# GreenRE Bulletin

Issue 7 | January - June 2022

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Featured Project: Green Office Space

## ARUP

Kuala Lumpur

**Green Build Conference 2022**
Event Highlights

**The Art of Placemaking**
Featuring GreenRE's First Platinum Certified Office Interior Project

# Editorial Team.




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**GreenRE Bulletin**
Issue 7 | January - June 2022


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## Inside

# FOREWORD.

Dear Readers,

Welcome to the mid-year edition of the GreenRE Bulletin 2022.

As the covid-19 pandemic is transitioning to an endemic phase, and the economy is set to recover, it is time to shift our focus back to the climate change issue which may have been put on the back burner. This first half of the year we have seen the effects of climate change. Domestically, we see the floods in Klang Valley as well as in the east coast of peninsula Malaysia. The floods have gotten worse each time and it is undeniable, that it is a result of human activities. Globally in June and July this year, we see Europe, USA and China experiencing persistent heat waves as high as 47°C; where some states in the UK and USA hit unprecedented high temperatures resulting in heat related morbidities. These heat waves have been linked to climate change, this adds on the list of increasingly severe climate change related natural disasters. This shows despite our current efforts to limit global warming, it is not sufficient and we need to take serious measures to adapt to current and future risks.

According to Architecture 2030, the built environment accounts for almost 50% of all greenhouse gas emissions (GHGS). Thus, it is imperative to build green as this will significantly reduce the impact of buildings contributing to climate change. The GreenRE tools is holistic in the sense that it encompasses not only the construction phase of the building but also the life cycle of the building, making sure that the building post construction continues to be "green".

In the first half of 2022, GreenRE increased engagement with various stakeholders to push the green agenda. Collaborations with local authorities have been successful, with the recent acceptance of GreenRE as a green building rating tool by the Penang State Government. It is heartening to note that green building certification has been increasing year to year as we see developers, and industrial facilities doing more and strengthening their sustainability pledges and goals.

Additionally, The 2nd Green Build Conference (GBC 2022) was successfully organised with overwhelming support by developers and the green community. GreenRE also carried out a number of training programmes virtually and will organise in-person courses from the third quarter of 2022. Collaborations were also carried out with various organisations to strengthen our partnership and work together towards our common goal, ie. Climate Governance Malaysia and CEO Action Network, Singapore Green Building Council, WWF Malaysia, Majlis Bandaraya Petaling Jaya, etc.

Finally, our sincere appreciation to all our stakeholders for their continued support and let us move forward together towards a greener future.

*Jason Hiang*

GreenRE Management Committee Member

# EVENTS.

## GREEN BUILD CONFERENCE, GBC 2022
## 14 JULY 2022, AVANTE HOTEL

**PETALING JAYA:** The Second Green Build Conference 2022, jointly organised by GreenRE and REHDA Institute, saw a huge participation as synergising efforts to advance the green building agenda in Malaysia heats up.

With climate change having an undeniable impact on the way cities are planned and managed, passivity is no longer an option, and businesses will need to take proactive adaptation measures to position themselves as sustainable business leaders. In addition, the Covid-19 pandemic left a big economic scar on the Malaysian economy for which the real estate sector has not been spared.

"Affordability and overhang issues have been plaguing the sector in recent years and this has been further exacerbated by the pandemic. Sustainability is often put on the back burner, as companies and developers face soaring prices in labour and material prices as well as inflation.

### BIG CONFERENCE PARTICIPATION SHOWS ESG IS A HOT TOPIC

*as published in StarProperty by Joseph Wong


"However, inaction is not an option as unprecedented floods in many parts of Malaysia are evidence enough that our climate is changing and we need to take serious measures to adapt to current and future climate risks. Climate-exacerbated disasters cost companies and investors billions globally," said GreenRE chairman Datuk Seri Fateh Iskandar Mohamed Mansor.

He said the Green Build Conference had developed into an important platform for the Malaysian green building community to come together, and achieve the shared vision of a greener built environment.

GreenRE and REHDA Institute are the two arms of the Real Estate and Housing Developers' Association (REHDA). GreenRE was set up in 2013 to drive sustainability in Malaysia's real estate sector through a tropical-centric green building and township rating system.

REHDA Institute, since its formation, has been carrying out activities focused on the three core components of training, research and education to improve productivity, innovate new ideas and work alongside top institutions of higher learning.

Investors are progressively calling on businesses to evaluate their climate risks and plan for transitioning to a low-carbon future through mitigation and adaptation, he said in his opening speech at the conference.

# EVENTS.

"Consequently, many larger companies, nations as well as cities are setting ambitious net-zero targets. Building back better must be the mantra of the real estate sector incorporating a pragmatic approach to achieve a balance between the trilemma of economic, environmental and social sustainability.

Property developers must seek to address the high impact, low hanging fruit areas to green the built environment," Fateh said.

The property and construction sector is responsible for approximately 40% of Malaysia's GHG emissions with around 30% from operational carbon and 10% from embodied carbon.

Buildings consume 50% of all electricity generated in the country. Decarbonizing the electricity grid - for which 80% is still sourced from fossil fuels – is imperative alongside carbon reduction measures that need to be undertaken by the property and construction sector.

Also, an important aspect to address is the current or older building stock across Malaysia that face the real possibility of becoming energy obsolete, said Fateh.

"There is a need to address the barriers to energy retrofits for the existing building stock to move towards greater environmental performance. Less than 1% of Malaysia's building stock is currently green certified – unlike other countries such as Singapore and the UK.

"Pushing the green agenda and the successful take-up of green projects inadvertently depends on the push from the top. A firm top-down plan by the government with necessary incentives is imperative to guide the sector towards achieving this.

"The tax incentives under the Investment Tax Allowance Scheme by MIDA (Malaysian Investment Development Authority) have been slow to take off as only commercial building owners are eligible.

With the home ownership campaign underway to increase home ownership among Malaysians and to address the property overhang, a similar system could be put in place to provide stamp duty exemption for house buyers who purchase green certified properties," said Fateh.

Fateh is confident that the conference would foster a productive exchange of ideas that will guide stakeholders to create cities and homes of the future with ambitious targets and best-in-class standards.

"To sustain the green building movement, we also need green-minded communities. We need a strong buy-in from building owners, users and members of the public," he said.

Four major themes were covered in the panel discussions namely National and Local Policies towards a Low Carbon Roadmap, Beyond Benchmarking and Reporting for ESG (Environmental, Social, and Governance), Financing Sustainable Buildings and Transition towards Decarbonising the Property Sector Case Studies. The event was attended by developers, stakeholders from the construction industry, universities, government and professional agencies as well as sustainability consultants and providers.













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# EVENTS.

## GREENRE AWARD PRESENTATION FOR PLATINUM PROJECTS (2020-2022) AT GREEN BUILD CONFERENCE, GBC 2022

Currently, GreenRE has a portfolio of over 324 registered projects encompassing more than 200 million square feet of built-up area across Malaysia. It is timely that an event such as the Green Build Conference and award presentation is held to acknowledge the commitment by these developers and their notable green certified projects. Awards were presented to 12 illustrious GreenRE certified Platinum projects at GBC 2022.


### Platinum Certification Criteria

Platinum GreenRE Projects are the highest-ranking certification available, scoring 90 points and above. Platinum Projects are required to fulfill stringent pre-requisites such as:

BUILDING ENVELOPE DESIGN WITH OVERALL THERMAL TRANSFER VALUE (OTTV) OF

**40 W/M2 OR LOWER.**

DEMONSTRATE STIPULATED ENERGY SAVINGS OF

**AT LEAST 30% ENERGY SAVINGS**

OVER ITS REFERENCE MODEL USING AN ENERGY MODELLING FRAMEWORK SET OUT.

SCORE A MINIMUM OF 5 CREDITS UNDER

**SUSTAINABLE CONSTRUCTION**

SCORE A MINIMUM OF 4 CREDITS UNDER

**SUSTAINABLE PRODUCTS**

# EVENTS.

## GREENRE PLATINUM AWARD RECIPIENTS (2019-2022)

PROVISIONAL
Non Residential Building (NRB v3.1)

### Sunway International School Sunway City KL

by Sunway Education Group Sdn Bhd (by Sunway Integrated Properties)

Sunway International School Sunway City KL comprises of 6 blocks which are connected together by naturally ventilated corridors. The building relies on passive architecture to achieve energy savings while ensuring high standards of thermal comfort. The OTTV is 34 W/sqm. Air-conditioning will be supplied to several blocks by water-cooled chiller plant with an estimated operating efficiency of 0.64kW/RT resulting in an EEI of 95kWh/m2/yr and almost 45% energy savings. The development will be equipped with an intelligent building management system with accurate measurement and verification instrumentations to ensure precise controls and monitoring for energy savings. The building is also designed to have good daylighting and indoor air quality.

PROVISIONAL
Non Residential Building (NRB v3.0)

### Sunway Velocity Two Office Tower

by Sunway VTwo Holdings Sdn Bhd

Sunway Velocity Two is an office building located in the Sunway Velocity mixed development located in the heart of Kuala Lumpur. The exterior façade is designed to meet an OTTV of 39 W/sqm. The two towers will be served by an efficient air-conditioning system of 0.7 kW/RT with close to 40% energy savings. To meet the intention of sustainable water usage, all toilets in the building are designed to be fitted with SPAN's WELPS rated water efficient fittings. Furthermore, the building will incorporate an extensive list of eco labelled building materials.

# EVENTS.


PROVISIONAL
Residential Building & Landed Home
(RES v3.1)

## Sunway Flora Residences
by Sterling Paradise Sdn Bhd
(by Sunway Integrated Properties)

Sunway Flora consists of two towers of exclusive residential serviced apartment named located in Bukit Jalil. The building will have an external façade made up of high-performance tempered heat soaked and tinted laminated glazing resulting in a Residential Envelope Thermal Value of 18 W/sqm. The building design incorporates lush greenery elements and also optimally captures daylight whilst reducing glare and allowing for sufficient views to the outside for occupants. Additionally, every unit in the development is design to have good natural ventilation. Efficient 5 Star rating air-conditioning system will be installed in each unit to reduce the operating electricity consumption.


ACTUAL
Existing Non Residential Building
(ENRB v3.1)

## 1) Green Station – Caltex Ayer Keroh R&R Southbound & Northbound
## 2)Caltex Bukit Gantang R&R Northbound & Southbound
by Chevron Malaysia Limited

Chevron Malaysia Limited has become a pioneer in developing green petrol stations under GreenRE's Existing Non-Residential building category. The stations are equipped with 5 Star electrical appliances, extensive solar photovoltaic system and high-performance lighting which leads to almost 50% energy savings. The stations are also equipped with water efficient fittings, rainwater harvesting and actively promotes recycling activities through the provision of recycling bins for visitors and building occupants.

# EVENTS.

PROVISIONAL
Non Residential Building (NRB v3.1)

## Menara UOB 2
by UOB Properties (KL) Bhd

Menara UOB 2 is a high-end office tower located at Jalan Raja Laut, Kuala Lumpur. It is strategically located and accessible via public transport with less than 100m walking distance. High performance glazing is used on the façade design to minimize heat ingress and achieve an overall thermal transfer value of only 40 W/sqm. Energy efficiency is improved further through a high efficiency chiller plant system resulting in over 30% energy savings. The lighting system incorporates LEDs and high frequency ballast fluorescent luminaires. Furthermore, the building has incorporated extensive greenery resulting in a Green Plot Ratio of 6 which will help alleviate the heat island effect.

PROVISIONAL
Residential Building & Landed Home (RES v3.0)

## Bloomsvale, Menara Vista Petaling
by Kerjaya Prospek Property Sdn Bhd

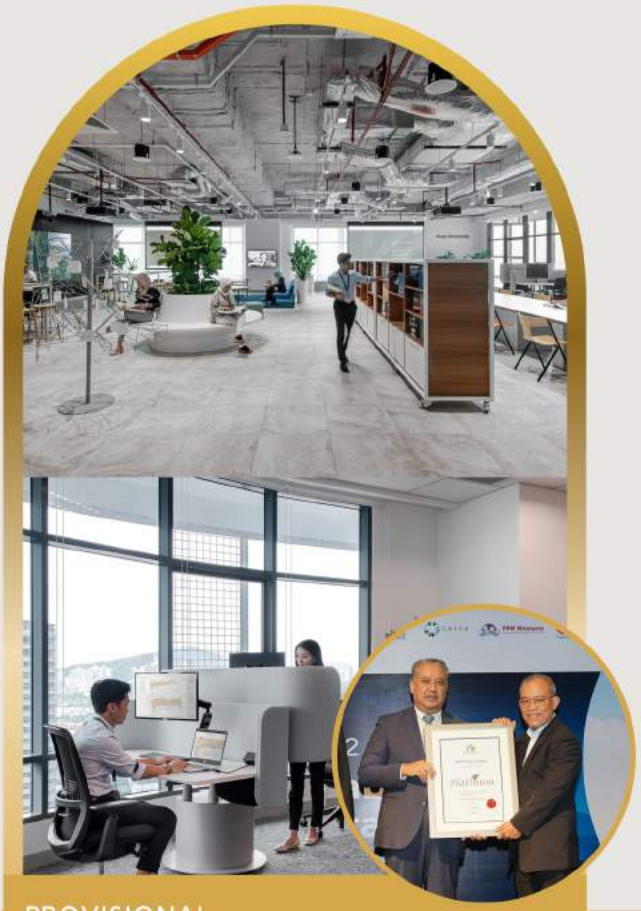
The Bloomsvale, Menara Vista Petaling consists of two towers of service apartments which is part of a mixed type development located at Old Klang Road. The development has been designed to harness natural ventilation which improves thermal comfort and indoor environmental quality. In terms of energy efficiency, Bloomsvale will have 5 Star Air conditioning installed for all the units and efficient light fittings in the common area. 90% of conventional water fittings are replaced with Singapore's WELS rated efficient water fittings.

# EVENTS.

ACTUAL
Non Residential Building (NRB v3.0)

## CTRM Aero Composite Building No. 6
by CTRM Aero Composite Sdn Bhd

This industrial facility located in Melaka produces composite components for both aerospace and non-aerospace applications. The project has achieved close to 33% energy savings benchmarked against similar facilities through high efficiency air-conditioning and an extensive solar photovoltaic system. CTRM has also achieved 85% water savings by installing SPAN's WELPS rated water efficient fittings. Additionally, the building was constructed with minimal concrete resulting in a Concrete Usage Index Value of only 0.2 m3/m2.



PROVISIONAL
Office Interior (INT v1.0)

## Arup Kuala Lumpur
by Arup Jururunding Sdn Bhd

Arup's office space is located in the 1 Powerhouse building which is also GreenRE Gold rated. It is Is the 1st office to be certified under GreenRE's Office Interior Toolkit. The Office space is efficiently designed to achieve energy savings of over 40% and an Energy Efficiency Index, EEI of 65 kWh/m2/year. The office has excellent indoor environment quality and incorporates eco labelled products. Recycling is extensively promoted through provision of recycling bins and an office specific waste management plan.

# EVENTS.

ACTUAL
Residential Building & Landed Home
(RES v3.0)

## WAO Child Care Center
by Women's Aid Organisation

This industrial facility located in Melaka produces composite components for both aerospace and non-aerospace applications. The project has achieved close to 33% energy savings benchmarked against similar facilities through high efficiency air-conditioning and an extensive solar photovoltaic system. CTRM has also achieved 85% water savings by installing SPAN's WELPS rated water efficient fittings. Additionally, the building was constructed with minimal concrete resulting in a Concrete Usage Index Value of only 0.2 m3/m2.

## CONGRATULATIONS TO ALL GREENRE PLATINUM CERTIFICATION RECIPIENTS

# EVENTS.

## STUDY VISIT TO PNB 118, 13 JULY 2022

A Green Study Visit to PNB 118, was co-organised by GreenRE and PNB Merdeka Ventures for a delegation from Singapore Green Building Council, in conjunction with GBC 2022. This working visit for SGBC was organised as part of our collaborative efforts to foster international ties in our green building community. Participants from SGBC, REHDA and GreenRE visited PNB 118, the second tallest building in the world and a GreenRE Platinum rated building.

# EVENTS.

## MBPJ 16TH ANNIVERSARY CELEBRATION

GreenRE was invited to participate in the Green Product Exhibition held in conjunction with Petaling Jaya City Council's (MBPJ) 16th anniversary celebration, 24th-26th June 2022 @ Laman MBPJ, Jalan Yong Shook Lin Petaling Jaya.

MBPJ launched its PJ Smart Sustainable Resilient 2030 blueprint back in 2018. The blueprint focuses on seven core areas – public transport, low carbon city, recycling, security, natural disasters, reducing energy consumption and a barrier-free city. By 2030, MBPJ aims to increase the use of public transportation by 40%, reduce total energy consumption by 30%, bring down crime rates by 10% yearly, reduce carbon emission by 2% yearly, increase recycling by 3% yearly and bring down flood woes to below 10%.

GreenRE aims to work together with local authorities on our common goal of encouraging and building sustainable buildings and townships.


## PLATINUM AWARD PRESENTATION AT CALTEX GREEN STATION AYER KEROH NORTHBOUND & SOUTH BOUND

Chevron Malaysia organised an award presentation session for their recently certified, Caltex Ayer Keroh Northbound & Southbound. The stations successfully achieved tge GreenRE Platinum Certification (under the Existing Non-Residential category, ENRB V3.1), making the outlets Malaysia's first GreenRE Platinum-certified service station.

With the sustainable criteria and features implemented, the petrol station is estimated to offset up to 34% of its total annual carbon emission, which equivalent to carbon sequestered by 8,000 trees.

# EVENTS.

## GREENRE FREE SUSTAINABILITY WEBINAR SERIES EPISODE 7: FUTURE PROOFING BUILDINGS WITH GREEN INNOVATIONS, 19 JANUARY 2022

The property & construction sector contributes approximately 40% of Malaysia's carbon footprint encompassing emissions throughout its lifecycle. Further, two-thirds of the buildings that exists today will still exist in 2050 necessitating upgrades and retrofitting to lower their carbon impact. This 90 minute webinar discussed innovative green solutions for sustainable real estate.

**Speakers & Presentations**

1) Solar PV Solution for Commercial & Industrial Buildings by Mr Yong Sien Wae, Chief Executive Officer, Hasilwan (M) Sdn Bhd
2) Cooling as a Service by Mr Leo Cher, Deputy Manager, Business Development, Keppel DHCS
3) Electric Vehicle Charging Solutions by Dato' Thiruchandran Thiruchelvam, Executive Director, Charge N Go Sdn Bhd

Download the presentation slides here: https://greenre.org/webinar_details?no=9




# EVENTS.

## GREENRE AWARENESS DRIVE

2022 has been an encouraging year for green development in Malaysia, as companies are keen to work together with GreenRE to raise awareness on Green Buildings and Sustainable Development in their organisations. In the last 6 months, Green Building introductory workshops were held for Mah Sing, Maybank, KWSP and numerous local authorities.

### GreenRE Introductory Course for EPF

GreenRE in collaboration with KWSP (EPF) held a 1-day Introduction to GreenRE and Green Building Certification on 18th July 2022.

The topics covered included Introduction to GreenRE and GreenRE Rating tools by the GreenRE Team, Ms Juanita and Ms Siti Suhana respectively, Energy Efficiency and Active Design by Ts. Ahmad Thibri Mashri (ESD Greentech Sdn Bhd), Passive Design for Buildings by Ar. Axxu Hoi Jung Wai (Axial Design Architects Sdn Bhd), Overall Thermal Transfer Value (OTTV) and Daylighting by Ar. Dr. Joseph Kong (DME Solutions Sdn Bhd), Water Efficiency and Carbon Emission by our own assessors, Ms. Nur Fateha and Ms. Intan Siti Zulaikha.

Around 20 participants from Jabatan Pengurusan Harta attended webinar.



### GreenRE-WWF Green Building Awareness Drive for Local Authorities

World Wide Fund For Nature Malaysia's (WWF-Malaysia) One Planet City Challenge team together with GreenRE has organised Webinar Trainings for Local Authorities on Green Building Certification, passive design and UBBL 38A since 2021.

We have successfully carried out the webinars for the following local authorities, Penang, Negeri Sembilan, Melaka and Negeri Terengganu and most recently Pahang.

*The One Planet City Challenge (OPCC) is WWF's invitation to cities to join our sincere intentions to celebrate national and global frontrunners. We review cities' climate actions and ambitions, and assess whether they align with the goals set forth in the Paris Agreement. WWF supports cities in accelerating their climate transformation and showcases participants' efforts to create a better environment for the world's citizens with the support of partners such as GreenRE.*

# TRAININGS.

## GREENRE ACCREDITED PROFESSIONAL'S COURSE NO.27 AND NO.28 (WEBINAR)

GreenRE continued online sessions for the GreenREAP Course Intake 27 and 28, held last February 2022 and May 2022 respectively. Participants for GreenREAP course consisted of developers (ie. Engineers, architects, facilities managers, project managers, etc.), green consultants and also academicians. It is encouraging to note the increasing interests from developers to attend the green building courses.

This course also applicable for CPD points from Suruhanjaya Tenaga, Institute of Engineering, Malaysia (IEM), Lembaga Arkitek Malaysia (LAM), Lembaga Penilai, Pentaksir, Ejen Harta Tanah dan Pengurus Harta (LPPEH) and GreenRE.

The next GreenREAP Course will be our first physical course (since Covid-19), it will be held next September 2022 in Penang. We are proud to announce that GreenRE certification has been recently recognised as a certification tool for green building projects by the Penang State government. The Penang GreenREAP Course will be a great opportunity for developers in the Northern Region to obtain knowledge on GreenRE Green building certification.



## GREENRE TECHNICAL SEMINAR 01-2021 ON EFFICIENT CENTRAL AIR-CONDITIONING DESIGN AND MEASUREMENT & VERIFICATION SYSTEMS (WEBINAR)

The 4th intake the Efficient Central Air-Conditioning Design and Measurement & Verification Systems (ACMV) Seminar was conducted online from 22nd – 24th March 2022. The ACMV seminar has been one of our most popular technical seminars since 2019.

The trainers were Mr. Steven Kang (Director) and also Ms. Chloe Ng (Business Development Manager), both from Measurement & Verification Pte Ltd. The aims is to provide an understanding on the fundamentals of air-conditioning measurement and verification (ACMV) and its optimisation. This technical course covered topics such as Central Chilled Water Plants, Chilled Water Airside Systems, Energy Efficient Water & Air Distribution Systems, Chiller Plant Performance Optimization, AHRI 550 and SS591.

# NEWS & ANNOUNCEMENTS.

## GREENRE RECOGNISED BY PENANG STATE GOVERNMENT

We are pleased to announce that GreenRE certification is now recognised as a certification tool for green building projects by the Penang State government.

In a recent press conference, Penang's Local Government, Housing, Town and Country Planning Committee chairman Jagdeep Singh Deo also announced that all public housing schemes in Penang must be green buildings. While it is a requirement for property developers to develop green buildings for their new projects, existing old buildings are encouraged to be retrofitted to become green buildings.

Read the full article here, https://www.buletinmutiara.com/exco-man-wants-all-public-housing-schemes-to-attain-green-building-certification/

## GREENRE IS NOW A GRESB REAL ESTATE INDUSTRY PARTNER

GRESB provides a consistent framework to measure the ESG performance of individual assets and portfolios based on self-reported data.

For more information, visit https://gresb.com/nl-en/about-us/

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## GREENRE-JCI UP PARTNERSHIP

GreenRE has partnered the Junior Chamber International United Penang (JCI UP) and JCI Malaysia Sustainable Development Award Committee for their upcoming 2022 JCI Malaysia Sustainable Development Award (JCI SDA).

The JCIM SDA aims to raise awareness of UN Sustainable Development Goals (UNSDGs) to the public as well as to recognise companies and NGOs that have done projects that help advance the Sustainable Development Goals (SDGs).

# GREENRE ACCREDITED PROFESSIONAL'S COURSE no.29 (PENANG)

## 20-22 SEPTEMBER 2022

9.00am – 6.00pm (Registration at 8.30am)

Sunway Hotel Georgetown, Penang

Assessment Date: 20th & 21st October 2022 (online)

HRDCORP CLAIMABLE

### ABOUT THE **EVENT**

The GreenREAP Training Course is a 3 day course geared to equip individuals with the knowledge and skills on green building best practices. This will enable them to optimize the design of active and passive components in building projects and thereby facilitate GreenRE certification.

### COURSE FEE

| | |
|---|---|
| Member - Early Bird (before 14 Aug 2022) RM1,050.00 | Non Member- Early Bird (before 14 Aug 2022) RM1,250.00 |
| Member - Normal RM1,200.00 | Non Member - Normal RM1,350.00 |
| Member Group of 3 pax RM3,300.00 | Non Member Group of 3 pax RM3,450.00 |
| Member Group of 5 pax RM5,500.00 | Non Member Group of 5 pax RM5,650.00 |

**CPD POINTS: GREENRE (15) | IEM, LAM, ST, LPPEH, MBOT (tbc)**

- **Group fees are not available for early bird offers**
- **Upon completion of 3 days course, participant will get a Certificate of Attendance and Certificate of GreenREAP (requirements to be fulfilled)**
- **Member: GreenREAP, REHDA, IEM, BEM, LAM, ST, MBOT, LPPEH, RISM, BQSM, ACEM, MIP, MBAM, SHAREDA, SHEDA**

For further information, email training@greenre.org / call 03-78032978

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SCAN TO REGISTER

## Course Objectives

- To provide information and knowledge on the best practices of green building principles
- Understand and reduce life cycle cost of green buildings
- Legislative requirements on Environmental Sustainability for Buildings
- Provide an understanding on the interpretation of the GreenRE Tool Criteria, scores and certification process

## Assessment of GreenREAP's Course

- The examination measures knowledge on green buildings, GreenRE rating system and the certification process
- The examination is divided into 2 sections. Part 1 is multiple choice question (MCQ) test and Part 2 is group project. In keeping with our green and sustainable practices, course notes will be available in e-format

## GreenREAP Application

- Fully attended 18 hours of GreenREAP's Course
- Pass the assessment (MCQ and group project)
- A recognized Degree or Diploma in related diciplines (engineering, architecture, QS, environmental science etc.) approved by GreenRE Review Panel, in addition to at least 3 years working experiences for Degree holder or 5 years working experiences for Diploma holder
- GreenREAP's certification is valid for 2 years from issuance

## Renewal Requirements

- Compulsory attendance for GreenRE Refresher Course (at least once for each renewal application) or Basic Course of GreenREAP's Course (1st Day only)
- Accumulation of CPD points of 10 points per year (green building courses OR GreenRE project submission)

# PROGRAMME STRUCTURE

## 20 Sept. 2022

| | |
|---|---|
| 08.30am - 09.00am | Registration & Breakfast |
| 09.00am - 09.30am | Introduction to GreenRE and GreenREAP's Course (Ms. Juanita and Ms. Nariemah) |
| 09.30am - 11.30am | Introduction to GreenRE Buildings and Township Rating Tools (Ms. Siti Suhana - GreenRE) |
| 11.30am - 12.00pm | GreenRE Assessment Process (Ms. Intan Siti Zulaikha - GreenRE) |
| 12.00pm - 01.00pm | Passive Design for Green Buildings & Township (Ar. Axxu Hoi Jung Wai - ADA) |
| 01.00pm - 02.00pm | Lunch Break |
| 02.00pm - 04.30pm | Overall Thermal Transfer Value (OTTV) & Residential Envelope Trasmittance Value (RETV) (Ar. Dr. Joseph Kong - DME Solutions) |
| 04.30pm - 04.45pm | Evening Tea Break |
| 04.45pm - 05.45pm | Sustainable Construction & Green Products (Mr. S. Ramesh - IJM Land) |

## 21 Sept. 2022

| | |
|---|---|
| 08.30am - 09.00am | Registration & Breakfast |
| 09.00am - 12.30pm | Air-Conditioning & Mechanical Ventilation System (ACMV) (Mr. Choong Chow Neng - G Energy Pte Ltd) |
| 12.30pm - 02.00pm | Lunch Break |
| 02.00pm - 04.00pm | Artificial Lighting & Daylighting (Ar. Dr. Ratnakala Sithravel - PAM) |
| 04.00pm - 04.15pm | Evening Tea Break |
| 04.15pm - 05.45pm | Indoor Environmental Quality & Green Innovation Features (Mr. Gregers Reimann - IEN Consultants) |

## 22 Sept. 2022

| | |
|---|---|
| 08.30am - 09.00am | Registration & Breakfast |
| 09.00am - 11.00am | Energy Modelling & Ventilation Simulation (Mr. ken Po - Building System & Diagnostics Pte Ltd) |
| 11.00am - 12.00pm | Water Efficiency & Rainwater Harvesting (Ar. Clement Wong - Clement Wong Architecture) |
| 12.00pm - 12.30pm | Green Plot Ratio (Ar. Clement Wong - Clement Wong Architecture) |
| 12.30pm - 02.00pm | Lunch Break |
| 02.00pm - 03.00pm | Solar Photovoltaic for Buildings & Township (Mr. Christophe Inglin - Energetix Pte Ltd) |
| 03.00pm - 04.00pm | Stormwater Management (JPS) |
| 04.00pm - 04.15pm | Evening Tea Break |
| 04.15pm - 04.45pm | Green Tax Incentives & Green Cost Calculation (GreenRE) |
| 04.45pm - 05.15pm | Group Assessment Briefing (GreenRE) |

Notes:

- The pro forma invoice will be sent once the registration has been submitted
- The registration is confirmed once the payment done. The invoice and receipt will be sent after the payment received
- GreenRE has the right to alter the schedule of the course in the best interest and is not responsible for cancellation due to unforeseen circumstances

# BEX ASIA

BUILT ENVIRONMENT XPO ASIA

**6 - 8 SEPTEMBER 2022**
SANDS EXPO & CONVENTION CENTRE

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## PRODUCT CATEGORIES AVAILABLE AT BEX ASIA 2022

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- Advanced Construction Solutions
- Architectural & Interior
- Digitalisation
- HVAC & IAQ
- Mechanical, Electrical & Plumbing
- Smart Facility Management
- Sustainability

## WHY YOU SHOULD VISIT BEX ASIA

- Source the Latest Built Environment Solutions for Your Projects
- Be Part of the Conversation on The Trends and Opportunities that will Facilitate Business Growth and Transformation at IBEW (International Built Environment Week) Conference
- Learn From the Latest Innovations and Solutions At Our Complimentary Technical Seminars
- Identify, Connect and Establish Partnerships with Thousands of Sellers and Buyers Through Our Smart Matching System
- Connect with International Peers and Suppliers to Expand Your Network and Business Opportunities

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# CALENDER OF EVENTS.

**23/8/2022**

GreenRE Refresher Course 2022

Online

GreenRE CPD Points: 3

**5-9/8/2022**

International Built Environment Week, IBEW 2022

Singapore/Online

**17/8/2022**

Property & Construction Sector Round Table Engagement by Climate Governance Malaysia (CGM)

-Online

**13/9/2022**

World Class Sustainable Cities, WCSC 2022

Royale Chulan Kuala Lumpur Hotel, Kuala Lumpur

**20-22/9/2022**

GreenRE Accredited Professional's Course No. 29 (Penang)

Sunway Hotel Georgetown, Penang

GreenRE CPD Points: 15

**20/10/2022**

GREENREAPC29 - Examination

Online

**21/10/2022**

GREENREAPC29 - Group Projects

Online

**15-16/11/2022**

GreenRE Technical Seminar 02-2022

Wisma REHDA, Kelana Jaya

GreenRE CPD Points: 10

FEATURED PROJECT.


# ARUP in Kuala Lumpur

## The First GreenRE Platinum Office Interior Project


# CREATING A GREEN AND HEALTHY WORKPLACE

by Arup Kuala Lumpur

Global consulting firm Arup has confirmed its confidence and commitment to Malaysia with the move to a new office and recruitment of additional specialists to support its expanded services in Kuala Lumpur.

Boasting an approximate 36,500 ft$^2$, Arup new office is on Level 26, 1 Powerhouse – a Grade A, MSC-status landscaped green tower with a GreenRE Gold rating, in a suburb within the city of Petaling Jaya.

In line with Arup's strategy that puts sustainability at the heart of its work, resource efficiency is a priority in this office design. The office is the first in Malaysia to target the highest possible green performance rating of GreenRE Platinum for Office Interior (INT) category.

"We expect a 40% improvement on energy consumption with the state-of-the-art energy-efficient features in our new office"

- Malaysia Leader, Lawrence Yeap.

The office features LED light source, occupancy sensors, high energy-efficient office equipment and chillers, and the most efficient WEPLS rating for all water fittings. The availability of public transportation (MRT) at doorstep further promotes carbon footprint reduction.

## OUR DESIGN APPROACHES

Co-designed with Hassell, Arup's consultants contributed to the sophisticated look and operations of the office with environmentally sustainable design, lighting, acoustic and audio-visual systems, and mechanical and electrical engineering.

One of the key drivers of the design is about bringing in community, engagement and innovation, understanding that Activity Based Working (ABW) needs diverse settings that make sense for the culture and business. The office design put emphasis on integrating the strong learning culture of Arup into the new KL workplace to encourage more collaboration and choices of where to work both individually and together.

More than just bringing in-house library as part of this new space, the team delivered the project through an integrated building information modelling (BIM) approach, combining design and engineering into a cohesive whole.

The design responds to Arup's regional Workplace Guidelines to steer the development of new workplaces in Melbourne, Sydney, Singapore and now Kuala Lumpur.

## FOSTERING COLLABORATION AND CREATIVITY

Designed to cater for future expansion, the workplace can fit more than 400 members in ABW work settings. It comes with flexible, interactive spaces coupled with excellent digital technologies and tools to encourage the exchange of ideas and the development of integrated solutions. Clients and Arup's colleagues in Penang and around the world will benefit from the strong connections, ideas and efficiencies. The new office sends a strong signal about the importance and value of collaboration with clients, and between team members and different teams.

## PRIORITISING HEALTH AND WELLBEING OF OUR MEMBERS

Arup has taken opportunities to weave in biophillic design and make this a healthy place to work, such as maximising daylight and using environmentally friendly materials in the furniture and fittings wherever possible. There are many indoor plants which will improve the air quality, as well as softening the look of the office.

Some important inclusions are acoustically treated rooms, height adjustable desks and ergonomic chairs. 'Personal' spaces are designed to look after our people and make coming to the office a good experience, such as the new recreational area and the mothers' and wellness room.


## EXPANDING SERVICES AND INVESTING IN MALAYSIA'S FUTURE

Investing in a new workplace marks the beginning of a new chapter for Arup in Malaysia. Recognising the changing business landscape, the firm, best known for its engineering and design expertise, is broadening its technical capabilities and advisory services with a team of more than 300 people in Malaysia.

The Malaysian team has a strong track record of delivering successful projects including the the country's tallest (and world's second highest) building Merdeka 118, KVMRT rail line, the Subterranean Penang International Convention & Exhibition Centre (SPICE) and the Rawang Bypass.

## PROJECT TEAM

**Owner:** Arup

**Architect:** Hassell Design (Singapore) Pte Ltd, SW1 Solutions Sdn Bhd

**M&E Consultant:** Arup

**Lighting & Acoustic Consultant:** Arup

**Quantity Surveyor:** Turner & Townsend Sdn Bhd

**ESD Consultant:** Arup

**Contractor:** One International Group Sdn Bhd

**Image credit to ©David Yeow**

FEATURED ARTICLE.

# CARBON-BREAKDOWN OF HOUSE @ SIME DARBY SUSTAINABILITY DAY

Gregers Reimann

IEN Consultants Sdn Bhd

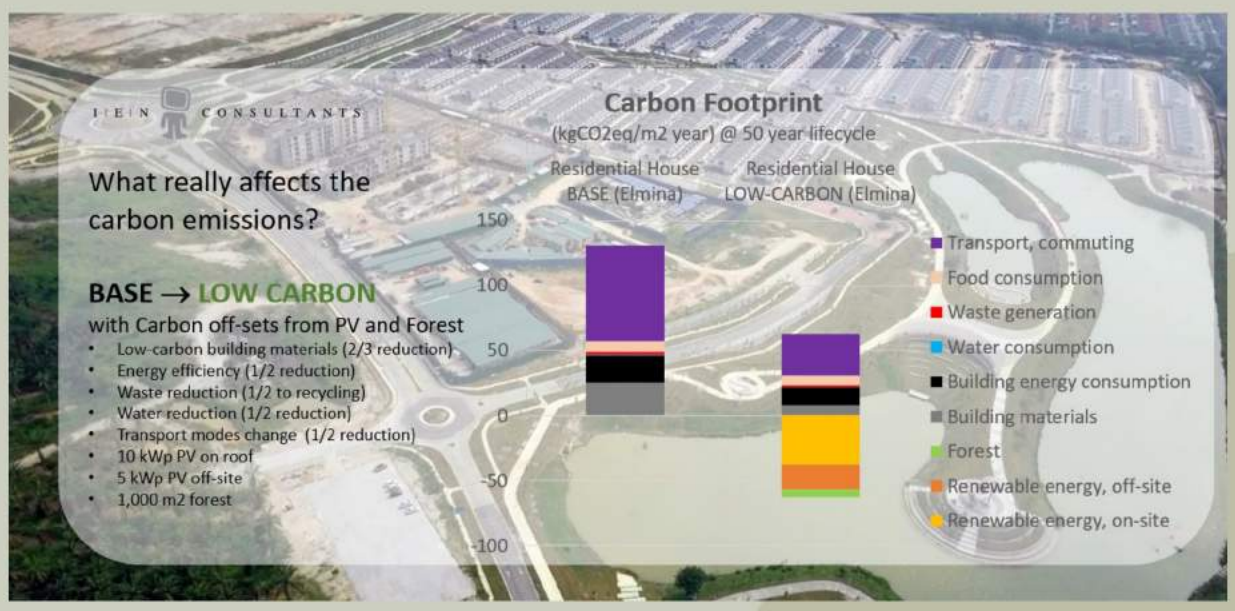
*as published in Carbon-breakdown of House @ Sime Darby Sustainability Day (ien.com.my)

Glad to see Sime Darby's continued focus on going green as evident during today's Sime Darby Sustainability Day for which IEN was delighted to be invited back as one of the speakers. Attended by more that 600 of their staff, the Sime Darby management told that Sime Darby intends to achieve operational carbon-neutrality within a decade or so; the official announcement will be made at a later date. In this light, IEN chose to present the carbon emission breakdown for a typical house in a Sime Darby housing development. In other words, where the carbon is emitted? And what low-carbon measures really matter in order to get to zero-carbon?

Based on actual operational figures for typical Sime Darby houses with respect to energy, water and waste as well as drawing upon carbon databases locally and internationally, our carbon emission breakdown over a 50-year period shows that three biggest carbon emissions of housing developments come from:

- 57% (commuting transport)
- 19% (building materials)
- 16% (building electricity consumption)

From a low-carbon perspective, it is therefore most important to address the significant carbon emissions from transportation. Implementing a network of conducive, safe and shaded pathways for bicycling and walking that connects nearby shops / workplaces / schools / amenities can greatly contribute to reducing carbon emissions for transportation. Moreover, with the advent of electric cars and electric bicycles/scooters, property developers can make transport zero-carbon with sufficient solar capacity installed for free-of-charge vehicle charging - a great incentive to make the residents switch to electric vehicles.

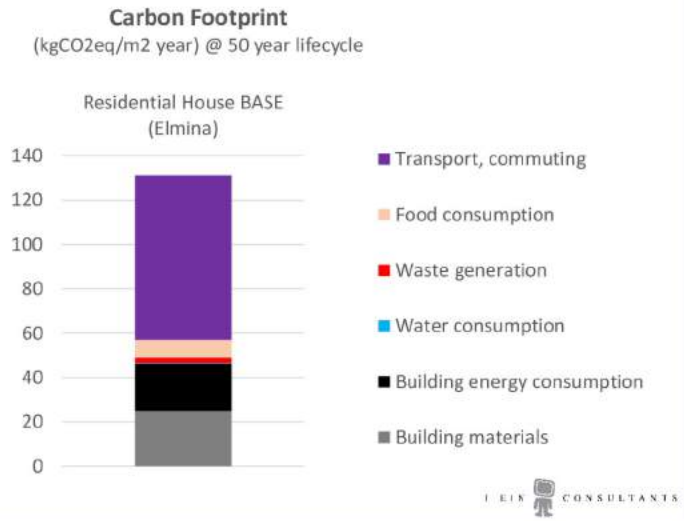



# Carbon Footprint of House @ Elmina

186 m² GFA. 4 pax. 608 kWh/month. 40 km transport/day/person. 180 kg waste/month. 20 m³ water/month

What really affects the carbon emissions?

**BASE Building**




# Carbon Footprint of House @ Elmina

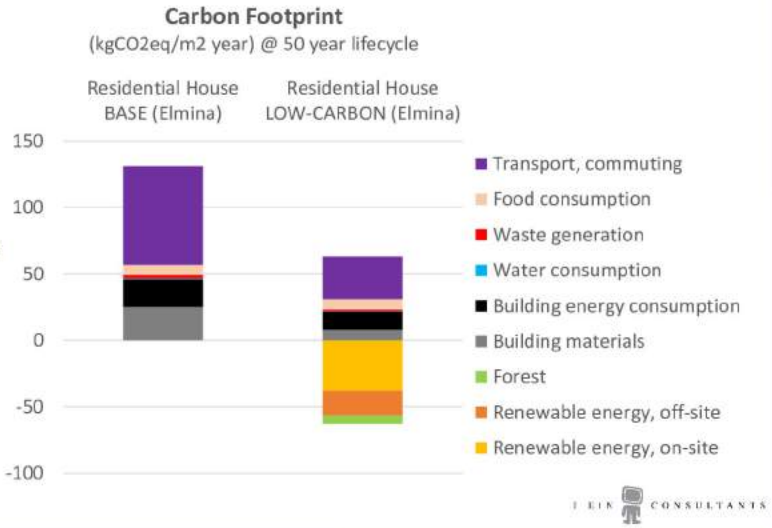
186 m² GFA. 4 pax. 345 kWh/month. 40 km transport/day/person. 180 kg waste/month. 20 m³ water/month

What really affects the carbon emissions?

**BASE → LOW CARBON**

with Carbon off-sets from PV and Forest

- Low-carbon building materials (2/3 reduction)
- Energy efficiency (1/2 reduction)
- Waste reduction (1/2 to recycling)
- Water reduction (1/2 reduction)
- Transport modes change (1/2 reduction)
- 10 kWp PV on roof
- 5 kWp PV off-site
- 1,000 m2 forest



## Low-Carbon Measures that Matter

1) **Low-carbon transport**
   - bicycle/pedestrian network to local amenities/workplaces/schools
   - electric vehicles/electric bicycles

2) **Energy Efficiency**
   - passive design (design with the climate, not against it)
   - active design (e.g. energy efficient air-con, 4-5 times more efficient split air-cons coming onto the market soon)

3) **Low-carbon building materials**

4) **Carbon off-setting**
   - renewable energy (onsite & off-site)
   - tree planting / micro forests

5) **Food**
   - locally produced vegetables/fruits (about 30% of emissions) [possible]
   - locally produced meat (about 70% of emissions) [difficult]

EIN CONSULTANTS

Energy efficient buildings that are designed to work with Nature - instead of against it - as well as the use of low-carbon materials will also help to reduce the carbon footprint of housing development.

Reducing carbon emissions from food might be possible from growing vegetables and fruits in community gardens within the housing development.

In short, there are lots of discussions and design optimisations to be had on the exciting and necessary journey to carbon-neutrality.

## Property and Construction Sector Roundtable Series 2022


Organized by:

CAN ceo action network

Supported by:

GreenRE Sime Darby Property malaysiaGBC

UPCOMING EVENTS

Listen to these sessions to find out how Malaysia can strengthen its climate ambition, understand the challenges we are facing and how these can be overcome.

90% of Malaysia's population is estimated to be living in cities by 2050. The built environment contributes to approximately 40% of Malaysia's carbon footprint encompassing emissions throughout it's entire lifecycle including final energy use. Further, two-thirds of the building area that exists today will still exist in 2050 necessitating upgrades and retrofitting to lower their carbon impact.

The property development and construction sectors involve a diverse range of stakeholders and a concerted effort is required to achieve decarbonization. Join in the following roundtables that will discuss the high impact areas requiring urgent attention.

**2.00 pm- 3.30 pm [Virtual] Wednesday 17 August 2022**

Session 1: Towards a Low Carbon Property and Construction Sector- Cities Engagement Session

**2.00 pm- 3.30 pm [Virtual] Wednesday 14 September 2022**

Session 2: Ecological and Biodiversity Preservation Engagement Session

RSVP at www.cgmalaysia.com

# TECHNICAL UPDATES.

## 1.0 Revision of Rating System Scoring

GreenRE Rating system scoring will be revised as follow:

- Non- Residential Building, Existing Non-Residential, Healthcare Facilities, Industrial Facilities, Existing Industrial, New Data Centre & Residential Building

| Score | Rating |
|---|---|
| 91 and above | GreenRE Platinum |
| 86 to ≤ 90 | GreenRE Gold |
| 76 to ≤ 85 | GreenRE Silver |
| 50 to ≤ 75 | GreenRE Bronze |

- Office Interior

| Score | Rating |
|---|---|
| 91 and above | GreenRE Platinum |
| 81 to ≤ 90 | GreenRE Gold |
| 71 to ≤ 80 | GreenRE Silver |
| 50 to ≤ 70 | GreenRE Bronze |

- Township

| Score | Rating |
|---|---|
| 101 and above | GreenRE Platinum |
| 91 to ≤ 100 | GreenRE Gold |
| 76 to ≤ 90 | GreenRE Silver |
| 60 to ≤ 75 | GreenRE Bronze |

## 2.0 RES 1-2 Provision of Air-conditioning and Compliance to Pre-requisites (Effective 1st January 2022)

For Gold and Platinum projects registered 1st January 2022 onwards, 5 Star rated air conditioning is required for common area facilities.

## 3.0 RES 3-4 (h) & NRB 3-4(h) Provision of Sustainable Operation and Management Guideline

To include GreenRE Renewal checklist and guideline as a requirement in the Sustainable Operation and Management Guideline (SOMG).

# NEWLY CERTIFIED GREENRE PROJECTS.

| Project Name & Location | Company | ESD Consultant | Design Ref | Type of Cert | Date of Cert |
|---|---|---|---|---|---|
| **Platinum** | | | | | |
| Caltex Bukit Gantang Southbound, Taiping | Chevron Malaysia Limited | DLM Engineering Sdn Bhd | ENRB v3.1 | Provisional | 12/5/2022 |
| Caltex Bukit Gantang Northbound, Taiping | Chevron Malaysia Limited | DLM Engineering Sdn Bhd | ENRB v3.1 | Provisional | 20/5/2022 |
| Sunway Flora Residence, Kuala Lumpur | Sterling Paradise Sdn Bhd | Li-Zainal Sdn Bhd | RES v3.2 | Provisional | 21/6/2022 |
| WAO's Child Care Center, Petaling Jaya | Women's Aid Organisation | BSD Consultancy Sdn Bhd | RES v3.0 | Actual | 28/4/2022 |
| **Gold** | | | | | |
| Sunway Alishan, Kuala Lumpur | Sunway Kinrara Sdn Bhd | Zeal Greentech Sdn Bhd | RES v3.1 | Provisional | 25/1/2022 |
| Residensi Maya Ara, Petaling Jaya | Sime Darby Property (Ara Damansara) Sdn Bhd | BSD Consultancy Sdn Bhd | RES v3.2 | Provisional | 8/2/2022 |
| The Scarletz, Kuala Lumpur | Suriamas Lumayan Sdn Bhd | Zeal Greentech Sdn Bhd | NRB v3.0 | Provisional | 30/3/2022 |
| Refurbishment and Renovation to Sunway Resort Hotel, Petaling Jaya | Sunway Reit Management Sdn Bhd | DME Solutions Sdn Bhd | ENRB v3.2 | Provisional | 30/3/2022 |
| Level 27 & 28 @ Menara B (The Met), Kuala Lumpur | Triterra Metropolis Sdn Bhd | DME Solutions Sdn Bhd | INT v1.0 | Provisional | 17/5/2022 |
| 8BU Commercial B, Petaling Jaya | Bandar Utama Development Sdn Bhd | ESD Greentech Sdn Bhd | NRB v3.1 | Provisional | 21/6/2022 |
| D'Quince Residence, Kuala Lumpur | Momentumace Sdn Bhd | Zeal Greentech Sdn Bhd | RES v3.1 | Provisional | 23/6/2022 |
| Bon Kiara, Kuala Lumpur | Land Maker Sdn Bhd | ESD Greentech Sdn Bhd | RES v3.2 | Provisional | 24/6/2022 |
| Sunway Geolake, Petaling Jaya | Sunway South Quay Sdn Bhd | BSD Consultancy Sdn Bhd | RES v3.1 | Actual | 24/3/2022 |
| **Silver** | | | | | |
| Thomson Hospital Kota Damansara, Petaling Jaya | Thomson Hospitals Sdn Bhd | ESD Greentech Sdn Bhd | HC v1.0 | Actual | 21/6/2022 |
| **Bronze** | | | | | |
| 111 Menerung, Kuala Lumpur | BRDB Developments Sdn Bhd | G-Energy Global Pte Ltd | RES v3.2 | Provisional | 10/2/2022 |
| Plot 1 - Sri Damansara Club Development, Petaling Jaya | Sri Damansara Sdn Bhd | ESD Greentech Sdn Bhd | NRB v3.2 | Provisional | 25/3/2022 |
| IBIS Hotel, Petaling Jaya | Luxury Alpine Sdn Bhd | DME Solutions Sdn Bhd | NRB V3.1 | Provisional | 30/3/2022 |
| Hyatt Centric Kota Kinabalu, Sabah | Sunhill Ventures Sdn Bhd | DME Solutions Sdn Bhd | NRB v3.1 | Provisional | 5/4/2022 |
| The Fiddlewoodz@KL Metropolis, Kuala Lumpur | Ivory Interpoint Sdn Bhd | Zeal Greentech Sdn Bhd | RES v3.1 | Provisional | 10/5/2022 |
| Pangsapuri Optimus, Johor Bahru | Xlee Studio Sdn Bhd | XLee Studio Sdn Bhd | RES v3.2 | Provisional | 10/5/2022 |
| Eco Spring (Plot 3), Nusajaya | Eco Summer Sdn Bhd | BSD Consultancy Sdn Bhd | TS v1.0 | Provisional | 20/5/2022 |
| Eco Tropics (Plot 3), Pasir Gudang | Eco Tropics Development Sdn Bhd | BSD Consultancy Sdn Bhd | TS v1.0 | Provisional | 10/6/2022 |
| Eco Botanic 2 (Precinct 1), Nusajaya | Melia Spring Sdn Bhd | BSD Consultancy Sdn Bhd | TS v1.0 | Provisional | 13/6/2022 |
| Residensi Riana Dutamas 1, Kuala Lumpur | 368 Segambut Sdn Bhd | Green Quarter Sdn Bhd | RES v3.1 | Actual | 13/4/2022 |
| Guinea Foods Sdn Bhd (GF2) Green Building, Taiping | Guinea Foods Sdn Bhd | In-House Team | EIND v1.0 | Actual | 10/6/2022 |
| A.Clouet & Co.(KL) Sdn Bhd, Shah Alam | A.Clouet & Co.(KL) Sdn Bhd | In-House Team | ENRB v3.1 | Renewal | 30/6/2022 |

# NEWLY CERTIFIED GREENRE ACCREDITTED PROFESSIONALS (GREENREAPS).

| CERT NO. | NAME | COMPANY |
|---|---|---|
| GREENREAP0319 | Norman Tie Seng Teck | KJ Technical Services Sdn Bhd |
| GREENREAP0320 | Ir. Pang Wei Chin | SECM Sdn Bhd |
| GREENREAP0321 | Alif Arif Iskandar | Veritas Architects Sdn Bhd |
| GREENREAP0322 | Nurulhuda Mhd Non | Veritas Architects Sdn Bhd |
| GREENREAP0323 | Mohd Hafiz Bin Zainuddin | Knight Frank Property Mgmt. Sdn Bhd |
| GREENREAP0324 | Ts. Lim Vincent | Conevo Green Consultancy Sdn Bhd |
| GREENREAP0325 | Ar. David Yek Tak Wai | David Yek Architect |
| GREENREAP0326 | Chai Ai Xin | Zeal Greentech Sdn Bhd |
| GREENREAP0327 | Ir. Mohd Hazwan Bin Mohamed Haniffa | SIRIM Bhd |
| GREENREAP0328 | Ts. Dr. Ruzaimah Binti Razman | Universiti Tun Hussein Onn Malaysia |
| GREENREAP0329 | Tho Win Son | Sunsuria Berhad |
| GREENREAP0330 | Ir. Ng Min Li | Sunsuria Berhad |
| GREENREAP0331 | Mohamad Azim Bin Mohd Adam | ESD Greentech Sdn Bhd |
| GREENREAP0332 | Wong Yi Xin | GBI Innovation Sdn. Bhd. |
| GREENREAP0333 | Leong Yee Nam, Kap | Zhongtian Ardc Sdn Bhd |
| GREENREAP0334 | Bernard Ng Chai Pew | Bon Estates Sdn Bhd |
| GREENREAP0335 | Lim Sern Khern | Sunsuria Berhad |
| GREENREAP0336 | Dr. Mohd Azuan Bin Zakaria | Universiti Tun Hussein Onn Malaysia |
| GREENREAP0337 | Ts. Mohd Nazli Bin Zakaria | Sunsuria Berhad |
| GREENREAP0338 | Chua Ang Tze | BSD Consultancy Sdn Bhd |
| GREENREAP0339 | Dr. Lim Yaik Wah | Universiti Teknologi Malaysia |
| GREENREAP0340 | Wong Cung Zau | Li-Zainal Sdn Bhd |
| GREENREAP0341 | Annabel Leong Tsin Tze | BSD Consultancy Sdn Bhd |
| GREENREAP0342 | Hiang Jeng Chun | Panantara Sdn. Bhd. |
| GREENREAP0343 | Azwan Bin Awalludin | KJ Technical Services Sdn Bhd |
| GREENREAP0344 | Lim Wing Keong | Asian Pac Holdings Berhad |
| GREENREAP0345 | Yuganesan K Tarmalingam | SFI Food Sdn Bhd |
| GREENREAP0346 | Tai Soon Wen | BSD Consultancy Sdn Bhd |
| GREENREAP0347 | Khairzrul Haikal Bin Mohd Khairul | Platinum Victory Development Sdn Bhd |
| GREENREAP0348 | Irene Ng Sin Ruey | Sunway Integrated Properties Sdn Bhd |
| GREENREAP0349 | Nur Alia Meor Ahmad | BSD Consultancy Sdn Bhd |

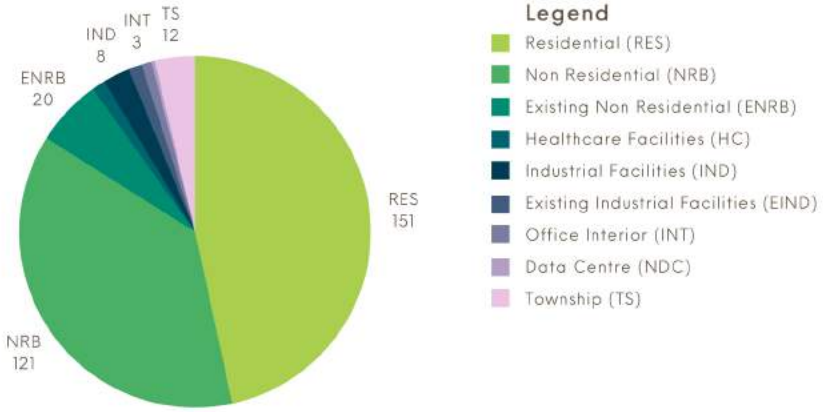
CONGRATULATIONS

WELCOME ABOARD

# PROJECT STATISTICS.

## Project Registered

As of June 2022




## Project Certified

194 out of 324 projects registered are certified as of June 2022


### Certified Buildings

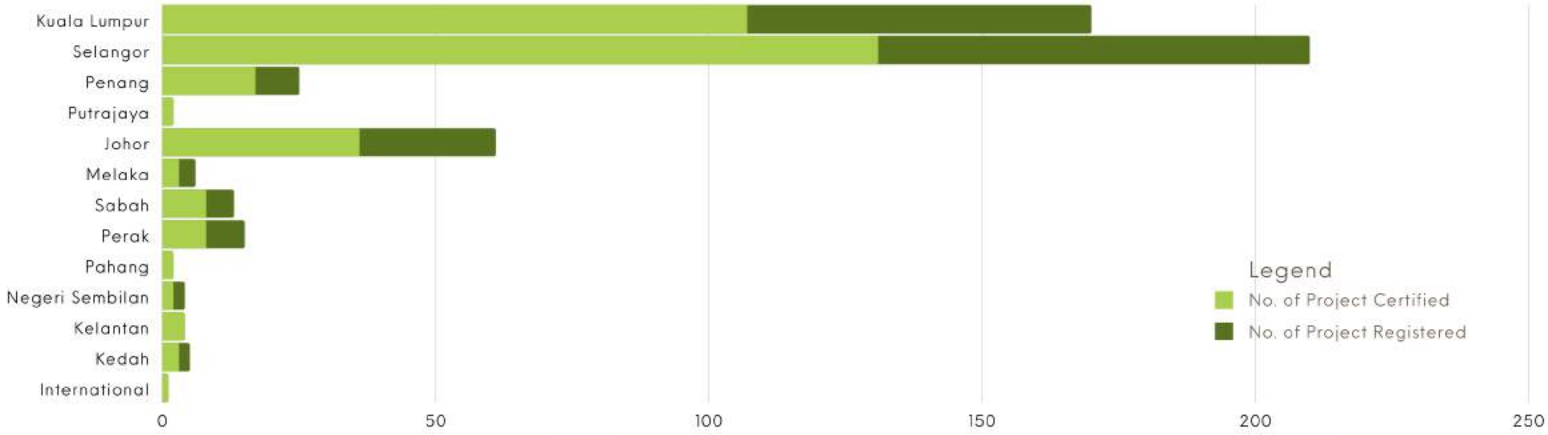
9,550,818.82 sqm out of 19,193,279.38 sqm of buildings are certified as of June 2022


### Certified Township

84,355.57 acres out of 89,749.51 acres of townships are certified as of June 2022

## Project Distribution

As of June 2022




## Projects Certified by Rating