Issue 1/2019

GREENRE BUILD

SEMI - ANNUAL BULLETIN

GreenRE
Malaysia's Leading Green Building Certification Body

ISO 9001 Quality Management

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CHAIRMAN'S MESSAGE

GreenRE is proud to launch the first edition of our GREM bulletin. This semi-annual bulletin will keep our members up to date on GreenRE's projects and events. In addition, we will feature articles on current events shaping the green building sector.

Since it's inception in March 2013, GreenRE has continuously engaged with not only property developers and consultants but also both the federal and state governments to push forward the 'green agenda' to all relevant stakeholders. Now in it's 6th year, GreenRE has accumulated a portfolio of over 180 projects encompassing more than 100 million square feet in built up area across Malaysia.

In line with the World Green Building Council (WGBC) quality assurance requirements, GreenRE has obtained the ISO 9001:2015 quality management system accreditation. As our tools are developed on a consensus basis from the industry, we take great effort to obtain stakeholder feedback in order to develop and evolve our tools over time. We are proud to have an established technical panel comprising experienced, internationally recognized green building practitioners. Strict impartiality is ensured in implementing our standards as we have two stage – internal and external – review mechanism in place for project certification assessment.

As Malaysia is heading towards a high income economy, the concept of sustainable development must be engraved in our development philosophy, ie. better facilities management incorporated to enhance Malaysian lives and their property values. Moving forward, we hope to synergize the efforts of all parties in the industry to drive Malaysia's sustainability agenda forward. We hope to obtain all your support and drive rapid change. Let's embrace the slogan "Hijau Boleh" in our true Malaysian spirit.

Datuk Seri FD Iskandar
REHDA Immediate Past President & GreenRE Chairman

EDITORIAL

We would like to hear from you if you would like to share your articles and latest projects or research that could improve sustainability or you would like us or if you would like to be included in our delivery mail list.

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QUALITY AIR FOR LIFE

Green Build Conference (GBC) 2019
27th June 2019, One World Hotel, Petaling Jaya

YBM Senator Dato' Raja Kamarul Bahrin, Deputy Minister of Housing and Local Government officiated the Green Build Conference (GBC) 2019 in front of local and international speakers and participants.

BANDAR UTAMA, PETALING JAYA: Green Build Conference (GBC) 2019 was jointly organised by GreenRE and REHDA Institute at One World Hotel PJ on 27th June 2019. The conference was attended by around 330 participants from the real estate industry. YBM Senator Dato' Raja Kamarul Bahrin Shah Ibni Raja Ahmad Baharuddin Shah, Deputy Minister of Housing and Local Government as Guest of Honour delivered the opening address. The conference featured notable speakers from Australia, Hong Kong, Singapore and Malaysia.

Highlights from the conference:

• Three insightful segments - business case for building green, a panel discussion on the financial solutions and service offerings for sustainable investment and how it can be used as a tool to drive innovation and case studies on inspiring real-life projects and applications that are game changers in the green building design arena.

• A post lunch debate on the future of plastics, as waste management and use of sustainable products are aspects of a green development. A representative from the Malaysian Plastic Manufacturers Association and an environmental activist deliberated on the undeniable need for plastics in our everyday life and reducing plastic waste.

• Showcases and booths by green product suppliers, namely Panasonic Malaysia's air purifying systems, Midorie's soilless growing media (PAFCAL), Khind's EV Charger, Rentwise Green IT Infrastructure Services and Airestec's HVAC/AC eco friendly decontamination and treatment system.

• This event also aimed to include sustainability principles. The event did away with single use plastic (plastic bottles and individually wrapped mint), printed lanyards for participants and registration documents (QR Codes were sent to participants before the event). Additionally, the HIVE was invited to set up a booth selling sustainable consumer product alternatives (e.g. metal straws, cutlery, food containers, personal care products, etc.

GBC strategic partners were CIDB and CREAM, sponsors were Panasonic Malaysia, Sime Darby, Khind Malaysia, MKH Berhad, Rentwise, Airestec, MHUB and Midorie, and a host of supporting partners namely MESTECC, MIDA, MGTC, IEM, ACAM, MBAM, MIPA, PPKM, REHDA Youth and Star Property.

REHDA Youth Green Development Study Tour in Conjunction with Green Build Conference 2019

KUALA LUMPUR : A Green Development Study Tour was held on 26th June 2019. The tour was co-organized by REHDA Youth and GreenRE in conjunction with GBC 2019. REHDA Youth Study Tour Series are held to educate and champion sustainability in the property development arena. Around 40 participants visited Etiqa Tower which is a GreenRE Platinum rated building and the City of Elmina which is seeking GreenRE's township certification.

At Etiqa Office Tower, participants had the opportunity to hear from the architects (Veritas) of the project as well as GreenRE's Assessor about the unique attributes of the building. The tour highlighted the green features of the building such as the EMS monitoring system, CO monitoring system, waste recycling, grey water recycling, sustainable building products, among others.

Participants having talks from both consultants and GreenRE representatives regarding Etiqa Tower Platinum award building.

Participants of the tour being briefed by Sime Darby's sustainability team.

At the second tour site, City of Elmina, participants visited Clusia at Elmina Gardens, D3 Affordable Housing@Elmina and Elmina West. A briefing was given by Sime Darby's sustainability team. City of Elmina boasts a myriad of sustainability initiatives, from green roof insulation to Community Edible Gardens and communal parks. The Divergent Dwelling Design (D3) project aims to deliver quality homes using IBS components, enabling cost savings and minimising construction wastage.

Plot systems are used in Community Edible Gardens.

did YOU know?

CITY OF ELMINA IS ONE OF THE FIRST WELLNESS-THEMED DEVELOPMENTS IN MALAYSIA THAT EMBRACE THE CONCEPT OF A HOLISTIC "LIVABLE CITY" WHICH FOCUSES ON FORMING A TOWNSHIP WITH EIGHT DISTINCT ELEMENTS OF WELLNESS WHICH IS SEEN ACROSS ITS LAND. THESE FACETS OF WELLNESS INCLUDE

COMMUNITY, ENVIRONMENTAL, INTELLECTUAL, FAMILY, OCCUPATIONAL, PHYSICAL, EMOTIONAL & SPIRITUAL.

GreenRE at International Construction Week (ICW) 2019

Ir Ashwin Thurairajah presenting his paper during the seminar

KUALA LUMPUR: GreenRE participated in the ICW 2019 held at Malaysia International Trade and Exhibition Centre (MITEC), Kuala Lumpur from 18th-21st March 2019. GreenRE participated as an exhibitor and presented two papers at the ASEAN Super 8 Free Seminars.

Ir Ashwin Thurairajah, COO GreenRE presented a paper on Passive and Active Design Principles for Green Buildings', covering the essentials of green design requirements and cost benefits of a green development. Additionally, Ar Kevin Teh, Consulting Director of ESD GreenTech Sdn Bhd presented a paper on 'Creative Green Cities: Innovative and Workable Ideas from Real Projects' with examples from Bangkok and UK. Both presentations were well received and concluded with a lively Q&A session.

Green Building Seminar at Matrix Concepts Holdings Berhad (MCHB)


Ir Ashwin, Ar Kevin and Colin Timothy presented at the seminar.


The participants of the seminar

SEREMBAN: Climate change has undeniable impact on the way we plan and manage the built environment, it is increasingly important to rethink our current development practices. Consequently, Malaysia has committed to the international community to reduce our greenhouse gas emissions intensity by 40% from 2005 levels before 2020 and 45% by 2030. With the built environment being responsible for more than a third of these emissions in Malaysia, a structured and coordinated effort is necessary by all stakeholders in the sector to achieve these targets. With this in mind, GreenRE in collaboration with Matrix Concepts Holdings Berhad (MCHB) ran a half day in-house seminar, 'Introduction to Green Building Concepts-Why Go Green?' at d'Tempat Country Club, Bandar Sri Sendayan. This half day seminar was also held in conjunction with the GreenRE-Matrix Memorandum of Collaboration (MoC) initiative.

The seminar was well attended by 58 Matrix personnel, including Matrix Board of Directors and top management. Dato' Haji Mohamad Haslah bin Mohamad Amin, Matrix Chairman, officiated the seminar. Topics covered included, Green Buildings and Townships 101, How green building and township certification synergize with corporate sustainability reporting, cost benefit analysis for green buildings and townships, legislation in Malaysia pertaining to green buildings and townships, health benefits of green buildings and case studies in Malaysia. Essentially, when you choose to build with sustainable objectives in mind, the development is able to protect the ecosystem, reduce emissions, improve air and water quality, conserve water, reduce waste and conserve and restore natural resources.

The presentations were well received and was concluded with an interactive Question & Answer Session and discussion. Matrix Directors, i.e. Dato' (Ir.) Batumalai A/L Ramasamy and Dato' Firdaus Muhammad Rom Bin Harun contributed productive sustainability input based on their previous experience as mayor of Majlis Bandaraya Shah Alam (MBSA), and director of Jabatan Pengairan Dan Saliran Negeri Sembilan (JPS) respectively.

This was a successful outreach programme, as GreenRE with the support of MCHB was able to communicate the vital need for sustainable development to a major player in the real estate industry. GreenRE aims to collaborate with other developers in the region to create awareness on green development amongst both industry members and consumers.

University Tunku Abdul Rahman (UTAR)
Green Building Innovation Competition, 28th June 2019

Puan Nur Fateha from GreenRE is one of the panel in the the competition.

KAJANG: In conjunction with UTAR's Engineering and Science Fiesta 2019, GreenRE co-organised a Green Building Innovation Competition, 'My Green Space' with UTAR Sungai Long Campus.

Open to students of all engineering and design related undergraduate programmes, the programme aimed to provide a platform for students to showcase their ideas on how to build an eco-friendly house through the application of green building sustainability pillars, ie. energy and water efficiency, environmental protection, cost optimisation, innovation and green technology and indoor environmental quality utilising sustainable planning and management.

The competition which kicked off on 15th February 2019, culminated in a showcase and judging panel on 28th June 2019. There were nine participating teams were given three (3) months to execute the project. Part of the concept paper included a short video describing the green building prototype. GreenRE was involved in the green building and certification workshop on 16th February and was part of the judging panel.

The winning team secured a cash price of RM2,000. Their prototype focused on basic requirements of a green building; N-S facing orientation, renewable and efficient energy usage (RE & EE), passive cooling applications, rainwater harvesting and occupants' comfort and well-being.

By instilling sustainability principles in the next generation of architects, engineers and green building professionals, a greener future awaits Malaysia.

From left: 1st winner, 2nd prize, 3rd prize and consolation prize winners with their green home models.

Research Grant to Universiti Tunku Abdul Rahman (UTAR) for Carbon Database Studies

Dr Vignes Ponniah from UTAR

KAMPAR: GreenRE has committed to re-invest proceeds from green building certification and training towards research and development in the sector. On the 19th of February 2019, GreenRE awarded UTAR's Faculty of Engineering and Green Technology a grant amounting to RM10,000 to analyse the energy performance of green buildings in Malaysia and subsequently set up a Malaysian green building database. The principal researcher for this project is Dr. Vignes Ponniah who will spearhead the research collaboration between Universiti Tunku Abdul Rahman (UTAR) and Universiti Sains Malaysia (USM). A key component of this study will be determining the return of investment in green building projects by evaluating the passive and active design features to minimize energy consumption incorporated into their design. A minimum sample size of 50 green buildings certified by various green building standards (i.e GreenRE, LEED, Greenmark, GBI etc) will be considered. This research study will augment and existing study by UTAR to evaluate the effectiveness of energy modelling to optimize design of high performance buildings in Malaysia.

50% Reduction in GreenRE Assessment Fees for Affordable Home Projects

Minister of Finance, YB Lim Guan Eng officiated the Opening Ceremony of MAPEX, accompanied by REHDA President, Dato' Soam Heng Choon and MAPEX Chairman, Datuk Ng Seing Leong.

KUALA LUMPUR: In conjunction with Malaysia Property Expo (MAPEX) 2019 and to align our efforts with Ministry of Housing and Local Government (KPKT) to promote sustainable and affordable homes, GreenRE is excited to announce a 50% reduction in assessment fees for affordable home projects. These projects can be assessed under the GreenRE residential building and landed homes standard that has been developed with a strong focus on energy efficiency. Energy efficient homes will have lower utility bills thereby reducing the financial burden of home owners. GreenRE and REHDA are committed to supporting Malaysia's sustainable development agenda.This special rate was announced by REHDA President, Dato' Soam Heng Choon at the his opening speech at the HOC-MAPEX held on 26th April 2019 Mid Valley Exhibition Centre.

GreenRE Manager's Course (GREMC)

18th Intake, 26th- 28th March 2019

Picture 1: All the participants of GREMC 18th Intake having group photo session with GreenRE COO, Ir. Ashwin Thurairajah
Picture 2, 3 & 4: Participants during the 3 days course.

PETALING JAYA: GreenRE Manager's Course (GREMC) is a comprehensive training course which incorporates multiple aspects of green building industry, tailored made for professionals in the project development team involved in the designing of sustainable buildings. The course provides an in-depth understanding of the GreenRE Criteria for buildings-baseline, scoring system and certification process. Hosting imminent speakers from Singapore and Malaysia, the training modules cover requirements on Environmental Sustainability, Energy Efficient Lighting, Energy Modelling, Typology of Sustainable Building Design, Water Conservation & Strategies to Water Efficiency, Green Practices in Construction Sites etc. The 18th Intake of GREMC was held on 26th - 28th March 2019, involving 23 participants from various backgrounds, i.e. engineers, architects, environmental consultants, surveyors, lecturers and university students. Participants are required to attend all 3 days of the course, pass an MCQ Examination and submit a group project on a green building case study to be eligible for the GreenRE Manager application. GREM courses are eligible for CPD points from Institute of Engineers Malaysia (15 points), Lembaga Arkitek Malaysia (3 points) Suruhanjaya Tenaga (16 points) and GreenRE (15 points).

GreenRE Technical Seminar (GRETS)

GRETS Session 2: Energy Modelling Advanced Course 15th- 16th January 2019

PETALING JAYA: The GreenRE Technical Seminars (GRETS) are short courses introduced in 2018 to expand GreenRE's training portfolio. GRETS aims to provide a platform for knowledge sharing and to create a community in the sustainable built environment area. GRETS Session 2: Energy Modelling Advanced Course follows the first GRETS on Energy Modelling held in 2018. The course wa s conducted by Mr. Jimmy Lee Chee Yue (previously from IES Ltd, currently a freelance green consultant). Mr Jimmy Lee has experience in both M&E design and building performance analysis using simulation tools.

Energy modelling (EM) and airflow programmes are tools used to design energy efficient buildings. These simulation programmes are used during designing new or retrofitting buildings. This course covered the concept of building energy modelling, GreenRE energy modelling methodology and requirements, various building energy simulation tools and capabilities, modeling inputs and analysis methods of building components. In addition, a large component of the course provided hands-on training using IES-VE software. Using the energy simulation software, course participants were guided to guided to tabulate building energy data via simulation models.

Mr Jimmy Lee, trainer for GRETS Session 2: Energy Modeling Advanced Course provided a hands-on training experience for participants of the using the IESVE software.

GRETS Session 3: Efficient CentralAir-Conditioning Design and Measurement & Verification Systems

Mr Steven Kang from Measurement & Verification Pte Ltd conduct the seminar

The speaker presenting the actual project to the participants.

PETALING JAYA: The third session in the GRETS series was held 19th - 20th February 2019, in Wisma REHDA, covering the topic of Efficient Central Air-Conditioning Design and Measurement & Verification Systems. The course was conducted by Mr Steven Kang, Director of Business Development for Measurement & Verification Pte. Ltd. Mr Kang is a Certified Green Mark Professional, Singapore Certified Energy Manager, US Certified Energy Manager and LEED Accredited Professional. Well experienced in the field of designing efficient air conditioning systems, Mr Kang conducts in-depth training on HVAC design and optimization to ESCOs, consultants and building owners throughout Asia. GRETS-03 attended by 20 professionals, provided attendees with the fundamentals of air-conditioning, central chilled water plants, chilled water airside systems, chiller plant performance measurement & verification (M&V) and their optimisation. The speaker provided case studies based on his vast experience in the industry. The importance of efficiently designed air conditioning system and M&V system is unquestionable. Efficient air conditioning systems has the potential to decrease operating and maintenance costs, decrease equipment purchase price, improve indoor air quality and overall indoor comfort, and reduce consumption by mitigating a variety of common system performance issues.

Wisma Paramount Sungai Petani, Kedah

By: Ar. Kevin Teh & Naediea Jamil (ESD Greentech Sdn. Bhd.)

PROJECT:
Wisma Paramount Bukit Banyan

LOCATION:
Wisma Paramount, 1, Lorong BLM 1/1, Bandar Laguna Merbok, 08000 Sungai Petani, Kedah Darul Aman, Malaysia.

DEVELOPER:
Paramount Property (Utara) Sdn Bhd

GREEN BUILDING CONSULTANT:
ESD Greentech Sdn Bhd

ARCHITECT:
KL Wong Architects Sdn Bhd

C&S ENGINEER:
Perunding Kelana Sdn Bhd

M&E ENGINEER:
TAFA Perunding Sdn Bhd

The Paramount Group scored a first when it recently received the GreenRE Platinum Award for their new Wisma Paramount in Bukit Banyan, Sungai Petani, Kedah Darul Aman. The Platinum award is the highest rating achievable in GreenRE, the leading green building certification body in Malaysia. The award signifies the developer's commitment to sustainability in the five key areas of Energy Efficiency, Water Efficiency, Environmental Protection, Indoor Environment Quality and Innovative Green features.

The 520-acre Bukit Banyan township cradles the fringe of the Sungai Petani in Kedah, located only nine kilometres from the town centre. Bukit Banyan is Sungai Petani's first and only hilltop development. With verdant landscaping and plentiful green lungs, this gated and guarded mixed development brings nature to the door-step, while keeping modern conveniences within easy reach.

"It has been our mission since day one of Bukit Banyan to make it a greener and healthier township project, as well as a strong adherence to quality and commitment to deliver value for the customer,"

- Mr Ooi Hun Peng, AMK, BKM
Chief Executive Officer of Paramount Property (Utara) Sdn Bhd

"The GreenRE Platinum is indeed an excellent endorsement to our efforts in achieving sustainable development. We are pleased, excited and proud of the achievement and it has motivated our strong confidence to pursue further our goal in creating a green environment for Bukit Banyan,"

- Ooi

Artist impression

The two-storey Wisma Paramount stands as an iconic entrance statement to the new township. Standing prominent with clean overhanging roof shading a large expanse of glazing, the 2500 sqm headquarters of Paramount (Utara) also serves as its main Sales Gallery and project management office. The project scores highly in Energy and Water Efficiency.

"Energy simulation result showed that Wisma Paramount achieved 33.6% saving compared to conventional building design. It also achieved 48.55% water saving," reports environment engineer Mr Gan Yan Seng of ESD Greentech Sdn Bhd. Those savings are significant for it to be certified as a platinum green building.

CEO Ooi agrees. "We did well in the area of energy efficiency. The optimum design of building thermal performance and air-conditioning system have enabled outstanding achievement in energy efficiency."

Professionally, it has been a satisfying journey for the Client, Architect and Engineers towards this Award. Mr Gan of ESD Greentech explains, "We started with green knowledge sharing. From there, we crafted a set of green design/green practices which suits the building and its users. We then implemented cost effective engineering, choosing those measures that are applied daily by the building owner. By doing so, we are actually saving resources."

Engineer Gan's biggest satisfaction in any project is to see a heightened awareness of environmental sustainability among the stakeholders and end-users. "By helping Wisma Paramount score Platinum, it has led us all to live greener and healthier."

PARAMOUNT PROPERTY

Artist impression

The Bukit Banyan township is implementing its three-prong vision of a healthy community:

- A well maintained environmental friendly development
- A wide spectrum of product mix that caters for various market segments
- Creation of 25 acres of hill park that offers various healthy family activities

Paramount's Ooi sums it up:

"We strongly believe that a sustainable development must be able to address the needs andconcerns of house buyers as well as surrounding communities. It is not limited to early product design and quality but also a sustainable environment that looks after healthy lifestyle and wellbeing of residents and non-residents."

Artist impression

FEATURE ARTICLE

An Introduction to Green Plot Ratio (GnPR)

By: Nur Fateha Jamaludin

The value of greenery in a particular development can be broadly divided into three categories, ie. environmental (eco-system services), ecological (enhanced urban biodiversity) and social (aesthetic and psychological benefits). Malaysia's residential and non-residential buildings sector is still expected to grow an annual average of 3.7% between 2018 and 2027, according to a report by Finch Solutions. As a consequence, further green spaces will be replaced with infrastructure, building structures and other urban landscapes. The Green Plot Ratio (GnPR) was developed by Dr Ong Boon Lay at the National University of Singapore in 2002 to provide a metric to measure the amount of greenery on a particular site. This in turn can be used communicate the value of greenery and to set greenery requirements for green projects.

GnPR is used across Singapore's green building certification schemes. Since 2017, it has also been incorporated by Urban Development Authority Singapore in its LUSH 3.0 programme to introduce transparent and objective standard for landscaping provided within Landscape Replacement Areas'. GreenRE has adopted the GnPR calculation as part of its green building certification requirements.

Leaf Area Index (LAI)

GnPR is derived from the average amount of greenery on a given lot per the leaf area index (LAI) in proportion to the total lot area. It is the sum of the products of the area of each greenery type and its corresponding LAI value, which is divided by the total lot area. LAI quantifies the amount of foliage in the plant canopy. It is important tool as it measures the amount of leaf material in an ecosystem which drives photosynthesis, respiration, rain interception, etc. LAI is a key variable in many models describing vegetation-atmosphere interactions, particularly related to carbon and water cycles.

There are numerous factors to be considered when determining the LAI beyond the species cover ie. the density of leaves differs from plant to plant within a particular species from time to time during the plant's growth, even from spot to spot throughout the plant's canopy (Ong 2012).

Generally, two approaches are used to quantify LAI values, ground measurement or using remote sensing. Currently, LAI values are based on various species cover on four (4) categories of plants: groundcover, shrubs, palms and trees. For the 'Tree' Category, LAI figures have been allocated based on Canopy, Open, Intermediate or Dense. The 'Shrub' Category is divided based on seed classification, ie. monocot and dicot. Palm trees are classified based on its' tree growth, either solitary or cluster. Examples of LAI measurements for different classes of plants-shrubs, palms and trees are as per Table 1 below:

Category	Sub category	LAI Value (A)
Trees	Open Canopy	2.5
	Intermediate Canopy	3.0
	Dense Canopy	4.0
	Intermediate columnar canopy	3.0
Trees	Planted at ≤ 2.0m trunk to trunk	
Palms	Solitary	2.5
	Cluster	4.0
Palms	Solitary (trunk to trunk ≤2m)	2.5
Shrubs	Monocot	3.5
	Dicot	4.5
Turf	Turf	2.0
Vertical greenery		2.0

Table 1: Catagory, Sub catagory and LAI value for greeneries
Source: Landscape Excellence Assessment Framework (NParks, 2016)

Figure 1: Types of greeneries *(Source: http:// Florafaunawen.nparks.gov.sg)*

Green Plot Ratio (GnPR)

GnPR allows for a more precise regulation of greenery on a project site; maximising the allowable built-up area without compromising the greenery requirements. It provides flexibility to the landscape architect while simulteneously protecting the green quota of the design. Figure 2 shows an example of GnPR implementation and the relation between percentage of the green area and the GnPR.

A study by Jusof & Wong (2009) conducted across Singapore, revealed empirical data that shows lower measured temperatures in areas with higher GnPR. During the day, shading from trees and leaves plays a part in lowering temperatures, and at night, plants aid cooling via evapotranspiration.

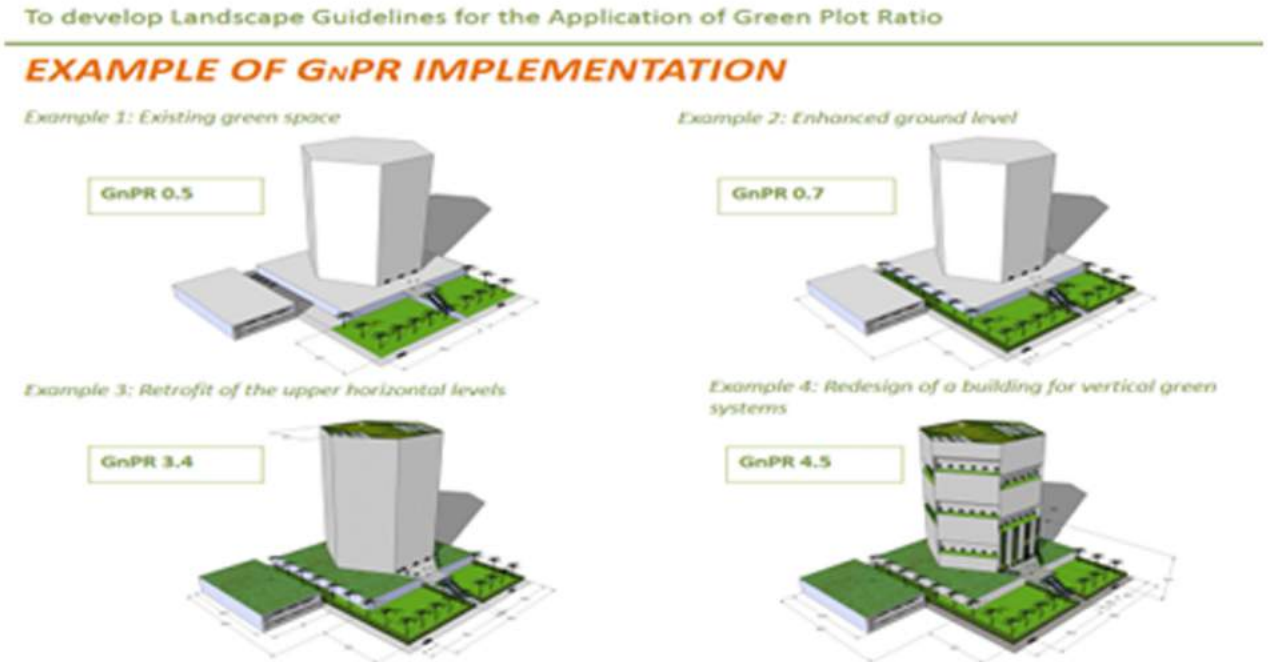

Figure 2: GnPR illustration *(Source: Centre for Sustainable Asian Cities, NUS)*

By determining the GnPR, the amount of CO_2 uptake, water retention and other environmental benefits can be theoretically estimated. The GnPR equation is as follows:

$$GPR = \frac{Total\ Leaf\ Area}{Total\ Site\ Area} = \frac{\sum LAI \times canopy\ area}{Total\ Site\ Area}$$

(Ong, 2003)

In Malaysia, the adaptation and implementation of GnPR is still at an infancy stage. Whilst currently all local authorities require a percentage of greenery area in developments, further studies need to be carried out to incorporate GnPR or other more exacting calculations in the regulations.

Conclusion

In general, the benefits of green spaces in terms of cooling, aesthetic value and air quality is unrefuted. However, moving forward into a sustainable city framework, inclusion of greenery into design plans and existing developments will need to be integrated and utilised for additional economic returns, ie. using plants to recycle water, reduce air-conditioning, provide food and resources etc. By utilising a standardised measurement system, ie. GnPR, precise requirements for green space can be quantified and regulated.

Reference

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UPCOMING EVENTS

19th September 2019

Melaka, Avillion Legacy - 23rd July 2019
Pahang, Rocana Kuantan - 20th Aug 2019
Johor, TBA - 24th Sept 2019

3rd – 6th September 2019
Sands Expo & Convention Centre, Singapore

9th- 11th October 2019

5th- 7th November 2019

GreenRE
SUSTAINABLE DESIGN AWARD 2019
November 2019

UPCOMING TRAINING

21st August 2019

GREEN BUILDING TAX INCENTIVE FORUM 2019

Venue: Wisma REHDA
CPD: BEM, LAM, GREM, BQSM

12th September 2019

GREENRE REFRESHER COURSE 2019

Venue: Wisma REHDA
CPD: GreenRE, IEM, LAM, ST*

24th September 2019

GREENRE EVENING TALK SESSION 2

Venue: Wisma REHDA
CPD: GreenRE, IEM, LAM, ST*

22nd- 24th October 2019

GREENRE MANAGER'S COURSE 20TH INTAKE

Venue: Wisma REHDA
CPD: GreenRE, IEM, LAM, ST*

25th- 26th November 2019

GREENRE TECHNICAL SEMINAR

Venue: Wisma REHDA
CPD: GreenRE, IEM, LAM, ST*

18th December 2019

GREENRE EVENING TALK SESSION 3

Venue: Wisma REHDA
CPD: GreenRE, IEM, LAM, ST*

GREENRE MANAGER'S COURSE (PJ)

20th INTAKE

MS1525, MS2680 & UBBL38A Readiness

COURSE OBJECTIVES

This is to accord recognition to professionals who have the knowledge and ability to advise their development project team in designing sustainable buildings.

- To gain better understanding of GreenRE criteria and framework
- To facilitate towards an Integrated design which is compliance with GreenRE standards
- To conduct cost benefit analysis of options and to explore innovative solutions which would enhance scoring
- To coordinate the documentation process necessary for smooth processes of certification and implementation

Venue : Wisma REHDA, Kelana Jaya, PJ
Time : 9:00 a.m. – 6:00 p.m.
(8:30 a.m. registration)
22 October 2019 -- Basic
23 & 24 October 2019 -- Advanced
***Complete course** is **3.5 days** including the examination
Examination Date: 23 November 2019

LEARNING OUTCOMES

An in-depth understanding of GreenRE criteria for buildings including baseline, scores and certification process.

- Ability to implement practical strategies and solutions to minimize energy & water usage to improve indoor environmental quality and to reduce waste
- Familiarize with current sustainable best practices which are applicable to green buildings
- Ability to facilitate and manage buildings for GreenRE certification

CERTIFICATION REQUIREMENTS

Applicants for the **certified GreenRE Manager** must satisfy the following criteria:

A recognised degree in engineering, architecture or other building related disciplines approved by the **GreenRE Review Panel** with a minimum 3 years working experience in a related field for degree holders or 5 years minimum working experience for diploma holders ***OR*** other Building practitioners with a minimum of 5 years relevant working experience accepted by the **GreenRE Review Panel AND** has successfully completed the **GreenRE Manager's Course**.

Applicant is deemed to have successfully completed the course by attending at least 75% of the 3-day course and passing the examinations and group project.
The GreenRE Manager's Course is separated into two which called as Basic and Advanced course. Day 1 is the Basic course. Meanwhile, the Advanced course is the combination of Day 2 & Day 3. It is **mandatory** for the participants to take the Basic course before register for the Advanced course. However, to be eligible to sit for the examination, participants shall complete both courses (Basic and Advanced) within two years from the date of the first attendance of the Basic course. Basic course shall also serve as a refresher course for existing certified GreenRE Managers and they are encouraged to attend it in order to renew the certificate.

REGISTRATION FORM

Salutation & Full Name: .....
NRIC/Passport No.: .....
Company Name: .....
Designation: .....
Office/HP No.: .....
Email Address: .....
Mailing Address: .....
.....
.....
Membership No.: .....
(refer to the list of membership body below)
Field Specialization: .....
(Civil/Mechanical/Electrical/Architect/Surveyor/others)

Salutation & Full Name: .....
NRIC/Passport No.: .....
Company Name: .....
Designation: .....
Office/HP No.: .....
Email Address: .....
Mailing Address: .....
.....
.....
Membership No.: .....
(refer to the list of membership body below)
Field Specialization: .....
(Civil/Mechanical/Electrical/Architect/Surveyor/others)

PAYMENT INFORMATION

Please tick ☒ which part (s) you are participating;
Complete Course ☐ **Basic Course** ☐ **Advanced Course** ☐

Early Bird (before 30/9/19)	**Complete Course (Day 1, 2 & 3)**		**Basic Course (Day 1)**		**Advanced Course (Day 2 & 3)**	
Member	RM1040.00	☐	RM 455.00	☐	RM 666.00	☐
Non-member	RM1262.00	☐	RM 540.00	☐	RM 805.00	☐
Normal Rate						
Member	RM1219.00	☐	RM 519.00	☐	RM 784.00	☐
Non-member	RM1484.00	☐	RM 625.00	☐	RM 943.00	☐

Course fees;
i) include **6% SST (SST No.: B16-1809-32000727)**
ii) include training materials, F&B, examination fees and certificates
iii) are **HRDF claimable**
Member rate: **GREM/REHDA/IEM/PAM/BQSM/SHAREDA/SHEDA/ACEM/MIP/RISM/MBAM**

Bank drafts of cheque should be crossed and made payable to "**GreenRE Sdn Bhd**". The cheque/cash can be deposited to GreenRE's Public Bank account no. **3182 978 625** and please email the bank in slip to training@greenre.org. Submit your registration form to training@greenre.org

CONTACT PERSON (if different from the above)

Salutation & Full Name: .....
Office/HP Tel. No.: .....
Designation: .....
Email address: .....

IMPORTANT NOTES & DISCLAIMER

1. **Upon the approval and confirmation of registration and payment, the e-confirmation will be sent to your email.**
2. **Cancellation will occur no fee but replacement is compulsory.**

The organizer reserves the right to change the content, venue and date or cancel the event if insufficient minimum target number of participants are met.

Company Stamp with Address

.....

ANNOUNCEMENTS

CONGRATULATIONS

New GreenRE Managers (GREMs)

Cert No	Name	Company
GREM0196	Ammar Bin Mohd Nawi	Symphony Life Berhad
GREM0197	H'ng Yam Keat	Eastern & Oriental Berhad
GREM0198	Nik Ahmad Aizuddin Bin N. Husin	DPI Konsult Sdn Bhd
GREM0199	Ahmad Faisal Bin Che Mohamad	Sunway PSM Sdn Bhd
GREM0200	Ng Man Fee	Li-Zainal Sdn Bhd
GREM0201	Yue Chi Seng, Lucas	See Hoy Chan Facilities Mgmt Sdn Bhd
GREM0202	Faisal Bin Norazman	See Hoy Chan Facilities Mgmt Sdn Bhd
GREM0203	Zarith Fahtehah Binti Mohd Khalis	Sunway Iskandar Sdn Bhd
GREM0204	Ng Chai Teck	Sunway Pendas Management Sdn Bhd
GREM0205	Ir. Esma Niza Bin Nawi	Ilham IZ Consultants
GREM0206	Ng Keong Chin	Sapphire Delights Sdn Bhd
GREM0207	Fam Siew Ling	YC Lee Architect
GREM0208	Lee Yong Chiew	YC LEE Architect
GREM0209	Ir. Ahmad Hazley Bin Mat Yusoh	KNS Consultant Sdn Bhd

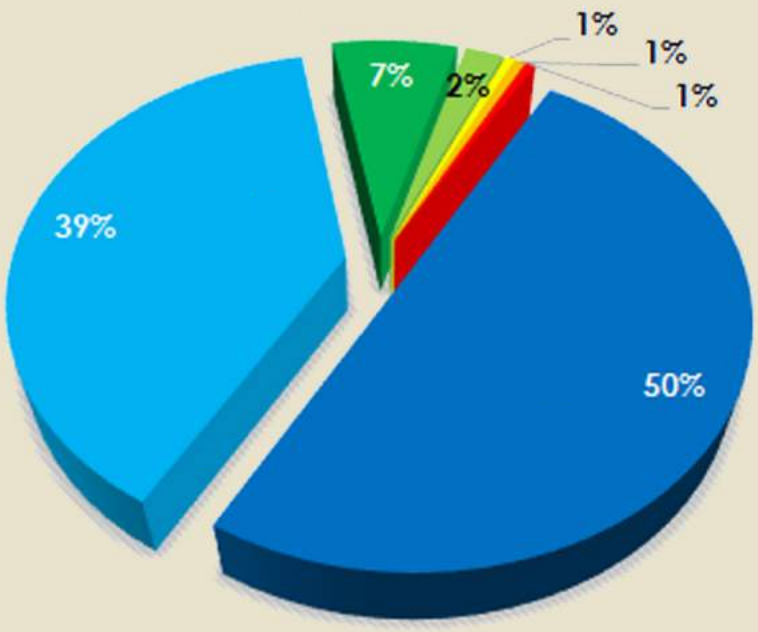
Newly Certified & Renewed Projects

Project Name	Company	Location	Design Ref. Guide	Type of Cert.	Date of Cert.
Building 6, CTRM	Ecologically Sustainable Design Sdn Bhd	Melaka	NRB v3.1	Provisional	28/2/2019
ASM Technology (M) Sdn Bhd Phase 2 Extension	ASM Technology (M) Sdn Bhd	Johor	NRB v3.0	Provisional	2/4/2019
Arte Cheras	Asiamega Capital Sdn Bhd	Kuala Lumpur	NRB v3.0	Provisional	30/1/2019
Bloomsvale@Menara Vista Petaling	Kerjaya Prospek Property Sdn Bhd	Kuala Lumpur	RES v3.0	Provisional	25/3/2019
Smart Factory	Heng Hiap Industries Sdn Bhd	Johor	NRB v1.2	Provisional	6/5/2019
Sentral Suites	Country Annexe Sdn Bhd	Kuala Lumpur	RES v3.0	Provisional	22/1/2019
Pavilion Damansara Heights Parcel 2 Commercial Tower (TB) – Office	Jendela Mayang Sdn Bhd	Selangor	NRB v3.1	Provisional	7/3/2019
Sri KDU International School	Paramount Education (Klang) Sdn Bhd	Selangor	NRB v3.0	Provisional	2/4/2019
Sunway Avila	Sunglobal Resources Sdn Bhd	Selangor	RES v3.1	Provisional	26/3/2019
A.Clouet & Co. (KL) Sdn Bhd Green Building	A.Clouet & Co.(KL) Sdn Bhd	Selangor	ENRB v3.1	Actual	27/5/2019

PLATINUM GOLD SILVER BRONZE

GreenRE applauds these developments for incorporating green principles and applications, contributing towards lowering Malaysia's carbon footprint and the sustainable development agenda!

REGISTERED PROJECTS



LEGEND

- Residential (RES)
- Non-Residential (NRB)
- Existing Non-Residential (ENRB)
- Township (TS)
- Healthcare Facilities (HC)
- Industrial Facilities (IND)
- Office Interior (INT)

*As per 30th June 2019

TOTAL FLOOR AREA (GFA)

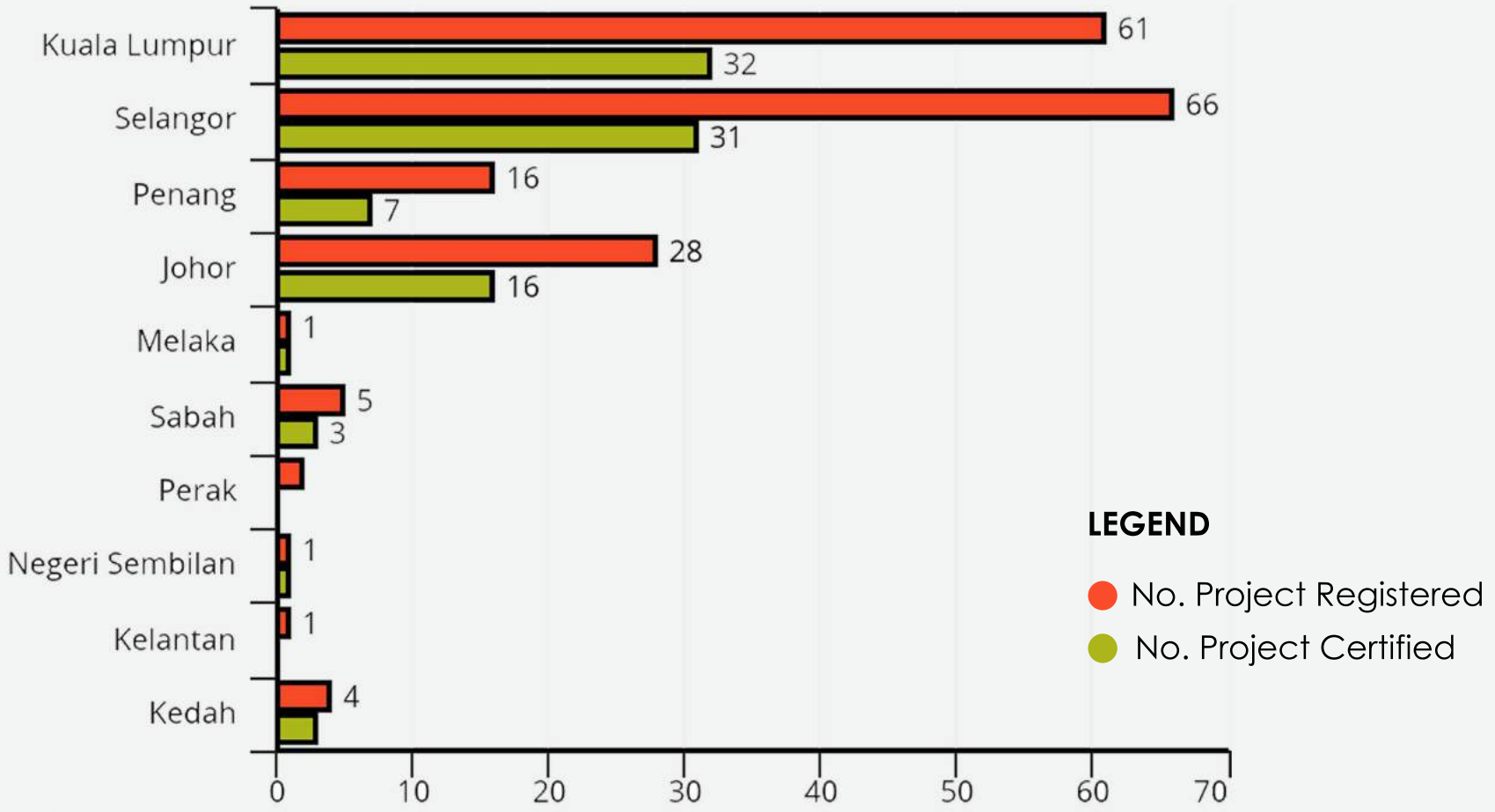
180 projects*

*For all design guidekine: RES, NRB, ENRB, HC, IND, TS

4,544,318.93 m²

1,976.20 acre

PROJECT DISTRIBUTION



PLATINUM

12% Residential, Non-Residential

GOLD

26% Residential, Non-Residential, Existing Non-Residential, Township

SILVER

18% Residential, Non-Residential, Existing Non-Residential

BRONZE

44% Residential, Non-Residential, Existing Non-Residential, Township

GreenRE
Malaysia's Leading Green Building Certification Body

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