

ENVIRONMENT Energy / Water Efficient Features Indoor Environmental Air Quality

THE NATIONAL FLOWER Do you know our National Flower?

CONTENTS





actually not from Malaysia?





-Green Technology -Sustainable Office Interior -Resetting Our Cities : Principles Of Sustainable Urban Places — The Why, What And How ARCHITECTURE -Building of the Month: Menara ETIQA -Energy Efficiency Features -Water Efficiency -Indoor Environmental Air Quality -Innovation THE NATIONAL FLOWER -Did you Know, our National Flower is







Green Technology ------

Green technologies can be found in the most common of spaces in the office such as the communal toilets, corridors and work spaces. Motion sensor lighting (PIR) has been on the market since the 1950s. Real life usability has to feature in sustainable design or the office refurbishment will frustrate, rather than fulfil goals. There are a multitude of options to reduce the carbon footprint in offices like lighting, water reduction and other aspects of M&E . Eco-friendly furniture, LED lighting, green certified wall paints and floor finishes is crucial when considering a sustainable office design.



Sustainable Office Interior -----

Going green does not mean placing a few potted plants here and there in any given space. To be considered green, sustainability needs to be reflected from the beginning and I integrated strategically. In sustainable interior design, designers must minimize the negative impact of their designs on the environment by applying green innovative methods - recycling, repurposing, energy saving technology and other elements that support long-term ecological balance.





Biophilia-----

"Biophilia", a concept used within the design industry to make a direct connection to the natural environment by using raw materials, increasing the indoor/outdoor connectivity and ventilation. One of the most common uses of biophilia indoors is to grow a green wall or a "living wall" as some may refer to it. It is important to understand the difference and bring the focus round to our development of how we can make out built environment better for human health through nature.

Work Place Culture -----

It is not just about saving the environment or saving money, the focus around employee well-being has been thrusted to the forefront of most design conversations of late and there is the science to back up why it is so integral. With accreditations such as WELL Building and Fitwel becoming so workplaces influential, are constantly aspiring to enhance employee wellness. By utilising the natural ventilation, sunlight and bringing the outdoors inside, these are all proven to have mental health benefits, which in turn keep employees' productivity high.

01 INTERIOR

Recycling | Repurposing ----

In a Nut Shell------

A well-designed sustainable office will i grow with the business and avoid unnecessary waste and costs.

Sustainable design saves energy, money, and our planet, to make people happier, healthier, and more productive.



RESETTING OUR CITIES : PRINCIPLES OF SUSTAINABLE URBAN PLACES — THE WHY, WHAT AND HOW

With the recent pandemic that hit us, and still recovering from it, developers, designers and builders still believe that there are still opportunities for growth. Many have used this to imagine new model for cities, buildings, public spaces, one that is more inclusive, resilient, sustainable and healthy, to rebalance the existing issues of affordability, economics, property, social and environmental.



Creative Repositioning -----

Diversity in many aspects (in mixed uses, housing types, job creation, etc.) at many different levels (city, neighbourhood, building) is essential. Adapt large commercial floor plates to accommodate different scales and uses, buildings are "hacked" to accommodate a new mix of functions. A similar dynamic is played out at the city block and CBD scales, further breaking down traditional typologies and zoning.



PROPOSED BANDAR MALAYSIA (CBD) ------

Located on a 486-acres former Royal Malaysian Air Force Airbase, Sungai Besi Airport site, the proposal for Bandar Malaysia draws upon the historic role of ports as centres for commerce, trade, business, bureaucracy and governance. The exchange of goods and influences between cultures brings diversity, activity, and celebration to these important sites. Through the introduction as a central transport hub connecting HSR, MRT, KTM Commuter and ERL, and a hub for global multinationals, cultural and entertainment related destinations, Bandar Malaysia shall be Malaysia's portal to the world.

Bandar Malaysia is essentially a TOD with 90% of the site within 10min walk to any public transportation. It also observe the 6D, Density, Diversity, Destination, Design, Distance, Demand Management of a TOD development. The interesting and progressive concept of the "Layered City" allow Bandar Malaysia to service infrastructure, traffic, parking seperately from the upper pedestrian level. This liberates a new ground plane to focus on the quality of urban living, green, daylight, amenities, culture, walkability, and community.

02 PLANNING

Prioritizing Diversity for Greater Resilience --

Strong correlation between urban regeneration and resilience. Urban regeneration - the process of renewal, restoration, and growth that makes ecosystems resilient. Urban resilience - the capacity of people, communities, institutions, businesses, and systems within a community to survive, adapt, and thrive. The new CBD must diversify risk. In doing so, the future CBD will be far more interesting, diverse, healthy, sustainable, and fun.



Rethink Zoning and Development Regulations

Create zoning and development regulations that promote walkability, resiliency through adaptive reuse, and inclusivity that would allow the CBD to be enjoyed by all.

An Open-mindedness -----

Trying new things. Think big, prioritize smaller, less ambitious ideas that have incremental but meaningful impact.









- GREEN ARCHITECTURE CONCEPT • Humanistic value of ergonomics, proportion and spatial quality
- Greeneries for the environment as well as for the people
- Main area of energy saving from daylight, harvesting, reduction in thermal transfer and efficient air condition usage.
- Improve indoor environment qualities through sensors and control, low VOC paints.
- Improve water efficiency through rainwater, greywater system and water efficient fittings.













03 ARCHITECTURE

Menara Etiqa is one of the latest iconic state of the art office building in Kuala Lumpur, owned by Etiqa Life Insurance. Menara Etiqa, strategically situated along Jalan Bangsar where it is within 200m of covered walking distance to LRT Bangsar Station and just 500m radius away from Midvalley and Federal Highway makes it the most sought-after office building in Bangsar.

Menara Etiqa is also Multimedia Super Corridor (MSC) rated building, with the ambition to be the greenest and most sustainable office in Bangsar. Menara Etiqa is GreenRe Platinum rated and GBI Gold rated building.

Menara Etiqa is 38 stories tall, consisting 27 floors of high-end office, 3 floors of recreational podium, 7 stories of underground parking and 3 and a half stories of podium parking.





Menara ETIQA



Active Features

1. High Frequency T5 Ballast

2. Photometric sensors photosensors placed at strategic window areas to switch on / off the lighting when not needed

3. High efficient ACMV system, cooling towers, VSD pumps, AHUs with high efficient motors. BEI of 87 kwh/m2/year, compared to conventional 220 kwh/m2/year.

4. Lighting levels MS1525 lux level, Alternate circuiting with timer provided to ensure only necessary areas in used are light up.

5. Condensate water recovery from at least 50% of the AHUs and recycle back the water for cooling tower.

6. Efficient BMS system To impose Energy Monitoring System to have maximum demand limiting programme.

7. Metering & Leak Detection System Submeters for both electrical and digital water meter

8. Regenerative Lifts Regenerative drive to harvest energy generated



LOCATION PLAN



SITE CONTEXT



GROUND FLOOR







LEVEL 1

Energy Efficiency Features ----



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04 ENVIRONMENT Low VOC Paint

Figure 10: Singapore Green Label Scheme low VOC paint certificate logo

Water Recovery System During Fire Testing



Regenerative and Energy Efficient Lift

- Reuses the heat and converts into electricity
- traction energy during braking converted into electrical energy



05 THE NATIONAL FLOWER

Did you Know, our National Flower is actually not from Malaysia?"

Hibiscus rosa-sinensis is the national flower of Malaysia. Bunga Raya (literally: great flower) in Malay, was introduced to the Malay Peninsula in the 12th century. In 1958, the Ministry of Agriculture nominated 7 flowers namely ylang ylang, jasmine, lotus, rose, magnolia, medlar and hibiscus to be selected as the national flower.

A nationwide survey was carried out and on 28 July 1960, it was declared by the government of Malaysia that Hibiscus rosa-sinensis would be the national flower.



Hibiscus tea is a popular beverage. Ever had hibiscus tea at Starbucks?



Hibiscus tea has a strong and tart tea flavour, because of the abundance of beneficial acids like citric acid, tartaric acid, malic acid, and its own unique hibiscus acid(allo-hydroxycitric acid lactone).

Don't worry, these are the kinds of acids that won't hurt.

It can be used to polish shoes

If you run out of shoe polish, have no fear, the bunga raya is here! Just rub the flower petals against your squeaky leather shoes, and walk out the door looking like you've just bought them.

It is used in traditional medicine

This flower has been used in Chinese and Ayurvedic medicine. Its roots are used to make herbal mixtures to remedy hair loss, coughing, and head lice.

Hibiscus may help to lower blood pressure and cholesterol levels, and can be used as a weight loss aid because of its effect on the human metabolism.

CROSSWORD

Use your invasive species knowledge by filling in the crossword puzzle.



<u>DOWN</u>

1. Wastewater from non-toilet plumbing systems such as hand basins, washing machines, showers and baths.

2. Natural ______ is a healthy and cost effective way to save energy and provide fresh air for building occupants.

5. Cells, convert sunlight directly into electricity

6. A system dedicated to eliminating waste by reusing, sharing, repairing, and recycling resources.

. ______ relative to buildings usually refers to the undesirable and unintended leaking of water or air into the building.

9. _____ architecture has been introduced as a concept which involves assembling multiple pre-fabricated modules on site to create a working unit.

11. The _____ Design Group was founded in 1987, began as an architectural practice, but now offers a full range of supporting design services for the built environment through subsidiary companies.

It could signal marital availability

If you're single and ready to mingle in Tahiti or Hawaii, you can do what the locals do and tuck this flower behind your right ear. Men may or may not come flocking.

If you're married, or simply not looking to couple up, you can use the hibiscus as a fashion piece, too — just be sure to wear it behind your left ear.

ACROSS

3. An international program that recognizes sustainable buildings and infrastructure projects with a star rating from one to six and a designation of "pass," "good," "very good," "excellent," or "outstanding."

4. _____ architecture, a skew towards computerized, algorithm design processes, blending complexity and variety, thus rejecting homogeneous utilitarianism.

8. The condition of mind that expresses satisfaction with the thermal environment. 10. The first office building designed by VERITAS to achieve Gold rating for GBI and GreenRE Platinum award.

12. A building certification that gives designers, builders, and building users a consistent standard by which to measure the sustainability of a building's construction and operation.

13. The total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.

14. Achieving a balance between emissions produced and emissions removed from the atmosphere; also known as carbon neutrality.

15. _____was a masterpiece of Wright's theories on organic architecture, which sought to integrate humans, architecture, and nature together so that each one would be improved by the relationship.

16. A country which has the highest carbon footprint in the world with more than 10000 million tonnes recorded in 2019

17. _____was an influential art and design movement that began in 1919 in Weimar, Germany. The movement encouraged teachers and students to pursue their crafts together in design studios and workshops.