Government Initiatives, Policies, Incentives & Green Construction Updates
Government Initiatives, Policies & Incentives for Green Construction

Sustainability

• Initiatives

Policies

• Incentives
Roadmap

United Nations Conference on the Human Environment

United Nations set up the World Commission on Environment and Development

Bruniland Report on definition and principles of sustainable development

Rio Summit: World commitment on sustainable development & Agenda 21

Kyoto Declaration on Green House Emission

Johannesburg Earth Summit 2002, Rio

Bali Roadmap Towards International agreement on Climate Change


Malaysia National Environmental Policy

Malaysia (Local Agenda 21)

Planning Doctrine – holistic dev. for land use planning

SREP (small renewal energy power program)

2004:

Ministry of Natural Resources and Environment

2005 – National Physical Plan 21

2006 - Malaysia Ninth Malaysia Plan – 4th Thrust (Improve Standard and Sustainability of Quality of Life)- RE – From Waste to Energy

2006 – National Urbanisation Policy

April 2009 – Ministry of Energy, Green Technology and Water

July 2009 – National Green Technology Policy

10th Malaysia Plan

In 2009, Prime Minister Datuk Seri Najib Tun Razak made a pledge at the United Nations Climate Change Conference 2009, Copenhagen (COP-15) to deliver to the world, Malaysia's ambitious carbon emission of 40%. The PM's COP-15's pledge will remain unachievable unless there is real integration and understanding of this green culture between industrial supply realities and the lifestyle demand of Malaysians.
Initiatives
Environmental management is an incipient industry with substantial growth potential in green technology and will spin off new categories of professionals and new areas of specialization for architectural and engineering services. The key strategies to nurture the growth of this segment include:

- Streamlining the Green Technology Council to drive the green technology agenda across multiple ministries and agencies which include regulatory aspects, developmental, awareness and promotion; and

- Creating the environment and demand for the green technology industry to spur business opportunities for professional and service providers by:
  - Developing and enforcing regulations especially on energy efficiency in buildings for new developments;
  - Promoting investment in renewable energy to provide long-term contracts for renewable energy providers and create the spillover effects on the related domestic service providers; and
  - Promoting culture of conservation and efficiency in energy and water use.
## 10th Malaysian Plan

<table>
<thead>
<tr>
<th>Sector</th>
<th>Highlight Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Phasing out of incandescent light bulbs by 2014 to reduce carbon dioxide emissions by an estimated 732,000 tonnes and reducing energy usage by 1,074 gigawatts a year</td>
</tr>
<tr>
<td></td>
<td>Increasing energy performance labelling from four (air conditioner, refrigerator, television and fan) to ten electrical appliances (six additional appliances - rice cooker, electric kettle, washing machine, microwave, clothes dryer and dishwasher). Labelling appliances enables consumers to make informed decisions as they purchase energy efficient products</td>
</tr>
<tr>
<td>Township</td>
<td>Introduction of guidelines for green townships and rating scales based on carbon footprint baseline and promoting such townships starting with Putrajaya and Cyberjaya</td>
</tr>
<tr>
<td>Industrial</td>
<td>Increasing the use of energy efficient machineries and equipment such as high efficiency motors, pumps and variable speed drive controls</td>
</tr>
<tr>
<td></td>
<td>Introduction of Minimum Energy Performance Standards for selected appliances to restrict the manufacture, import and sale of inefficient appliances to consumers</td>
</tr>
<tr>
<td>Building</td>
<td>Revision of the Uniform Building By-Laws to incorporate the Malaysian Standard: Code of Practice on Energy Efficiency and Renewable Energy for Non-Residential Buildings (MS1525). This allows for integration of renewable energy systems and energy saving features in buildings</td>
</tr>
<tr>
<td></td>
<td>Wider adoption of the Green Building Index (GBI) to benchmark energy consumption in new and existing buildings</td>
</tr>
<tr>
<td></td>
<td>Increasing the use of thermal insulation for roofs in air conditioned buildings to save energy</td>
</tr>
</tbody>
</table>
To develop Putrajaya and Cyberjaya as pioneer townships in green technology, as a showcase for the development of other townships in the country.
Lead by Example

Key Goals 2010: Green Township

- Developing Green Township Guidelines
- Developing Green Rating System
- Carbon Footprint Baseline for Putrajaya & Cyberjaya
- 10% savings in energy & water in all government buildings
Policies
Green Policies

**Emission per capita (2007)**
- Malaysia: 6.7 tonnes of CO₂ per person
- United States: 19.1 tonnes of CO₂ per person
- Singapore: 9.8 tonnes of CO₂ per person
- Japan: 9.7 tonnes of CO₂ per person
- United Kingdom: 8.6 tonnes of CO₂ per person
- China: 4.6 tonnes of CO₂ per person
- Thailand: 3.5 tonnes of CO₂ per person
- Indonesia: 1.7 tonnes of CO₂ per person
- India: 1.2 tonnes of CO₂ per person

**Emission intensity (2007)**
- Malaysia: 1.3 tonnes of CO₂ per US$1000 GDP
- United States: 0.5 tonnes of CO₂ per US$1000 GDP
- Singapore: 0.3 tonnes of CO₂ per US$1000 GDP
- Japan: 0.2 tonnes of CO₂ per US$1000 GDP
- United Kingdom: 0.3 tonnes of CO₂ per US$1000 GDP
- China: 2.5 tonnes of CO₂ per US$1000 GDP
- Thailand: 1.3 tonnes of CO₂ per US$1000 GDP
- Indonesia: 1.6 tonnes of CO₂ per US$1000 GDP
- India: 1.7 tonnes of CO₂ per US$1000 GDP

*World Average: 4.35 tonnes of CO₂ per person, 0.73 tonnes of CO₂ per US$1000 GDP*

*SOURCE: International Energy Agency, 2009*
Green Policies

**May 2001**
- Suruhanjaya Tenaga

**July 2005**
- MBIPV programme
  - UNDP-GEF & Min. Energy, Water & Communication

**April 2009**
- KeTTHA
  - Green Technology on national agenda with KTAK now restructured as KeTTHA

**November 2009**
- National Green Tech. & Climate Change Council established by cabinet

**January 2010**
- RM1.5 billion allocation for Green Technology financing scheme announced [http://www.gtfs.my/](http://www.gtfs.my/)

**October 2010**
- SIRIM Eco-Label
  - Became a member of Global Ecolabel Network (GEN)

**May 2001**
- Small Renewable Energy Program (SREP)

**January 2007**
- MBIPV Suria1000 programme

**October 2009**
- Income Tax Exemption Order (2009) for GBI certified building

**December 2009**
- 40% reduction in carbon intensity from baseline year of 2005

**April 2010**
- PTM is restructured as "Malaysia Green Technology Corp" or GreenTech Malaysia

**April 2010**
- National Green Technology Master plan published

- Sustainable Energy Development Authority Act and Renewable Energy Act gazetted

8th December-2012
Green Policies
## Green Policies

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>- Ensure economic, social and cultural progress through environmentally sustainable development</td>
<td>- Ensure sustainable development</td>
<td>- Streamline and coordinate across existing legislation and policies</td>
</tr>
<tr>
<td>- Strategies focus on effective management of natural resources and the environment, prevention and control of pollution, strengthening institutional capacity, education and awareness efforts and formulation of action and implementation plans</td>
<td>- Develop roadmaps to guide application of green technologies in various sectors, including power generation, transport and construction</td>
<td>- Establish inter-ministerial and cross-sectoral committee to drive and facilitate implementation of adaptation and mitigation measures</td>
</tr>
<tr>
<td></td>
<td>- Establishment of a Green Technology Financing Scheme (GTFS) with a RM1.5 billion fund to encourage investments in green technology, construction and innovation</td>
<td>- Identify options and strategies to achieve a low-carbon economy</td>
</tr>
</tbody>
</table>
Green Policies

NATIONAL GREEN TECHNOLOGY POLICY

Green Technology shall be a driver to accelerate the national economy and promote sustainable development

1. Strengthen Institutional Frameworks
2. Provide A Conducive Environment For Green Technology Development
3. Intensify Human Capital Development In Green Technology
4. Intensify Green Technology Research And Innovations
5. Promotion And Public Awareness
Green Policies

NATIONAL GREEN TECHNOLOGY & CLIMATE CHANGE COUNCIL
Majlis Teknologi Hijau Dan Perubahan Iklim (MTHPI)

Working Committees under the MTHPI
1. Work Group on Industry
2. Work Group on Human Resources
3. Work Group on Research & Innovation
4. Work Group on Transportation
5. Work Group on Green Neighbourhood
6. Work Group on Promotion & Public Awareness
7. Work Group on Green Development
8. Work Group on Climate Change
<table>
<thead>
<tr>
<th></th>
<th>Green Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Industry</td>
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<tr>
<td>2.</td>
<td>Human Resources</td>
</tr>
<tr>
<td>3.</td>
<td>Research &amp; Innovation</td>
</tr>
<tr>
<td>4.</td>
<td>Transportation</td>
</tr>
<tr>
<td>5.</td>
<td>Green Neighbourhood</td>
</tr>
<tr>
<td>6.</td>
<td>Promotion &amp; Public Awareness</td>
</tr>
<tr>
<td>7.</td>
<td>Green Development</td>
</tr>
<tr>
<td>8.</td>
<td>Climate Change</td>
</tr>
</tbody>
</table>
Green Policies

Ministry of Housing and Local Government (KPKT)

Work Group on Green Neighbourhood
Jawatankuasa Kerja Kejiranan Hijau

Task Force on Green Neighbourhood & Green Technology (Department of Town & Country Planning)

Task Force on Sustainable Solid Waste Management (National Department of Solid Waste Management)

Documents:
1. Garis Panduan Perancangan Kejiranan Hijau
2. Low Carbon Cities Framework
3. Green Technology Road Map
4. Green Building Index - Township
Low Carbon Cities Framework (LCCF)

Comprehensive system to guide the development of Low Carbon Cities

- Comprise framework & assessment system
- Developed by KeTTHA
- Suitable for Local Councils, Developers, Town Planners and the general public
SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY (SEDA) ACT 2011

1. Current laws only cover electricity. This Act covers ALL form of energy use e.g. District cooling, biomass, thermal plants etc. The scope covers ‘Sustainability’ of energy (not only ‘Efficiency’).

2. The SEDA has wide power to request for data, collect funds, impose penalties, disseminate funds and regulate energy use.
In the budget speech for 2010, Dato’ Seri Najib Tun Abdul Razak, the Prime Minister of Malaysia announced the establishment of Green Technology Financing Scheme as an effort to improve the supply and utilization of Green Technology. The scheme could benefit companies who are producers and users of green technology.

As a sign of commitment, the Government will bear 2% of the total interest/profit rate. In addition, the Government will provide a guarantee of 60% on the financing amount via Credit Guarantee Corporation Malaysia Berhad (CGC), with the remaining 40% financing risk to be borne by participating financial institutions (PFIs).
“to further boost the production and utilization of green technology-based products, the fund for GTFS will be increased by RM2 billion and the application period extended for another three years ending 31 December 2015”

YAB Dato’ Sri Mohd Najib Tun Haji Abdul Razak
Prime Minister at 2013 Budget Speech
Incentives
2. Feed in Tariff (R.E. Act)
4. Tax Exemption Order (8) 2009 for buildings certified GBI
5. ‘Investment Promotion Act; 1986’ Pioneer Status:
   a) Energy Conservation Project by Contractor
   b) Generation of Energy using R.E.
Incentives

Renewable Energy Act 2011

1. Feed in Tariff for Renewable Energy,
2. R.E. Eligible are Biomass and Solar,
3. The FiT payback cost for RE generated electricity is almost 3x normal buy in rate.
4. Additional FiT rates are given for:
   (a) PV integrated with roof/building system
   (b) Local sourced inverters
5. FiT rates are subject to digression rates every subsequent year.
Incentives for Renewable Energy, Energy Efficiency & Green Buildings in Malaysia
## Incentives

<table>
<thead>
<tr>
<th>Sector / Activity</th>
<th>Corporate tax incentives</th>
<th>Indirect tax incentives</th>
</tr>
</thead>
</table>
| Companies generating energy from renewable sources | • Pioneer status with tax exemption of 100% of statutory income for ten years; or  
• Investment tax allowance on qualifying capital expenditure incurred to be set-off against 100% of statutory income for five years. | • Import duty and sales tax exemption on equipment used to generate energy from renewable sources not produced locally; and  
• Sales tax exemption on equipment purchased from local manufacturers. |
| Companies generating renewable energy for own consumption | • Investment tax allowance on qualifying capital expenditure incurred to be set-off against 100% of statutory income for five years. |  |
| Others | • N/A | • Import duty and sales tax exemption on solar photovoltaic system equipment for the usage by third parties be given to importers including photovoltaic service providers approved by the Energy Commission; and  
• Sales tax exemption on the purchase of solar heating system equipment from local manufacturers. |
### Incentives

| Building expenditure incurred by a person or company (Income Tax (Exemption) (No. 8) Order 2009*) | 100% tax exemption on additional capital expenditure to obtain GBI certificate  
Set-off against 100% statutory income  
Once in a lifetime claim on GBI buildings  
Incentive claimed once certificate is issued for new buildings and upgrade of existing buildings  
Effective date: Buildings awarded GBI certificates from 24 October 2009 to 31 December 2014 |
| --- | --- |
| Property buyers (Stamp Duty (Exemption) Order 2009) | Stamp duty exemption based on additional cost to obtain GBI certificate  
Buildings and residential properties with GBI certificate  
Applies only to purchases from developers  
First property owner only  
Effective date: Sale and purchase agreements executed from 24 October 2009 until 31 December 2014. |

*Note: Not applicable to a company which has been granted investment tax allowance or pioneer status under the Promotion of Investments Act 1986 [Act 327] in respect of qualifying expenditure incurred on activity for generation of renewable energy or for conservation of energy.*
RENEWABLE ENERGY QUOTA OPEN FOR BIDDING ON 17TH DECEMBER 2012

SEDA announced the opening of FiT quota for bidding to start on 17th December 2012 for 20MW, i.e. 5MW for first half of 2013 and 15MW for second half of 2013. They will impose a restriction that a maximum application per entity is 500kWp or below.

Find out more from SEDA @ www.seda.gov.my OR call Gading Kencana @ 03-5513 9888 (Nisa) or call Nisa @ 016-2610 5871 or email to irguntortobeng@yahoo.com to find out great discounts for MGBC members.
1. SAVE or Sustainability Achieved via Energy Efficiency, a program spearheaded by the Ministry of Energy, Green Technology and Water to improve energy efficiency through 5 initiatives.

2. The pilot initiative is to stimulate sales of energy-efficient chiller by providing rebates to qualified business owner to replace existing chillers with new energy efficient chillers.

3. The rebate program starts on July 7, 2011 and will last until all rebates are taken at the end of 2012.

<table>
<thead>
<tr>
<th>Total Target Quantity / Quota Allocated</th>
<th>Total Redeemed Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jumlah kuantiti sasaran / Peruntukan Kuota</strong></td>
<td><strong>Jumlah Kuantiti ditebus</strong></td>
</tr>
<tr>
<td>(Refrigerant Tons/RT)</td>
<td>Value (RM Million) Nilai (RM Juta)</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Total / Jumlah</td>
<td>72,000</td>
</tr>
<tr>
<td>Rebate / Rebat</td>
<td>Eligibility / Kelayakan</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Refrigerator (RM200/unit)</td>
<td>Initially for households which consumes an average 200 to 400 kWh in 6 months in Peninsular Malaysia.</td>
</tr>
<tr>
<td>Peti sejuk (RM200/unit)</td>
<td>Pada permulaannya untuk hanya isi rumah Malaysia yang menggunakan purata 200-400 kW j dalam 6 bulan di Semenanjung Malaysia.</td>
</tr>
<tr>
<td>Kuantiti: 100,000 units</td>
<td>The criteria was later opened for households with average consumption of up to 800 kWh in 6 months and later to opened to all household consumers to enable more domestic consumers have the opportunity to participate in the program;</td>
</tr>
<tr>
<td></td>
<td>Kriteria ini kemudian dibuka kepada penggunaan purata sehingga 800 kWh dan kemudian dibuka untuk semua pengguna isi rumah untuk memberi peluang yang lebih kepada pengguna domestik;</td>
</tr>
<tr>
<td></td>
<td>All Malaysian households in Sabah and Sarawak; and</td>
</tr>
<tr>
<td></td>
<td>Semua isi rumah Malaysia di Sabah dan Sarawak; dan</td>
</tr>
<tr>
<td></td>
<td>Refrigerators models are those with capacity up to 400 litres only</td>
</tr>
<tr>
<td></td>
<td>Model dengan kapasiti sehingga 400 liter sahaja</td>
</tr>
<tr>
<td></td>
<td>For air-conditioners the models are those a capacity up to 2.5 horsepower only; and</td>
</tr>
<tr>
<td></td>
<td>Model dengan kapasiti sehingga 2.5 kuasa kuda sahaja;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air-conditioner (RM100/unit)</th>
<th>All Malaysian households in Peninsular Malaysia, Sabah and Sarawak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity: 65,000 units</td>
<td>Semua isi rumah Malaysia di Semenanjung Malaysia, Sabah dan Sarawak</td>
</tr>
<tr>
<td>Penghawa dingin (RM100/unit)</td>
<td>Registered private entities in Malaysia; and</td>
</tr>
<tr>
<td>Kuantiti: 65,000 unit</td>
<td>Entiti swasta berdaftar di Malaysia; dan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chiller (RM200/RT)</th>
<th>Chiller for air conditioning systems in commercial buildings for comfort cooling only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity: 72,000 RT</td>
<td>Penyejuk untuk sistem penyaman udara di bangunan komersial untuk keselesaan penyejukan sahaja</td>
</tr>
<tr>
<td>Chiller (RM200/RT)</td>
<td></td>
</tr>
<tr>
<td>Kuantiti: 72,000 RT</td>
<td></td>
</tr>
</tbody>
</table>
Green Lane

1. Loans with subsidised interest rate at 2% per annum subject to the maximum sum amount of RM200,000 annually or cumulative amount of RM1,000,000 for five years for each company, from the Development Institutes Development Financial Institutions / banks approved by Ministry of Finance (MoF);
2. Tax exemption;
3. Government Procurement;
4. Privileges in the Ministry of Finance Incorporated Companies' Procurement;
Green Construction
Green Construction

- Energy
- Infrastructure
- Standard Industry
- Site
- Innovation
- Design
Green Building Rating Tools

- **BREEAM**
  - Leadership in Energy and Environmental Design

- **LEED**
  - US Green Building Council

- **BCA Green Mark**
  - Singapore

- **Green Star**
  - Australia

- **CASBEE**
  - Japan

- **greenbuildingindex**

- **World Green Building Council**
  - www.worldgbc.org

Timeline:
- 1990
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
Green Building Rating Tools

Tool: Green Building Index (GBI)
www.greenbuildingindex.org
www.mgbc.org.my

Tool: Green Mark Singapore
http://www.sgbc.sg/

Tool: Greenship
www.gbcindonesia.org

Tool: “Berde”
http://philgbc.org/

Tool: Lotus
www.vgbc.org.vn

Thailand Green Building Council

Tool: None Yet
Green Building Index

NRNC  Non Residential New Construction
RNC   Residential New Construction

National Green Tech Masterplan
Green Tech Fund (RM1.5B)
Income Tax Exemption Order
(for GBI certified building)

2008
- 2009  -
- May -
- October -
- 2010 -
- April -
- 2011 -
- March -
- April -
- June -
- 2012 -
- Sept. -
- 2013 -

3 M² GFA certified
7,500 acres reg. for GBIT

NEW LIFE FOR OLD
PLUGGING THE LEAKS IN EXISTING BUILDINGS
26 APRIL 2010
LAUNCH OF THE GBI - EXISTING BUILDING RATING TOOL

THE 2010 BUDGET SPEECH
By
YAB DATO’ SRI MOHD. NAJIB TUN ABDUL RAZAK
PRIME MINISTER AND MINISTER OF FINANCE
INTRODUCING THE SUPPLY BILL (2010)
IN THE DEWAN RAKYAT
23 OCTOBER 2009

SUSTAINABLE TOWNSHIPS
BUILDING BETTER GREEN COMMUNITIES
LAUNCH OF THE GBI TOWNSHIP RATING TOOL
+ RNC TOOL (VERSION 2)
TUESDAY 27 MARCH 2012

GREEN FACTORIES
TUESDAY 7 JUNE 2011
LAUNCH OF THE GBI INDUSTRIAL NEW CONSTRUCTION (INC.) & GBI INDUSTRIAL EXISTING BUILDING (IEB) RATING TOOLS
WITNESSING THE LAUNCH OF THE GBI RATING TOOLS
ON 26 APRIL 2010

Going green in 2009

Contact
Tel: 603 2693 6274 Fax: 603 2693 6275
Email: info@greenbuildingindex.org
www.greenbuildingindex.org
Green Building Index

1. NRNC (Non Residential New Construction) 2009
2. RNC (Residential New Construction)

3. NREB (Non Residential Existing Building) 2010
4. RNC V2 (Residential New Construction, Version 2)

5. GBI Township (Township Development) 2011
6. IEB (Industrial Existing Building)
7. INC (Industrial New Construction)

8. NRNC Data Centre
9. NRNC Shopping Centre (to be launched) 2012
10. NRNC Resort Hotel (to be launched)
<table>
<thead>
<tr>
<th>Update on Green Building Index</th>
<th>TOTAL as of 15 August 2012</th>
<th>NRNC Non Residential New Construction</th>
<th>RNC Residential New Construction</th>
<th>INC Industrial New Construction</th>
<th>NREB Non Residential Existing Building</th>
<th>IEB Industrial Existing Building</th>
<th>T Township</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied</td>
<td>354</td>
<td>203</td>
<td>119</td>
<td>7</td>
<td>13</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Registered</td>
<td>325</td>
<td>181</td>
<td>113</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total Certified</td>
<td>86</td>
<td>50</td>
<td>28</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>With Provisional Certification after DA</td>
<td>79</td>
<td>46</td>
<td>26</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Received Final Certification after CVA</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RATING</td>
<td>TOTAL as of 15 August 2012</td>
<td>NRNC Non Residential New Construction</td>
<td>RNC Residential New Construction</td>
<td>INC Industrial New Construction</td>
<td>NREB Non Residential Existing Building</td>
<td>IEB Industrial Existing Building</td>
<td>T Township</td>
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</tr>
<tr>
<td>PLATINUM</td>
<td></td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5%)</td>
<td>86 to 100 points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOLD</td>
<td></td>
<td>23</td>
<td>16</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(27%)</td>
<td>74 to 85 points</td>
<td></td>
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<tr>
<td>SILVER</td>
<td></td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12%)</td>
<td>66 to 75 points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified</td>
<td></td>
<td>48</td>
<td>25</td>
<td>18</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(56%)</td>
<td>50 to 65 points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Certified</td>
<td></td>
<td>86</td>
<td>50</td>
<td>28</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Gross Floor Area, sqm (As Submitted)</td>
<td>TOTAL as of 15 August 2012</td>
<td>NRNC Non Residential New Construction</td>
<td>RNC Residential New Construction</td>
<td>NREB Non Residential Existing Building</td>
<td>INC Industrial New Construction</td>
<td>IEB Industrial Existing Building</td>
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<tr>
<td>2,830,467 (30,466,904sqft)</td>
<td>1,607,346</td>
<td>1,017,520</td>
<td>168,273</td>
<td>27,500</td>
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<tr>
<td>GBI Projects by State/Territory</td>
<td>Registered Projects</td>
<td>Certified Projects</td>
<td></td>
<td></td>
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<td></td>
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<td>Kuala Lumpur</td>
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<tr>
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<tr>
<td>Johor</td>
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<td>Melaka</td>
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<table>
<thead>
<tr>
<th>GBI Projects by State/Territory</th>
<th>Registered Projects</th>
<th>Certified Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perak</td>
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<tr>
<td>Pahang</td>
<td>4</td>
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<tr>
<td>Negeri Sembilan</td>
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<tr>
<td>Kedah</td>
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As of 15 August 2012
<table>
<thead>
<tr>
<th>CO2 REDUCTION PROJECTION</th>
<th>TOTAL as of 15 August 2012</th>
<th>NRNC Non Residential New Construction</th>
<th>RNC Residential New Construction</th>
<th>NREB Non Residential Existing Building</th>
<th>INC Industrial New Construction</th>
<th>IEB Industrial Existing Building</th>
</tr>
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<tbody>
<tr>
<td>CO2 Emission Reduction</td>
<td>133,169</td>
<td>96,397</td>
<td>25,544</td>
<td>9,939</td>
<td>949</td>
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</table>

(tCO2e/annum, based on electricity energy reduction only @ 1kWh = 0.69 kg CO2)
GREENING MALAYSIA
Over 26 Million Square Feet of Green Building in 3 years
<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>Registered Projects</th>
<th>Certified Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009/Q2</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>2009/Q3</td>
<td>5</td>
<td>0</td>
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<tr>
<td>2009/Q4</td>
<td>12</td>
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<tr>
<td>2010/Q1</td>
<td>21</td>
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<tr>
<td>Year One Total</td>
<td>55 (Average 4.5/month)</td>
<td>0</td>
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<tr>
<td>2010/Q2</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>2010/Q3</td>
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<td>1</td>
</tr>
<tr>
<td>2010/Q4</td>
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<td>5</td>
</tr>
<tr>
<td>2011/Q1</td>
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<td>3</td>
</tr>
<tr>
<td>Year Two Total</td>
<td>86 (Average 7/month)</td>
<td>15 (Average 1.25/month)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>Registered Projects</th>
<th>Certified Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/Q2</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>2011/Q3</td>
<td>24</td>
<td>13</td>
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<tr>
<td>2011/Q4</td>
<td>44</td>
<td>7</td>
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<tr>
<td>2012/Q1</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Year Three Total</td>
<td>124 (Average 10.3/month)</td>
<td>42 (Average 3.5/month)</td>
</tr>
<tr>
<td>2012/Q2</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>2012/Q3</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>2012/Q4 (15 Aug)</td>
<td>30</td>
<td>14</td>
</tr>
</tbody>
</table>

As of 15 August 2012
Platform for Implementation of National Benchmarks

- Local Authorities’ Structure Plans and Local Plans
- Uniform Building Bye Laws
- MS1525 Code of Energy Efficiency
- Industrialised Building System (IBS)
- Manual Saliran Mesra Alam (MASMA)
- Malaysian Timber Certification Scheme (MTCS)
Background of MGBC

The Malaysia Green Building Confederation (MGBC) is a not-for-profit, non-governmental, membership based organisation formalised in April 2009 to lead and guide the local building industry in the direction of sustainable built solutions.

MGBC has representation of a diverse range of stakeholders including professionals, professional institutions, academicians, government organisations, developers, contractors, manufacturers and others related to the building and construction industry.

MGBC promotes green building programmes, technologies, design practices and processes as well as green labels in embracing responsible sustainable measures and other green requirements for environmental, social and economic benefits.

An emerging member of the World Green Building Council (WGBC), MGBC is the only organisation in Malaysia endorsed and supported by WGBC.
Future Trends
Engaging Local Authorities
UNDANG-UNDANG KECIL DI BAWAH UNDANG-UNDANG KECIL BANGUNAN
SERAGAM 1984 YANG TELAH DIWARTAKAN

Tarih : 26/06/12
Kepada : Senarai Edaran seperti di Lampiran

Bersama-sama ini diperoleh salinan Undang-Undang Kecil di bawah UKBS 1984
berkaitan: Sistem Pengumpulan dan Penyimpanan Air Hujan (SPAHA) dan
Pemasangan Komunikasi Sebagai Pormidat Asas yang telah diwartaikan oleh
negeri-negeri berikut :

✓ JOHOR
☐ KEDAH
☐ KELANTAN
☐ MELAKA
☐ NEGERI SEMBilan
☐ PAHANG
☐ PULAU PINANG
☐ PERAK
☐ PERLIS
☑ SELANGOR
☐ TERENGGANU
☐ WILAYAH PERSEKUTUAN

Sekian, terima kasih.

Jabatan Kerajaan Tempatan
Kementerian Perumahan dan Kerajaan Tempatan
Some examples of incentivising at local levels:

- "green lane" approvals for green certified projects;
- Reduction (or hopefully exemption) in assessment rates (one local authority is seriously contemplating this move).
- Lowering stringent planning requirement on the argument that green building places less stress on infrastructure and the environment, e.g. reducing requirement on water storage tank if we are implementing rain water harvesting etc.
- Allowing increase density over zoning requirement for projects aiming for platinum or gold level green-certification.
Local Authorities

JKR GBI Course
7 July 2010

Workshop with Hang Tuah Jaya
17 December 2010
Green Building Product Certification & Listing
KeTTHA is working with the Ministry of Finance (MoF) to develop a mechanism for Green Procurement to be implemented in government agencies.

KeTTHA is working with the Standards and Industrial Research Institute of Malaysia (SIRIM) to develop standards, certifications and labeling mechanisms including green procurement manuals and procedure to enable government and private sector to embark on green purchasing.
MGBC Forthcoming Events

✓ 18th & 19th January 2013
✓ Danga Bay Convention Centre, Johor Bahru
✓ Day 1 Low Carbon Cities; Day 2 Green Construction
✓ Networking Night 18th January 2013

Eco-B™
Eco-Building Workshops

✓ 26th March 2013
✓ KLCC
✓ Eco-B Exhibition; 26th to 28th March 2013

Cornucopia of Green Building Design

☐ Regional case studies in plenary session
☐ Multiple parallel sessions on advanced design practice
The End