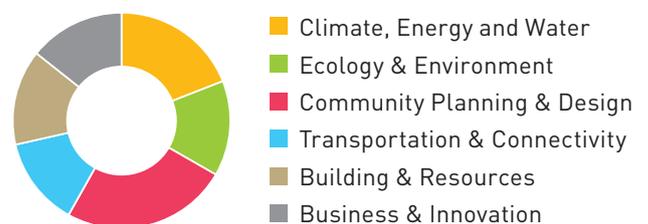
Countries throughout the globe have adopted various approaches and strategies for addressing climate change and driving sustainable development. The Malaysian Government has set a range of ambitious policies and targets – what is now needed is a vehicle for the implementation and delivery of projects that support the government's goals.

What is the GBI Township Tool?

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 green property development.

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



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.

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.

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.

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.

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.

6 Business & Innovation



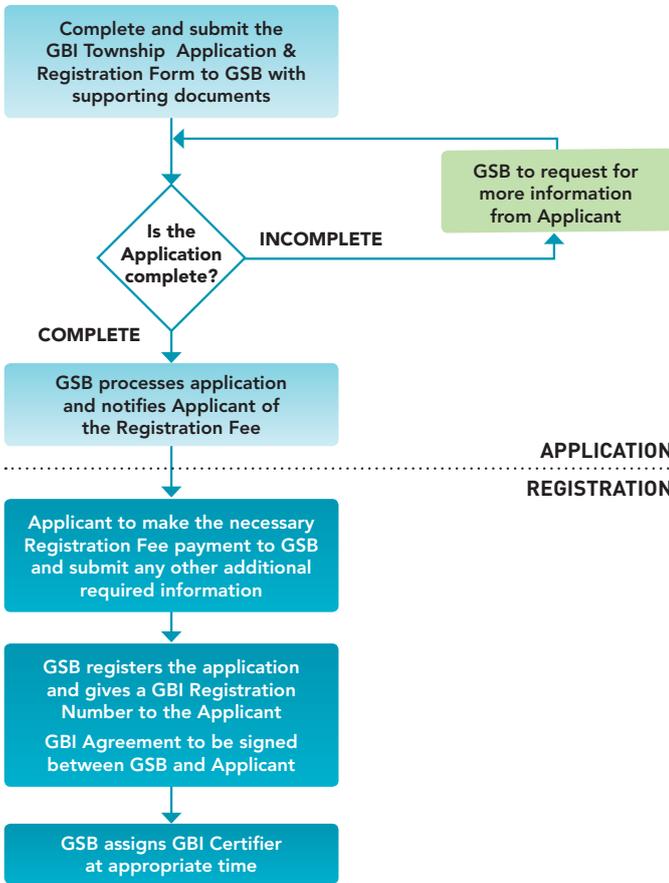
Sustainable Townships are tailored to respond to local needs in creating business and employment whilst incorporating innovative solutions

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.

THE GBI TOWNSHIP A

STAGE 1 APPLICATION & REGISTRATION

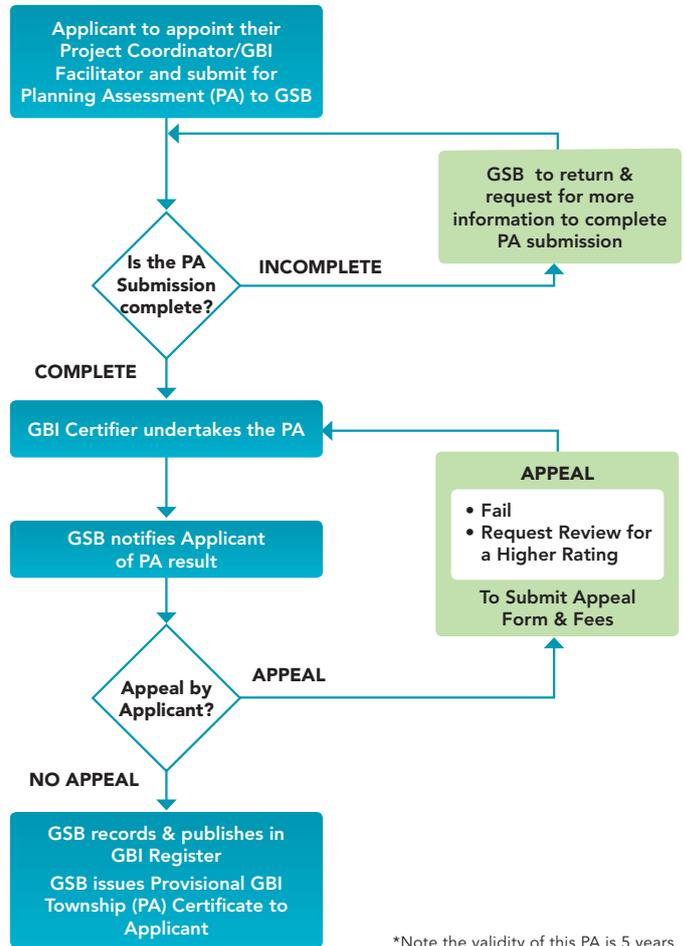


*GSB = Greenbuildingindex Sdn Bhd

Complete and submit the GBI Application Form with the Applicants contact details, project information and supporting documents to Greenbuildingindex Sdn Bhd (GSB). The Registration Fee will be set depending on the size of the project. Upon payment of the fees, a GBI registration number will be given and the GBI Terms and Conditions will be signed between the Applicant and GSB. A GBI Certifier will then be appointed for the project.

Note: Minimum to register shall be 20 acres and 50% of buildings to be GBI Certified.

STAGE 2 PLANNING ASSESSMENT (PA)



*Note the validity of this PA is 5 years.

The Applicant may submit a development for GBI Planning Assessment (PA) either directly or through an appointed GBI Facilitator. Submission should be done when all key sustainable strategies and criteria are finalised. The GBI Certifier will then undertake the Planning Assessment for GSB. This may include a presentation by the Applicant and the Project Team or by the GBI Facilitator. The GBI Certifier will upon completion, table the assessment report to the GBIAP to register and award the certification. The Provisional GBI Township (PA) certification will then be issued with the accompanying GBI score sheet to show the scores achieved

THE GBI TOWNSHIP REGISTRATION FEES

SIZE OF PROJECT	ACREAGE (acres)	REGISTRATION FEES (RM)
SMALL	20 to 40	15,000.00
INTERMEDIATE	41 to 100	29,000.00
MEDIUM	101 to 150	40,000.00
LARGE	151 to 350	55,000.00
EXTRA LARGE	351 to 500	90,000.00
MEGA PROJECT	501 to 1,000	135,000.00
	Above 1,000	Fee will be determined on a project-by-project basis

PROJECT ASSESSMENT

Fee as per prescribed includes:

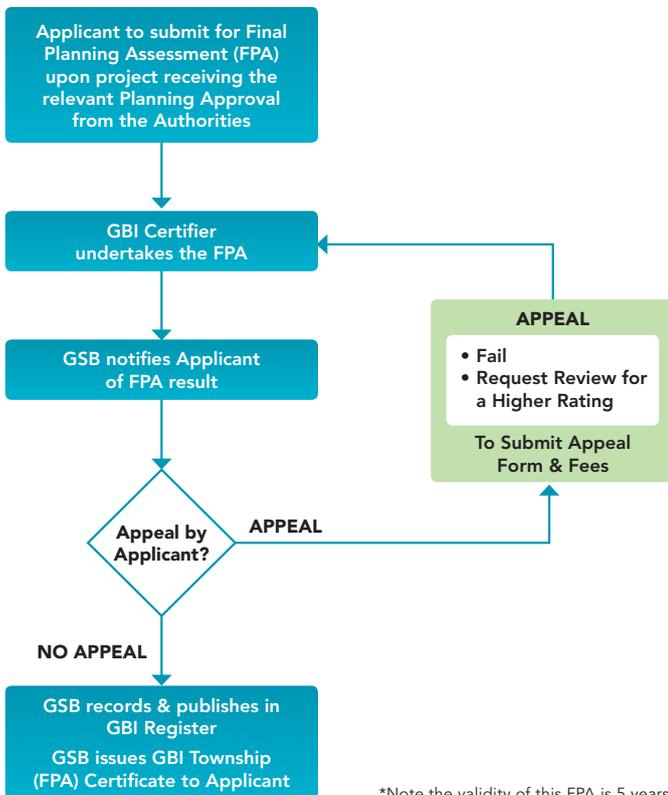
- 1 Planning Assessment (PA)
- 1 Final Planning Assessment (FPA)
(PA/FPA are subject to renewal every 5 years. Additional Fees will apply.)
- 1 Completion & Verification Assessment (CVA)

*Rates shown are as-of-date of Registration and may be revised from time to time.

*Rates shown are excluding Government Service Tax (GST).

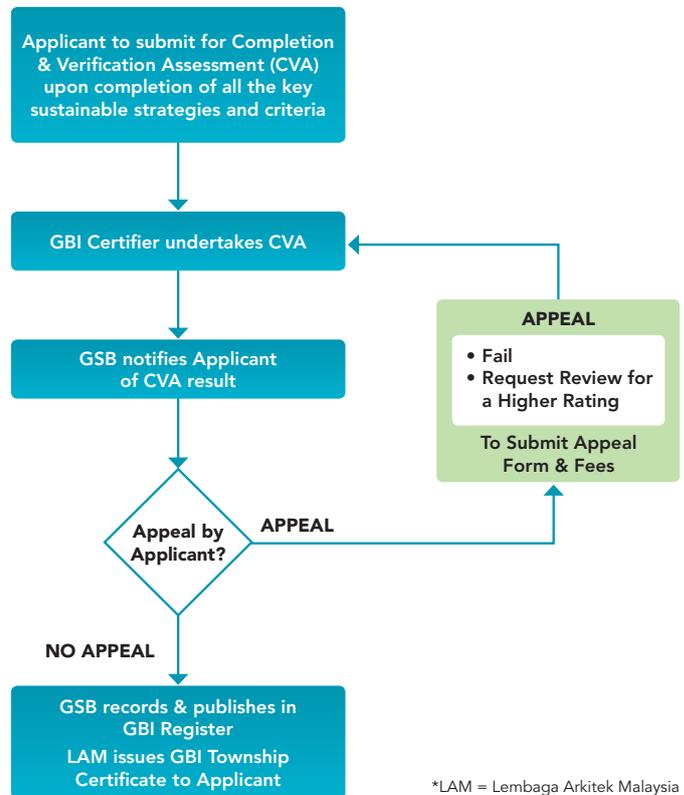
ASSESSMENT PROCESS

STAGE 3 FINAL PLANNING ASSESSMENT (FPA)



Upon the project receiving the relevant Planning Approval from the Authorities the Applicant should submit for the Final Planning Assessment.

STAGE 4 COMPLETION & VERIFICATION ASSESSMENT (CVA)



Upon completion of all the key sustainable strategies and criteria the Applicant should submit for Completion and Verification Assessment (CVA). The GBI award will be issued by the GBIAP upon completion of the CVA Assessment.

INCENTIVES FOR BUILDINGS OBTAINING GREEN BUILDING INDEX 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 to this tax exemption are addressed in the guidelines issued by Lembaga Hasil Dalam Negeri Malaysia (LHDNM).

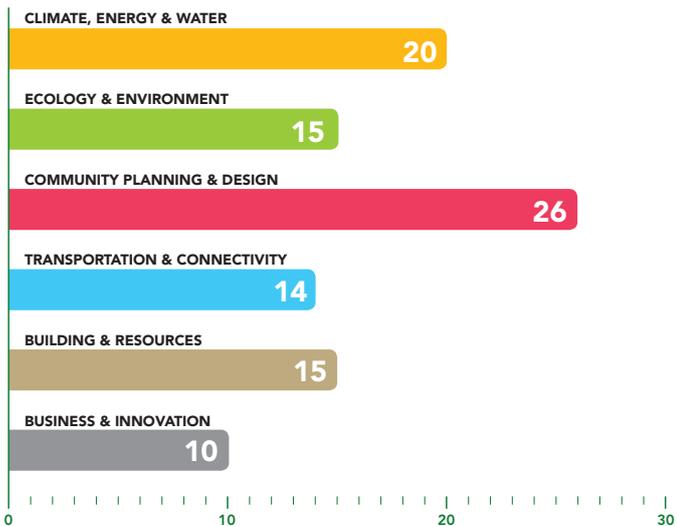
B) STAMP DUTY EXEMPTION

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.

GBI Township Tool Points Allocation Chart



GREEN BUILDING INDEX CLASSIFICATION

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

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.



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