Malaysia's International Green Benchmark
Why have MALAYSIAN Green Rating Tool? / Why develop Malaysia’s own Green Building Rating Tool?

• Most available tools are for temperate climates. Apart from Green Mark this will be the FIRST TROPICAL GREEN TOOL
• Identify PRIORITIES & LOCAL NEEDS
• Take advantage of Local RESOURCES
• Recognize Local CHALLENGES
• Suit our local CLIMATE & CULTURE
• Reflect local PRACTICES & STANDARDS
• Include all Local STAKEHOLDERS
• Recognize GLOBAL CHALLENGES
Compliance with Malaysian Laws and Industry Practices

GBI has incorporated the following Malaysia’s own building bylaws, codes of practices, building standards and guidelines into the tools:

- Uniform Building By-Laws (UBBL), incl Amendment 2012 by law 38A,
- Local Authorities’ Structure Plans,
- Malaysian Standards such as MS1525,
- MSMA,
- CIDB’s IBS and QLASSIC,
- DoE Act,
- KPKT’s Guidelines on SWM,
- RE Act
Background of Green Building Index
Aug 2008

- PAM Council formed Sustainable Committee with initial funding of RM100,000
- Briefed and obtain full support from BIPC
- Invited ACEM to join Committee to develop tool

Oct/Nov 2008

- Visited BCA Singapore to study Green Mark
- Visited GBC Australia to study Green Star
Oct/Nov 2008

- Introduced GBI at Green Design Forum at KLCC CEC
- Launched www.greenbuildingindex.org
- PAM/ACEM registered GREENBUILDINGINDEX SDN BHD

Dec 2008

- Decided to draft both GBI Non-Residential & Residential buildings simultaneously
Briefing & Other Activities

- Briefed CIDB (QLASSIC incorporated in GBI)
- Briefed USM and UPM – to incorporate GBI into their curriculum
- Commenced regular MS1525 seminars in Feb 2009
- Detail GBI seminar commencing 31/3/09
- Briefing to KTAK, MIDA, JKR, FIABCI etc
- Launch of GBI in April/May 2009. The Prime Minister of Malaysia has been invited to officiate the launch
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LEMBAGA ARKITEK MALAYSIA
LEMBAGA JURUTERA MALAYSIA

GREENBUILDINGINDEX SDN BHD

GBI A PANEL
# PUBLIC TRUST

<table>
<thead>
<tr>
<th>RELATIONSHIP</th>
<th>BUILDING INDUSTRY SUPPORT. PUBLIC &amp; GOV SUPPORT</th>
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<tbody>
<tr>
<td>REPUTATION</td>
<td>SET UP &amp; MANAGED BY PROFESSIONALS</td>
</tr>
<tr>
<td>RESULTS</td>
<td>TRANSPARENCY IN GBI TOOL DEVELOPMENT &amp; ASSESSMENT METHOD</td>
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</tbody>
</table>
More about Green Building Index

- Non-Profit Organisation
- Recognised by the World Green Building Council (WGBC)
- Recognised by Malaysia Government
- Recognised by many local Government authorities
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GBI Tool Development

• By Volunteers representing stakeholders
• To suit Malaysian conditions
• To benefit Malaysian environment
• To incorporate Malaysian laws and code of practice
Recognize

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

I wish to congratulate Pertubuhan Akitek Malaysia (PAM) and the Association of Consulting Engineers Malaysia (ACEM) for the launch of the new Green Building Index (GBI) tool to help property owners upgrade their existing buildings to become more “Green” and sustainable.

This is an important step towards achieving the Vision 2020 of building a harmonious, environment-friendly and sustainable Malaysia.

In addition, GBI Malaysia is a good example of how the private sector, professionals and NGOs can work together to come up with an internationally accepted standard for Green Buildings in the tropics. We appreciate and encourage more of such innovation and creative input.

I support and wish you every success in its implementation.

“1 MALAYSIA” People First. Performance Now.

YAB DATO’ SRI MOHD NAJIB

“1 MALAYSIA” People First. Performance Now.

YAB DATO’ SRI MOHD NAJIB
GBI’s formation was supported by members of the Malaysia Building Industry Presidents’ Council (BIPC) which comprises the Presidents representing the following organizations:

- Architects (PAM),
- Engineers (ACEM),
- Developers (REDHA),
- Contractors (MBAM),
- Town Planners (MIP),
- Interior Designers (MIID),
- Surveyors (RISM),
- Engineers (IEM)
Accreditation Panel & Process

- GBI Accreditation Panel (GBIAP) is formed to accreditate certified buildings and GBI Facilitators.

- GBIAP is an independent body consisting of industry recognised professionals consisting from PAM, ACEM, RISM.

- Volunteers are appointed by PAM and ACEM, on a yearly basis, and are non-permanent

- Most members of the GBIAP are members of the tool development committees, hence are very knowledgeable about the tools and the accreditation process.
GBI RATINGS

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GBI TOOLS

- NRNC
- RNC
- NREB
- INC
- T
GBI BUILDING TYPES

- Commercial
- Residential
- Industrial

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Number of Rating Tools

Existing Rating Tools:-

• Residential New Construction (RNC) version 3.0
• Non-Residential New Construction (NRNC)
• Non-Residential Existing Building (NREB)
• NRNC: Data Centre
• NREB: Data Centre
• NRNC: Retail (developed with PPK)
• NREB: Retail (developed with PPK)
• Industrial New Construction (INC)
• Industrial Existing Building (IEB)
• Township Tool
• Hotel & Resort Tool (developed with MAH/MAHO)
• Interior Tool (developed with MIID)
• Hospital Tool
• Residential Existing Building

One Rating Tool under development:-

• Heritage Tool

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COLLABORATION with INDUSTRY

**INC, IEB TOOLS**
in collaboration with FMM

**TOWNSHIP TOOL**
in collaboration with KeTTHA’s LCCF

**HOSPITAL TOOLS**
in collaboration with Health Industry Partners

**NRNC RETAIL, NREB RETAIL TOOLS**
in collaboration with PPK

**NRNC RESORT, NREB RESORT TOOLS**
in collaboration with MAH

**GBI INTERIORS TOOL**
in collaboration with MIID
GBI TRAINING

- 34 GBI Facilitators’ Courses conducted
  Over 3,200 GBI Facilitators trained

- 852 qualified GBI Facilitators listed on website

- 24 CxS listed on website

- 10 GBI Facilitators’ FAQ Sessions conducted

- Many Consultation Sessions held fortnightly
<table>
<thead>
<tr>
<th></th>
<th>NRNC</th>
<th>RNC</th>
<th>NREB</th>
<th>INC</th>
<th>IEB</th>
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<td>13</td>
<td>9</td>
<td>3</td>
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<td>265</td>
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</table>

As of 15 Apr 2017

Source: GBI
GBI REGISTERED PROJECTS

BY TOOL

<table>
<thead>
<tr>
<th>NRNC</th>
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<td>20</td>
<td>765</td>
</tr>
</tbody>
</table>

Greening Malaysia one building at a time

As of 15 Apr 2017

Source: GBI
GBI CERTIFIED PROJECTS

BY RATING

<table>
<thead>
<tr>
<th>PLATINUM</th>
<th>GOLD</th>
<th>SILVER</th>
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<td>16</td>
<td>89</td>
<td>43</td>
<td>248</td>
<td>396</td>
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</tbody>
</table>

As of 15 Apr 2017

Source: GBI
Greening Malaysia one building at a time

GBI REGISTERED PROJECTS

BY STATE

<table>
<thead>
<tr>
<th>KUALA LUMPUR</th>
<th>SELANGOR</th>
<th>PENANG</th>
<th>PUTRAJAYA</th>
<th>JOHOR</th>
<th>OTHERS</th>
<th>TOTAL</th>
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<tr>
<td>235</td>
<td>284</td>
<td>71</td>
<td>36</td>
<td>66</td>
<td>73</td>
<td>765</td>
</tr>
</tbody>
</table>

As of 15 Apr 2017

Source: GBI
PAM Malaysian Institute of Architects moves into its new GBI Platinum rated Centre

GBI contributed to 778,346 tCO2 e reduction in carbon to date

Energy Efficiency Standard MS1525 passed into Building By-law 1-1-2017

Government Tax Incentive for GBI Certified buildings extended to 2020
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PAM Building – GBI Platinum
(Exterior & Interior)
PAM CENTRE 2016
A GBI PLATINUM RATED GREEN BUILDING KEY FEATURES

• BEI Building Energy Intensity  102 kWh/m2/yr
• Daylight allow lights to be switched off during office hours 90% of time
• Only office work area are air conditioned. Others have natural ventilation
• Roof BIPV yields 28,700 KW of electricity equal to 7.38% building energy use
• High efficiency water fittings gives savings of 38%
• Bubble slab construction allows for no columns inside the building
ENERGY EFFICIENCY STANDARDS PUT INTO BUILDING BY-LAWS

• EE Standard MS1525 in by-law 1-1-2017
• Heat gain through building fabric cannot exceed 50 w/m²
• Heat gains through roofs cannot exceed 25 w/m²
• Similar by-laws are already in operation in Singapore & Hong Kong

• Government Tax Incentive for GBI Certified buildings extended from 2009/2014 to 2020 & tax exemption for Green Consultants for 5 years
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PAM’s Events / Activities Related to Green Building

BSEEP NATIONAL CONFERENCE 2017

Venue: Plenary Theatre, Kuala Lumpur Convention Centre
Date: 11th May 2017

PAM MBCP CPD SEMINAR 2015

GBI PROFESSIONAL SERIES 2015

13 August 2015 (Thursday), 8.30am - 5.30pm
Bakawal S, Vivatel, Jalan Loko Yew, Kuala Lumpur

SEMINAR ON Lighting and Daylighting Strategies

PROGRAMME
3.30pm Registration
4.00pm Opening Remarks
9.00am Safety and Performance Aspects of Lighting in Malaysia
9.30am Lighting Emphasis in Lighting and How to Choose Glare Lighting
9.30am Technical
11.00am Using Natural Daylight
11.45am Progress of GBI Initiative Lighting in Malaysia
12.15pm Lunch
2.00pm Implementing Sustainability Process in the Lighting Control System
3.00pm Guide 10 Lighting Management Solutions
3.45pm End (lighting and Case Studies
4.00pm GBI
4.00pm End of Seminar

LIMITED SEATS!
Total Capacity: 400 seats

For more information please contact
PAM Green Building Index

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PAM Green Building Index
Greening Malaysia one building at a time

Thank You!

www.pam.org.my
www.greenbuildingindex.org