GREENRE BUILD

Semi Annual Bulletin

GreenRE
Issue 5
January - June 2021
eISSN 2785-9401
9772785940000

Green Spaces – A crucial element to promote liveable cities around Malaysia

G Tower – Continuous commitment towards sustainability since 2014 Existing Non-Residential Building

Industrial Innovation

Hap Seng Business Park Gold Certified Industrial & Commercial Hub

Editorial.

EDITORIAL OFFICE
GreenRE Sdn Bhd
1st Floor, Wisma REHDA,
No. 2C, Jalan SS5D/6,
47301 Petaling Jaya,
Selangor.

Tel: +603-78032978
Fax: +603-78035285
Email: info@greenre.org

GreenRE Build is published by
GreenRE Sdn Bhd.

www.greenre.org

GREENRE BUILD
Semi Annual Bulletin

Follow us on social media for the latest news & announcements:

greenresdnbhd greenresdnbhd greenremalaysia

Content.

HIGHLIGHTS

FEATURES

GreenRE has a brand new website!
Visit
WWW.GREENRE.ORG
for our latest project listing, statistics & rating tool development

IN LOVING MEMORY OF

DATO' RICQUE LIEW YIN CHEW, GREENRE DIRECTOR
4 AUGUST 1960-21 FEBRUARY 2021

His contribution to GreenRE and the green building movement in the Malaysia's Real Estate Sector was immense. Despite his illness, his perseverance and dedication to driving GreenRE forward was remarkable. He will be deeply missed.

GREENRE TEAM

Foreword.

Dear Readers,

Welcome to the June edition of the GreenRE Bulletin for 2021.

The COVID-19 pandemic has seriously impacted Malaysia's construction and housing industry, namely in terms of material supply, labour shortage and more importantly the sector confidence level. The government's implementation of expansionary fiscal policy has assisted Malaysians in weathering this crisis.

With the implementation of the movement control order, Malaysians are more concerned about the places we live and work in. We want increased energy savings and a healthier environment be it at home or office. We demand a greener and balanced way to live, work and play.

At GreenRE, through our certification standards, we are driving the direction towards achieving these aims in an affordable and flexible manner. As Malaysia's leading green certification body and a not-for-profit organisation, our aim is to help Malaysia achieve a sustainable built environment and more importantly a net zero future.

In our portfolio, GreenRE has completed the provisional certification of the PNB Merdeka 118 Tower (Platinum Provision), the tallest building in Malaysia and the second tallest building in the world. We have also received our first international project registration from Cambodia and expect much more to come through our alignment with Singapore's Greenmark. We are proud to announce GreenRE has certified over 100 million square feet of green space including affordable residential projects. This year, GreenRE is looking to strengthen our collaboration with CIDB to certify government funded projects and buildings to support and promote Malaysia's Green Technology Master Plan 2017-2030.

Finally, our sincere appreciation to our stakeholders and let's work together to fight the COVID-19 pandemic.

Stay safe, stay home and stay green.

Dato' Rick Cheng Wooi Seong

GREENRE MANAGEMENT COMMITTEE MEMBER

Events.

GreenRE-WWF Green Building Awareness Drive for Local Authorities

GreenRE in collaboration with WWF under WWF's One Planet City Challenge (OPCC) initiative is running 1-day webinars for Local Authorities (LAs) on 'Green Building Certification, Enhanced Passive Design of Buildings and UBBL 38A.

These webinars aim to get local authorities on board with sustainable development and green building best practices, with a focus on energy efficient buildings, i.e. considering overall thermal transfer values (OTTV), roof thermal transfer value (RTTV) and passive design.

Three sessions have been carried out successfully thus far, with 3 more sessions planned for the rest of the year.

- 29 March 2021 Penang State LAs
- 24 May 2021 for Negeri Sembilan State LAs
- 10 June 2021 for Melaka State LAs

Events.

GreenRE Sustainability Webinar Series 2021

With climate change having an undeniable impact on the way we plan and manage cities, buildings and construction projects will need to take into account all available technologies and best practices to ensure a cleaner and greener environment. GreenRE held free webinars as part of our Sustainability Awareness Campaign in 2021.

Episode 4 : Towards Sustainable Real Estate: Construction Waste Management, 30 March 2021

This 90 min webinar covered the current waste generation scenario in Malaysia and its carbon impact, legal requirements of construction waste management by Malaysian authorities as well as waste management strategies in each construction phase. Around 200 participants registered for this webinar.

- *Uplifting the Construction Industry with Sustainable Waste Management* by Khairul Nizam Anuar Bashah, Manager, Technology Development Sector, Construction Industry Development Board (CIDB).
- *Regulations for Waste Management*, by Mohd Azrul bin Azmi, Engineer Construction Waste Division, SW Corp.
- *Nexus of Construction Waste Management & Carbon Emissions* by Dr Eric Lou, Manchester Metropolitan University (UK).

Events.

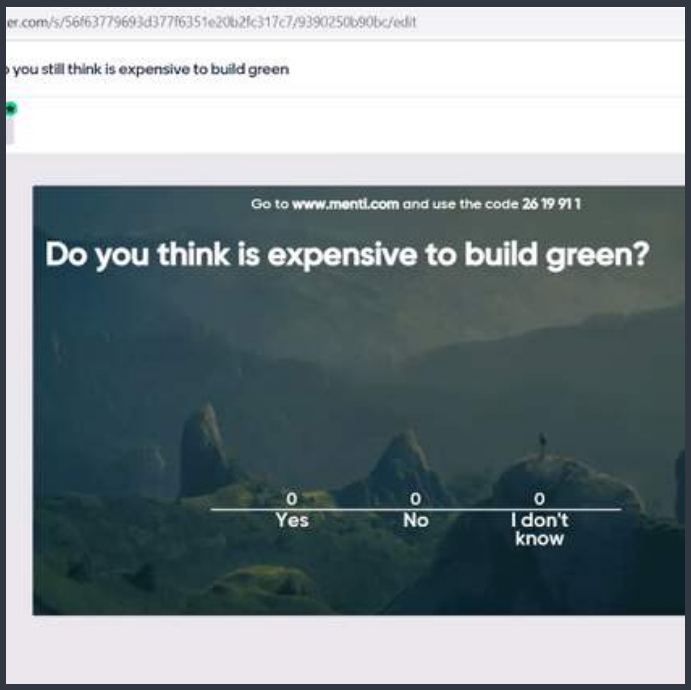
National Energy Awards 2020

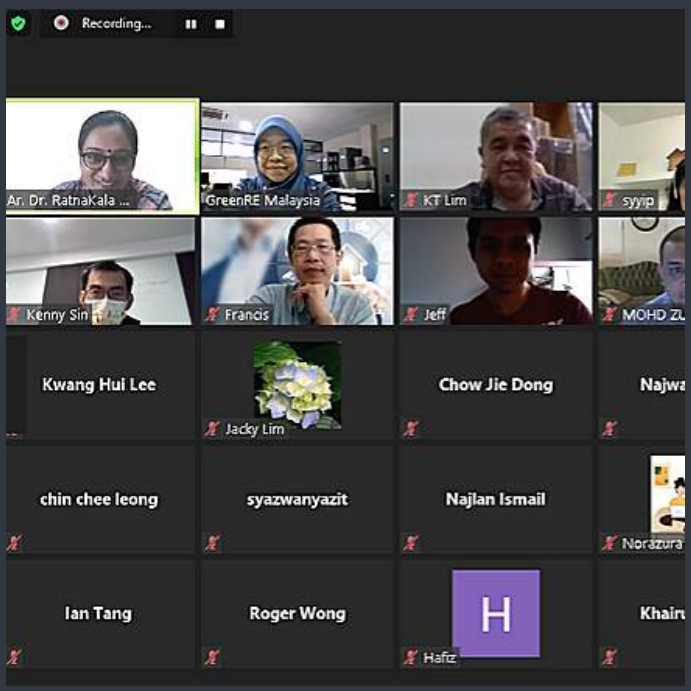
National Energy Awards (NEA) is an annual event organised by Kementerian Tenaga dan Sumber Asli (KETSA) recognising Malaysian organisations leading the field in sustainable practices through the adoption of energy efficiency and renewable energy. It is also platform to promote innovation in local projects & solutions in line with the country's aspiration to spur energy sector as the new area for economic growth. In NEA 2020, two GreenRE Certified Project was recognised under National Energy Awards:

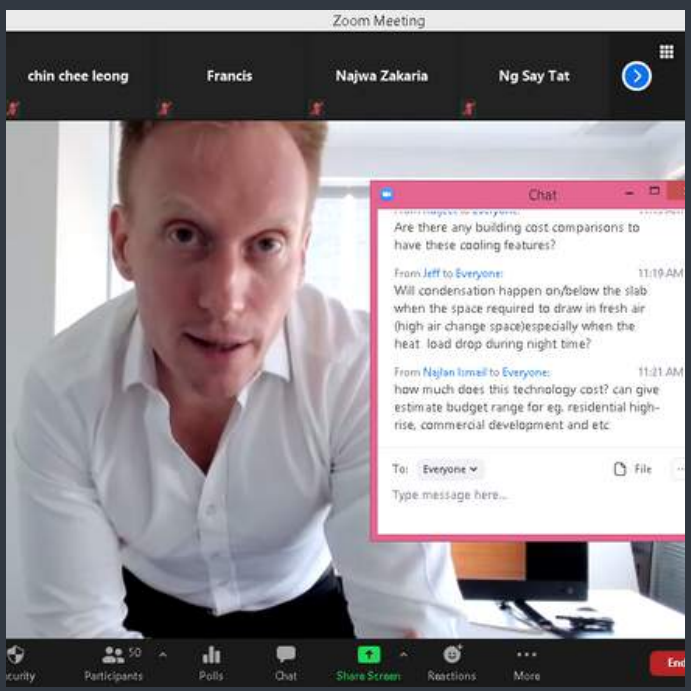
- Category 1 Energy Efficiency for Green Building (Large) Menara KEN TTDI by Ken TTDI Sdn Bhd, a GreenRE Platinum Certified Building.
- Category 1 Energy Efficiency for Green Building (Small) Wisma REHDA by REHDA Malaysia, a GreenRE Gold Certified Building.

Congratulations Ken TTDI Sdn Bhd & REHDA Malaysia on your achievements and your efforts towards sustainable real estate!

nea
NATIONAL ENERGY AWARDS







Training Programmes.

GreenRE Manager's Course 24th Intake (Webinar)

The 24th Intake of GREMC (now known as GreenRE Accredited Professionals Course) was conducted from 22nd - 25th February 2021 online (Zoom). The course aims to provide a thorough understanding of green building principles and operations which enable candidates to gain knowledge on green building certification with a focus on GreenRE certification.

The GREMC 24th was attended by 44 participants from various backgrounds, ie. architecture, engineering (civil, mechanical and electrical), quantity surveying and project management. Sunway Group sent 19 participants for this intake as part of their sustainability efforts.

The MCQ examination and group project assessment was conducted one month after the lectures, 25th and 26th March 2021 respectively. Passing both the MCQ exam and group project are part of the requirements to be eligible to apply for the GreenRE Accredited Professional's certificate (formerly named as GreenRE Manager).

GREMC 24th was also eligible for CPD points from various institutions, ie. Institution of Engineers Malaysia (IEM), Lembaga Arkitek Malaysia (LAM), Suruhanjaya Tenaga (ST) and Lembaga Penilai, Penaksir, Ejen Harta Tanah dan Pengurus Harta (LPPEH), in addition to 15 CPD points from GreenRE.

The next intake of GREMC (GreenRE Accredited Professional's Course No.26) will be organised in 25th - 28th October 2021 and due to the on-going COVID restrictions, it will be held online.

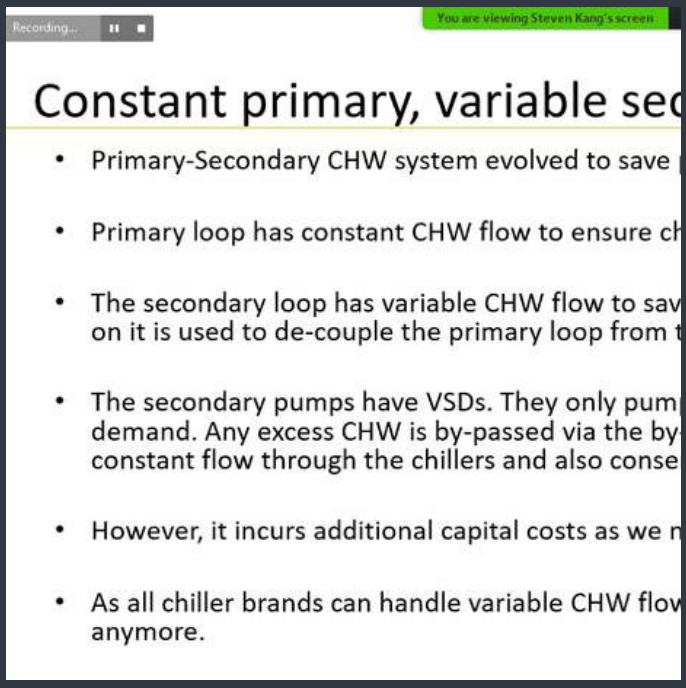
Training Programmes.

GreenRE Technical Seminar on Efficient Central Air-Conditioning Design and Measurement & Verification Systems (Webinar)

The third intake of GreenRE Technical Seminar on Efficient Central Air-Conditioning Design and Measurement & Verification Systems (ACMV) was conducted online from 6th to 8th April 2021. The trainer for these 3 days seminar was Mr Steven Kang, Director of Business Development of Measurement & Verification Pte Ltd Singapore. Mr Kang is a Singapore and US Certified Energy Manager.

The course aims to provide an understanding on the fundamentals of air-conditioning measurement and verification (ACMV) and its optimization. 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.

There were 20 registered candidates for this intake, the course also included an examination. 16 of the participants sat for the examination and successfully obtained the 'Certificate of GreenRE M&V Practitioner'. Based on the positive feedback from the GreenRE ACMV Technical Seminar intakes, a 4th intake is planned for the 1st quarter of 2022.



ANNOUNCEMENT

Rebranding of GreenRE Manager's Course (GREMC) & GreenRE Managers (GREM)

As of April 2021, the 'GreenRE Manager's Course' (GREMC) will be known as GreenRE Accredited Professional's Course (GREAPC), and 'GreenRE Managers' as GreenRE Accredited Professionals (GreenREAP).

For further clarification please contact Ms. Nariemah at training@greenre.org

Calendar.

July-December 2021

12, 16 & 19 — **July - Property & Construction Sector Roundtable**

Roundtable 1: *Reducing Embodied Carbon in the Built Environment*
Roundtable 2: *Reducing Operational Carbon in the Built Environment*
Roundtable 3: *Improving Resilience and Minimising Ecological Damage*

15 - 16 — **July - GreenREAPC No.25**

Examination & Group Project Assessment

24 - 25 — **August - GRETS**

GreenRE Technical Seminar 02 (2021)
GreenRE CPD Points 5

TBA — **August - GreenRE Sustainability Webinar Series**

Episode 6: Building for Post Covid (Indoor Air Quality)
GreenRE CPD Points 1

29 — **September - Refresher Course**

GreenRE Refresher Course 2021
GreenRE CPD Points 3

25 - 28 — **October - GreenREAPC No.26**

GreenRE Accredited Professional's Course (Webinar)
GreenRE CPD Points 15

18 - 19 — **November - GreenREAPC No.26**

Examination & Group Project Assessment

24 - 25 — **November - GRETS**

GreenRE Technical Seminar 03 (2021)
GreenRE CPD Points 3

SAVE THE DATE

"CAN Malaysia Achieve Net Zero Emissions by 2050?"

A private sector roundtable series to solicit feedback and recommend future policies and provisions

Property and Construction Sector Round Tables

11am-12:30pm Monday 12 July 2021
Reducing Embodied Carbon in the Built Environment
Speakers include: Mr. Gregers Reimann, GreenRE & EuroCham

11am-12:30pm Friday 16 July 2021
Reducing Operational Carbon in the Built Environment
Speakers include: Ar. Serina Hijjas, malaysiaGBC

11am-12:30pm Monday 19 July 2021
Improving resilience and minimizing ecological damage
Speakers include: Dr Dzaeman Dzulkifli, TRCRC

2.30pm-3.30pm Tue 27 July 2021
Fireside chat with Ministry of Housing and Local Government

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 series of forums that will discuss the high impact areas requiring urgent attention.

RSVP: http://nze50my.peatix.com/

Organised by:

CAN ceo action network

Climate Governance Malaysia

Content Partners:

REHDA

GreenRE

With the support of:

Green Tech Malaysian Green Technology and Climate Change Centre

pwc

ISIS Malaysia

Just a friendly reminder to take part in this initiative. RSVP now!

HAP SENG BUSINESS PARK

GOLD CERTIFIED INDUSTRIAL + COMMERCIAL HUB

By Nur Izzati Mohd Sabri
DME Solutions Sdn Bhd

The Hap Seng Business Park is a mixed industrial and commercial hub situated in Seksyen 23, Shah Alam that comprises a total of 10 blocks; a Unity Square – Commercial Center, Detached blocks, Semi Detached blocks, a Flatted Warehouse, as well as the Mercedes-Benz Body & Paint Center. Each block was designed to include sustainable and green features, befitting its status as the first GreenRE Gold award rated development of its kind.

UNITY SQUARE – Commercial Center

As the only air-conditioned building in the development for the tenanted areas, the project team has taken steps to ensure that the Commercial Center is able to operate with excellent energy efficiency. The building is installed with high performance air-conditioning system to optimize the building energy consumption. It has a Low-E glass façade which aids in minimizing the amount of heat transmittance while preserving the natural daylight into the indoor spaces. The ceiling is adorned with a skylight which allows natural daylight into the building, thus lowering the reliance on artificial lighting within the indoor spaces. In addition, the building is equipped with escalators with energy saving features. An indoor garden and a vertical green wall with grow lights are also found at the Commercial Center, therefore livening up the indoor environment and reducing the indoor temperature.

OVERALL DEVELOPMENT

In order to promote better indoor thermal comfort, every block is built with roofs with high Solar Reflectance Index and walls with Thermatech features that are more effective in reflecting heat off the buildings. Additionally, taking advantage of the prevailing wind conditions, the window openings at the non-air-conditioned blocks are oriented towards the North-South direction for better natural ventilation thus enhancing the indoor thermal comfort.

As a measure to promote the overall energy efficiency of the development, all blocks are fully installed with LED lighting to reduce the energy consumption while maintaining optimal lighting levels. The lighting efficiency is taken even a step further to include LED street lighting in the entire compound. Additionally, every lift installed in the development comes with AC variable voltage drive motor and sleep mode features that will turn off the fan and lighting in the lifts when not in use.

The Hap Seng Business Park also places an emphasis on water efficiency and therefore utilizes water fittings that are rated under the internationally recognized Water Efficiency Labeling Scheme (WELS). Furthermore, water sub-meters are used to monitor the water consumption and early leak detection. The development also adopted a rainwater harvesting system to replace the consumption of potable water for landscape irrigation purposes.

One of the most prominent features of the Hap Seng Business Park is the landscape design which incorporate an array of natural elements into an otherwise industrial environment. The landscape offers open green spaces for recreational use, and it also includes trees to provide shade and edible plants. A closer look into the landscape design reveals that a few trees were restored and relocated from Menara Hap Seng 3. Another notable landscape feature are the pockets of skylight with greenery which open up the basement carpark to natural lighting and ventilation, therefore reducing the dependence on artificial lighting and mechanical ventilation within the basement.

The development has adopted a number of environmental management strategies by monitoring the construction phase. The energy and water consumption, as well as construction waste were monitored for efficient usage and disposal. Furthermore, the project team has implemented an effective Indoor Air Quality (IAQ) management plan throughout the duration of the construction. The intention of the plan is to prevent any adverse health problems to the workers due to the construction dust and debris. Additionally, the plan ensures that the building ventilation systems are clean and free from residuals left over from construction activities that can be harmful to the tenants during occupancy.

PROJECT TEAM

DEVELOPER
Hap Seng Logistics Sdn Bhd

ARCHITECT
Asima Architects Sdn Bhd/Kooi Keat Architect

C&S CONSULTANT
WK & Partners Consult Sdn Bhd

M&E CONSULTANT
Han Yang Consultancy Sdn Bhd

QUANTITY SURVEYOR
Perunding Kos T&K Sdn Bhd

LANDSCAPE ARCHITECT
UDG Associates Sdn Bhd

ESD CONSULTANT
DME Solutions Sdn Bhd

ESD CONSULTANT
Nakano Construction Sdn Bhd

In order to promote a healthy indoor environment, the interior walls at every block are fully painted with low VOC paints. The interior finishes and materials were also carefully selected to optimize the use of environmentally friendly products for a healthier indoor environment.

To further optimize the sustainable practices of the Hap Seng Business Park, the project team has taken the initiative to incorporate innovative green features such as siphonic rainwater discharge on the rooftops, and using precast concrete drainage and system formwork to minimize the wastage of materials during the construction. The development was also awarded with a QLASSIC score of 74%, a great achievement for an industrial development.

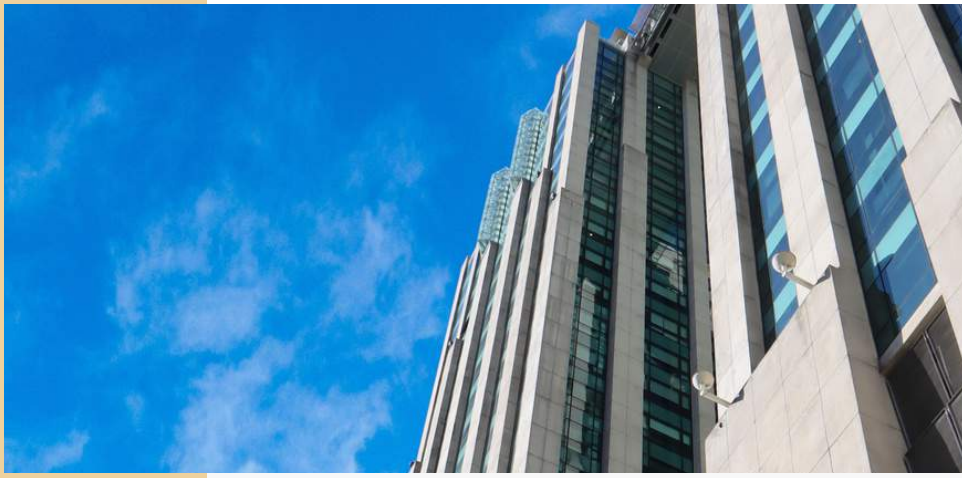
Overall, the Hap Seng Business Park is designed to maximize its green features and sustainable practices in every aspect, making it a pioneer in the environmentally friendly business and industrial development concept. --

G TOWER

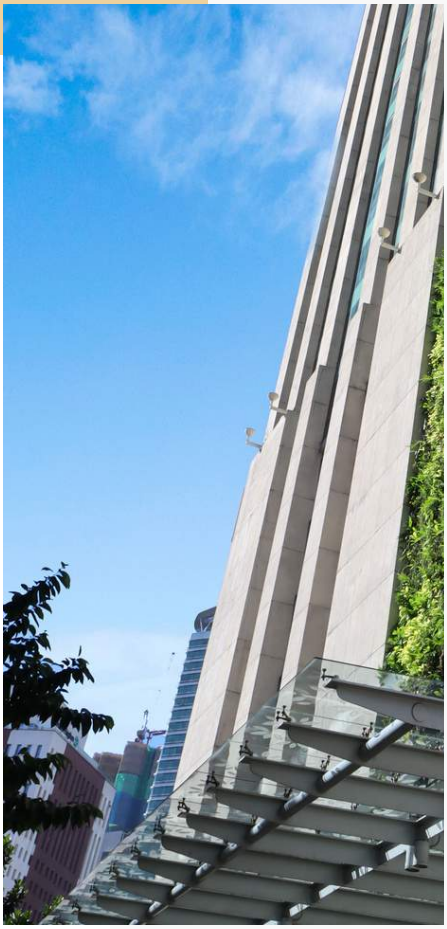
GreenRE Gold (Renewal)

By Nur Shuhada Aishah Shahidan
ESD GreenTech Sdn Bhd

GTower is a 30-storey building strategically located at the crossroads of Jalan Tun Razak and Jalan Ampang in the heart of Kuala Lumpur. The prestigious development was designed with sustainability as its core design principals. The development fulfils important sustainability criteria such as energy savings, water savings, excellent indoor air quality and sustainable construction management.



Back in 2010, the esteemed building was announced as the first building to be fully certified as a green building in Malaysia. Recently, as the building is able to maintain its sustainability features, it has been awarded with the Renewal GreenRE Gold certification. Once again, it has become the first in the industry – now as the first building to be fully renewed under GreenRE certification scheme.



The building façade was designed with overall thermal transfer value (OTTV) lower than 40 W/m2, which limits solar heat gain while maintaining the quality of daylight penetration into the building. This also allows the building tenants to have excellent external views while reducing eyes strain during occupancy hours. The building is also equipped with energy efficient lighting design, making use of LED lighting throughout the building. Other than that, effective lighting zoning strategies enable the tenants to fully utilise daylight by switching off unnecessary artificial lighting.

Considering that one of the main contributors of energy consumption in the building is from the air-conditioning plant, GTower has implemented a highly efficient chiller plant system.

Their chiller plant system has an efficiency of 0.64 kW/RT which is lower than the stipulated baseline in GreenRE guidelines and considerably lower than conventional buildings in Malaysia. GTower has been reaping the financial benefits contributed from the low energy consumption of the chiller plant operation. Overall, GTower's building energy consumption is 40% lesser than conventional buildings of similar topology in Malaysia.

Water efficiency is also one of the sustainability features that was addressed by the management team. A rainwater harvesting system was installed and most of the sanitary fittings in the building is either 2 or 3 ticks under the Water Efficiency Labelling and Standards (WELS). Additionally, water consumption is also monitored closely every month with the installation of water sub-meters which helps detect water leakages. Besides the water and energy savings features, the team has also incorporated energy, water and environmental policies in their daily operations and maintenance activities. The management aims to further reduce energy and water usage by ensuring effective planning and implementation.

Apart from energy and water efficiency, there are other green and sustainable features implemented in the building such as effective waste recycling and good indoor air quality. The building management team has been consistently sorting, monitoring and collecting recyclable waste and transporting them to relevant recycling entities every month. GTower has also conducted an indoor Air Quality Audit and it shows that GTower has an excellent indoor air quality according to NIOSH guidelines. The report shows that the VOC, Formaldehyde, Carbon Dioxide, Carbon Monoxide, as well as Ozone levels are all below the baseline.

The above-mentioned sustainability features incorporated in GTower, as well as the relevant efforts taken throughout the building life cycle have proven the high commitment that GTower has towards sustainability. Hopefully GTower's inspiring sustainability initiatives will push others to emulate the green drive that are very much needed for the betterment of our planet. --

PROJECT TEAM

Building Owner & Management:
GTower Sdn Bhd

GreenRE Consultant:
ESD Greentech Sdn Bhd

GREEN SPACES

A CRUCIAL ELEMENT TO PROMOTE LIVEABLE CITIES AROUND MALAYSIA

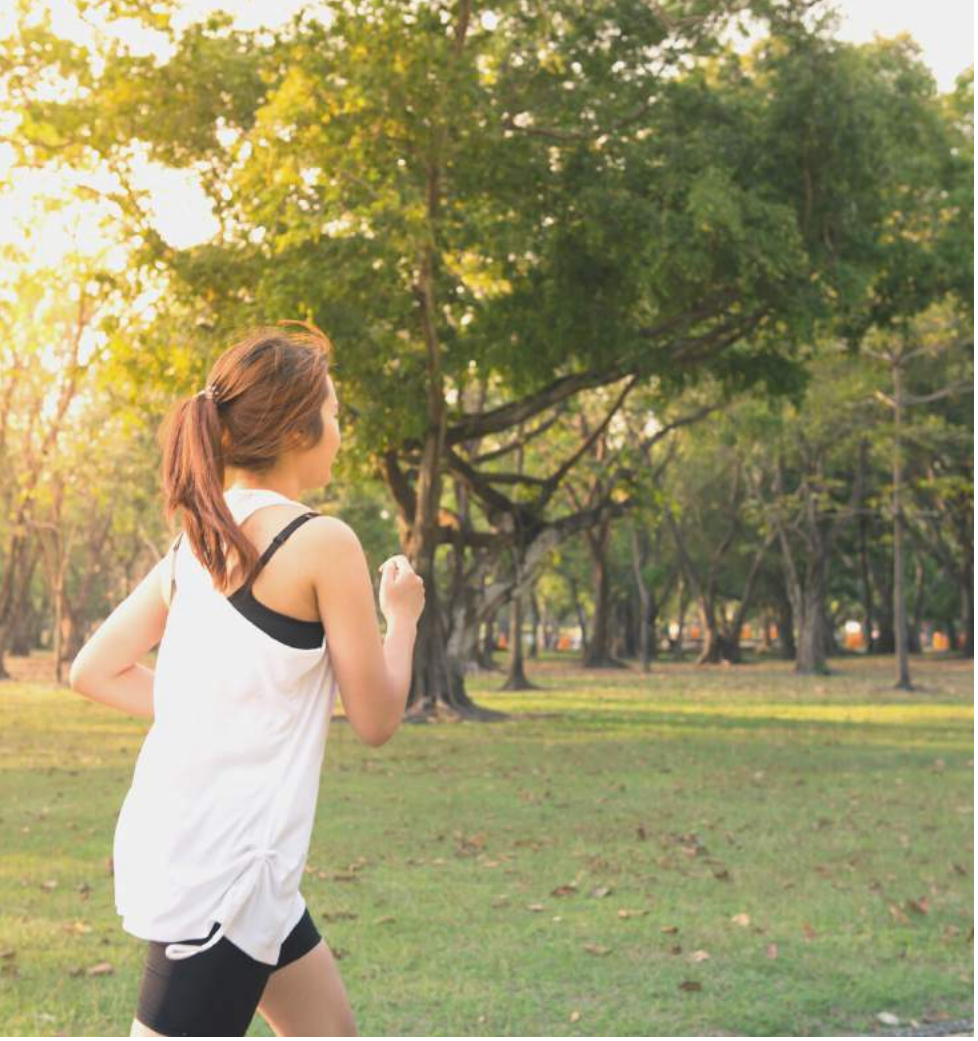
By Amanda Yeo
EMIR Research (M) Sdn Bhd
Email: amanda.yeo@emirresearch.com
Website: www.emirresearch.com

Although the Covid-19 pandemic has substantially restricted people's movement to travel across borders freely, it has allowed many countries to rethink how to operate their cities more efficiently and sustainably with the consideration of green spaces.

This can be seen in Malaysia, whereby the current administration advocates sustainable development agenda in the Budget 2021 for the first time, followed by the 100 Million Tree Planting Campaign on Jan 9 and the first Climate Change Action Council (MyCAC) meeting on April 13.

Even though the current administration is committed to reducing greenhouse gas (GHG) emissions by 165 million tonnes of carbon dioxide through the Low Carbon Mobility Development Plan 2021-2030, rapid urbanisation in Malaysia might prevent local citizens from enjoying a higher quality of life.

According to the 2017 study by the Martin Prosperity Institute, University of Toronto's Rotman School of Management, Malaysia is projected to have an urbanisation rate of more than 80 per cent by 2030.



Despite cities promote economic growth, rapid urbanisation would eventually lead to traffic congestion, overcrowded living conditions, risks to critical infrastructure, water crises and increased likelihood of diseases – a detrimental effect on the health and well-being of the citizens.

This can be seen in the Klang Valley area – 29 water cuts last year; each water cut lasts a minimum of one and a half days.

According to the Federation of Malaysian Consumers Associations (Fomca) president Marimuthu Nadason, Klang Valley residents still had to pay their water bill in full despite facing water cuts for 45 days last year.

In addition, the floods in several states of Malaysia such as Kuala Lumpur, Negeri Sembilan, Kelantan, Johor, Sarawak and Sabah during the third Covid-19 wave in October last year placed the life of the ordinary citizens in more devastating situations.

Therefore, the ongoing threat of water disruption and floods in Malaysia indicates that more green spaces are required in the country, promoting liveable cities around Malaysia.

In general, green spaces refer to initiatives that encourage the development of open space in an urban setting - providing people with the avenue to exercise, relax and socialise.

For instance, parks, waterfronts, walking trails, sporting fields, community gardens, forests and beaches are known as green spaces that could integrate the natural environment with the built environment within the city itself, creating refuges of peace and quietness within the bustle of the city life.

By integrating nature and high-rise buildings into the city planning processes, green spaces could slow down the rapid urbanisation in the country. At the same time, it also helps to promote better physical and mental health of all Malaysians regardless of socio-economic status, neighbourhoods and genders.

A scientific review published in *The Lancet Planetary Health* found urbanites living near a park or a garden had a lower risk of premature death. They also tend to have a lower risk of lung diseases and diabetes.

On Dec. 2 last year, Khazanah Research Institute (KRI) has indicated in its State of the Households 2020 report that several Malaysian states with higher Gross Domestic Product (GDP) per capita (i.e., Kuala Lumpur, Penang, Sarawak and Selangor) – record higher life expectancies, compared to poorer Malaysian states.

Studies have shown that people who spend at least two hours in nature each week are less likely to have depression, anxiety

and stress besides better sleep quality – generating higher levels of well-being, including greater happiness and life satisfaction.

According to a 2019 study conducted by the University of Arizona, 60 per cent of students reported they had better problem-solving skills after spending more time in nature. The majority had better attention spans and learning abilities, as well as better imagination and creativity.

Furthermore, green spaces in a city could reduce atmospheric temperatures between 2° and 8° Celsius, stimulating community walkability, food security, job creation and youth engagement.

Therefore, to create more urban green spaces in Malaysia, the Malaysian Government could consider some of the initiatives below:

Designated Walk/Cycleways

Installing pedestrian walkways or cycling pathways in place of roadways – promoting not more than 15-minute walking or cycling distance for most shops, parks, leisure facilities and residential areas. With these facilities, the local citizens can enjoy nature, get fit, relax and release stress through cycling and jogging activities.

Pocket Park

Creating mini-forests to remove carbon dioxide and air pollution, reduce water pollution and serve as a noise buffer. They also provide habitat for other organisms such as birds and insects. Even though mini-forests are small, they can restore biodiversity to cities.

Urban Farms

Converting empty spaces into urban farms – tackling food security related issues besides making good use of the existing sites.

Green Economy

Utilising natural resources advantage of the country to create more green jobs for the benefits of its citizens. For instance, Malaysia could invest in reducing the cost of existing low-carbon energy-efficient technologies such as solar, wind and bio-energy – transforming into a low-carbon economy.

GROWTH FOR THE SAKE OF GROWTH IS THE IDEOLOGY OF THE CANCER CELL.

EDWARD ABBEY

As urbanisation is still taking place, city councils in Kuala Lumpur, Selangor, Johor Bahru, Kota Kinabalu, Georgetown and Kuching shall create more green spaces in their surroundings, addressing global warming.

In a nutshell, now is the time for the current administration to turn commitments into action – working closely with local authorities, community groups and environmental advocates to provide accessible and high-quality green spaces in Malaysia. --

Yeo Yan Yin @ Amanda is a Research Analyst at EMIR Research. Prior researching socio-economic issues in Malaysia, she served as Private Secretary to both Minister of Youth and Sports of Sabah and Minister of Health and People's Well-Being of Sabah. Amanda earned her MSc (International Relations) at the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore, and BSc (Economics and Finance) from University of London.

GreenRE Certification incorporates Green Plot Ratio (GnPR) in our assessment framework. The GnPR was developed by National University of Singapore in 2002 to provide a metric to quantify the amount of greenery in an area. Theoretically using this metric, the amount of carbon sequestration, water retention and other environmental benefits of plants can be estimated. This in turn could be used to communicate the value of greenery and to set greenery requirements for green projects.

The GnPR equation is as follows:

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

This calculation 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 simultaneously protecting the green quota of the design.

TECHNICAL UPDATES

1.0 Site Verification Assessment

- **Residential & Landed Home (RES)**

  Site Verification Assessment (SVA) submission can be done immediately after issuance of Certificate of Compliance and Completion (CCC) for projects requiring urgent final certification. 3-6-months of utility bills shall be subsequently provided to verify the EEI of common area.

2.0 General

- **Part 1 Minimum Credits (For Building Toolkits)**

  The minimum 30 credits required for PART 1 to be eligible for certification does not include the 20 credits available for Renewable Energy.

- **Artificial Lighting (NRB 1-6): RETAIL**

  For retail buildings, allowance is given for frequently used walkway/corridor illumination design to be 200-400 lux with a maximum lighting power density of 8 W/sqm.

- **Wind Data**

  Tabulation of the of prevailing wind direction and speed for specific zones in Malaysia is available for download from GreenRE's website. The data shall be used in conjunction with GreenRE's Ventilation Simulation Guideline - Appendix B for projects in Malaysia.

- **Building Infosheet**

  Building Info Sheet shall be submitted as part of Actual Assessment and Site Verification submission. Building Info Sheet is available for download from GreenRE's website.

- **Roof U Value**

  For roof U-Value mandatory compliance, calculation shall be provided for the roof above habitable space only. For the case of roof above the non-habitable space, roof U Value shall be calculated from the external surface roof to the internal surface of habitable space.

  Ideally, insulation material should be place above roof slab. Insulation below slab can be considered on a case-by-case basis.

CONGRATULATIONS

Newly Certified GreenRE Accredited Professionals (GreenREAPs)

CERT NO	NAME	COMPANY
GREENREAP0275	AR. LEE VUN LOONG	LOUIE LEE ARCHITECT
GREENREAP0276	TS. SHFULRIZAM MOHD DINAL	MHPT ENGINEERING
GREENREAP0277	AHMAD NAJIB MOHAMMAD AMIN	MALAKOFF UTILITIES SDN BHD
GREENREAP0278	WAN SURAYA RAIHAN WAN SULEIMAN	BRIGHTCON SDN BHD
GREENREAP0279	CHOW JIE DONG	SUNWAY INTEGRATED PROPERTIES SDN BHD
GREENREAP0280	NORETA BINTI HASAN	PDG GROUP
GREENREAP0281	AR. LAM SHEN FEI	FEI ARCHITECT
GREENREAP0282	SHAPHAN LIM	SUNWAY INTEGRATED PROPERTIES SDN BHD
GREENREAP0283	MOHD HAFIZ	SUNWAY SOUTHERN MANAGEMENT SDN BHD
GREENREAP0284	TAN ZHI KANG	SUNWAY INTEGRATED PROPERTIES SDN BHD
GREENREAP0285	FAIZUL AMIN	JOHOR PETROLEUM DEVELOPMENT CORP. BHD
GREENREAP0286	AZMI BIN OMAR	SPA INTEGRATED SDN BHD
GREENREAP0287	SHRREEFE SIM MEE HUI	JURUTERA PERUNDING VALDUN SDN BHD
GREENREAP0288	TS MOHD ZULKIFLI	YANBU NATIONAL PETROCHEMICAL CO., SAUDI ARABIA
GREENREAP0289	MUHAMMAD SYAZWAN MOHD YAZIT	SUNWAY CITY (JB) SDN BHD

CONGRATULATIONS

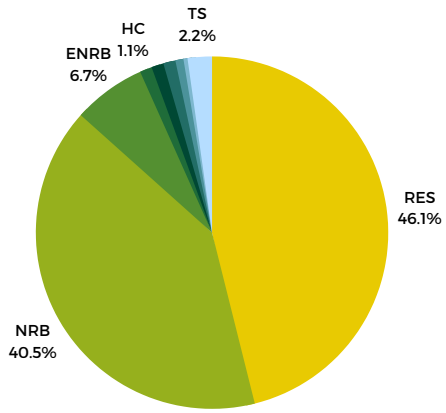
Newly Certified GreenRE Projects

PROJECT NAME & LOCATION	COMPANY	ESD CONSULTANT	DESIGN REF	TYPE OF CERT	DATE OF CERT
Gasing House, Petaling Jaya	Black Dog Estate Sdn Bhd	ESD Greentech Sdn Bhd	RES v3.0	Provisional	22/3/2021
Menara UOB 2, Kuala Lumpur	UOB Properties (KL) Bhd	G-Energy (M) Sdn Bhd	NRB v3.1	Provisional	16/3/2021
Sunway International School, Sunway City, Subang Jaya	Sunway Education Group Sdn Bhd	BSD Consultancy Sdn Bhd	NRB v3.1	Provisional	17/2/2021
Green Station - Caltex Ayer Keroh R&R Northbound, Melaka	Chevron Malaysia Limited	Viva Energy Services (M) Sdn Bhd	ENRB v3.1	Actual	17/6/2021
Green Station – Caltex Ayer Keroh R&R Southbound, Melaka	Chevron Malaysia Limited	Viva Energy Services (M) Sdn Bhd	ENRB v3.1	Actual	20/4/2021
Sunway Onsen Suites, Ipoh	Sunway City (Ipoh) Sdn Bhd	BSD Consultancy Sdn Bhd	RES v3.1	Provisional	5/3/2021
Seri Wangsa, Petaling Jaya	Sunway Avila Sdn Bhd	Zeal Greentech Sdn Bhd	RES v3.1	Provisional	20/5/2021
Stonor 3, Kuala Lumpur	Cipta Klasik (M) Sdn Bhd	G-Energy (M) Sdn Bhd	RES v1.2	Actual	13/4/2021
Hap Seng Business Park, Shah Alam	Hap Seng Logistics	DME Solutions Sdn Bhd	NRB v3.0	Actual	17/3/2021
Wisma REHDA, Petaling Jaya	REHDA Malaysia	In House	ENRB v3.0	Renewal	19/4/2021
G Tower	G Tower Sdn Bhd	ESD Greentech Sdn Bhd	ENRB v3.1	Renewal	13/6/2021
KAIA Heights, Subang Jaya	Sunrise Alliance Sdn Bhd	ESD Greentech Sdn Bhd	RES v3.1	Provisional	1/4/2021
Residensi Tujuh, Shah Alam	Kwasa Sentral Sdn Bhd	Greenscapes Sdn Bhd	RES v3.1	Provisional	9/4/2021
Wah Kong New Warehouse, Shah Alam	Wah Kong Marketing Sdn Bhd	DME Solutions Sdn Bhd	NRB v3.1	Provisional	8/1/2021
Bay 21, Kota Kinabalu	Remajaya Sdn Bhd	BSD Consultancy Sdn Bhd	RES v1.2	Actual	2/6/2021
Millerz Square Block C, Kuala Lumpur	Lim Legacy Development Sdn Bhd	Zeal Greentech Sdn Bhd	RES v3.0	Provisional	3/6/2021
Residensi 121, Petaling Jaya	FDM Development Sdn Bhd	ESD Greentech Sdn Bhd	NRB v3.0	Provisional	8/4/2021
Plaza @ Kelana, Petaling Jaya	Glomac Segar Sdn Bhd	ESD Greentech Sdn Bhd	NRB v3.0	Provisional	25/3/2021
KU Apartment, Shah Alam	Paramount Property Development Sdn Bhd	ESD Greentech Sdn Bhd	RES v3.1	Provisional	16/3/2021
Mercedes-Benz Autohaus @ Setia Alam	Hap Seng Realty (Auto) Sdn Bhd	DME Solutions Sdn Bhd	NRB v3.1	Provisional	6/4/2021
Residensi Jernih, Kajang	Daksina Harta Sdn Bhd	BSD Consultancy Sdn Bhd	RES v3.1	Provisional	12/3/2021
Solaris Parq - The Office, Kuala Lumpur	Ibarat Duta Sdn Bhd	BSD Consultancy Sdn Bhd	NRB v3.1	Provisional	28/5/2021
UMW HVM Park : Precinct 1, Rawang	UMW Development Sdn Bhd	DME Solutions Sdn Bhd	TS v1.0	Provisional	1/4/2021
Exsim Macalister, Kuala Lumpur	Exsim Macalister Sdn Bhd	Zeal Perunding Sdn Bhd	RES v3.1	Provisional	27/5/2021
Residensi Mahogani, Petaling Jaya	Everest Pioneer Sdn Bhd	Ecologically Sustainable Design Sdn Bhd	RES v3.2	Provisional	23/6/2021
Waterside Residence, Penang	Jelutong Development Sdn Bhd	BSD Consultancy Sdn Bhd	RES v3.0	Actual	26/5/2021

Project Statistics.

Project Registered

*As per June 2021



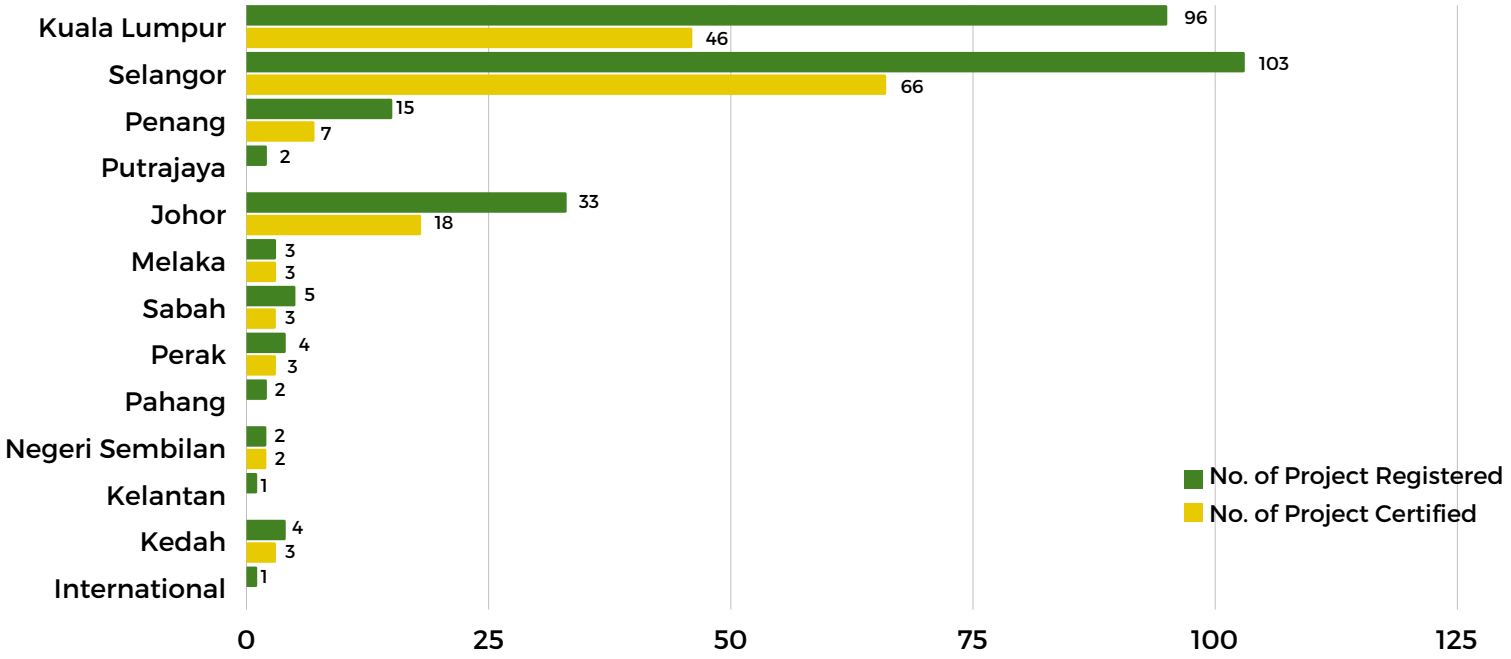
- Residential (RES) 124 nos
- Non Residential (NRB) 110 nos
- Existing Non Residential (ENRB) 18 nos
- Healthcare Facilities (HC) 3 nos
- Industrial Facilities (IND) 3 nos
- Existing Industrial Facilities (IND) 3 nos
- Office Interior (INT) 2 nos
- Data Centre (NDC) 1 nos
- Township (TS) 6 nos

270
Registered Project

7,527,779.79 sqft
Certified Building

2,131.05 acre
Certified Township

Project Distribution



Certified by Rating

12%

Residential (RES) 28%
Non Residential (NRB) 61%
Existing Non Residential Building (ENRB) 11%

26%

Residential (RES) 59%
Non Residential (NRB) 33%
Existing Non Residential Building (ENRB) 5%
Township (TS) 3%

17%

Residential (RES) 48%
Non Residential (NRB) 36%
Existing Non Residential Building (ENRB) 4%
Healthcare Facilities (HC) 4%
Existing Industrial Facilities (EIND) 8%

45%

Residential (RES) 49%
Non Residential (NRB) 35%
Existing Non Residential Building (ENRB) 9%
Industrial Facilities (IND) 3%
Township (TS) 4%