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# **OUR GLOBAL PRESENCE**

We are Gamuda Berhad, working across key regions, with multiple international partnerships and diverse environments. We operate in nine countries

– Malaysia, Australia, United Kingdom, Singapore, Taiwan, Vietnam, India, Bahrain and Qatar.



# **GAMUDA AT A GLANCE**

Gamuda is a global engineering and construction, property and infrastructure company that provides innovative solutions and delivers sustainable developments. Established in 1976, the company business model builds enriching and transformative projects that meet people's needs.



We aim to lead the region in innovative breakthrough solutions for large scale public infrastructure and property developments.



We reliably deliver innovative world-class infrastructure and premier lifestyle properties for our customers through our core businesses in infrastructure development and construction, operation of infrastructure facilities and property developments.



Guided by our mission and principles, our strategy is focused on achieving sustainable growth through 3C's approach - Capacity, Capability and Competitiveness.

# WHAT WE DO

# Our primary business activities focus on Engineering and Construction, Property Development, Infrastructure Concessions.

#### **ENGINEERING AND CONSTRUCTION**

#### **Turnkey Contractor**

Design and build, interface and integrate, testing and commissioning

#### **Project Integrator**

'Top to toe' single point of accountability to deliver projects to safety, quality, time and cost targets

#### **PROPERTY DEVELOPMENT**

Development of large-scale townships, high-rise properties and commercial real estates

#### **INFRASTRUCTURE CONCESSIONS**

Develop, finance, operate and transfer





# **OUR EXPERTISE**

We conceptualise, design and deliver world-leading insights and engineering solutions. The cornerstone of our delivery capabilities relies on a long-term commitment to understanding the environment, connecting people and communities, as well as focusing on positive contributions to the society through our projects.



# **46 YEARS OF MAJOR MILESTONES**



### Urban Metro Systems in Greater Kuala Lumpur

- Klang Valley Mass Rapid Transit (KVMRT)
- MRT Kajang Line (Line 1)
- MRT Putrajaya Line (Line 2)

#### Malaysia's First Digital IBS Factory

Gamuda Digital Industrialised
 Building System

#### **Property Development**

- Gamuda Cove
- Gamuda Gardens
- twentyfive.7
- Horizon Hills
- Jade Hills
- Bukit Bantayan Residences
- Kundang Estates
- Madge Mansions
- The Robertson
- HighPark Suites
- Gamuda Walk
- Gamuda GM Klang
- Gamuda GM Bukit Bintang
- Kota Kemuning
- Valencia
- Bandar Botanic
- Gamuda Biz Suites

#### Key Intra-Urban Expressways and Highways

- Lebuhraya Damansara-Puchong (LDP)
- Shah Alam Expressway (SAE)
- Western Kuala Lumpur Traffic Dispersal Scheme (SPRINT Highway)
- Pan Borneo Highway Package (WPC-04), Sarawak

#### Inter-State Rail Transport

• Electrified Double Track Project (EDTP) (Ipoh-Padang Besar)

#### World's First Dual-Purpose Tunnel

• Stormwater Management and Road Tunnel (SMART)

### Water Regulating Dam, Water Treatment and Power Plant

- Gamuda Water
- Sungai Selangor Dam
- Rasa and Bukit Badong Water Treatment Plants (SSP3)
- Prai Power Station, Penang

#### **Urban Transformation in Penang**

- Penang South Islands (PSI)
- Penang Transport Master Plan (PTMP)

#### Hospital, Ports and Marine Structure

- Hospital Universiti Kebangsaan Malaysia
- Lumut Naval Harbour, Perak
- North Butterworth Container Terminal, Penang

#### **Bridges**

- Kuantan Bridge, Pahang
- Pulau Bunting Bridge, Kedah
- Batang Lupar Bridge, Sarawak



#### **Property Development**

- Celadon City, Ho Chi Minh City
- Gamuda City, Hanoi
- Binh Duong

#### **Urban Regeneration**

- Yen So Sewage Treatment Plant, Hanoi
- Yen So Park, Hanoi



#### **Rail Transport**

 Kaohsiung Metropolitan Mass Rapid Transit

#### **Marine Project**

- Marine Bridge Guan Tang
- Seawall Taipei Port
- Cable Tunnel Songshu Guangfeng



#### **Highway and Airport**

- Dukhan Highway
- Hamad International Airport



#### **Bridges**

Sitra Causeway Bridges



#### **Property Development**

- OLÁ
- GEM Residences

#### **Public Infrastructure**

- Gali Batu Multi-Storey Bus Depot
- Defu Station and Tunnels, Cross Island Line (Phase 1), Mass Rapid Transit



#### **Property Development**

• 661 Chapel St., Melbourne

#### **Public Infrastructure**

Sydney Metro West
Western Tunnelling Package

# UNITED KINGDOM

#### **Property Development**

- Aldgate Residential
- West Hampstead



### Key Urban Expressway and Highway

- Durgapur Expressway
- Panagarh-Palsit Highway

# **OUR APPROACH TO SUSTAINABILITY**

Gamuda Green Plan 2025: Making sustainable development a reality and foundation of all our business aspects.

	pillar 1	pillar 2
GREEN	SUSTAINABLE PLANNING AND DESIGN FOR CONSTRUCTION	OUR COMMUNITY AND OUR BUSINESS
he Gamuda Green Plan (GGP) 2025 is amuda's strategic roadmap towards driving nvironmental, Social and Governance (ESG) ithin the Group. The GGP 2025 empowers amuda to strategically address ESG risks and pportunities towards delivering the greatest ositive impact and value.	To facilitate sustainable masterplanning featuring climate-responsive design, integrated transport and super low energy (SLE) buildings with smart features.	To equip ourselves with the right ESG knowledge, become SMEs in our respective domains and cultivate good governance in ESG.
ur GGP 2025 comprises four pillars, and it ommits the entire Group with specific steps reduce direct and indirect corporate eenhouse gas emissions intensity by 30 ercent in 2025, and by 45 percent in 2030.	pillar 3	pillar 4
	ENVIRONMENTAL AND BIODIVERSITY CONSERVATION	ENHANCING SUSTAINABILITY VIA DIGITALISATION
	To drive impactful efforts in nature conservation and biodiversity stewardship in our developments.	By leveraging on technology and data management that will enhance and enable Group-wide efforts in sustainable development.
	A Company and	

# **COMMITMENT TO SUSTAINABILITY**

We integrate sustainability principles across our businesses by delivering value through innovation, building sustainable cities and communities while developing our human capital.



We created 200 employment opportunities for the indigenous (Orang Asli) communities at our Arboretum and nurseries via the Wild Seed Tree Bank, Advance Tree Planting, sale of crafts and farm produce, and eco-education programmes. We also conducted after-school learning classes and provided tablets for 165 indigenous children to support their educational needs.



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Our end-to-end Digital IBS solution employs cutting-edge IR 4.0 technology that drives a more sustainable approach than conventional construction methods. Our Gamuda Land commitment to adopt Digital IBS across our township to provide guality living with a sustainable construction method.



#### **Biodiversity and Environmental Conservation**

Thus far, we have planted 302,281 trees, achieving 30% of our target to plant one million trees and saplings by 2023



We are the first corporate company in Malaysia to establish and operate an Employment Transition Programme (ETP) to empower young adults on the autism spectrum to be gainfully employed.







#### **FTSE4Good Index:**

• ESG Rating of Public Listed Companies Assessed by FTSE Russell (3 out of 4 Stars)



#### **Enhancing Projects Through** Accredited Sustainability Assessment

We achieved the Five-Star Sustainable INFRASTAR certification for Design and Construction for the MRT Putrajaya Line. The MRT Putrajaya Line is the first infrastructure project to receive a Five-Star rating for Environmental Sustainability under the Design and Construction category, Construction Industry Transformation Plan 2016-2020 (CITP).

#### **Proactive and Adapting to Altered Operating Conditions Amidst the New Normal**

We invested RM8 million to establish the RT-PCR Laboratory, Gamuda Clinics and Triage Centre. We became the first private Malaysian company to set up a laboratory with two state-of-the-art testing machines with RT-PCR and RTK Antigen testings conducted fortnightly for all our 20,000 employees. We are also committed to providing working conditions aligned with the international best practices concerning human and labour rights. This includes the provision of Centralised Labour Quarters (CLQs) and Centralised Quarantine Quarters (CQQs) that exceed regulatory standards.

#### **Keeping All Stakeholders Safe**

We have a duty of care towards all of our stakeholders and continue to maintain a strong safety culture to achieve our zero work-related injuries goal. 100% of Gamuda's operational sites are certified with ISO 45001.

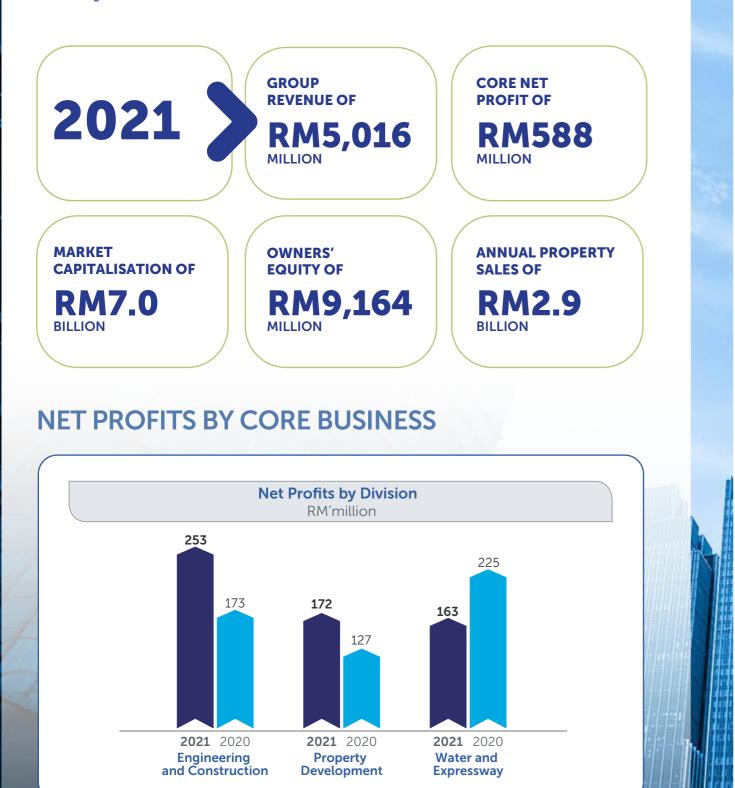
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#### **Promoting Diversity and Equal** (=) **Opportunity at the Workplace**

Gender diversity is reflected across the Group's management levels and continues to have increased balance over the years. Currently, women representation in Gamuda is 43% at the Board level

# **FINANCIAL PERFORMANCE**

A stable and resilient business outlook attributed to a proven and recognised COVID-19 management ecosystem.





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Our growth over more than four decades is underscored by our differentiated strengths and expertise, brought about by a strategic workforce who are motivated to work hard and who constantly think up ideas that create new opportunities for the Group.

We want to commit to areas where we can make the biggest impact when it comes to climate action. Thus, our focus now has shifted to further defining the Group's environmental, social and governance (ESG) goals with a clear set of targets to map our path to a green economy.

As an infrastructure group, master planning and engineering design are where we can make a difference. As we build, we will continue to invest in strengthening our capabilities to deliver sustainable solutions for people everywhere.

**YBHG DATO' LIN YUN LING** Group Managing Director

# **OUR LEADERSHIP**

BOARD OF DIRECTORS	
<b>YBHG DATO' MOHAMMED HUSSEIN</b> Chairman	
<b>YBHG DATO' LIN YUN LING</b> Group Managing Director	
YBHG DATO' IR HA TIING TAI Deputy Group Managing Director	
YTM RAJA DATO' SERI ELEENA BINTI ALMARHUM SULTAN AZLAN MUHIBBUI AL-MAGHFUR-LAH Non-Independent Non-Executive Directo	
YBHG TAN SRI DATO' SETIA HAJI AMBRIN BIN BUANG Independent Non-Executive Director	
MS. CHAN WAI YEN, MILLIE Independent Non-Executive Director	
PUAN NAZLI BINTI MOHD KHIR JOHAR Independent Non-Executive Director	ki i
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GAMUDA ENGINEERING	GAMUDA L/
MR. JUSTIN CHIN JING HO Managing Director EN. ADIL PUTRA BIN AHMAD Executive Director	MR. NGAN CHER Chief Executive



#### **ALTERNATE DIRECTORS:**

**ENCIK MOHAMMED RASHDAN BIN MOHD YUSOF** Alternate to YBhg Dato' Lin Yun Ling – Deputy Group Managing Director

**MR. JUSTIN CHIN JING HO** Alternate to YBhg Dato' Ir Ha Tiing Tai – Managing Director, Gamuda Engineering

#### **BOARD COMMITTEES**

• Audit • Nomination • Remuneration



# AREAS OF EXPERTISE

Championing a different way of doing business and development

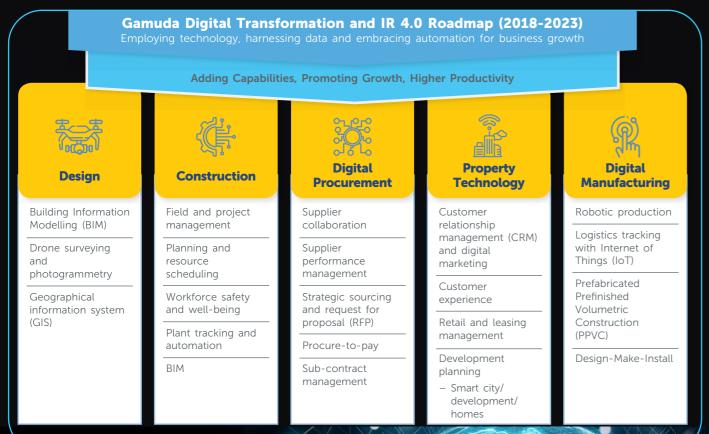
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# ADVANCED DIGITAL ENGINEERING AND CONSTRUCTION TECHNOLOGY

The use of technology is pervasive across Gamuda to transform our current processes and value chain. The Gamuda Digital Transformation and IR 4.0 Roadmap is the strategic pillar of employing technology, harnessing data and embracing automation for business growth.





# MALAYSIA'S FIRST FULLY DIGITAL IBS

Revolutionising the construction industry, Gamuda Digital Industrialised Building Systems (IBS) is a vision of future home building and a sustainable construction method that transforms traditional delivery models with robotic automation, enhancing productivity and quality.

We incorporate complete Digital IBS services into our builds, from cloud-based digital design and seamless integration with Building Information Modelling (BIM), to high-level automation and end-to-end precision robotic production for precise builds reduced construction wastage as part of our ESG commitments and improved productivity.

In our pursuit of accelerating technology adoption and doing business responsibly, Gamuda's Digital IBS is a key enabler to elevate industry standards with proven track records.







# Cloud-based system and design integration

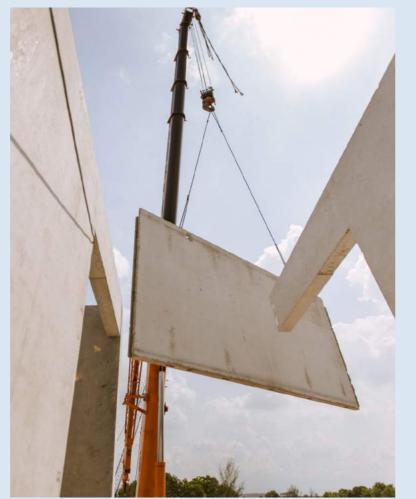
A unique differentiator for our township development is when accelerated the adoption of 100 percent Digital IBS across landed and high-rise developments in Gamuda Land. Having an IBS designed construction is an advantage in upcoming bids from property developers and infrastructure builders. This accord us the competitive advantages to address the challenges faced by the housing and property market – working towards green building, innovation and technology.

We take pride in our factories with the largest manufacturing capacity in Malaysia, delivering up to 10,000 residential units per year. Gamuda Digital IBS provides a full suite of digital services from cloud-based digital design, BIM integration, high-level automation and precision robotic production. All these bring about value engineering from a digital ecosystem perspective, with various precast products suitable for residential, commercial and infrastructure.,









### Enhancing sustainability through digital construction

We spearhead change to deliver sustainable quality living using Digital IBS across our townships. With an overarching the objective of achieving circular construction, this innovative method focuses on using proven construction technologies to bring value to our developments through meticulous detailing from digital design and robotic manufacturing until delivery through a digital ecosystem. We manufacture homes that are fully tested and checked at every step to bring quality builds & enhanced living quality.

### Upskilling the nation

The Construction Research Institute of Malaysia has independently verified Gamuda Digital IBS to increase builder productivity, equip contractors for the Industry 4.0 revolution and create higher-income job opportunities in Malaysia.

Our high-quality control standard is already seeing Digital IBS rapidly expanding into several Gamuda Land projects, including Amber Residence at twentyfive.7, GAIA Residences at Gamuda Gardens and Maya Bay Residences at Gamuda Cove. Moving forward, plans are underway to fabricate high-rise homes and luxurious landed bungalows, high-rise buildings up to 50 storeys, and even public facilities like hospitals.





# **BIM ENABLING TIMELY AND INTELLIGENT PROJECT PLANNING AND PROGRAMMING**

Gamuda is a leader in designing and using the latest technology and tools across our construction and infrastructure projects. This technology includes our digital industrialised building system (IBS) and 4D and 5D building information modelling (BIM) systems.

Building Information Modelling (BIM) is an intelligent process that gives architecture, engineering, and construction professionals the insight and tools to collaboratively plan, design, construct and manage buildings and infrastructure. It combines technology with a set of work processes that involve designing a building or piece of infrastructure collaboratively using one coherent system of virtual models rather than as separate sets of drawings.

This leads to cost-saving, increased productivity and allows for better collaboration, communication, as well as risk mitigation.

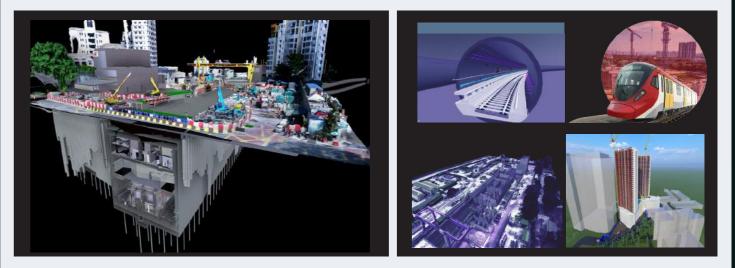


The first main contractor in Malaysia to receive the prestigious BSI (British Standard Institution) Kitemark™ certificate for Design, Construction and Commissioning. The certification recognises our milestone in digital construction. It demonstrates our excellent compliance with the global ISO 19650 standards in implementing BIM for construction.



Continuing our efforts to enhance sustainability via digital construction towards a resilient future, we have even developed our own augmented reality platform, called BIMAR, in which we can overlay virtual design and construction elements with real-time worksite images. BIMAR app also allows us to undertake a site visit with clients before construction even begins, which means we can identify and rectify any issues early and efficiently.

Winner of Augmented and Virtual Reality in Engineering Category, Malaysia Technology Excellence Awards (MTEA) 2020.



#### **BIM Academv**

Gamuda's focus on embracing digital construction is further enhanced with the BIM Academy. It sets to pioneer a significant move up the value chain in the local construction sector to develop more skilled talent in the digital engineering ecosystem.



Application BIMAR is a first generation augmented reality application for buildings, construction sites and infrastructure projects. Along with various cloud-enabled functions which allow direct reporting from the field, BIMAR is scalable and customisable to facilitate seamless, large-scale roll-out across mega infrastructure projects in a short time in line with IR 4.0 trends.

# STORMWATER MANAGEMENT AND ROAD TUNNEL (SMART)

### The world's first dual-purpose stormwater diversion and motorway tunnel

SMART left an indelible legacy on the Malaysian infrastructure engineering landscape when it took the world by storm with its unique concept to solve two of the most critical dilemmas faced by urban cities- traffic and floodwater drainage.

Functioning as a climate mitigation infrastructure since 2007, this world's first dual-purpose 13.2m diameter tunnel was constructed with a Slurry Mix-Shield Tunnel Boring Machine (TBM) – the latest in Southeast Asia and the second largest in Asia. The stormwater tunnel length runs 9.7km, while the double decking motorway length is 3km.

SMART tunnel in its own capacity could address 45% of Klang Valley's major floods, especially within flood-prone areas such as Masjid Jamek, Dataran Merdeka, Leboh Ampang and Jalan Melaka.

- Project value
- RM 1.94 billion
- Public-Private Partnership
- Turnkey Contractor
- Concessionaire
- CNN'S LIST OF TOP TEN TUNNELS
   IN THE WORLD
- UNITED NATIONS-HABITAT
   SCROLL OF HONOUR AWARD 2011
- SPECIAL AWARD FOR NATIONAL CONTRIBUTION, FIABCI MALAYSIA PROPERTY AWARD, MALAYSIA CHAPTER 2010
- BEST INTERNATIONAL PROJECT, BRITISH CONSTRUCTION INDUSTRY AWARD 2008
- SPECIAL AWARD FOR LARGE PROJECT, BRITISH ACE ENGINEERING EXCELLENCE AWARDS 2008

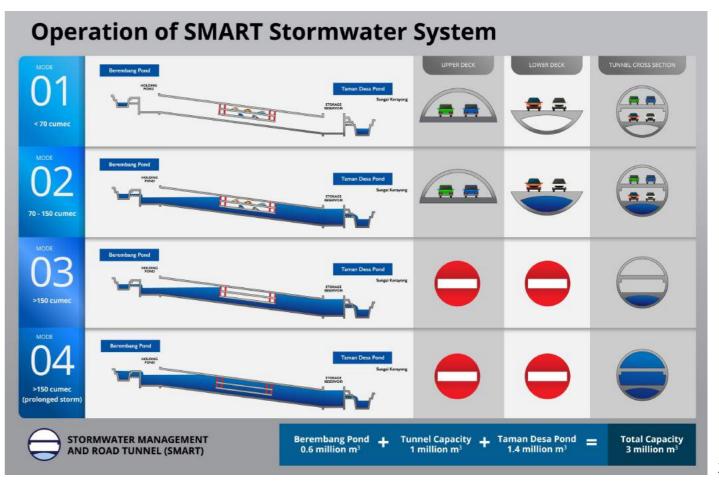
# Climate mitigation innovation

SMART is touted as a visionary infrastructure built with a sustainable, climate change solution in mind. It is innovative and unique, and the design incorporates green infrastructure.

The tunnel has demonstrated the degree of urban development Malaysia has achieved and is an example for other developing countries to emulate. SMART continues to evolve and improve its ESG value.

The operations of the SMART Tunnel are classified into four different modes.

- Diverted floodwaters on over 550 occasions to date.
- Averted an estimated RM1.4 billion in public damages.



#### Mode 1:

No flood water will be diverted into the SMART system.

#### Mode 2:

The SMART system will be activated, and flood water will be diverted into a bypass tunnel in the lower channel of the motorway. Up to this point, the motorway will still be open to traffic.

#### Mode 3:

The SMART system will be activated, and the motorway will be cleared and closed to traffic. Sufficient time will be allocated to allow the last vehicle to exit the motorway. The tunnel is on standby mode for stormwater diversion into the motorway component.

#### Mode 4:

The SMART system will be activated if a heavy rainstorm prolongs, and the motorway will be filled with stormwater after all the gates are opened. Motorway components will be used for the passage of floods after traffic evacuation is completed. The motorway will be re-opened to traffic within 48 hours.

# UNDERGROUND TUNNELLING WORKS

Challenging geotechnical engineering

The biggest challenge in our underground construction works are the geological formations beneath Kuala Lumpur. The tunnelling works primarily face three key geological formations: Kenny Hill, Karstic Limestone and Granite, with most of the tunnel alignment situated in Grade V karstic limestone.

The underground portion of the MRT Putrajaya Line traverses very complex ground environment.. There are many mixed-face conditions, as well as interfaces of different geological conditions and faults. There are quite a lot of quartz intrusions, which makes it a lot more challenging.

The land condition for the MRT Kajang Line also proved to be challenging as the tunnel had to cross the two main landforms of sand and sedimentary rock formation at Kenny Hills and limestone formations in Kuala Lumpur. To tackle these complex conditions, we saw the debut of the Variable Density (VD) TBM, the first of its kind in the world. MAJOR PROJECT OF THE YEAR, INTERNATIONAL TUNNELLING ASSOCIATION (ITA) AWARDS 2021

> TUNNELLING PROJECT OF THE YEAR, NEW CIVIL ENGINEER TUNNELLING FESTIVAL 2021



INTERNATIONAL PROJECT OF THE YEAR, GROUND ENGINEERING AWARDS 2021

A total of 12 Tunnel Boring Machines (TBM) were used to excavate the underground section of the MRT Putrajaya Line. Of these, eight are refurbished machines that were used for the MRT Kajang Line, while the remaining four are new TBMs.



### Variable Density Tunnel Boring Machine (VD TBM)

Winner of 2014's Technical Innovation of the Year Award from the International Tunnelling and Underground Space Association, the VD TBM is a home-grown solution designed to operate in multiple tunnelling modes, with the added ability to vary its slurry density to tackle different ground conditions.

The development of the 'variable density' enhancement stemmed from Gamuda's previous experiences tunnelling through similar karstic limestone conditions during the Stormwater Management and Road Tunnel (SMART) project, which encountered numerous sinkholes and settlements with significant impact and damage to public roads and properties.

The introduction and use of the VD TBM during the construction of the MRT Kajang Line resulted in a 95% reduction in sinkhole occurrence incidents compared to the SMART project, echoing the resounding effectiveness of the VD TBM in the level of achievable ground control. The first of its kind in the industry, the VD TBM continues to be optimised and updated for MRT Putrajaya Line, resetting the boundaries of underground construction, and leading to the development of Gamuda's Autonomous Tunnel Boring Machine (A-TBM).

- INNOVATION AWARD (VARIABLE DENSITY IN TUNNELLING TECHNIQUE) FOR MRT KAJANG LINE (UNDERGROUND), MALAYSIAN CONSTRUCTION INDUSTRY EXCELLENCE AWARDS (MCIEA) 2017
- TECHNICAL INNOVATION OF THE YEAR, MRT KAJANG LINE (UNDERGROUND), NCE INTERNATIONAL TUNNELLING AND UNDERGROUND SPACE AWARDS 2014



### Autonomous Tunnel Boring Machine (A-TBM)

A world's first and a massive upgrade to our previously innovated Variable Density TBM, the A-TBM was developed in-house to enable autonomous control of TBM operations using customised artificial intelligence algorithms.

The system analyses machine data in real-time and assumes control of steering, advance, excavation and slurry sub-systems with minimal human input.

The overall result of this autonomous TBM is safer tunnelling, which means improved cost, faster response times, higher accuracy and tangible productivity benefits that surpass manual input, plus offers the advantage of integrating multiple TBM drives effectively. It has been successfully deployed in Line 2 tunnel drives crossing 4 distinct geological formations.

#### INNOVATION IN TUNNEL EXCAVATION AWARD, NEW CIVIL ENGINEER TUNNELLING AWARDS 2019

 TECHNICAL PRODUCT/EQUIPMENT INNOVATION, ITA TUNNELLING AND UNDERGROUND SPACE AWARDS 2019



# MRT KAJANG LINE Malaysia's most iconic

infrastructure

Malaysia's first metro system- the Mass Rapid Transit (MRT) Kajang Line, was handled from conceptualisation to completion by our joint venture MMC Gamuda.

Pioneering the first Project Delivery Partner (PDP) model in Malaysia by taking on a single point of accountability, Gamuda guaranteed the delivery of the elevated section to safety, quality, time and cost. Featuring world-class metro facilities complete with sustainable, energy-efficient features, the MRT Kajang Line aim to serve a catchment of 1.2 million people, connecting passengers travelling between populated residential, commercial centres and key employment hubs in the Klang Valley.

The line has 31 stations, of which seven are underground, and the world's first variable density tunnel boring machine (VD-TBM) was deployed for the underground portion of the alignment. The MRT Kajang Line is a symbol for greater and more seamless urban connectivity in Malaysia.

- Project value RM 24 billion
- 51km, 31 stations
- Serving a catchment of 1.2 million people
- Pioneered the first PDP model in Malaysia
- Used highly-complex VD TBMs for challenging karstic limestone ground
- Delivered MRT Kajang Line ahead of schedule and below cost

• BUILDER'S AWARD FOR (CIVIL ENGINEERING CONSTRUCTION) FOR MRT KAJANG LINE (UNDERGROUND), 2018

International Federation of Asian and Western Pacific Contractors' Associations

- HIGHLY COMMENDED COMMUNITY ENGAGEMENT AWARD FOR MRT KAJANG LINE (UNDERGROUND), 2017 New Civil Engineer Tunnelling Awards
- FIVE STAR OCCUPATIONAL HEALTH AND SAFETY AUDIT (FOUR STARS) -MRT KAJANG LINE (UNDERGROUND), BRITISH SAFETY COUNCIL 2016
- INTERNATIONAL SAFETY AWARD (WITH DISTINCTION) FOR MRT KAJANG LINE (UNDERGROUND), BRITISH SAFETY COUNCIL 2015
- SECTOR AWARDS CONSTRUCTION AND PROPERTY ACTIVITIES CATEGORY, BRITISH SAFETY COUNCIL 2015

# MRT PUTRAJAYA LINE A success of innovation excellence

The success of MRT Kajang Line led to Gamuda delivering the MRT Putrajaya Line, solidifying the Group's reputation as the premier rai and infrastructure partner in Malaysia. As the turnkey contractor for the entire MRT Putrajaya Line alignment, Gamuda constructs the elevated and underground portions.

With 36 operational stations, of which 27 are elevated and eight underground, the second line of the KVMRT Project will serve a corridor population of approximately 2 million people, stretching from Kwasa Damansara to Putrajaya, Malaysia's federa administrative centre.

This game-changing project will significantly impact the places it crosses, bringing the nation's government agencies and suburbs around Klang Valley closer to the city centre.

- Project value RM 29.9 billion
- 52.2km, 36 stations
- Expected to serve a corridor population of approximately 2 million people
- Largest railway turnkey contractor in Malaysia
- MRT Putrajaya Line's sustainable design achieved a Five-Star Sustainable INFRASTAR certification



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FIVE STAR OCCUPATIONAL HEALTH
AND SAFETY AUDIT (FIVE STARS)
– MRT PUTRAJAYA LINE
(UNDERGROUND), 2021
British Safety Council

- SWORD OF HONOUR AWARD FOR MRT PUTRAJAYA LINE, 2020 British Safety Council
- FIVE STAR OCCUPATIONAL HEALTH AND SAFETY AUDIT (FIVE STARS)
   MRT PUTRAJAYA LINE (UNDERGROUND), 2020
   British Safety Council
- AUGMENTED AND VIRTUAL REALITY
   (ENGINEERING), 2020
   Malaysia Technology Excellence Awards
- SWORD OF HONOUR AWARD FOR MRT PUTRAJAYA LINE, 2019 British Safety Council
- FIVE STAR OCCUPATIONAL HEALTH AND SAFETY AUDIT (FIVE STARS)

   MRT PUTRAJAYA LINE (UNDERGROUND), 2019
   British Safety Council
- **BEST IN COUNTRY AWARD, 2019** British Safety Council 2019
- PUBLIC SERVICES ARCHITECTURE AWARD FOR MRT PUTRAJAYA LINE ELEVATED STATION SERAMBI DESIGN, ASIA PACIFIC PROPERTY AWARDS 2019
- TRANSPORT INFRASTRUCTURE CATEGORY (BIM LEVEL 2 AND CDE, MRT PUTRAJAYA LINE), ASIA GEOSPATIAL EXCELLENCE AWARDS 2017
- DIGITAL ENGINEERING FOR MRT PUTRAJAYA LINE, ASIA GEOSPATIAL AWARDS 2017

# RAIL AND METRO SYSTEMS

# ELECTRIFIED DOUBLE TRACKING RAILWAY PROJECT

Working together with the Ministry of Transport, we fulfilled the Malaysian Government's objective to reduce the heavy dependence on road transport through a railway that provides more efficient inter-city travel.

The successful completion and operation of the EDTP have since provided a tremendous multiplier effect for the nation. The rail network positively impacted tourism in the northern region by increasing accessibility to major cities, commercial hubs for locals and foreigners, and a faster and more efficient cargo transportation mode to the Indo-China region.

Consisting of two tunnels, seven main stations and spanning 329km, the project involved laying two parallel electrified tracks linking the states of Perak, Kedah, Penang, and Perlis. The double-track was designed to cater for electric trains that move at speeds between 140-160kph, drastically cutting down on the average travelling time by two thirds.

Aside from upgrading the original single track to two parallel rail tracks, the EDTP project scope included constructing new stations, various bridges, tunnels, land and marine viaducts, control centres, and a depot. We also completed the electrification of the tracks and signalling systems. Since it began transporting passengers back in 2008, the line has handled more than 20 million passengers each year.

- Ipoh Padang Besar, Malaysia
- Project value RM 12.52 billion
- Turnkey contractor
- 329km, 23 stations
- Bukit Merah Marine Viaduct – 3.5km
- Prai Swing Bridge 282m
- Bukit Berapit Tunnel 3.3km
- Larut Tunnel 0.33km
  - BEST MAJOR INFRASTRUCTURE
     PROJECT AWARD 2015
     Malaysian Construction Industry Excellence
  - NATIONAL OCCUPATIONAL SAFETY
     AND HEALTH (OSH) EXCELLENCE
     AWARD, 2012

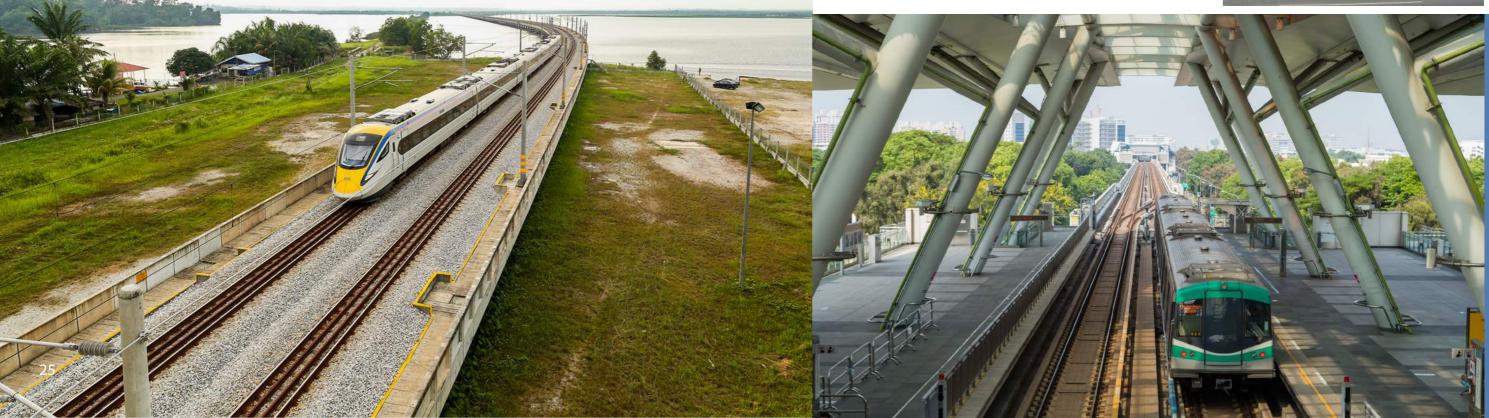
# KAOHSIUNG METROPOLITAN MASS RAPID TRANSIT, TAIWAN

Before Gamuda embarked on building the SMART Tunnel, we clinched a tunnelling job in Kaohsiung, Taiwan. Working with the Kaohsiung Rapid Transit Corporation, Gamuda built 3.86km of the 43km line, which involved constructing two parallel underground tunnels and two underground stations – the two-storey Fengshan Junior High School and four-level Dadung.

Our engineering expertise was deployed in complicated situations where ground conditions were soft, wet and aggravated by earthquakes.

After completion, our rigorous approach to environmental protection, quality control and project management earned us the Air Quality Protection Award and National Environmental Protection Outstanding Award from the Government of Taiwan.

- Package C04
- Project value RM 823 million
- Design and Build Contract





# SYDNEY METRO WEST -WESTERN TUNNELLING PACKAGE, AUSTRALIA Largest overseas tunnelling contract

Our ambition of becoming a regional tunnelling contractor propelled us to leverage our domestic tunnelling expertise to bid for competitive overseas tunnelling jobs. In early 2022 we successfully clinched our maiden rail tunnelling contract in Australia through the awarding of the Western Tunnelling Package (WTP), Sydney Metro West (SMW) project.

The WTP is expected to create multiplier social benefit initiatives and is Gamuda's largest overseas tunnelling contract secured to date. Early works for this project commenced in April 2022, with tunnelling scheduled to start in late 2023 and be completed in 2025.

A huge recognition of our tunnelling credentials, we are excited to share our international experience in building high-frequency rail sustainably, and are focussed on generating benefit for communities in Western Sydney. We aim to deliver this infrastructure successfully and at the same time to leave a positive legacy by creating local jobs and building a solid partnership with local stakeholders and communities. Supporting a growing city and delivering world-class metro services to more communities, this new underground railway will connect Greater Parramatta and the Sydney Central Business District. SMW will create more than 10,000 direct new jobs and 70,000 indirect jobs, with many of these jobs generated by this major contract.

- Project value RM6.5 billion
- Twin 9km tunnels from Sydney Olympic Park to Westmead
- Design and Construct



# DEFU STATION AND TUNNELS – CROSS ISLAND LINE (PHASE 1), SINGAPORE A strategic market for growth

Being awarded the deal to build Defu Station and Tunnels by the Land Transport Authority, Singapore is another positive breakthrough for us and a testament to Gamuda's strategic business advancement in our target markets.

This also marked our second infrastructure project foray in Singapore, and an opportunity to contribute to its national agenda in major infrastructure investments benefitting both current and future generations. For the Singapore market, we continue to look forward to actively participating in its 15-year generational infrastructure upgrade plan, providing local employment opportunities, as well as expanding our international footprint in this close-to-home market given the healthy pipeline of exciting projects in the coming years.

Defu Station is one of the 12 stations on the Cross Island Line (Phase 1), which serves residential and industrial areas such as Loyang, Tampines, Pasir Ris, Defu, Hougang, Serangoon North and Ang Mo Kio. Upon completion, the line will benefit more than 100,000 households along the vicinity. It is foreseen to improve access to industrial areas, leisure parks and new business hubs in the city. Defu Station works are expected to commence by the second quarter of 2022 and are scheduled for completion in 2030.



- Project value RM1.45 billion
- One underground station and two tunnels
- Design and Construct



AIRPORT



# HAMAD INTERNATIONAL **AIRPORT, QATAR**

Leading a consortium of experienced builders and working seamlessly with global project manager Bechtel, the Hamad International Airport was Gamuda's first project in the Gulf States.

We were awarded the design and construction of the airport's airfield facilities, access tunnels and detention ponds. The airfield facilities were designed to cater to the latest large-body aircrafts with two runways (asphalt), three parallel taxiways (asphalt), twelve aircraft parking aprons (concrete), remote parking bays, drainage works and Airfield Ground Lighting (AGL) facilities.

The runways were constructed under world-class engineering standards and required meticulous planning and precision programming.

- Package CP10
- Project value RM 3.44 billion
- Design and Build Contract



We take pride in building modern bridges that are both architecturally majestic and able to withstand harsh weather fluctuations with expertise to bring bridge designs to life.

The replacement of existing bridge to 4km dual four-lane carriage freeway in heavily congested traffic conditions. Flyovers and interchanges were built at both ends of the causeway of Umm Al Hassam and North Sitra.

# SITRA CAUSEWAY BRIDGES, BAHRAIN



# **BRIDGES IN MALAYSIA**



#### **Kuantan Bridge**

As the key developer of the Kuantan Bridge, now one of the most iconic bridges on the east coast of Peninsular Malaysia, we were responsible to construct the four bridge lanes.

#### **Pulau Bunting Bridge**

We undertook the design, construction and completion works for the 2.3km-long, 13m-wide sea crossing between Pulau Bunting and Kedah.

# ROADS AND EXPRESSWAY

# MALAYSIA'S MAJOR INTRA-URBAN HIGHWAY BUILDER

Our extensive engineering reputation includes designing, testing, commissioning and constructing major road projects spanning hundreds of kilometres.

Through our intra-urban highways – Lebuhraya Damansara-Puchong (LDP), Shah Alam Expressway (SAE), Western Kuala Lumpur Traffic Dispersal Scheme (SPRINT Highway), we improved connectivity and accessibility for local communities across Klang Valley, and catalysed the developments and job creation, fostering long-term economic growth.

- Project value RM 3.23 billion
- Infrastructure Concessions
- Design, Build, Finance, Operate Contract
- Spanning 110km, serving over
  - 2 million motorists daily

BEST PERFORMING AND SAFEST EXPRESSWAY (OPEN TOLL CATEGORY) 2020 BY THE MALAYSIAN INSTITUTE OF ROAD

Safety Research (Miros)



### Shah Alam Expressway (SAE)

The Shah Alam Expressway (SAE), also known as KESAS is a 34.5km, dual three-lane road with 12 interchanges and three toll plazas. This road allowed several new townships to flourish, including Gamuda's very own Kota Kemuning, a 740-hectare township, our maiden attempt into property development (and we have built many more since then).

The SAE links many areas in Greater Kuala Lumpur to Port Klang, Malaysia's largest port (and the world's 12th best container port). Port Klang is located approximately 25km southwest of Kuala Lumpur City Centre, and the opening of SAE has enabled the easy movement of freight in and out of Malaysia.

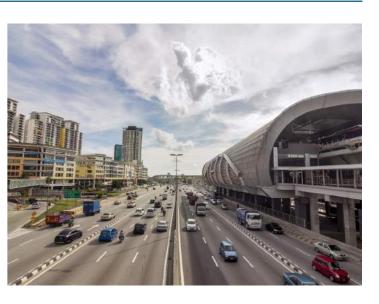
### Lebuhraya Damansara Puchong (LDP)

The Lebuhraya Damansara-Puchong (LDP) was Gamuda's second foray into highway construction. Connecting two key satellite towns in the Klang Valley, the LDP spans a 40km dual three-lane expressway with 19 interchanges, 21 bridges and four toll plazas. LDP also saw the construction of the first cable-stayed land bridge in Malaysia. The three-level overpass spans 600m over the Federal Highway and remains an important landmark until today.

### Western Kuala Lumpur Traffic Dispersal Scheme – SPRINT Highway

Connecting the Kerinchi Link, Damansara Link and Penchala Link wasn't an easy feat, but the SPRINT Highway did just that. The SPRINT Highway is a 26.5km dual three-lane road with 13 interchanges, 10 pedestrian bridges, three toll plazas and 700-metre twin-bore tunnels.









# **CONNECTING PEOPLE AND PLACES**

### Dukhan Highway, Qatar

The 43km long highway connects Shahaniya town to the existing Zekreet interchange near the Dukhan Industrial area. This construction project included grade separated interchanges, bridges and ancillary works for the four-lane dual carriageway.

- Project value RM 793.8 million
- Construction Contract



# YEN SO SEWAGE TREATMENT PLANT AND YEN SO PARK, VIETNAM

The Yen So Sewage Treatment Plant and Yen So Park are Meanwhile, environmental rehabilitation of the Yen So Park Gamuda's expansion at its maiden township development of and Yen So Lakes remained a remarkable turnaround story Gamuda City in Hanoi. The absence of a proper sewage depicting the transformation of one of Hanoi's most polluted system in Hanoi had resulted in contamination of its and inhospitable areas into a thriving green lung. The project waterways and lakes, which created growing concern for has improved the community's quality of life, as well as the public health and the need for better water management water quality in surrounding rivers, lakes and drains. practices.

Backed by our credible experience and expertise in drainage and wastewater treatment projects, a proposal was made to the Hanoi government to build Yen So Sewage Treatment Plant and to rejuvenate Yen So Park.

Working alongside the Hanoi's People Committee on design, construction, testing and commissioning works, we constructed a plant that could treat up to 200,000m<sup>3</sup> of wastewater every day.

### **Durgapur Expressway and** Panagarh-Palsit Highway, India

We entered the international civil infrastructure market with the colossal Panagarh-Palsit Highway and Durgapur Expressways.

Forming a part of West Bengal's National Highway 2 and at a combined length of almost 130km, these expressways were completed on a Build-Operate-Transfer basis, and our expertise included design, supervision and construction of service roads, bridges, interchanges, overpasses and toll booths.

Gamuda operates and maintains both expressways with the National Highways Authority of India.

- Project value RM 617 million
- Design, Build, Finance, **Maintenance Contract**







• ENVIRONMENTAL (REHABILITATION/CONSERVATION) (WORLD GOLD AWARD), 2018

FIABCI World Prix d'Excellence Award

 MERIT INNOVATIVE PLANNING AWARD (MASTERPLAN SECTOR), 2018

Malaysian Institute of Planners (MIP) Planning Excellence Awards

### DAM, WATER TREATMENT **& POWER PLANT**

# PORTS, MARINE STRUCTURE, **BUILDINGS AND UTILITIES**

# SUNGAI SELANGOR DAM

While Malaysia may be blessed with a relatively high amount of rainfall, storing rain for the dry days is still a necessity as rainfall is not evenly distributed throughout the year. There is still a need for dams to capture rainfall so that water can be released into the rivers at regular intervals to ensure water treatment plants can keep on running.

Gamuda clinched the job to ensure water supply security to more than seven million residents living in Selangor, Kuala Lumpur and Putrajaya through the construction of Sungai Selangor Dam. The Selangor Dam acts as a regulating dam to store water from a pristine tropical forest catchment.

Collectively called Phase 3 of the Selangor River water supply scheme (SSP3), the project was Gamuda's first dam construction project. SSP3 was identified as the most feasible solution to meet the ever-increasing demand for water supply in Greater Kuala Lumpur.

- Project value RM 2,146 million
- Design, Build, Finance, Operate, **Maintenance Contract**

PROVEN TRACK RECORD IN DAM ENGINEERING, HAVING BUILT MALAYSIA'S LARGEST WATER SUPPLY SCHEME.

# WATER TREATMENT AND POWER PLANT

We recognise water purification and accessibility is important for all living beings on the planet. Through Gamuda's engineering proven expertise in water treatment solutions, we led to the completion of designing and construction of various water supply schemes, treatment plants and power stations.

#### **Rasa and Bukit Badong** Water Treatment Plants



Providing clean and safe water for Malavsia's biggest cities, the Rasa and Bukit Badong Water Treatment Plants feature clarifiers, water quality monitors, disinfection and pH correction technology; engineered to be reliable, efficient and ready to serve the needs of surrounding residents.

#### **Prai Power Station**



Working with the National Electricity Board of Malaysia, we worked on the administration building, turbine blocks, power house and boiler plinths of this single-shaft power plant - making the Prai Power Plant the first of its kind in Southeast Asia at the time.



### Marine Bridge Guan Tang

Marine Bridge project at Guan Tang, Taiwan involves the construction and completion of a 1.23km marine bridge connecting a receiving terminal to a man-made island and a 284m long road embankment, and includes soil investigation, foundation, a temporary bridge, and a working platform with environmental protection works.



Seawall-Taipei Port is Gamuda's second project in Taiwan. It involves the construction of a 4,014-metre-long seawall for a reclamation project in the logistics storage area of Taipei port, dismantling existing 945m of seawall structures, and Southport shore protection works.

### **161kV Underground Transmission Line**

Gamuda's third foray in Taiwan is the 161kV underground transmission line project from Songshu to Guanfeng. The 7.3km design and build contract include cable tunnelling works through TBM mining, open-cut, and pipe jacking.

### North Butterworth Container Terminal

The North Butterworth Container Terminal was a civil project pioneered by Gamuda Berhad in the early 1990s. Working with the Penang Port Commission, we constructed the container wharf and approach bridge and container years, buildings, and utilities - effectively raising the productivity and robustness of Penang Port, now a prime shipping port in Peninsular Malaysia.

#### Lumut Naval Harbour

One of the earliest and most challenging marine-based turnkey projects we undertook was the Lumut Naval Dockyard and Offshore Structures in Perak. Now known as the Home of the Royal Marine Navy, this project marked our foray into large-scale marine engineering.

### Hospital Universiti Kebangsaan Malaysia

A major part of the University Kebangsaan Malaysia medical faculty, our work at the 1040-bed Hospital Universiti Kebangsaan Malaysia (HUKM) included completing clinical and education blocks, as well as hostels and quarters for students and staff. Upon completion, the faculty was easily one of the largest and most comprehensive of its kind in the country.







Our engineering solutions spanning from deep and shallow water jetties to teaching hospitals, thermal power stations and beyond, accomplished through innovative excellence, project management experience and advanced technical expertise.

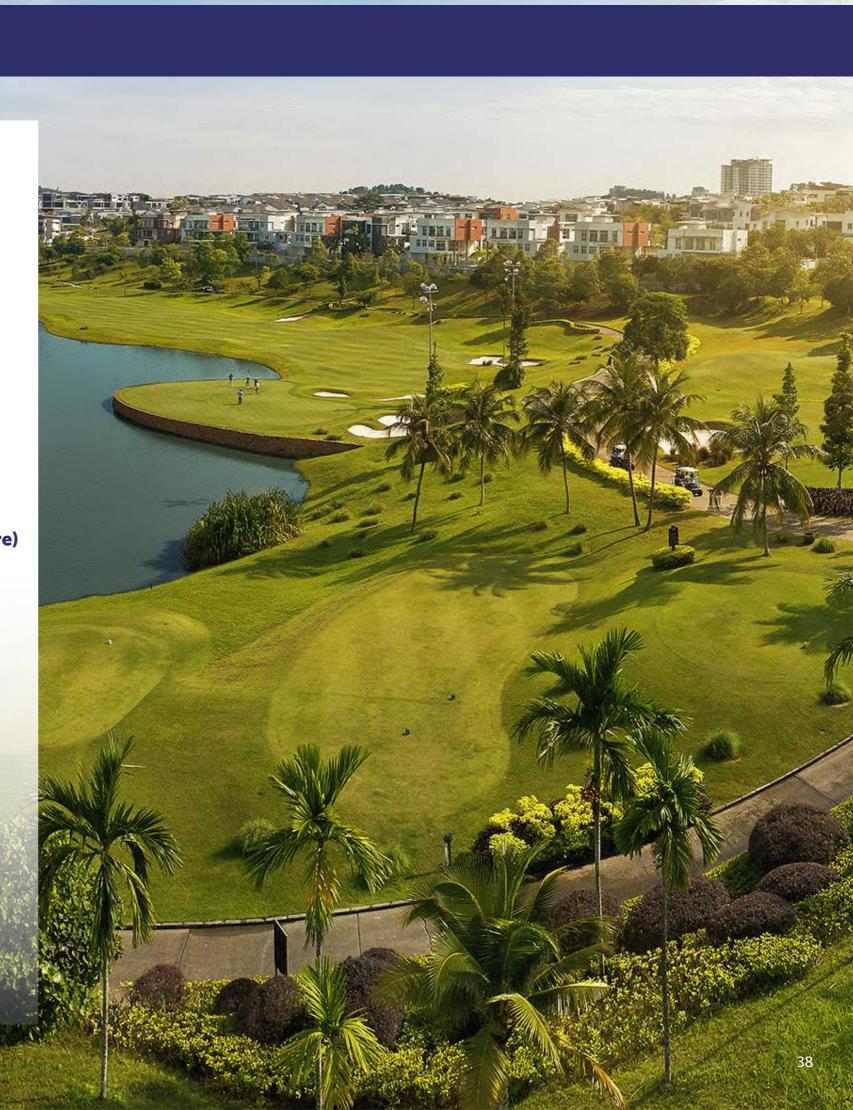
#### Sewall-Taipei Port

# MAKING GOOD AND SUSTAINABLE TOWNS

Gamuda Land, the property development division, is widely recognised as one of the nation's leading property developers. Through the culmination of over twenty years of building sustainable townships, Gamuda Land thrives on its development principles of as a responsible town-maker through mindful masterplan and quality execution.

Our vision in developing vibrant, smart and sustainable townships for the community has led to our success in Malaysia and expansion into the international market such as Australia, Singapore, the United Kingdom and Vietnam.

- Local GDV; RM16.5 billion (completed), RM97.9 billion (future)
- International GDV; RM6.7 billion (completed), RM13.1 billion (future)
- Total landbank 5,300 acres
- 11 townships and 11 vertical communities
- THE EDGE MALAYSIA TOP PROPERTY DEVELOPERS AWARD 2021 (RANKED TOP 3 PROPERTY DEVELOPER IN MALAYSIA)
- FIABCI WORLD PRIX D'EXCELLENCE AWARD 2020 – MASTERPLAN CATEGORY (WORLD GOLD WINNER)
- EDGEPROP MALAYSIA'S RESPONSIBLE DEVELOPER AWARD FOR BUILDING SUSTAINABLE DEVELOPMENTS
- EDGEPROP MALAYSIA'S BEST
   MANAGED AND SUSTAINABLE
   PROPERTY AWARDS (2017 2021)



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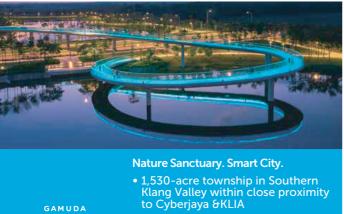
# **OUR LOCAL DEVELOPMENTS**



#### GΛMUDΛ GÅRDENS

In a Garden where Happiness Lives • 810-acre township in Sungai Buloh • 2 waterfalls and 5 cascading lakes integrated into a 50-acre central park

• GBI Silver certified



- 60-acre Central Park and 90-acre **Forest Park**
- Dedicated interchange
- GBI Gold certified (core business district planning assessment)



BANDAR BOTANIC

R

ROBERTSON

#### Premier Oriental-Themed Township

- 338-acre freehold residential township
- 20% of development allocated as a green lung
- 12 thematic gardens with walkways and recreational facilities CONQUAS rated

First Green Masterplan in Klang

• 1,242-acre freehold mixed development township

neighbourhood

CONQUAS rated

• Ambang Botanic, the first gated and guarded community in Klang

• 100-acre green lung, low density



#### Modern Countryside Living

- 40-acre boutique residential enclave in Sungai Buloh North
- Four interconnected parks with activities for residents of all ages
- Fosters organic, community farming that cultivates closer community living



#### An Avant Garde Designed Town • 257-acre township in

- Kota Kemuning
- twentyfive.7

GAMUDA

cove

- Vibrant Quayside Mall featuring 107 outlets with a waterfront promenade
- Features the 7-acre Quayside Park, with a dancing Aurora Rhythms musical fountain





Kundang

Estates

- First Resort Living Township In Joho • 1,228-acre freehold gated residential development
- 200-acre, 18-hole, par 72 international standard golf course

Deemed Iskandar Malaysia's Most Liveable Township by the Iskandar Regional Development Authonty (IRDA)





First to Weave Homes into Fairways 278-acre freehold gated and exclusive residential development • First residents-only golf course • CONQUAS rated



#### A Good Investment Begins With A Good Address

- Located in the heart of KL with great connectivity
- 9-hole private putting green at podium level
- GBI Gold Certified



#### Pioneering a Naturalistic Township

• 1,854-acre township

KOTA KEMUNING

- Resort inspired freehold & self-contained township including golf club, commercial and business district on top of residential precincts
- CONQUAS rated





Prime Freehold Residences in Petaling Jaya

- 3.38 acres of lush landscaped greens
- Five elevated parks and aerial gardens
- GBI Gold certified



- Highland Retreat Inspired Living
- Nestled within the Inanam mountains offering breathtaking views of Kota Kinabalu city and the South China Sea.
- Curve 25 retail segment at the heart of the development creates a community focal point
- 1.9-acre facility podium
- Earthquake-resistant structure

# **OUR LOCAL DEVELOPMENTS**



The Epitome of Luxurious Living • 2.2-acre freehold residential development along Embassy Row

- Exclusive condominium with palatial proportions CONQUAS rated

# Serving The Kota Kemuning Neighbourhood

- 3.6 acres of office suites & neighbourhood mall
- Strategically located in the well established township of Kota Kemuning
- QLASSIC rated

GAMUDA

GAMUDA Walk



- Low density, only one 25-storey apartment block (350 residential units)
- Served by a dedicated flyover from KESAS
- Well-equipped recreational facilities that encourage wholesome and healthy living
- Within 5km radius to commercial
- and business centres

# **OUR INTERNATIONAL DEVELOPMENTS**



An Urban Sanctuary within a Rapidly Developing City

- Lush greenery within bustling Ho Chi Minh City
- CELADONCITY

GEN BESIDENCES

MADGE

MANSIONS

- 16-ha dedicated to Celadon City Central Park Ho Chi Minh City's largestly privately-funded public park
- Homes nestled along the edge of the park with a view of the greenery



- From wasteland of untreated sewage to a picturesque parkland of scenic lakes, lush greenery and abundant flora and fauna
- AMUDACITY Rejuvenation of 323ha Yen So Park to create one of Hanoi's biggest community parks
  - Well-balanced mix of residential, commercial and recreational amenities



# V (A OLÁ

GM Residence Remia

- Spanish themed executive condominium at Sengkang, Singapore
- Features in-house telehealth kiosk • 548 units

#### West Hampstead, London

This development will feature homes together with offices and retail space centred around a new public courtyard, adding to the local vibrancy and urban renewal of West Hampstead.





- 130,832 sq ft luxury residential club-condo
- Strategically located 14 minutes from Singapore's CBD
- Bespoke concierge and on-demand services



66

#### The Art of Redefined Living

 Features never-to-be-built-out views of Melbourne city and the iconic Yarra River

Ample community gathering places including a 4-storey glass lantern lobby leading to an art-filled walkway decorated by Lalique pieces, curated by renowned artist Damien Hirst







#### Aldgate, London

Delivering community-focused micro-living development within the Aldgate Cluster in London.

# 

# **PENANG SOUTH ISLANDS**

Penang South Islands (PSI) is a 4,500-acre three-island development project over the next 30 years will be one of the key enabling strategies towards fulfilling the Penang State's vision which will be a World-Class Tourist Destination, a Green Technology Park for knowledge workers, a project that addresses Environmental Sustainability and a project with Smart City Planning.



### Taking the Pearl of the Orient into the Future

PSI is a strategic, transformative development plan that will reconstruct the sleepy southern coast of Penang Island into a Smart City and world-class tourist destination.

The PSI is a landmark project of the Gamuda Green Plan 2025, aimed at being climate-resilient with a set target to slash carbon emissions by half compared to business as usual by the end of this decade. This will be achieved through a 40 percent reduction in non-renewable energy (RE) use, 70 percent lower freshwater demand, 65 percent reduction in landfill waste, and a 100 percent RE-powered Green Tech Park with an estimated power demand of 65MW.

The key to making PSI an iconic development in the region is the setting up of a smart industrial park on the proposed reclaimed Island A, touted as the "Silicon Island". The masterplanned development of the first of the three islands will host a 700-acre (238ha) Green Tech Park, dedicated to attracting high-value electrical and electronics (E&E) companies that will complement the industrial ecosystem of Bayan Lepas in Penang.

With the emerging Green Tech Park as the centrepiece for cutting-edge E&E ecosystem, the entire place will be developed in line with UN Sustainable Development Goals (SDGs), featuring lots of solar photovoltaic power, super low energy buildings, and green mobility (bicycles and electric public transport over private cars) to achieve near-zero carbon emissions.

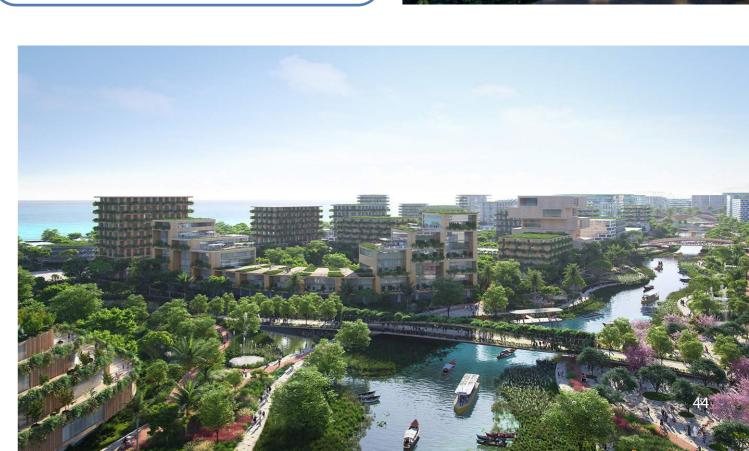
All these will be complemented by water recovery, storage, treatment, and sustainable waste management practices, among many others that easily makes Silicon Island a smart and sustainable city that is a great place to live, work, and play in.

### **ESG-compliant and in line** with Penang2030 vision

PSI supports and complies with UN SGD goals, ESG principles, Low Carbon Cities Framework, recommendations by the Intergovernmental Panel for Climate Change (IPPC) and the National Physical Planning Council, as well as the state's own Penang2030 vision that centres on family-focused development.

#### **PSI will have:**

- 20% of land on Island A reserved for green parks, mangroves, water canals, wetlands, floodplains and bioswales to enhance biodiversity and cool the environment by 1-2 degrees Celsius
- 7km of Central Canal, 3km of public beaches and 5km of the esplanade
- 140km of bicycle and walking tracks island-wide and 7km of a navigational waterway to encourage the use of green mobility, including water transportation
- A 100% renewable energy powered Green Tech Park • to achieve 50% carbon reduction by 2030
- Minimum platform level of 3m above mean sea level to ٠ face any joint occurrences of high tides and a 1,000-year storm surge







# QUALITY, SAFETY, HEALTH AND ENVIRONMENT

# **KVMRT SAFETY TRAINING CENTRE**

Health and safety are a top priority in our operations to safeguard all our employees, contractors, customers, suppliers, local communities, and other stakeholders.

Steered by a robust Quality, Safety, Health and Environment (QSHE) management system, we strive to achieve zero fatality through continuous management, monitoring and improvement of the Group's health and safety performance.

Our Integrated Management System (IMS) includes Quality, Safety and Health, and Environment.

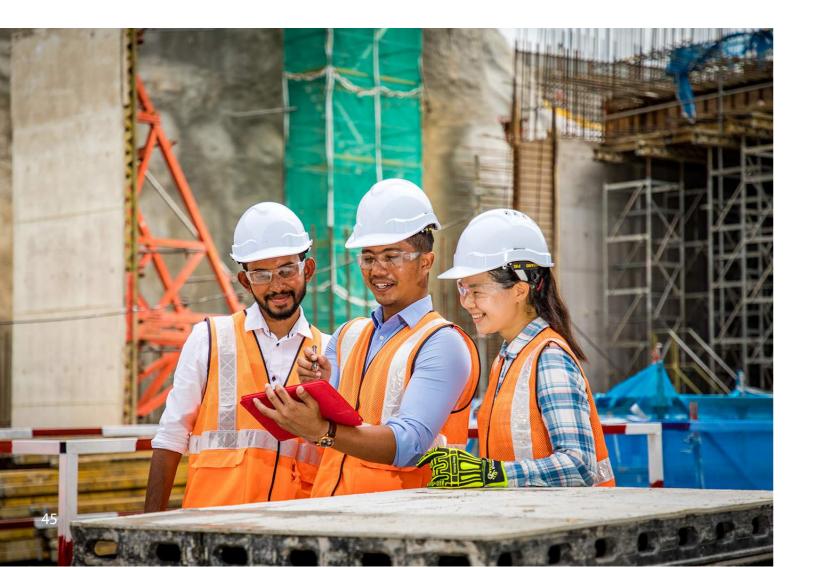
We are certified with ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 / ISO 45001 (similar to AS4801) and MS 1722:2011.

In Australia, we became the first Malaysian-based company to achieve accreditation from the Office of the Federal Safety Commissioner. Our consistent excellence beyond international safety standards has resulted in an impressive track record of achieving industry-leading safety performance for underground tunnelling works. Since 2018, we have been recognised for maintaining a Five-Star rating by the prestigious British Safety Council.



 FIVE STAR OCCUPATIONAL HEALTH AND SAFETY AUDIT (FIVE STARS) FOR MRT PUTRAJAYA LINE (UNDERGROUND) – 2021, 2020, 2019 and 2018 British Safety Council

 SWORD OF HONOUR AWARD FOR MRT PUTRAJAYA LINE – 2020 and 2019
 British Safety Council



Our KVMRT Safety Training Centre is a testament of the Group's paramount importance to place safety and elevate the standards of the whole MRT Putrajaya Line project. It was set up as part of the plan to reduce risks and practices that are deemed hazardous to address rising public concerns and scrutiny over the construction industry

In line with its establishment objective, the KVMRT project, especially the Putrajaya Line, was made an example by the government to set the benchmark for best practices for the construction industry in Malaysia. With increased training and tighter safety strategy, the number of fatalities and injury-related accidents has declined during MRT Putrajaya Line's construction compared with MRT Kajang Line.

The purpose-built construction competency and safety training centre covers OSH training and skills involved in specific high-risk jobs and electrified rail infrastructure construction. Contractors for KVMRT projects must send their workers for safety induction courses.

As a leading construction company, having a safe work environment has contributed to safeguarding project reputation. Our emphasis on safety and health also boosted the morale of our employees, helped us retain our pool of skilled manpower, and contributed towards developing a safe work culture.



- More than 42,000 workers and employees completed the SHE Passport Scheme
- Constant innovation and upskillingits workforce are factors in Gamuda winning the construction industry's Builder of the Year, 2016 award.



# GAMUDA PLANT OPERATOR SCHOOL (GPOS)

# TUNNELLING TRAINING ACADEMY (TTA)

Gamuda Plant Operator School (GPOS) was established in 1997 to streamline different competency levels of earthmoving plant operations in Malaysia. It remains the only private training academy for crane operators in the country. The school develops plant operators' capabilities in three specific areas: skills competency, safety awareness and youth apprenticeship programmes.

These programmes enable plant operators to obtain Certificates of Competency that are recognised by government regulatory bodies such as the Department of Occupational Safety and Health (DOSH) and CIDB. This is significant as the Malaysian government only permits Malaysians registered with DOSH to be trained as crane operators.

Since its establishment, GPOS has produced more than 45,000 trainees in crane and earthmoving plant operation, and safety and health programmes. As many as 75 percent of Malaysia's certified crane operators are GPOS trained. GPOS consist of in-house DOSH approved trainers.

- More than 45,000 trainees to date including subcontractors
- Malaysia's only private training academy for crane operators



Launched in 2011, with an investment of RM10 million, the Gamuda's Tunnelling Training Academy (TTA) is the first academy that develops niche talent for the highly specialised field of tunnel construction. It is the world's first learning institution specialising in Tunnel Boring Machine (TBM) technology. The TTA was set up to address the shortage of a competent, local workforce for the tunnelling works. The academy has trained over a thousand tunnel engineers and skilled superintendents.

The establishment of this academy is in line with the Government's aspirations to transform Malaysia into a high-income nation as well as being part of MMC Gamuda's training initiatives to upgrade knowledge, skills, and performance of workers in the local construction industry for future projects.

We have planned to further enhance our TTA courses by collaborating with industry experts Bosch Rexroth and Schneider Electric Malaysia to meet local and international tunnelling construction requirements.





- Trained over 1,000 tunnellers for MRT Kajang and Putrajaya Lines
- World's first learning institution specialised in TBM technology
- 30% of our trainees are from Sabah and Sarawak

# **DIVERSITY AND INCLUSION**

# SOCIAL AND COMMUNITY PARTNERSHIP

Gamuda employs a diverse workforce to tap into a wider talent pool with different backgrounds and expertise, generating creative solutions that will help the Group remain relevant and competitive in today's ever-challenging and globalised business climate. At Gamuda, we believe attracting, retaining and developing various groups of professionals stirs innovation and drives growth.

We also hold steadfast the principle of an inclusive workplace culture, whereby every employee is equal and supported in all areas. We strive to create a consistently high-trust workplace experience for everyone, with no discrimination towards race, religion, age, sexual orientation, disabilities, nationality and other demographic factors in the process of employee hiring, employee benefits, appraisal, remuneration and promotion.

Gender diversity is reflected across the Group's management levels and continues to have increased balance over the years. Group has boosted the number of females working across our business by more than 20 percent over three years.

- Total number of employees: 3,615
- Women representation in Gamuda: 43% Board level

With millennials and generation Y employees comprising 40 percent of the workforce in Gamuda, the Group sees the need for more of them in senior management ranks. This is necessary for the Group's long-term growth. We started by identifying good talent with great potential and placing them in critical roles while moving them up the value chain as part of development and succession planning.

We have also built an equitable and inclusive workplace for people with disabilities. Our workforce consists of people on the autism spectrum, graduates of our Enabling Academy.



# F Yayasan GAMUDA

The Group allocates around two percent of its profits annually to Yayasan Gamuda, which is primarily responsible for Gamuda's social initiatives.

Yayasan Gamuda was established in 2016 to oversee the Group's charitable efforts while ensuring these initiatives are aligned with Gamuda's objectives for people development and community investment.

Yayasan Gamuda conducts three recurring anchor programmes: Enabling Academy, Gamuda Scholarship and the Star Golden Hearts Award.





# SOCIAL AND COMMUNITY PARTNERSHIP



In 2017, Gamuda established the Enabling Academy (EA) to empower young adults on the autism spectrum to be gainfully employed. Gamuda remains the first corporate company to operate such ETP in Malaysia.

The ETP Trainer's Manual produced by the academy has been recognised by the Malaysian Ministries of Education, Youth and Sports as a leading guide for teachers and practitioners. The manual is available in English and Chinese.

Going further, the EA has made its training resources and materials available in the public domain without charges. The sharing of the intellectual property is intended to help develop more trainers and teachers in this niche field in Malaysia.

We advocate for collaboration with partner companies that embrace neurodiversity to build an impactful ecosystem with support networks to encourage sustainable employment opportunities for people with autism.

- 150 companies in the network
- 2,840 public awareness outreach
- 80% of graduates secured and sustained jobs
- First corporate company in Malaysia to establish and operate an ETP
- First in Malaysia to publish an ETP Trainer's Manual





# GAMUDA SCHOLARSHIP

The Gamuda Scholarship was established in 1996, a continuity of Gamuda's social (ESG) effort to prepare youths as future leaders through our own scholarship programme with the foresight of young people's development process and support.

Our goal is to provide educational aid and opportunity for young Malaysians to pursue their university education, subsequently, go on to successful careers in a wide range of professional fields and sustainably contribute to community development.

- 500 scholarships awarded
- Total investment of RM10 million for 2022



Our commitment to upgrading the scholarship programme is reflected in the Group's 5-year plan. We are increasing the scholarship guantum offered for 2022 to RM10 million and towards RM15 million in the next five years. The plan also includes greater emphasis on students from low-income families and increased allocation for overseas studies, extending to the communities within the countries we are operating in, such as Vietnam, Taiwan, and Australia. This outlook is further supported by a comprehensive and enhanced selection process and a broader outreach programme.

# SOCIAL AND COMMUNITY PARTNERSHIP

# EMPOWERING SOCIAL WORK

The Star Golden Hearts Award (SGHA) and Gamuda Inspiration Award (GIA) are joint initiatives by The Star Foundation and Yayasan Gamuda. They are among the most coveted awards for humanitarian and social works in Malaysia.

These awards recognise individuals or groups for their outstanding service and contribution to society. In particular, **community work related to employment**, **entrepreneurship**, **youth empowerment**, **digital literacy**, **waste management**, **nature conservation**, **urban agriculture**, **ecotourism**, **community welfare**, **disabled with special needs**, **water and sanitation in rural and indigenous communities**, **and animal welfare**.



G本MUDA INSPIRATION AWARD









# INDIGENOUS PARTNERSHIPS

Guided by Gamuda Green Plan 2025, our approach in the area of environmental and biodiversity conservation is complemented with native communities' inclusivity through their meaningful and effective participation.

We are committed to empowering the Indigenous community through education and employment opportunities. Harnessing their cultural connection with the natural environment, we work together with *Orang Asli* communities and environmental NGOs like Binturong Alam Ventures and The Asli Co, who have the know-how in biodiversity protection. Together, we set priorities that benefit the indigenous people, namely the *Orang Asli* communities adjacent to the Kuala Langat Forest Reserve and Gamuda Cove.

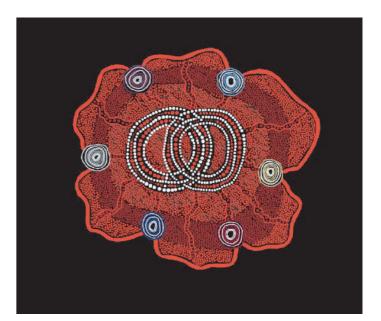
We also leverage on their experience and knowledge of the land and biodiversity through 200 job provisions at our Arboretum and nurseries, providing sustainable incomes for hundreds of families. Hundreds of children in *Orang Asli* communities have been given access to learning resources in our bid to support their educational needs through classes and tablets. We run after-school classes with dedicated tutors who have a background in teaching underserved communities to ensure consistent learning for these children.



### Gamuda Australia: Reflect Reconciliation Action Plan (RAP)

In Australia, we have formal commitment to reconciliation through the Reconciliation Action Plan (RAP) programme. Gamuda Australia chooses to start at the beginning, Reflect, being a new entrant and progress as the business matures.

Our first Reflect RAP is a living document to support the business to develop cultural understanding and achieve positive engagement with Aboriginal and Torres Strait Islander peoples and communities.



# **ENGINEERING CONSTRUCTION**

PROJECT	CLIENT	DURATION	SCOPE OF WORKS
Sydney Metro West - Western Tunnelling Package, Australia	Transport for NSW	2022 - 2025	<ul> <li>9km twin metro rail tunnel</li> <li>Excavation &amp; civil works for stations</li> <li>Earthworks</li> <li>Civil structures utilities &amp; connecting tunnels for Maintenance and Stabling Facility</li> <li>Precast segment manufacturing facility</li> <li>TBM operations site</li> </ul>
Defu Station and Tunnels MRT Cross Island Line (Phase 1), Singapore	Singapore Land Transport Authority	2022 – 2030	• 1 underground station • 2 tunnels
Cable Tunnel – Songshu Guangfeng	Taiwan Power Company	2021 – 2025	<ul> <li>7.3km underground cable tunnel</li> <li>13 units manholes,</li> <li>4 units working shafts</li> <li>Foundation for primary substation distribution transforme</li> </ul>
Sewall – Taipei Port, Taiwan	Taiwan International Ports Corporation Ltd.	2020 – 2025	4,014m seawall Dismantle existing 945m of seawall structures
Marine Bridge – Guan Tang, Taiwan	CPC Corp Taiwan	2019 - 2022	1.23km marine bridge 284m road embankment
Pan Borneo Highway, Malaysia	Ministry of Works, Malaysia	2016 - 2020	89.4km (Pantu junction to Batang Skrang)
Underground works for MRT Putrajaya Line, Malaysia	Mass Rapid Transit Corporation, Malaysia	2016- 2023	13.5km
Elevated works for MRT Putrajaya Line, Malaysia	Mass Rapid Transit Corporation, Malaysia	2015 – 2022	Total 52.2km (38.7km elevated)
Underground works for MRT Kajang Line, Malaysia	Mass Rapid Transit Corporation, Malaysia	2011 – 2017	9.5km
Elevated works for MRT Kajang Line, Malaysia	Mass Rapid Transit Corporation, Malaysia	2011 – 2017	Total 51km (37.5km elevated)
Yen So Park Urban Renewal Project, Vietnam	Hanoi People's Committee, Vietnam	2009 – 2012	• 200mld • Serves 900,000 people

PROJECT	CLIENT	DURATION	SCOPE OF WORKS
Electrified Double Track (Ipoh – Padang Besar), Malaysia	Ministry of Transport, Malaysia	2008 – 2014	329km
Sitra Causeway Bridges, Bahrain	Ministry of Works & Housing, Bahrain	2006 - 2009	• 4km • Dual 3-lane carriage freeway
Hamad International Airport, Qatar	New Doha International Airport Steering Committee	2005 – 2011	<ul> <li>2 runways: 4.9km &amp; 4.2km</li> <li>Multiple taxiways</li> <li>2 concrete tunnels</li> </ul>
Dukhan Highway (Shahaniya to Zekreet), Qatar	Public Works Authority	2005 – 2009	42.5km
Stormwater Management and Road Tunnel (SMART), Malaysia	Department of Irrigation and Drainage Malaysia & Malaysian Highway Authority	2003 – 2007	9.7km road and Stormwater Tunnel
Kaohsiung Metropolitan Mass Rapid Transit System, Taiwan	Kaohsiung Rapid Transit Corporation Taiwan	2002 – 2008	3.86km
Panagarh-Palsit Highway & Durgapur Expressway, India	National Highway Authority of India	2001 – 2005	128km (64km + 64km)

# LIST OF PROJECTS

# SIGNIFICANT RECOGNITION & AWARDS

# **PROPERTY DEVELOPMENT**

DEVELOPMENTS	SIZE (ACRE)
MALAYSIA	
Kota Kemuning	1,854
Valencia	278
Bandar Botanic	1,242
Horizon Hills	1,228
Jade Hills	338
Madge Mansions	2.2
The Robertson	3
Gamuda Biz Suites	3.6
HighPark Suites	4.9
Gamuda GM Klang	34
Bukit Bantayan Residences	18
Kundang Estates	89
Gamuda Gardens	812
twentyfive.7	257
Gamuda Cove	1,530

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DEVELOPMENTS	SIZE (ACRE)
OVERSEAS	
Gamuda City, Vietnam	426
Celadon City, Vietnam	203
661 Chapel St., Australia	0.35
GEM Residences, Singapore	3.0
Bin Duong, Vietnam	13.8
OLA, Singapore	12.7
Aldgate Residential, United Kingdom	0.12
West Hampstead, United Kingdom	1.70















**FIABCI WORLD PRIX** D'EXCELLENCE AWARDS



Master Plan Category (World Gold Award) For Gamuda City, 2020



# **INFRASTRUCTURE CONCESSIONS**

PROJECT	CLIENT	DURATION	SCOPE OF WORKS
Sungai Selangor Dam Water Supply Scheme	Selangor State Government	2000 – 2005	<ul> <li>110m high regulating dam with storage capacity of 234 million cubic meters</li> <li>2,000 mld/day water treatment plant</li> </ul>
Western Kuala Lumpur Traffic Dispersal Scheme – SPRINT Highway	Ministry of Works Malaysia	1999 – 2004	26.5km, dual 3-lane highway, 15 interchanges, 3 toll plazas, 700m twin bored tunnel
Lebuhraya Damansara Puchong (LDP)	Ministry of Works Malaysia	1996 – 1998	40km, dual 3-lane highway, 19 interchanges, 4 toll plazas
Shah Alam Expressway	Ministry of Works Malaysia	1994 – 1996	34.5km, dual 3-lane highway, 12 interchanges, 3 toll plazas

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Best Corporate Responsibility Initiatives

THEDGE Top Property Developers Awards 2021

RISM EXCELLENCE **AWARDS 2019** 

**Forbes** The World's **Best Employers** 2020

For full list of awards and certification, scan the QR code