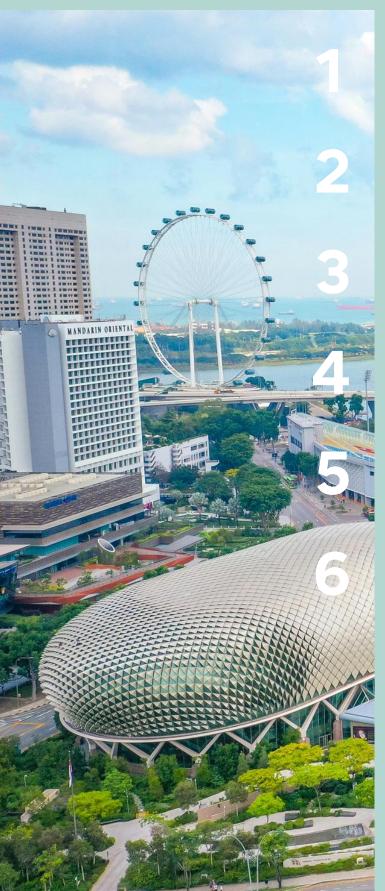
**SPECIAL ISSUE - OCTOBER 2025** 

# CELEBRATING 20 YEARS OF GREEN BUILDING EXCELLENCE



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SINGAPORE GREEN BUILDING COUNCIL (SGBC) BUILDING AND CONSTRUCTION AUTHORITY (BCA)



#### CHAMPIONING GREEN BUILDINGS

Twenty years ago, Singapore embarked on an ambitious journey to transform our built environment towards sustainability. The Building and Construction Authority's (BCA) partnership with the Singapore Green Building Council (SGBC), marked the beginning of our collective commitment to sustainable building practices.

Since then, our progress towards green building excellence, guided by successive Green Building Masterplans, has been remarkable. With more than 2,500 Green Mark-certified buildings locally and over 340 Green Mark projects across 18 countries, we have created a robust ecosystem where government leadership and industry collaboration drive innovation in tropical green building solutions.

SGBC has been a key pillar of the built environment sector in connecting our local ecosystem to the wider, global green building movement. This bridge between local action and international discourse has been fundamental to establishing Singapore as a definitive thought leader in tropical green buildings. By hosting landmark events like the first WorldGBC International Congress in Southeast Asia and establishing the Singapore Green Building Week as a premier knowledge-exchange platform, SGBC has been pivotal to the advancement of green buildings regionally.

Yet, as we face the challenge of achieving net-zero emissions by 2050, we recognise that our journey is far from complete. Energy efficiency and renewable energy adoption remain paramount, but we must also accelerate the integration of circular economy principles and smart building management systems to optimise operations and reduce carbon footprint throughout the building lifecycle.

The path ahead demands innovative solutions, particularly in addressing the unique challenges of our tropical climate. We need to scale up alternative cooling technologies, enhance smart digital systems for both new and existing buildings, and foster breakthrough innovations that can move the needle significantly towards our sustainability goals. Achieving our ambitious vision for a sustainable future is not a task for any single entity; it is a national endeavour that demands collective action and shared commitment. The longstanding and strategic partnership between the BCA and SGBC serves as a powerful catalyst in this mission. This synergy between public policy and industry leadership is what gives us immense confidence that we can, and will, accelerate the transition towards a greener, more sustainable, and resilient Singapore for all.

As we celebrate this milestone, we would like to extend our gratitude to all who have contributed to this green building journey— our pioneers, industry partners, academic institutions and other regulatory agencies. We call upon all stakeholders to join us in writing the next chapter of Singapore's green building story. Together, we can turn the challenges of climate change into opportunities for innovation, growth, and positive change.

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**Mr. Allen Ang**President (2025-2027)
Singapore Green Building Council (SGBC)



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**Mr. Ang Kian Seng**Group Director, Environmental Sustainability
Building and Construction Authority (BCA)





In the early 2000s, as global consciousness about climate change intensified and cities worldwide grappled with their environmental impact, Singapore took decisive steps to reshape its built environment. The building sector, accounting for over 20% of the nation's carbon emissions, presented both a challenge and an opportunity for meaningful climate action. While many countries were still formulating their responses to sustainability challenges, Singapore launched two key initiatives that would fundamentally transform its urban landscape.

The introduction of the Green Mark
Certification Scheme in 2005, followed by
the first Green Building Masterplan in
2006, marked the beginning of a
deliberate and structured approach to
greening Singapore's buildings. At a time
when green building standards were
predominantly focused on temperate
climates, Singapore boldly established
new green benchmarks for environmental
performance in the tropics.

#### Launch of BCA Green Mark Certification Scheme

In 2005, Singapore embarked on an ambitious journey to transform its built environment with the launch of the BCA Green Mark Certification Scheme.

This initiative established itself as the first tropical green building rating system, designed specifically to evaluate and enhance the environmental sustainability of buildings in Singapore's unique climate.

The scheme's inauguration year saw 17 pioneering projects achieve certification, including several iconic buildings that continue to stand as testaments to Singapore's early commitment to sustainability.

Among these trailblazers were Capital Tower, Republic Plaza, and the National Library Building, which set new benchmarks for environmental performance in the tropical context.

This first-of-its-kind certification framework was more than just a rating tool – it represented Singapore's strategic response to emerging global environmental challenges then. By establishing clear parameters and indicators for sustainable building design, construction, operation and maintenance across the whole-building life cycle, the Green Mark Certification Scheme provided the industry with a structured pathway towards enhanced environmental performance and building energy efficiency.



#### Launch of BCA's 1<sup>st</sup> Green Building Masterplan

When Singapore unveiled its first Green Building Masterplan in 2006, it marked a watershed moment in the nation's Green Building journey. This comprehensive blueprint came just a year after the successful launch of the Green Mark Scheme, strategically positioning Singapore to transform its built environment sector. The masterplan represented more than just a policy document – it was a statement of intent that Singapore was ready to take bigger steps towards becoming a global leader in green buildings.



At the heart of this transformation was the government's commitment to lead by example.

Through the Public Sector Taking the Lead in Environmental Sustainability (PSTLES) initiative, new public sector buildings with air-conditioned floor area exceeding 5,000m² were required to achieve Green Mark Platinum rating, while existing buildings needed to attain Green Mark Gold<sup>PLUS</sup> rating.

This decisive move sent a powerful signal to the private sector about the government's serious commitment to sustainable development.

Understanding that financial considerations often influence development decisions, the masterplan introduced the S\$20 million Green Mark Incentive Scheme for New Buildings (GMIS-NB). This scheme provided substantial support of up to S\$3 million per new building project for developments achieving Green Mark Gold rating and above. The funding also supported the engagement of environmental sustainability consultants, ensuring that developers had access to the expertise needed to achieve higher green standards.



The masterplan's vision was crystallised through the Inter-Ministerial Committee on Sustainable Development (IMCSD), which set an ambitious target to green 80% of Singapore's buildings by 2030. By focusing primarily on new developments, the masterplan ensured that sustainability features would be incorporated from the earliest design stages, making them more cost-effective and efficient to implement. Beyond targets and incentives, the masterplan recognised the crucial need to build industry capability. It catalysed the development of training programmes for industry professionals, established technical guidelines and standards, and promoted research and development in green building technologies.

#### 2009: A Catalyst Year for Singapore's Green Building Journey

2009 was a defining year for Singapore's Green Building Journey. Against the backdrop of the UNFCCC Climate Change Conference in Copenhagen, Singapore made a pledge to reduce greenhouse gas emissions by 16% below business-asusual levels by 2020 – a target we would later exceed significantly<sup>1</sup>.

That year also saw several key initiatives that would shape our green building landscape. The establishment of the Singapore Green Building Council created a crucial industry nexus for driving sustainable practices, while the launch of the Singapore Sustainable Blueprint provided a comprehensive roadmap for our environmental goals. The inaugural Singapore Green Building Week and International Green Building Conference positioned Singapore as a thought leader in tropical green building solutions, bringing global expertise to our shores.

Perhaps most emblematic of our ambitions was the opening of the Zero Energy Building at BCA Academy, Southeast Asia's first net-zero energy building retrofitted from an existing building. This living laboratory demonstrated that ultra-low energy buildings were not just possible but practical in our tropical climate. Our expertise even extended beyond our borders, with the implementation of Green Building Evaluation Standards at Tianjin Eco-City, showcasing Singapore's growing influence in sustainable urban development.





#### **Formation of SGBC**

The Singapore Green Building Council (SGBC) was established on 28 October 2009 as a private-public sector initiative to spearhead the building industry's efforts to make buildings more efficient. When the Singapore Green Building Council (SGBC) was formed in 2009, two of its key tasks were to connect with the international green building community and to create a sustainability certification scheme for products used in construction.

It attained the Established Member status with the World Green Building Council (World GBC) and was granted the right to host the WorldGBC International Congress 2010 on the 13-14 September 2010. This was the first time the Congress had been held in Southeast Asia and serves as a forum for the representatives from various Green Building Councils to discuss strategies and policies to promote environmental sustainability in the built environment.

The Singapore Green Building Week (SGBW) was launched in 2009 to "highlight Singapore's achievements in developing a sustainable city". It served as a platform for policy makers, industry, and advocacy groups to discuss key issues on the sustainability of the built environment.

The first gathering of the International Green Building Conference (IGBC), a biennial event, was organised in 13-16 September 2010 in conjunction with the 2010 WorldGBC International Congress. IGBC serves as a platform for global experts and regional players to share their knowledge on the latest trends in green building policies and technologies. The Conference has typically served as the anchor event during the Singapore Green Building Week.



One of SGBC's greatest achievements over the years has been to get built environment practitioners — developers, architects, engineers, contractors, and suppliers — to recognise the value and benefits of green buildings, so much so that the concept is now mainstream in the construction sector. Another big score is in boosting Singapore's reputation in green buildings.

"SGBC and BCA have received queries and requests for assistance to help with green buildings or even to set up national frameworks for green buildings [from all across the globe]," said Er. Lee Chuan Seng, founding president of SGBC.

That reputation, in his experience, has helped companies secure projects even in the highly competitive international arena.

"In some countries, clients tell us they have the best engineers in the world, from America and Europe, lining up outside their door to serve them. So, what do we, coming from a small place like Singapore, have to show? But when we are able to tell them that we have designed and completed green buildings that can save millions of dollars per year, they take note and we are able to secure work with them."

Now, with digitisation and data analytics playing an increasing part in sustainability, he predicted that the design and construction of green buildings will improve at a greatly accelerated pace, with SGBC at the heart of this transformation.

"SGBC is well placed to lead the charge in these efforts," he says, pointing to the initial reason for its formation. "As an NGO we are able to engage more deeply with our stakeholders to improve these and broaden as well as deepen the skillsets that they can acquire."

Sustainability, he believes, comes naturally to engineers due to the nature of their work, and this is why green buildings—and SGBC's work—have caught on so fast within the industry. "[As an engineer,] you are very focused on creating good, practical solutions that are cost-efficient," he explains.

"It's very aligned with sustainability: a lot of consideration given to how best to minimise waste, minimise the consumption of resources, and still balance quality with limiting factors."



#### **GREEN MOVEMENT**

Singapore's green building journey has been strategically guided by four masterplans since 2006, each building upon previous successes while tackling new challenges.

The first masterplan laid crucial foundations by targeting new developments and through public sector leadership. The second masterplan expanded this vision by introducing legislation for minimum energy standards and requirements for existing buildings.

With the third masterplan, the focus shifted to occupant wellness and existing building performance tracking, while introducing ambitious initiatives like the Super Low Energy (SLE) programme.

Today, the current Singapore Green Building Masterplan drives our most ambitious targets yet—the "80-80-80 in 2030" goals, pushing for widespread adoption of green buildings, super low energy standards in new developments, and significant energy efficiency improvements in our best-in-class buildings.





#### 80% of buildings to be green by 2030:

- Raising mandatory
   Environmental Sustainability
   Standards
- Publication of building energy performance data
- Green Mark 2021
- Nudging Poor Performers

#### **Support Scheme:**

Green Mark Incentive Scheme for Existing Buildings 2.0 (GMIS-EB 2.0)

### 80% of new developments to be SLE from 2030:

- GreenGov.SG
- Raise Environmental Sustainability Standard (including EE requirements) for projects under GLS programme
- Develop SLE standards for residential buildings

#### **Support Scheme:**

BE Transformation GFA Incentive Scheme

## 80% EE improvement (from 2005 levels) by 2030:

- GBIC Research and Development (GBIC R&D)
- GBIC Prototyping
- GBIC Demonstration (GBIC Demo)
- SLE Buildings (SLEB)
   Smart Hub

#### Support Scheme:

Enhanced GBIC funding (GBIC 2.0)

Supported by Integrated FM and Aggregated FM (IFM & AFM) grant for buildings to operate and maintain optimal building performance, to improve buildings' energy efficiency and cultivate a sustainable Built Environment in Singapore.

#### **KEY MILESTONES TIMELINE**



start here



2006



#### Launch of Green Mark Scheme with 17 building projects certified

- Framework for measuring building energy performance in the tropics
- Key Buildings: Capital Tower, Republic Plaza, National Library Building

#### Launch of Green Mark Scheme Version 2

- Unveiled the Sustainable Construction Masterplan
- Launched the Green Mark Manager Course and Green Mark Professional Course
- Introduction of Energy Modelling & prerequisites for energy efficiency



#### 1st Green Building Masterplan (2006 -2009)

- Inter-Ministerial Committee on Sustainable Development (IMCSD) set the target to green at least 80 per cent of buildings in Singapore by 2030
- Targeted new developments, to encourage developers to embed sustainable design from the onset.
- Drive lead demand through public sector requirements (PSTLES)
- Implemented the S\$20 million Green Mark Incentive Scheme for New Buildings (GMIS-NB)

2010

2014

2015

2021

#### Launch of Green Mark Scheme Version 4

- Introduced the Green Mark for Rapid Transit Systems
- Introduction of prerequisites outside of energy efficiency

#### Launch of Green Mark 2015 for New Buildings (Non-Residential)

- Reimagining the tropical green building rating tool
- Phasing out of Certified level to distinguish from regulations

#### Launch of Green Mark 2021

- Raise standards in energy performance (SLE/ZE/PE standards), place greater emphasis on non-energy sustainability outcomes which align with the UN Sustainable Development Goals
- Introduction of Badges across sustainability
   sections



- Focus shifted to occupant-centric approach
- Legislate existing building standards & energy consumption reporting to track building stock performance
- Expansion of initiative to reduce tenant energy use, improve IEQ & occupant wellness
- Launch of GBIC to spur R&I ecosystem for green building technologies
- Development of GM: Data Centres in 2019



#### **DID YOU KNOW?**

Since the launch of BCA's Green Mark scheme in 2005, we have greened **more than 60%** of our buildings by gross floor area (GFA).



## 2009

2009

#### Launch of Green Mark Scheme Version 3

- Introduced the Green Mark Champion Award
- · Introduced the Green Mark for Parks
- Inclusion of Computational Fluid Dynamics simulation
- Implemented the Legislation on Environmental Sustainability for New Buildings
- Formed the 1st International Panel of Experts for Sustainability of the Built Environment

#### Launch of New Green Mark Schemes

- Introduced the Green Mark for Districts scheme
- Introduced the Green Mark for Infrastructure
- Introduced the Green Mark for Office Interiors
- Introduced the Green Mark for Landed House

#### 2nd Green Building Masterplan (2009 -2014)

- Implemented the S\$100 million Green Mark Incentive Scheme for Existing Buildings (GMIS-EB)
- Introduced the Green Mark Gross Floor Area (GM GFA) Incentive Scheme
- Legislate minimum energy performance under Building Control Act for New Buildings
- GLS requirements & GFA incentives to spur higher GM ratings
- Expansion of initiatives to spur ecosystem for energy retrofits
- R&I: Launch of 1<sup>st</sup> retrofitted Zero Energy Building at BCA Academy

2nd GREEN BUILDING MASTERPLAN EXISTING BUILDINGS

2021

2024

2025

#### Singapore Green Building Masterplan (2021-2030)

- "80-80-80 in 2030" targets to unlock next lap of building EE improvement
- 80% of buildings to be green by 2030
- 80% of new developments to be SLE buildings from 2030
- 80% improvement in energy efficiency for best-in-class green buildings by 2030
- Launch of SLE Programme & Technology Roadmap
- Development of GM: Data Centres 2024
- Development of Mandatory Energy Improvement (MEI) Regime
- Initiated Green.Gov.sg for Public Sector to take the lead in mainstreaming SLE

#### Launch of Green Mark for Data Centres 2024

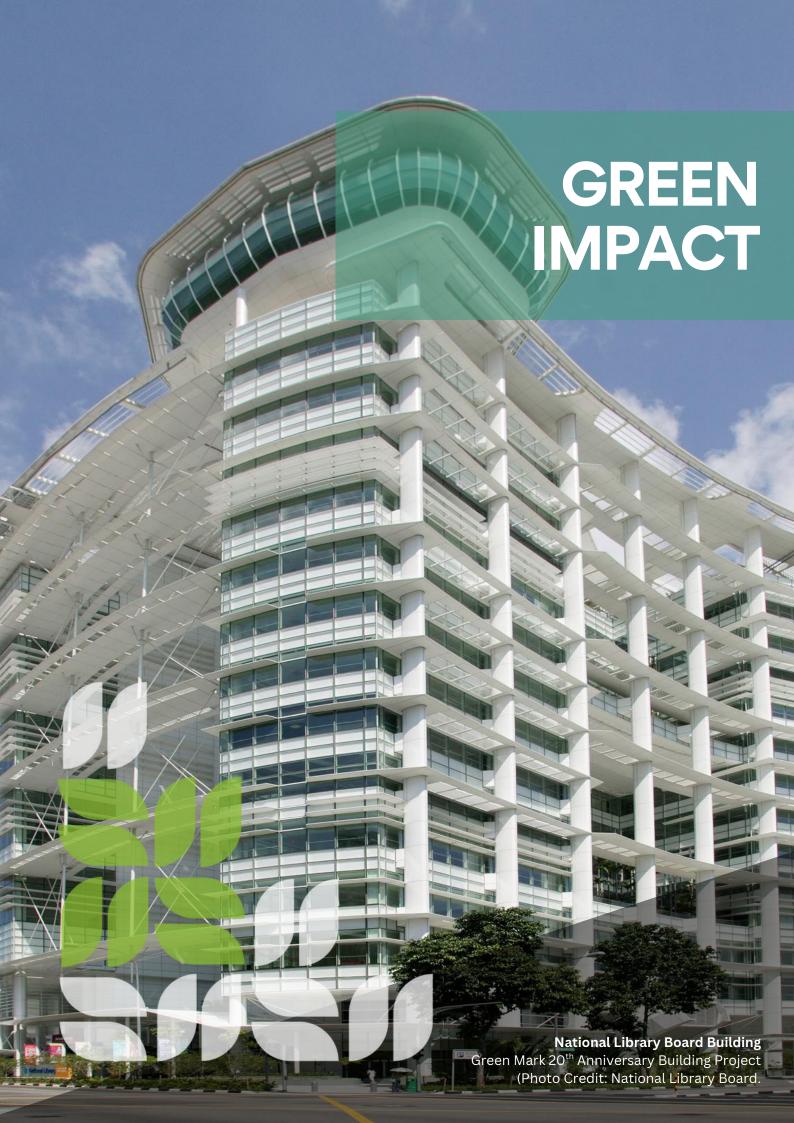
 Designed to recognise Data Centre (DC) operators that have successfully deployed green DC best practices

#### Launch of Green Mark for Interiors Scheme

 SGBC will assist BCA to administer the Scheme







Over the past 20 years, the BCA Green Mark Scheme has had significant impact on the Singapore built environment.

#### **Local Commitment**

As of March 2025, 2,590 buildings in Singapore have been granted the Letter of Award (LOA)<sup>2</sup> for Green Mark (excluding recertifications).

#### **Positive Impact on the Environment**

Based on data as of March 2025, the annual energy savings from the stock of GM-certified buildings (energy savings calculated based on minimum standards at the point of GM certification) is:

- Equivalent to powering one million 4room HDB flats,
- Translates to over S\$1.3 billion dollars saved.

Carbon emissions avoided from GM-certified buildings is about 1.7 million tCO2e annually, equivalent to:

- Replanting 1 million hectares of forest or a forest over 13 times the size of Singapore
- Having more than 396,000 ICE cars (non-electric cars) taken off the roads



#### International Presence

There have been over 340 Green Mark projects across 18 countries, establishing a significant international presence while contributing meaningfully to the global sustainability movement.

With two decades of experience, Singapore has built up its expertise in greening buildings. With the help of BCA's international arm, BCA International (BCAI), Singapore green consultants and firms have successfully exported their capabilities to help overseas stakeholders in their green and sustainability aspirations.

#### **Notable Projects**

#### Wisma BCA Foresta Indonesia



- First-ever BCA Green Mark Platinum Super Low Energy certification awarded in Indonesia.
- Supported by G-Energy Global as the green building consultant.

Sobha One Dubai, UAE



- First-ever BCA Green Mark project in the Middle East, first-ever Green Mark Platinum Super Low Energy certification awarded in the UAE.
- Supported by GreenA Consultants as the green building consultant.

#### Business Case for Property Developers & Building Owners

The investment in green buildings has proven to be not just environmentally conscious, but financially astute, particularly for Green Mark Super Low Energy buildings (SLEBs).

- New commercial buildings achieving the highest Green Mark SLE standard can recover their sustainability investments within just 4.5 to 6.5 years<sup>3</sup>
- Green Mark SLE office buildings are consuming 59% less energy than their non-Green Mark counterparts<sup>4</sup>

The market has responded positively to these green initiatives.

Green Mark certified office buildings are increasingly sought after, commanding higher occupancy rates and rental premiums.

- According to Cushman and Wakefield's 2024 report, Green Markcertified buildings in the CBD are not only maintaining occupancy rates 2.5%-4.0% higher than non-certified ones but also commanding rents up to 12% higher for Platinum certifications.
- A 2024 article by real estate company, Savills, also cited research studies that proved the business case for Green Mark.
- Keppel REIT has all its Singapore office assets bearing the highest BCA Green Mark Platinum Award. This has allowed Keppel REIT to enjoy a 99% occupancy rate for its Singapore properties.
- Grade A office stock enjoys a rental premium as high as 18% for buildings certified with a green mark.
- A 2025 research study by real estate company, CBRE, mentioned Singapore as the 3<sup>rd</sup> highest in Asia Pacific in terms of attracting higher occupancy rates.

This trend is driven by businesses' growing commitment to sustainability goals, with many willing to pay more for environmentally responsible spaces. Building owners with higher Green Mark ratings find themselves at a competitive advantage, particularly when seeking refinancing or green loans.

#### Growing Sustainable Finance for Green Buildings

Sustainable finance instruments, such as green loans and green bonds, are increasingly being utilised by companies committed to decarbonisation to access the capital needed for their transition. These instruments are essential for driving the shift towards a low-carbon economy, offering financial incentives for sustainable practices.

Singapore is part of an international alliance of world leading green building rating system organisations that has launched the first global practical guide to facilitate the \$35 trillion investment needed by 2030 to meet global energy transition goals.

As a deliverable of the alliance, the Financing Transformation: A Guide to Green Building for Green Bonds and Green Loans details how various building verification and certification standards can be used to comply with global classifications such as the Green Mark Scheme and bond frameworks, setting a trajectory for the global built environment to meet a sustainable 1.5°C climate threshold.



#### **Supporting the Green Building Workforce**

Beginning in 2019, SGBC took over from BCA a key green building certification scheme for professionals and an enhanced role in assessing buildings on their sustainability impact as the sector becomes a strategic focus for the city-state. Reflecting the growing importance of green buildings for Singapore's climate strategy and economic development, the national certification scheme for building and construction professionals has been refreshed and handed over to new management.

Since July 2019, built environment professionals who want to be certified in the design and development of green buildings will obtain their qualification from SGBC rather than from the BCA. The Green Mark Professional Qualification scheme, which replaces the Green Mark Specialist scheme, is intended to emphasise the need for and to build up competencies of industry professionals, given that Singapore has identified green buildings as one of three key areas to transform the nation's construction industry.

The key consideration in having SGBC take over the administration of the qualification was its international network of partners in the green building space. Thanks to SGBC's close ties to the World Green Building Council (WorldGBC) and regional counterparts, professionals who hold the new qualification under SGBC's management will have more flexibility in meeting their professional development requirements via international programmes, in recognition of the more globalised work that Singapore's green building professionals now take on.

SGBC now supports more than 1500 accredited Green Mark Professionals.

#### **Building from Sustainable Products**



The Singapore Green Building Product (SGBP) scheme is a certification for green building products and materials. While the Singapore Green Building Council is the owner of the SGBP certification scheme, its wholly owned subsidiary, SGBC Pte Ltd, is the certification body responsible for the evaluation of SGBP applications.

The SGBP is developed based on scientific and engineering principles that is built upon the collective knowledge and expertise of the building and construction industry. The scheme advances the built environment to one that is greener and more carbon-efficient while facilitating sustainable procurement. It helps to ensure that sustainability targets are met while providing transparency and credibility to the products we choose to use when building green into spaces and places.

The SGBP certification scheme is one of the key standards and benchmarks for green building products in the building and construction industry. Products and materials certified by the SGBP are highly recognised under the BCA Green Mark Scheme, which allows certified products to accrue points that count towards a project's Green Mark rating.

The SGBP Certification Scheme is also widely accepted by regional green building rating tools for its coverage of product's sustainability performance. Examples include GreenRE, a rating tool set up by the Real Estate & Housing Developments' Association (REHDA) of Malaysia, and LOTUS, Vietnam Green Building Council's rating tool. The SGBP complies with many of the requirements in ISO 14024 Environmental labels and declarations — Type I environmental labelling.

SGBC is always working to improve the SGBP's quality and usability. The SGBP Certification Scheme is similar to internationally leading eco-labels, such as Cradle2Cradle, DECLARE, Global Green Tag, Good Environmental Choice Australia, Korea Environmental Industry and Technology Institute. Future versions of the SGBP may provide additional recognition for products that excel in addressing social issues, circular economy, and low embodied carbon, and reorganise the Scheme's governance to allow for products certified under our Scheme to be recognised under other eco-labels.

The SGBP certification scheme has been accorded accredited status by the Singapore Accreditation Council (SAC) since 2024. This recognition signifies the scheme's adherence to the stringent ISO/IEC 17065 standard, a global benchmark for certification bodies. The accreditation underscores the SGBC's commitment to rigorous standards and transparency in promoting sustainable building products.

There are currently more than 2000 active SGBP certificates, with 22% of certified products manufactured or assembled in Singapore.

#### Enhancing the Delivery of Green Building Services

The Singapore Green Building Services (SGBS) certification scheme, launched in October 2012, is the first of its kind in Singapore that aims to advance the frontiers of green building performance through the industry's delivery of professional services.

The scheme provides a platform to recognise and profile professional services firms that deliver best-in-class green buildings aligned with the latest industry benchmarks and best practices. Certified firms have a strong track record in Green Mark projects and capabilities in various environmental sustainability fields. SGBS-certified firms are market leaders in their professional disciplines and have demonstrated a strong commitment to corporate environmental sustainability as well as employee capability development. SGBS-certified firms are an integral part of Singapore's green building network and keep abreast of industry trends and developments through participation in industry development initiatives.

SGBS-certified firms are market leaders in their professional disciplines and have demonstrated a strong commitment to corporate environmental sustainability as well as employee capability development. SGBS-certified firms are an integral part of Singapore's green building network and keep abreast of industry trends and developments through participation in industry development initiatives.

SGBS certification is also recognised as a Quality attribute under the Quality Fee Method (QFM) Framework for Public Sector construction-related consultancy services tenders.

"Advancing green building practices is really a long-term commitment and priority. It is exactly like how we started planting trees and making our streets green more than 50 years ago. Now, we have to take this next step to make not just our streets green, but our buildings green too. It is a long-term endeavour."

**Prime Minister Lawrence Wong** 

Former Minister for National Development, Singapore (2015 - 2020)

Extracted from Min/ND speech for SGBC Gala Dinner (13 September 2017)

"As climate change intensifies, green buildings have become even more critical to our environmental future and Singapore's national climate ambitions.

We are making good progress towards our ambitious '80-80-80 in 2030' targets outlined in the Singapore Green Building Masterplan. This year is particularly significant as we celebrate the 20th anniversary of the BCA Green Mark scheme— a cornerstone of our green building efforts that have delivered remarkable results."

Mr. Chee Hong Tat

Minister for National Development, Singapore

Extracted from Min/ND speech for SGBC Gala Dinner (11 July 2025)



As Green Mark celebrates its 20th anniversary, it is timely to recognise the pioneering projects, partners that have been instrumental in Singapore's green building journey. These buildings have not only consistently upheld high environmental standards through multiple Green Mark certifications but have also inspired others in the industry to pursue sustainability excellence. Their unwavering commitment has contributed significantly to Singapore's reputation as a leader in green building development in the region.

#### **Green Building Individuals**

We recognise and acknowledge all winners of the SGBC-BCA Green Building Individual Awards and the SGBC-BCA Leadership in Sustainability Awards, individual exemplars of built environment sustainability.

Awardee Name	Awardee Organisation	Award	Year of Award
Mdm Vivien Heng Cheng Sim	 RSP Architects Planners & Engineers (Pte) Ltd	 Green Architect	 2011
Er. Tan Kiat Leong	 Beca Carter Hollings & Ferner (S.E. Asia) Pte Ltd	 Green Engineer	 2011
Mr. Allen Ang Aik Leng	 City Developments Limited	 Green Advocate	 2011
Dr. Ho Nyok Yong	 Samwoh Corporation Pte Ltd	 Green Innovator	 2011
Mr. Seah Hsiu- Min Eugene	 Davis Langdon & Seah Singapore Pte Ltd	 Green Advocate	 2012
Mr. Tan Phay Ping	 Building System and Diagnostics Pte Ltd	 Green Advocate	 2012
Ar. Tang Kok Thye	 ADDP Architects LLP	 Green Architect	 2012
Er. Tay Cher Seng	 Natflow Pte Ltd	 Green Innovator	 2012
Dr. Kelvin Lee Yang Pin	 Samwoh Corporation Pte Ltd	 Young Green Building Individual Award	 2013
Dr. Cheyyar Ramanathan Uma Maheswaran	 Jurong Consultants Pte Ltd	 Young Green Building Individual Award	 2013

Awardee Name	Awardee Organisation	Award	Year of Award
Mr. Mann Young	 Lend Lease Asia Holdings Pte Ltd	 Green Advocate	 2013
Er. Russell Neil Cole	 Arup Singapore Pte Ltd	 Green Engineer	 2013
Er. Teh Poh Suan	 Housing and Development Board (HDB)	 Commendation	 2013
Mr. Owen Wee Liam Choo	 Surbana International Consultants Pte Ltd	 Commendation	 2013
Mr. Jerry Ong Chin-Po	 CPG Consultants Pte Ltd	 Commendation	 2013
Ms. Jaye Tan Jia Yee	 DP Architects Pte Ltd	 Commendation	 2013
Mr. Anthony Goh	 City Developments Limited	 Green Facilities Manager	 2014
Mr. Lim Tow Fok	 Keppel Land International Limited	 Green Facilities Manager	 2014
Mr. Vincent Low	 G-Energy Global Pte Ltd	 Green Advocate	 2014
Mr. Alan Tan Hock Seng	 Housing and Development Board, Building Research Institute (BRI)	 Green Architect	 2014
Mr. Tan Shao Yen	 CPG Consultants Pte Ltd	 Green Architect	 2014
Er. Patrick Foong Keng Yuen	 E2Green Pte Ltd	 Green Engineer	 2014
Dr. Sujit Ghosh	 Holcim (Singapore) Ltd	 Green Innovator	 2014
Prof. Jason Pomeroy	 Pomeroy Studio	 Young Green Advocate	 2014

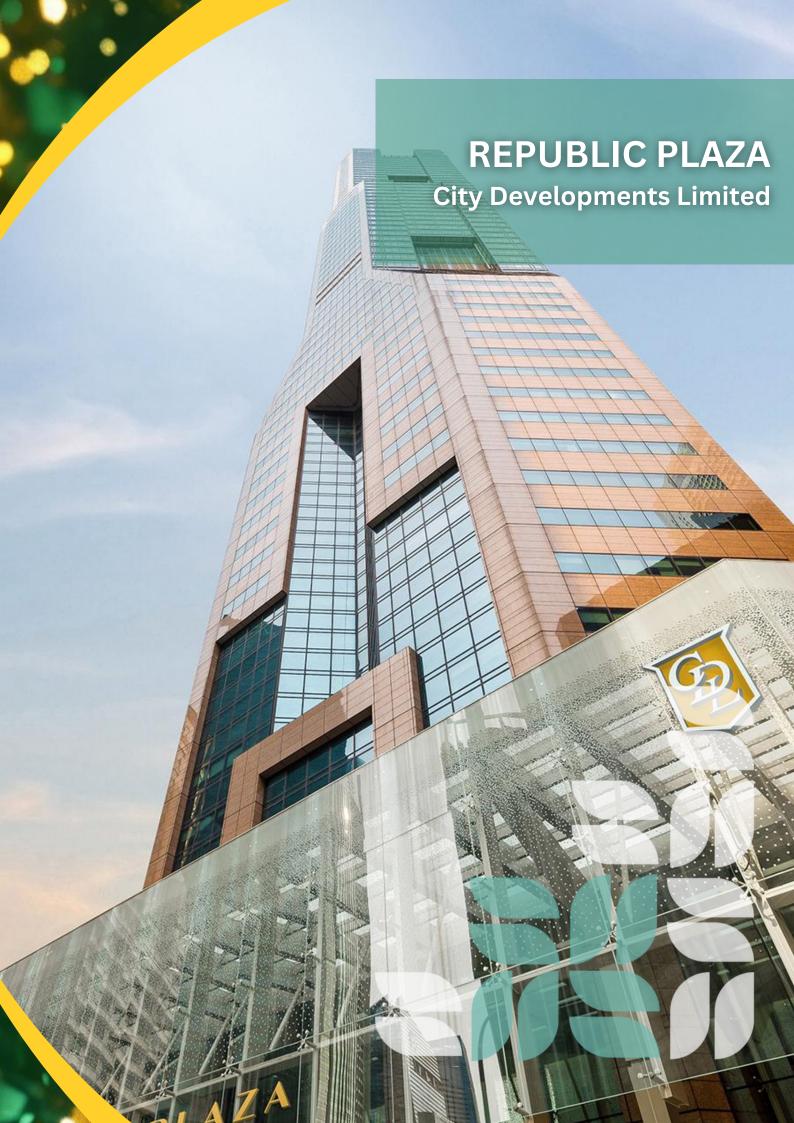
Awardee Name		Awardee Organisation	Award	Year of Award
Dr. Ng Khee Yang		ECO-Applications Pte Ltd	 Commendation	 2014
Mr. Lee Boon Woei	•••••	DP Sustainable Design	 Commendation	 2014
Er. Richard Phua Teck Meng		Squire Mech Pte Ltd	 Commendation	 2014
Mr. Martin Gui		Facility Link Pte Ltd	 Commendation	 2014
Er. Lee Chuan Seng	•••••	Beca Asia Holdings Pte Ltd	 Green Visionary	 2015
Mr. Kwek Leng Joo		City Developments Limited	 Green Visionary	 2015
Dr. Kenneth Yeang King Mun		T.R. Hamzah & Yeang Sdn Bhd	 Green Architect Lifetime Achievement	 2015
Mr. Lee Eng Lock		Measurement & Verification Pte Ltd	 Green Innovator Lifetime Achievement	 2015
Ms. Farizan d'Avezac de Moran		GreenA Consultants Pte Ltd	 Green Advocate	 2015
Mr. Sam CS Tan		KEN Holdings Bhd	 Young Green Advocate	 2015
Mr. Tan Szue Hann		Surbana Jurong Pte Ltd	 Young Green Architect	 2015
Dr. Shah Kwok Wei		National University of Singapore (NUS)	 Young Green Innovator	 2015
Mr. Lau Kah Kee, Paul		Keppel Land Ltd	 Commendation	 2015
Mr. Koh Kok Sin		NTUC Fairprice Co-operative Ltd	 Commendation	 2015
Mr. Wu Tzu Chiang		DP Architects Pte Ltd	 Commendation	 2015

Awardee Name	Awardee Organisation	Award	Year of Award
Er. Lim Ming Sing, Alfred	 CapitaLand Singapore Ltd	 Commendation	 2015
Er. Tang Pei Luen	 JTC Corporation	 Commendation	 2015
Er. Yong Siew Onn	 DP Engineers Pte Ltd	 Commendation	 2015
Dr. John Keung	 BCA Academy	 Green Visionary	 2017
Ms. Esther An	 City Developments Limited	 Green Advocate	 2017
Ms. Joanne Koh	 Temasek Polytechnic	 Young Green Advocate	 2017
Mr. Quek Yang Thee	 Republic Polytechnic	 Young Green Advocate	 2017
Ar. Khoo Poh Bin	 DCA Architects	 Green Architect	 2017
Ar. Kuan Chee Yung	 CPG Consultants Pte Ltd	 Green Architect	 2017
Er. Tong Kok Kwang	 Nanyang Technological University (NTU)	 Green Facilities Manager	 2017
Mr. Zac Toh	 GWS Living Art Pte Ltd	 Young Green Innovator	 2017
Ar. Quek Ser Bock	 Housing and Development Board (HDB)	 Commendation: Green Advocate	 2017
Dr. Pang Chin Hong	 Frasers Property Limited	 Green Advocate	 2019
Ms. Wenda Lew	 Comfort Management Pte Ltd	 Young Green Advocate	 2019
Dr. Tay En Rong, Stephen	 National University of Singapore (NUS)	 Young Green Advocate	 2019

Awardee Name		Awardee Organisation	Award	Year of Award
Ar. Theodore EC Chan		CIAP Architects Pte Ltd	 Green Architect	 2019
Ar. Alina Yeo Hwee Hua	•••••	WOHA Architects Pte Ltd	 Young Green Architect	 2019
Er. Yong Siew Onn		DP Sustainable Design	 Green Engineer	 2019
Er. Pang Pei Song		WSP Consultancy Pte Ltd	 Young Green Engineer	 2019
Mr. Kenny Low		International Plaza	 Commendation: Green FM	 2019
Mr. Kelvin Goh		Mercatus Co-Operative Limited	 Commendation: Green FM	 2019
Mr. James Ng		SMM Pte Ltd	 Commendation: Green FM	 2019
Ms. Lee Zhenyi		C&W Services (S) Pte Ltd	 Young Green Facilities Manager	 2019
Dr. Chai Kok Soon		Kaer Pte Ltd	 Green Innovator	 2019
Dr. Li Fuyun		Innosparks Pte Ltd	 Young Green Innovator	 2019
Prof. Tai Lee Siang		World Green Building Council Board	 Green Visionary	 2022
Ar. Alex Tang		ADDP Architects LLP	 Professional Leadership in Sustainability	 2022
Ms Irene Yong		Beca Carter Hollings & Ferner (S.E. Asia) Pte Ltd	 Professional Leadership in Sustainability	 2022
Er. Joseph Goh		DLM Pte Ltd	 Professional Leadership in Sustainability	 2022

Awardee Name	Awardee Organisation	Award	Year of Award
Er. Winston Ho	 JTC Corporation	 Professional Leadership in Sustainability	 2022
Mr. Venkatachalam Solaimalai	 Lendlease	 Professional Leadership in Sustainability	 2022
Mr. Praveen Hassan Chandrasekhar	 Surbana Jurong Pte Ltd	 Professional Leadership in Sustainability	 2022
Ms. Elaine Tan	 Arup Singapore Pte Ltd	 Professional Leadership in Sustainability	 2024
Mr. Prasantha Raveenthiraku mar	 C&W Services (S) Pte Ltd	 Professional Leadership in Sustainability	 2024
Ms. Qian Xuejia	 City Developments Limited	 Professional Leadership in Sustainability	 2024
Mr. Chen Wenjie	 Climate Asia Pte Ltd	 Professional Leadership in Sustainability	 2024
Mr. Kew Yuan Chun	 Frasers Property Retail Management Pte Ltd	 Professional Leadership in Sustainability	 2024
Mr. Joseph Loh Kum Hoong	 G-Energy Global Pte Ltd	 Professional Leadership in Sustainability	 2024
Mr. Robin Leow Kwang Peng	 Savills Property Management Pte Ltd	 Professional Leadership in Sustainability	 2024
Ms. Rena Foo	 SMM Pte Ltd	 Professional Leadership in Sustainability	 2024







Republic Plaza is a skyscraper in the Downtown Core. It comprises of two towers of differing heights, and has achieved annual energy savings of about 6.1 million kWh.

- Building Owner: City Developments Limited
- Architect: RSP Architects Planners & Engineers (Pte) Ltd
- M&E Engineer: Squire Mech Pte Ltd
- Facilities Manager: CBM Pte Ltd
- ESD Consultant: CBM Solutions Pte Ltd

#### **GREEN MARK JOURNEY**





PLATINUM SUPER LOW ENERGY



**PLATINUM** 

2009 2005



**GOLD** 

#### **About the Building Project**

- GFA: 102,875 m<sup>2</sup>
- No of Storeys: 66 (Tower 1) and 23 (Tower II)
- Building Type: Commercial

#### **Latest Building Performance**

• EUI: 170 kWh/m²/yr (2023)

- 'DigiHUB', a smart property management system, enables predictive maintenance for operational efficiency
- Auto daylight-responsive controls and occupancy insights dashboard
- EC+ Fans & Motors for AHUs
- Hybrid Cooling Fans
- Carpark Guidance System
- Recycling lamp, green initiatives
- CO<sub>2</sub> sensor in carpark
- Condensate water collection
- NEWater for fountains, irrigation and Cooling tower
- Automatic tube cleaning system for Chillers
- Destination Control System with Variable Voltage Variable Frequency (VVVF) for lifts
- Sleep Mode with VVVF for escalators
- LED lighting with Motion Detection System in common areas





City House, located in the Central Business District is a is a premium office building located within the city's prime downtown area. City House has achieved annual energy savings of about 600,000 kWh.

- Building Owner: City Developments Limited
- Architect: Swan & Maclaren Architects
- Facilities Manager: CBM Pte Ltd
- ESD Consultant: CBM Solutions Pte Ltd

#### **GREEN MARK JOURNEY**

2024



PLATINUM SUPER LOW ENERGY

2021 2018 2014



**PLATINUM** 

2011 2008



GOLD

#### **About the Building Project**

- GFA: 20,181 m<sup>2</sup>
- No of Storeys: 23
- Building Type: Commercial (Office)

#### **Latest Building Performance**

• EUI: 108 kWh/m²/yr (2024)

- 'DigiHUB', a smart property management system, enables predictive maintenance for operational efficiency
- Model Predictive Control for Airconditioning
- High Performance Chiller Plant with system efficiency of 0.565kW/RT
- Energy-efficient LED lighting in common areas
- Use of motion sensors in common areas
- Natural ventilation for staircases
- All water taps in common toilets are fitted with models that have achieved at least a "Very Good" rating under the Water Efficiency Labelling Scheme
- Office Common Corridors equipped with photocell sensors
- CO<sub>2</sub> sensor and monitoring for AHU operation control





Environment Building is a 25-storey office building on the fringes of Orchard Road and close to Newton MRT station. Environment Building has achieved energy savings of about \$1.1 Million and cumulative water savings of about \$1.7 Million.

- Building Owner: Ministry of Sustainability and the Environment (MSE)
- Facilities Manager: CBRE GWS Pte Ltd
- ESD Consultant: CBRE GWS Pte Ltd

#### **GREEN MARK JOURNEY**

2023



PLATINUM SUPER LOW ENERGY

2018 2014 2011



**PLATINUM** 

2007



GOLD

#### **About the Building Project**

- GFA: 49,122 m<sup>2</sup>
- No of Storeys: 25
- Building Type: Commercial

#### **Latest Building Performance**

• EUI: 170 kWh/m<sup>2</sup>/yr (2023)

- Efficient chiller plant with system efficiency of 0.54 kW/ton
- Raised the chiller chilled water supply temperature from 7°C to 9°C
- Maintain ambient indoor air temperature at 25°C
- All lifts equipped with regenerative drive and sleep mode features
- Switch off office lighting for at least one hour during lunch time
- Installed motion sensors to lightings at low traffic area, such as staircase, toilets, etc
- Dimmed lift lobby lights after office hours
- Use of automatic irrigation system with rain sensors for landscaping
- Recycling programmes segregation and recycling of paper, cans, plastics, printer cartridges, cooking oil and e-waste
- Food waste managed using bio-digestor
- Adoption of sustainable products and participated in carpet re-entry programme during renovation





Keppel Bay Tower is an 18-storey office tower with a 6-storey podium block situated in the HarbourFront Area, a part of Singapore's Greater Southern Waterfront.

- Building Owner: Keppel Bay Tower LLP
- Architect: DCA Architects Pte Ltd
- M&E Engineer: Meinhardt (S) Pte Ltd
- Facilities Manager: ENGIE Services Singapore

  Pte I td
- ESD Consultant: G-Energy Global Pte Ltd

#### **GREEN MARK JOURNEY**

2025



PLATINUM SUPER LOW ENERGY

2010



GOLD

Keppel Bay Tower achieved the BCA Green Mark Super Low Energy certification through strategic collaboration with G-Energy Global Pte Ltd and the BMS supplier. Key initiatives included optimising the chiller plant and airside systems, installing 22 AHU optimisers and 4 smart FCUs, which led to a 47% improvement in airside efficiency.

Additionally, fine-tuning the 10-year-old chillers resulted in a 22% enhancement in plant efficiency.

#### **About the Building Project**

- GFA: 41,908 m<sup>2</sup>
- No of Storeys: 18
- Building Type: Commercial (Office)

#### **Latest Building Performance**

- TSE: 0.700 kW/RT
- EUI: 130 kWh/m<sup>2</sup>/yr

- Chiller plant system efficiency of 0.577 kW/RT
- The building is 100% LED-lit
- Photovoltaic (PV) system on-site at 97 kWp
- Energy efficient air distribution system
- Smart lighting system
- Intelligent building control system
- Heat Load Reduction system
  - Non-chemical water treatment system





The Ocean Financial Centre is an office building located at Collyer Quay in the Raffles Place region of Downtown Core planning area, Singapore. The building has achieved annual energy savings of about \$295,000 thanks to cooling system energy cost savings.

- Building Owner: Ocean Properties LLP
- Architect: Architects 61 Pte Ltd
- M&E Engineer: Parsons Brinckerhoff Pte Ltd
- Facilities Manager: ENGIE Services Singapore
  Pte I td
- ESD Consultant: Barghest Building Performance Pte Ltd

# **GREEN MARK JOURNEY**

2025



PLATINUM SUPER LOW ENERGY



**PLATINUM** 

"At Keppel REIT, sustainability is at the core of our business strategy and operations. We are proud that all our properties in Singapore have achieved the BCA Green Mark Platinum certification, including Ocean Financial Centre and Keppel Bay Tower, which have both attained the BCA Green Mark Platinum Super Low Energy (SLE) certification. We are committed to advancing our sustainability efforts and delivering long-term value to our stakeholders."

- Mr. Chua Hsien Yang, CEO, Keppel REIT

#### **About the Building Project**

• GFA: 95,992 m<sup>2</sup>

• No of Storeys: 43

• Building Type: Commercial (Office)

#### **Latest Building Performance**

• TSE: 0.675 kW/RT

• EUI: 156 kWh/m<sup>2</sup>/yr

- Efficient chiller plant with system efficiency of 0.539 kW/RT
- 75 kWp solar panels installed on the roof
- Regenerative Drive System coupled with VVVF features for lifts and escalators are installed with motion sensors
- Heat Recovery for hot water and heat recovery wheel for pre-cool fresh air
- Extensive green wall, roof terraces and triple-glazed glass facade





Singapore Pools Building is a 12-storey full commercial building strategically located on the fringe of the Singapore CBD. The building has achieved annual energy savings of about 56 kWh/year.

- Building Owner: Singapore Pools (Pte) Ltd
- Facilities Manager: Savills Property Management Pte Ltd
- ESD Consultant: Savills (Singapore) Pte Ltd

# **GREEN MARK JOURNEY**

2024



PLATINUM SUPER LOW ENERGY

2022 2016 2013



**GOLD**PLUS

"We are honoured that the Singapore Pools
Building has been recognised as one of the
outstanding Green Mark 20th Anniversary Building
Projects. Sustainability is an integral part of how
we operate — from investing in green infrastructure
to adopting energy-efficient practices — as we
strive to contribute to a greener future for
Singapore. This recognition affirms our ongoing
commitment to environmental responsibility, and
inspires us to continue building a more sustainable
and resilient organisation."

Mr. Li Chong Jin Chief Financial Officer, Singapore Pools

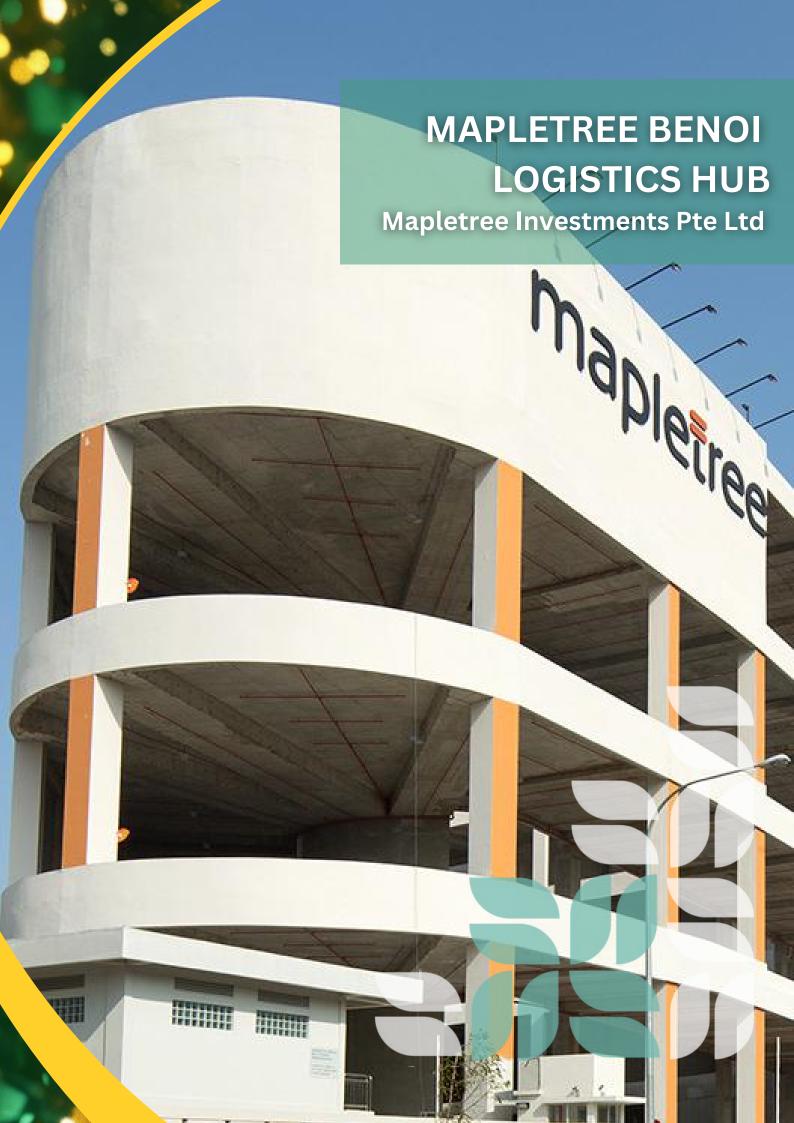
#### **About the Building Project**

- GFA: 13,121 m<sup>2</sup>
- No of Storeys: 12
- Building Type: Commercial (Office)

#### **Latest Building Performance**

TSE: 0.655 kW/RT

- Rooftop solar panels with an annual energy output exceeding 70,000 kWh
- Energy Efficient Air-Conditioning magnetic multi-compressor chiller
- Replacement of centrifugal fans to EBM EC Plug Fans
- Digitisation in Building industry incorporating EMS, BMS and FMS
- Adopt hybrid cooling in renovated office spaces to improve thermal comfort





Mapletree Benoi Logistics Hub is a five-storey ramp-up logistics facility located near the Jurong and Pasir Panjang Ports, with convienient access to the city. A 2.2 MWp rooftop solar installation was completed at the hub in 2020, enabling it to meet approximately 80% of its energy needs through on-site renewable generation. The Hub also exports approximately 1 million kWh of clean energy annually.

- Building Owner: Mapletree Logistics Trust
- Developer: HSBC Institutional Trust Services
   (S) Ltd
- Facilities Manager: Mapletree Property Management Pte Ltd
- ESD Consultant: Building Systems and Diagnostics Pte Ltd

# **GREEN MARK JOURNEY**

2024 2021

2018

2013



PLATINUM SUPER LOW ENERGY

## About the Building Project

- GFA: 92,463 m<sup>2</sup>
- No of Storeys: 5
- Building Type: Industrial (Warehouse)

#### **Latest Building Performance**

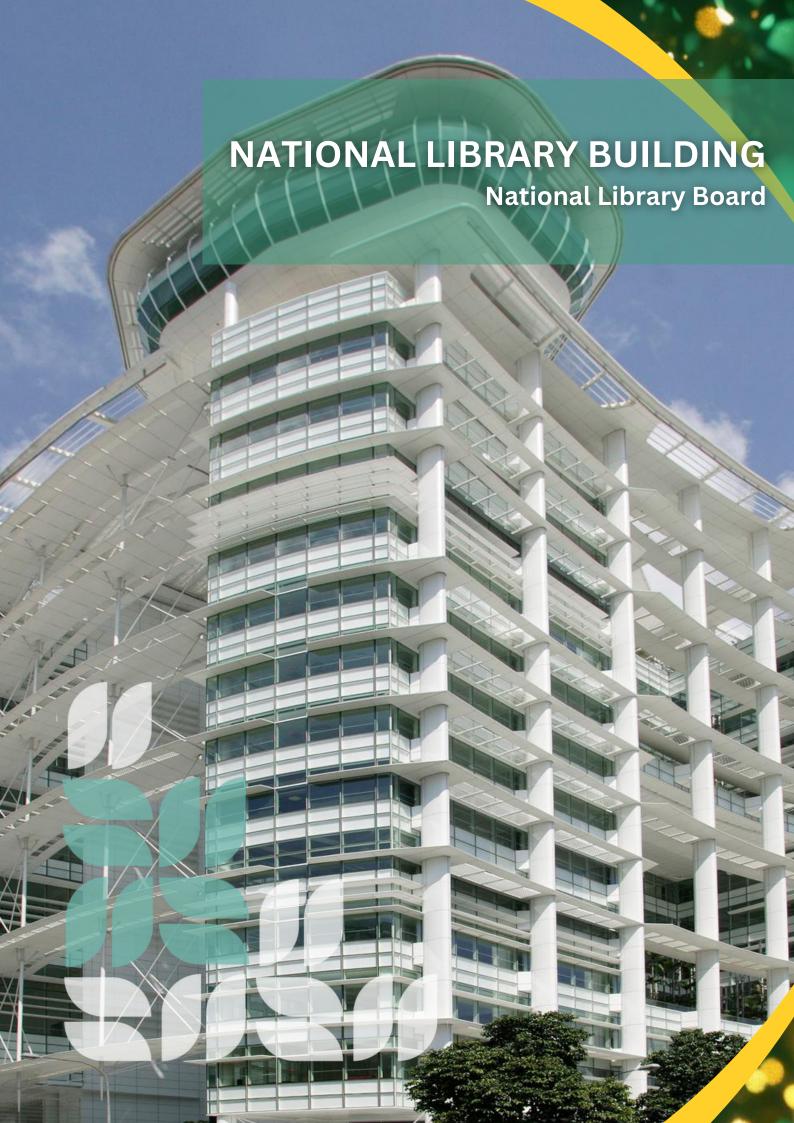
• EUI: 33 kWh/m<sup>2</sup>/yr

#### **Innovative Green Features**

- Extensive use of recycled demolition materials from the existing site
- Building incorporates green-certified materials and high volumes of recycled aggregates
- Flat slab design reduces concrete consumption, achieving a Concrete Usage Index (CUI) of 0.47
- Facade and internal walls designed with 100% cradle-to-cradle materials
- Roof skylight integrated with photo sensors to reduce lighting consumption
- Daylight and Computational Fluid Dynamics (CFD) simulations conducted to optimise building design
- Highly efficient layout and fittings, with high-bay motion sensor controls
- 2.2MWp rooftop solar system
- EV charging stations provided to support green transportation

1

PLATINUM





The National Library is the flagship library of Singapore. It consists of twin 16-storey blocks, linked by bridges on the upper floors with three underground basements. The building is located in Victoria Street within the Downtown Core. The building's new chiller system, commissioned in July 2025, is projected to achieve annual energy savings of approximately 3,630 MWh.

- Building Owner: National Library Board
- Architect: T.R Hamzah & Yeang Sdn. Bhd.
- M&E Engineer: Buro Happold Singapore Pte Ltd
- Facilities Manager: ENGIE Services Singapore
- ESD Consultant: ENGIE Impact Pte Ltd

# **GREEN MARK JOURNEY**

2025



PLATINUM SUPER LOW ENERGY



**PLATINUM** 

"Since 2005 when the National Library Building was conferred the Green Mark Platinum award, we have been working closely with BCA in our commitment to achieve the increasingly stringent sustainability standards to be met by green buildings."

Mr. Ng Cher Pong CEO, National Library Board

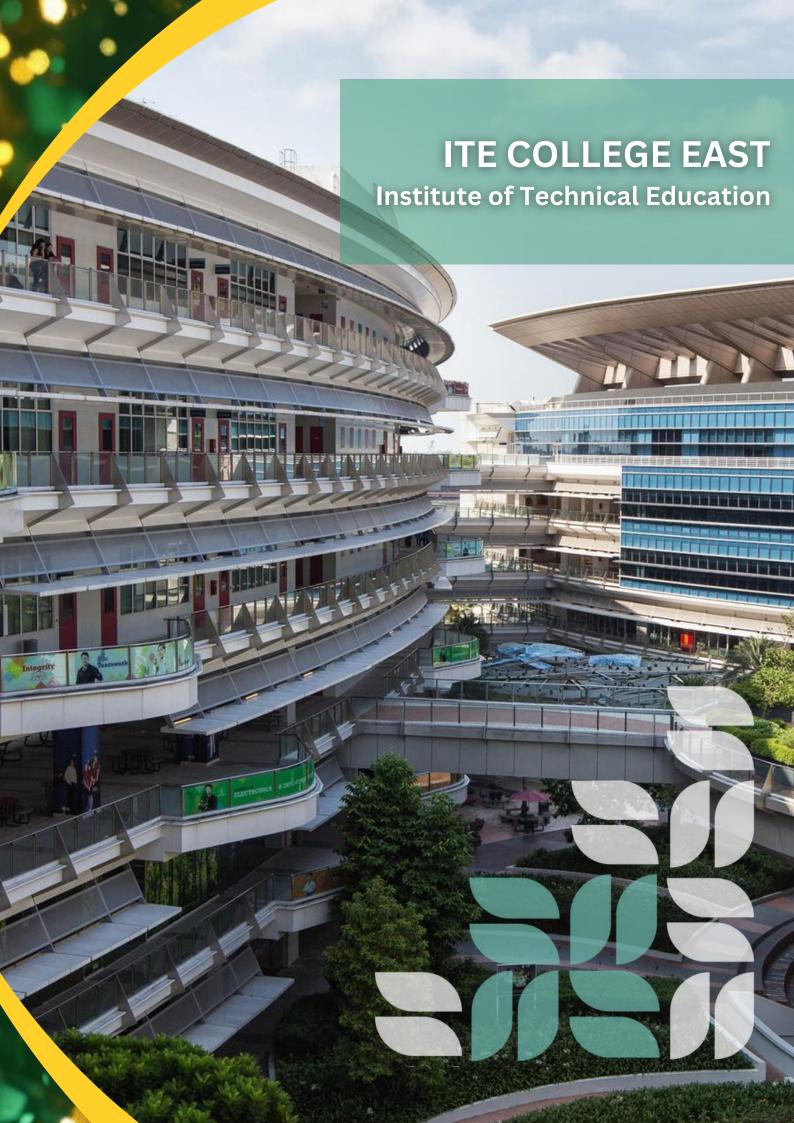
#### About the Building Project

- GFA: 58,783 m<sup>2</sup>
- No of Storeys: 16 floors, 3 basements
- Building Type: Cultural Institute

#### **Latest Building Performance**

• EUI: 201.63 kWh/m<sup>2</sup>/yr (2024)

- Naturally ventilated Events Plaza
- Extensive landscaping, sky terraces and roof gardens are utilised to lower local ambient temperature
- Rain sensors are used as part of the automatic irrigation system for rooftop gardens
- Integrated BMS with real-time monitoring
- Remote monitoring systems, e.g. Smart Lift Maintenance, Smart Toilet, etc
- Water-efficient taps and cisterns are used to conserve water





ITE College East is a post-secondary education institution and statutory board under the purview of the Ministry of Education in Singapore. Between 2023 and 2024, ITE College East saved over \$100,000 in energy use.

- Building Owner: Institute of Technical Education
- Architect: RSP Architects Planners & Engineers (Pte) Ltd
- M&E Engineer: Squire Mech Pte Ltd
- Facilities Manager: ST Engineering Synthesis
   Pte Ltd
- ESD Consultant: Johnson Controls (S) Pte Ltd

# **GREEN MARK JOURNEY**

2023



PLATINUM SUPER LOW ENERGY

2022 2018

2006



**PLATINUM** 



GOLD

#### About the Building Project

- GFA: 130,954 m<sup>2</sup>
- No of Storeys: 3 blocks of 6 storeys
- Building Type: Institutional (School)

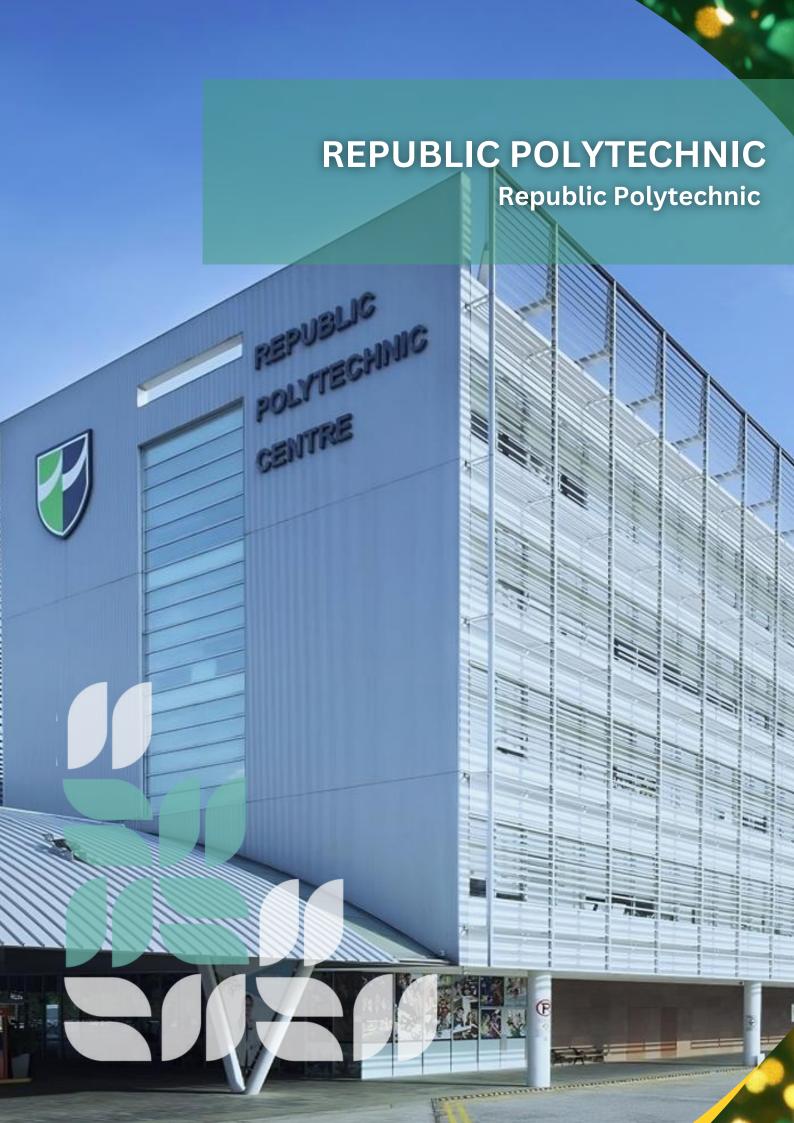
#### **Latest Building Performance**

• EUI: 73.29 kWh/m<sup>2</sup>/yr (2023)

#### **Innovative Green Features**

- Efficient chiller plant system performance at 0.59 kW/RT
- Use of sun-shades along the corridors, low-E performance glazing and laminated double-glazed curtain-wall
- Open staircases and circulation spaces minimise energy consumption
- Maximise day lighting into circulation spaces, multi-purpose rooms, classrooms and offices
- Extensive planting with integrated themed landscape walks for nature conservation
- Building design enhances physical permeability between the 3 blocks, natural ventilated corridors at perimeters, elevated central Forum structure, double-volume Concourse, internal landscaped courtyards, allow cross ventilation & maximise daylighting

45





Republic Polytechnic is a post-secondary education institution and statutory board under the purview of the Ministry of Education in Singapore. Between 2019 and 2024, the Polytechnic has achieved total energy savings of about 11 million kWh.

- Building Owner: Republic Polytechnic
- Architect: DP Architects Pte Ltd
- M&E Engineer: Beca Carter Hollings & Ferner (SE Asia) Pte Ltd
- Facilities Manager: Kim Yew Integrated Pte Ltd
- ESD Consultant: Johnson Controls (S) Pte Ltd

# **GREEN MARK JOURNEY**

2024



PLATINUM SUPER LOW ENERGY

2021 2012 2006



PLATINUM

"Sustainability isn't a choice; it's a shared responsibility. At RP, we are committed to showcasing our campus as a canvas for everyone to do their part."

#### Abel Ang Chairman, RP Board of Governors

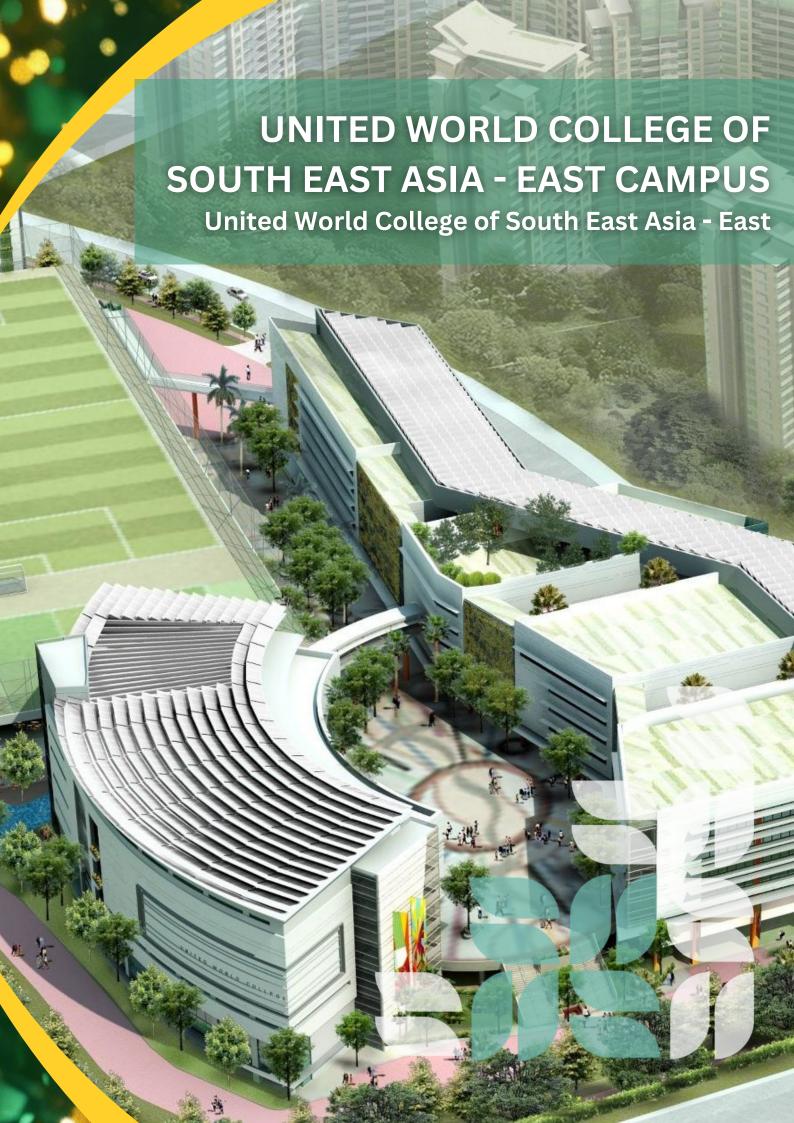
#### **About the Building Project**

- GFA: 231,464 m<sup>2</sup>
- No of Buildings: 21
- Building Type: Institutional (School)

#### **Latest Building Performance**

• EUI: 79 kWh/m<sup>2</sup>/yr (2024)

- Use of Electronically Commutated (EC) fans in Air Handling Units (AHUs)
- Use of renewable energy (Solar)
- Environmental Policy in place to reduce and minimise waste and carbon footprint
- Use of building products with Singapore Green Building Product (SGBP) certification
- More than 400 recycling bins on RP Campus to encourage the RP community to recycle





The United World College of South East Asia (UWCSEA) East Campus hosts around 3,000 students in Tampines. Over the past eight years, the campus reduced its annual electricity consumption by 825,993 kWh from FY 16/17 to FY 22/23, translating to approximately \$248,000 in annual energy cost savings.

- Building Owner: United World College of South East Asia - East
- Architect: P&T Consultants Pte Ltd
- M&E Engineer: United Project Consultants Pte Ltd
- Facilities Manager: United World College of South East Asia - East
- ESD Consultant: United World College of South East Asia - East

# **GREEN MARK JOURNEY**

2023 2020



PLATINUM SUPER LOW ENERGY

2015 2011



**PLATINUM** 

#### **About the Building Project**

- GFA: 76,809 m<sup>2</sup>
- No of Storeys: 7 interconnected blocks to support K-12 learning programme and a Boarding House (14 storeys)
- Building Type: Institutional (School)

#### **Latest Building Performance**

EUI: 63.9 kWh/m²/yr

- Solar Thermal Systems collect and pre-heat water, reducing reliance on conventional boilers
- Energy-Efficient Chillers, variable speed drives, and a smart BMS, lowering overall cooling energy demand.
- Extensive Solar PV Installation generates renewable energy onsite, offsetting grid electricity
- Green Roof and Landscaping helps with thermal insulation, stormwater management, and biodiversity
- Rainwater Harvesting System collects and reuses rainwater for irrigation and toilet flushing.
- Advanced Building Management System (BMS) centralises intelligent controls for lighting, HVAC, and energy monitoring to optimize operational efficiency
- Daylight and Occupancy Sensors reduce unnecessary lighting and maximize natural daylight, cutting energy use while maintaining comfort.
- Architectural design encourages passive crossventilation in classrooms and corridors, minimizing mechanical cooling needs
- High-Performance Building Insulated Walls, doubleglazed low-e windows, and shading devices reduce solar heat gain and improve indoor comfort
- Waste Management and Recycling Programs for waste segregation, composting organic waste, and promoting a zero-waste culture among students.
- Pollinator-friendly planting, native species selection, and dedicated green habitats to support urban wildlife







City Developments Limited (CDL) has achieved multiple industry 'firsts' in its sustainability journey. From Singapore's first eco-mall, City Square Mall, to Tree House, which held the Guinness World Record for the world's largest vertical garden in 2014. More recently, Copen Grand became Singapore's first Green Mark Platinum Super Low Energy Executive Condominium, while Newport Plaza earned toptier certification across residential, serviced apartments, office and retail components.

#### Portfolio Achievement Highlights

- 129 BCA Green Mark certifications for CDL's developments and office interiors
- Committed to achieving Green Mark certification for 100% of owned and/or managed buildings via CDL's Future Value 2030 Sustainability Blueprint targets
- Cumulative green building gross floor area of 224,784 sqm for commercial assets

#### **Sustainability Impact**

- CDL's longstanding green building efforts have saved over S\$44 million in energy savings from energy-efficient retrofitting and initiatives in CDL's locally managed buildings from 2012 to 2024
- In 2024, CDL became the first company in Singapore to adopt the TNFD Recommendations, joined the World Economic Forum Global Commission on Nature-Positive Cities, and achieved a carbon emissions intensity reduction of 25%, as compared to the baseline year of 2016.





"As a pioneer partner and adopter of the Green Mark scheme, we are honoured to have contributed to the greening of Singapore's built environment for three decades. Our flagship commercial property, Republic Plaza (RP), was among the first to receive the Green Mark Gold in 2005. Since then, through ongoing retrofitting to enhance energy efficiency and leveraging smart systems to optimise operations, RP attained Green Mark Platinum in 2012 and Platinum Super Low Energy (SLE) status in 2023. Beyond infrastructure upgrades, we actively engage our tenants to adopt sustainable practices within their office spaces.

Last July, we piloted the City Green Tenant Bonus Programme at RP, which saw 100% participation by all eligible tenants. This first-ofits-kind decarbonisation initiative incentivises tenants to adopt sustainable practices and effectively reduce energy consumption, which will contribute towards reducing Scope 3 emissions. Today, we have 129 Green Mark certifications for our developments and office interiors, with 39% at the highest Platinum and SLE tiers. With our target to achieve SLE certification for 80% of our owned and managed buildings by 2030, we will continue to invest in innovative solutions to improve energy efficiency, transform our value chain and support our nation's decarbonisation efforts."

Mr. Sherman Kwek Group Chief Executive Officer City Developments Limited (CDL)





CapitaLand is committed to being a responsible company and places sustainability at the core of what it does. The company has committed to achieving Net Zero carbon emissions for Scope 1 and 2 by 2050, contributing to the environmental and social well-being of the communities where it operates, as it delivers long-term economic value to its stakeholders.

#### Portfolio Achievement Highlights

- 86 BCA Green Mark certifications for CapitaLand's buildings in its portfolio.
- 23 buildings (>26%) attained GM Platinum and above.
- 4,382,915 sqm cumulative green building gross floor area.

#### **Sustainability Impact**

- CapitaLand actively contributed to the SBTi Buildings Criteria published in August 2024, as part of the SBTi Buildings Expert Advisory Group, and as the only Singapore company selected for the SBTi Building Sector Guidance Pilot.
- A Signatory to the Principles for Responsible Investment (PRI) and signed the Insitute of Limited Partners Association (ILPA) Diversity in Action initiative.
- CapitaLand's longstanding green building efforts have saved over 217 GWh and overall carbon emission reduction stands at 6.3kgCO<sub>2</sub>/m<sup>2\*</sup>





CapitaSpring, a 51-storey mixed-use skyscraper featuring a four-level vertical "Green Oasis". It is the first integrated development in Singapore to adopt prefabricated mechanical, electrical and plumbing systems for its common corridors, plant rooms and risers. This resulted in estimated productivity savings ranging from 43% to 54% for each of these construction modules. Achieved BCA Green Mark Platinum for excellence across energy, water, waste and wellness.

Raffles City Shopping Mall and Office retrofitted its chiller plant and air-side systems, achieving a Total System Efficiency of 0.74 kW/RT or better. It is also the largest integrated development in Singapore to adopt Cooling-as-a-Service (CaaS). Earned BCA Green Mark Platinum in 2025.

LogisTech, a four-storey industrial building near Changi Airport, achieved a Total System Efficiency of 0.68 kW/RT and installed 1,665 kWp of solar panels. LED lighting was implemented in all common areas. Retained BCA Green Mark Platinum Super Low Energy in 2023.

A key challenge in green building upgrades is the limited availability of high-ROI technologies that do not require major retrofits. Disruptive upgrades can reduce rental yields, while delays risk long-term income from outdated assets. Balancing sustainability improvements with operational continuity remains a key constraint. To address this, CapitaLand actively explore emerging, innovative technologies and collaborate with R&D partners, product innovators, and industry experts—ensuring that green solutions are both effective and minimally disruptive.

<sup>\*</sup>As compared to baseline consumption at Yr 2019.





As an early advocate of green buildings, Keppel was among the first adopters of BCA's Green Mark certification. With the certification's comprehensive framework for assessing environmental performance, it remains a key sustainability benchmark for Keppel's assets both in Singapore and overseas. In line with Keppel's commitment to sustainable development and decarbonisation of the built environment, Keppel applies BCA's robust standards and sustainable design principles across its portfolio of commercial real estate, industrial and data centre assets.

#### **Portfolio Achievement Highlights**

- By the end of 2024, Keppel has developed a total of 100 BCA Green Mark projects, including one BCA Platinum Positive Energy, two Platinum Zero Energy, one Platinum Super Low Energy and 17 Platinum Certifications.
- With the cumulative efforts over the years, Keppel was named in TIME Magazine and Statista's list of the World's 500 most Sustainable Companies for the second consecutive year.

#### **Sustainability Impact**

- At Keppel's Real Estate Division, the total energy savings that can be achieved from all its BCA Green Mark projects, is over 201 million kWh per annum, compared to codecompliant buildings. This is equivalent to the amount of energy required to power about 39,500 homes in Singapore for a year.
- This translates to annual cost savings of about \$65 million for the buildings' owners and users, and an avoidance of over 83,000 tCO<sub>2</sub>e in carbon emissions.





#### **Future Sustainability Commitments and Targets**

Keppel's Real Estate Division has set GHG emissions reduction targets in accordance with the Science-Based Targets Initiative (SBTi). Keppel is committed to halve their absolute Scope 1 and 2 GHG emissions from 2020's level by 2025, and achieve net zero by 2030.

To meet these goals, Keppel is undertaking carbon reduction measures which include developing high-performance commercial buildings, improving energy efficiency of existing buildings, tapping renewable energy and purchasing renewable energy certificates to reduce the remaining unavoidable energy use. Collectively, Keppel's efforts are expected to reduce approximately 23,600 tonnes of CO<sub>2</sub> emitted annually by 2030.

"As a global asset manager and operator, Keppel is committed to sustainability and advancing the decarbonisation of the built environment.
Building on the strong foundation of BCA's Green Mark standards, we are pushing the boundaries of what green buildings can achieve — integrating new technologies, boosting energy performance, and extending asset lifespans. Our approach to Sustainable Urban Renewal will not only help to create smarter and more resilient spaces but also high-quality assets that deliver long-term value to our stakeholders."

Mr. Louis Lim CEO, Real Estate Keppel Ltd.



Lendlease has rolled out its climate transition plan, called a Mission Zero Roadmap, to guide decarbonisation strategies across the business. Lendlease released its Scope 3 Protocol in September 2023 as an open source for all to tackle this challenge and calls for industry collaboration to increase the scale and pace of decarbonisation. Case studies are shared to benefit others who may lack resources to conduct deep research.

#### **Portfolio Achievement Highlights**

• Cumulative green building gross floor area of 417,442 sqm for commercial assets.

#### **Sustainability Impact**

- Lendlease achieved two global sustainability targets at the end of FY2025: Net Zero for Scope 1 & 2 emissions and the creation of more than \$250 million of social value.
- Lendlease sources 100% renewable electricity across the business globally.
- Lendlease partnered with the World Green Building Council for its global project Advancing Net Zero.
- Lendlease similarly is part of BCA's Green Building Masterplan Taskforce and contributed to the development of Green Mark 2021.
- Lendlease is a key contributor to the Singapore Green Building Council's Embodied Carbon Taskforce and Signatory to its Embodied Carbon Pledge, a commitment initiated by Lendlease.
- Lendlease was the first property
  management company to sign on to WWF
  PACT Partnership and co-authored
  "Circularity in Retail" with WWF, the first such
  study for the retail sector in Singapore.





#### **Green Building Strategy**

- Carbon Neutral Construction, using electric plant and equipment where available, trialling battery storage [and responsibly sourcing biofuels and renewable diesel, where possible]
- Develop & pilot next generation Green Leases for tenants, supported by education to partner with tenants to reduce their emissions
- Collaborate with suppliers to pilot and or procure lower embodied carbon building materials

"2025 is a milestone year - Green Mark's 20th Anniversary, and achievement of two of Lendlease's sustainability targets – Net Zero by 2025 for Scope 1 & 2 emissions and the creation of \$250m of social value by 2025. Lendlease is honoured to be recognised by BCA as an outstanding Green Mark 20th Anniversary Partner. With a long, proud history of delivering sustainable outcomes across the built environment, Lendlease has long understood the need for and importance of green building rating systems like Green Mark, in helping to shape and transform our sector and create a more sustainable future for all. We thank and congratulate the BCA on their continued commitment to innovation and green building excellence through their management of the Green Mark."

Darryl Stuckey Head of Corporate Sustainability Lendlease



# mapletree

As a real estate leader, Mapletree recognises its obligation as a steward of the community and the environment. This is reinforced by their focus on creating a climate-resilient portfolio, which is crucial in preserving the long-term value of business in the face of climate change.

In line with its commitment to achieve net zero by 2050, Mapletree has developed a net zero roadmap with pathways communicated to each business unit, through transitioning to renewable energy and decarbonising through engineering solutions.

#### Portfolio Achievement Highlights

- Achieved green building certifications across 1,727,505 sqm of gross floor area, including 27 Green Mark certified buildings within its portfolio.
- Achieved 56,007 tCO<sub>2</sub>e reduction across Scope 1, 2 and 3 from FY23/24 baseline.
- Achieved 150 MWp of installed solar capacity, with the goal to reach 200 MWp of total solar capacity by 2030.
- Achieved 17% reduction in upfront embodied carbon from established benchmark for projects completed in FY24/25, progressing toward a 30% reduction target by 2030.

#### **Sustainability Impact**

- Recognised for advancing urban renewal efforts, St James Power Station received the SGBC-BCA Leadership in Sustainability Award 2024.
- Secured \$8 billion green and sustainable financing facilities to date to advance net zero goals.
- Obtained over 800 local and international green building certification and energy ratings for its global asset portfolio.





Mapletree Business City (MBC) is one of the largest integrated developments in Singapore, conveniently located in the Alexandra Precinct. Comprising of MBC I and MBC II, the Grade A development is made up of one office tower, seven business park blocks and one retail F&B cluster. Together, they offer approximately 309,052 m² of premium office, business park and retail space designed to support, enhance and exceed the needs of modern businesses.

#### **Key Green Features**

- Energy-efficient district cooling system, lighting system and transportation system
- 1,920 kWp solar panel installation generating up to 2,400,000kWh/yr (~6% of total building energy consumption)
- Extensive greenery provides nurturing, healing and inclusive spaces which can enhance the building enhance building users' environment
- Fully-cladded facade with aluminum-framed and low-emissivity double glazed vision glass panels, to reduce heat transmission

"Mapletree is committed to deliver long-term sustainable returns to shareholders while creating a climate-resilient portfolio, enhancing social value within our workplace and community, and upholding high ethical standards. As the Group strategically invests in markets and real estate sectors with strong growth potential, we remain mindful of the impact of climate change in our decision-making process. This approach ensures our sustained commitment to delivering consistently attractive returns to stakeholders in sustainable over the long term."

Mapletree Investments Pte Ltd





HDB achieved Singapore's first Green Mark Platinum Award for public housing with Treelodge@Punggol in 2010. Since then, HDB has continued furthering its sustainability goals and even earned two BCA Green Mark Champion Awards in 2011 and 2018.

Today, HDB continues to drive sustainability in our public housing developments. Two of our Build-To-Order (BTO) projects have been awarded Green Platinum Super Low Energy Awards (Parc Residences @ Tengah and Punggol Point Crown). All HDB BTO projects with consultancy that are called from June 2025 will have to meet Green Mark Gold PLUS with Super Low Energy certification and Green Mark Badges for Maintainability and Health & Wellbeing.

#### Portfolio Achievement Highlights

- 254 BTO public housing developments with BCA Green Mark certification:
  - 2 projects awarded BCA Green Mark Platinum Super Low Energy (SLE)
  - 6 projects awarded BCA Green Mark Platinum
  - 126 projects awarded BCA Green Mark Gold<sup>PLUS</sup>
  - 120 projects awarded BCA Green Mark Gold
- All 38 HDB-managed commercial complexes have achieved Green Mark standards:
  - 1 commercial complex awarded BCA Green Mark Platinum SLE
  - 15 commercial complexes awarded BCA Green Mark Platinum
  - 2 commercial complexes awarded BCA Green Mark Gold<sup>PLUS</sup>
  - 20 commercial complexes awarded BCA Green Mark Gold





HDB Green Finance Framework and Green Bonds HDB first published its Green Finance Framework in February 2022, paving the way for the issuance of our inaugural green bond in March 2022. This marked HDB's first step into Green Finance Transactions.

Proceeds from green bonds will be used exclusively to finance or re-finance the development of eligible green public housing developments, both residential and non-residential, which are planned to achieve BCA Green Mark certification.

As at 30 June 2025, HDB has issued \$8.455 billion of green bonds. The Green Finance Framework has also been updated in June 2025.

As Singapore's largest housing developer, HDB plays a key role in supporting the nation's commitment to sustainable development. Over the years, we have intensified our efforts to introduce green initiatives into our developments and close to 300 HDB residential and commercial developments have achieved Green Mark certification for their good environmental performance. Receiving the Outstanding Green Mark 20th Anniversary Partner award is a positive endorsement that our efforts in creating smart and sustainable HDB towns for Singaporeans to live in is on the right track."

Mr. Tan Sze Tiong Chief Sustainability Officer and Group Director (Building & Research Institute) Housing & Development Board (HDB)





JTC pioneers sustainable, resilient and low-carbon industrial estates that support the future of Singapore's industries while fostering environmental stewardship. These next-generation industrial estates are designed to combine innovation with sustainability, featuring smart infrastructure and advanced green technologies.

Upcoming efforts focus on working closely with tenants to adopt greener practices, and designing targeted solutions to help companies reduce emissions.

#### Portfolio Achievement Highlights

- Total number of buildings greened: 74
  - o BCA Green Mark Platinum SLE: 2
  - o BCA Green Mark Platinum: 27
  - BCA Green Mark Gold PLUS: 11
  - o BCA Green Mark Gold: 8
  - o Certified: 26
- Cumulative green building gross floor area: 5,264,731 sqm

#### **Sustainability Impact**

- JTC has been implementing solar deployment initiatives since 2017, with the aim of achieving 1.25 GWp of solar deployment across their industrial estates by 2030 – contributing about 60% of Singapore's 2030 national target of 2 GWp.
- Masterplanned and developed the Punggol Digital District, Singapore's largest BCA Green Mark Platinum mixed-use district. The district targets 30% to 40% higher energy efficiency than standard commercial buildings.





From delivering Singapore's tallest Mass
Engineered Timber industrial building at Punggol
Digital District, to pioneering the Singapore
Building Carbon Calculator, JTC's projects reflect
that sustainability is more than a goal; it is a
responsibility integrated into every facet of
development. These achievements required the
navigation of new materials and methods, to
shifting industry mindsets. JTC remains
committed to reducing both operational and
embodied carbon, expanding solar adoption, and
enabling their tenants to decarbonise alongside
them.

JTC launched the Singapore Building Carbon Calculator, Singapore's first localised web-based embodied carbon calculator to support BCA Green Mark 2021 Whole of Life Carbon Assessment. The calculator is used as the industry standard for embodied carbon calculation. JTC also introduced the first Industrial Government Land Sales site with adaptive reuse requirements, for more sustainable development by reducing carbon emission from demolition and construction.

"Sustainability is embedded in every stage of how we shape industrial estates. From low-carbon construction to supporting tenants in their green journey, JTC is committed to building a sustainable future for Singapore industries."

**JTC** 





NTU's green building strategy is a key pillar in their broader sustainability framework. It emphasises resource efficiency, low-carbon infrastructure and practical innovation. NTU's goal is to drive sustainability across their campus.

NTU is integrating sustainability into every stage of campus development and management – from building design and construction to daily operations.

NTU aims to maintain a "living lab" where academic, administrative, and facilities teams work together to implement impactful solutions that enhance long-term performance.

#### **Portfolio Achievement Highlights**

- BCA Green Mark certified buildings:
  - 1 Positive Energy
  - 8 Zero Energy
  - 2 Super Low Energy
  - o 52 Platinum
- Green building gross floor area: 1,430,565 sqm (97.4% of NTU's GFA)

#### **Sustainability Impact**

- Against its 2011 baseline, in 2024 NTU has managed to:
  - reduce energy use intensity by 33.3%
  - o portfolio-wide financial savings achieved:
    - ~ \$6m per year in OPEX savings
  - reduced carbon emission intensity by 46%
  - o Overall carbon emissions reduction:
    - ~ 10 million kgCO₂e per year, which is enough to power more than 4,400 tworoom HDB flats for a year
  - reduced water use intensity by 26.9%
  - o reduced waste disposal by 14.5%





NTU has introduced many outstanding sustainable practices holistically across its operations, infrastructure, education & research, and policy innovation. Key achievements include:

- Building Singapore's Largest On-campus Photovoltaic (PV) Installation
- Achieving 1 positive energy and 8 net-zero energy buildings, the highest number on a single campus in Singapore
- Pioneering the use of Mass Engineered Timber and Passive Cooling Design in Gaia, Asia's largest wooden building, and The Wave
- Integrating sustainability education into NTU's undergraduate curriculum to equip future generations to build a more sustainable future
- Serving as a living lab to test and scale sustainability innovations while supporting cutting-edge research
- Being Asia's first university to issue a sustainability-linked bond

NTU is committed to enhancing the sustainability standards of our campus infrastructure through integrated green building practices. Our campus serves as a 'living lab' for sustainable design and construction, supported by our strengths in education, research and innovation. Together, we aim to deliver meaningful, real-world impact in sustainability."

Dr. Sintia Teddy-Ang Chief of Staff, President's Office and Executive Director, Sustainability Office Nanyang Technological University





Within its list of accolades, NUS established Singapore's first BCA Green Mark Gold<sup>PLUS</sup> District in University Town and is a champion of net zero energy and low-carbon buildings, aiming towards the first Net Positive Energy building cluster with three buildings (SDE1, SDE3, SDE4) and one adaptive reuse BCA Green Mark Platinum SLE student hub (Yusof Ishak House) in operation.

NUS is also the first educational institution in Singapore to establish comprehensive microclimate sensor network and map to monitor and manage urban hotspots. Extensive campus greening efforts increased tree canopy coverage to 59% in 2024, up from 36% in 2019. For all its efforts, NUS was awarded the President's Award for the Environment 2023 and Green Mark Platinum Champion 2021.

#### Portfolio Achievement Highlights

- Cumulative BCA Green Mark buildings: 63
- Cumulative green building gross floor area: 1,069,665 sqm
- Established Singapore's first purpose-built net-zero energy building, the SDE4

#### **Sustainability Impact**

- Striving to plateau Scope 1 & Scope 2 emissions to baseline levels by 2027 with growing campus GFA
- Installed and commissioned 10.8 MWp of solar PV capacity, equivalent to powering over 2,500 4-room HDB flats
- Planted over 50,000 trees with a target of 100,000 by 2030, contributing to NParks' OneMillionTrees movement
- Developed the first institution's microclimatic map with densest sensor network to identify hotspots
- Nurturing sorting culture with campus-wide low contamination rate





#### **NUS SDE4**

As Singapore's first purpose-built net zero energy building, NUS SDE4's key green features include:

- Open and porous architecture design optimises natural ventilation and daylighting into the building.
- ~ 60% of GFA is Non Air-Conditioned
- Achieved EUI of 44
- Large extended flat roof provides sufficient overhang for shading and installation of 428kWp Solar PV system.
- Use of Hybrid cooling Higher room temperature setpoint of 26°C to 27°C with ceiling fans to elevate air speed achieving airside efficiency of about 0.11 kW/Ton
- Highly Efficient LED Lighting system with overall lighting power budget < 5W/m<sup>2</sup>
- Advanced control system utilising occupancy, daylight and IAQ sensors for demand control of lighting and AC
- Highly efficient water saving features such as rainwater harvesting and condensate water recycling.

"Sustainability is at the heart of what we do. We are committed to decarbonising our campus infrastructure and operations, prioritising energy reductions tailored to different building types. Through building design, we aim to shape behaviour and foster a culture of resource stewardship among our students and staff."

Mr. Koh Yan Leng Vice President, Campus Infrastructure National University of Singapore



#### SGBMP 2030 - Are we there yet?

Singapore's journey towards a low-carbon built environment continues to gain momentum, with significant strides made towards our ambitious "80-80-80" targets under the Singapore Green Building Masterplan (SGBMP).

As of January 2025, we have successfully greened 61% of our building stock, marking steady progress towards our 2030 target of 80%. The adoption of Super Low Energy (SLE) buildings has seen encouraging growth, with approximately 26% of new developments now certified as SLE, demonstrating the industry's increasing commitment to pushing beyond basic green standards. Our best-in-class green buildings are leading the way in energy efficiency, achieving an impressive 72% improvement compared to 2005 levels already approaching our 2030 target of 80% improvement.

The past year has been particularly significant, with around 500 buildings meeting the minimum environmental sustainability standards required by legislation and more than 150 buildings achieving at least SLE certification thus far. These achievements reflect the growing momentum in Singapore's built environment sector, keeping us firmly on track towards our 2030 goals.

#### SGBMP Progress (as of 2025)

Greening 80% of Singapore's Buildings by 2030

61%

80% of new developments (by GFA) to be SLE buildings from 2030

~26%

Achieving 80% Energy Efficiency Improvement in Green Buildings by 2030

# Looking Ahead: Opportunities in Our Green Building Future

As we advance towards 2030 and beyond, the business landscape for green buildings is evolving rapidly, creating new imperatives for action. Mandatory climate reporting by ACRA and SGX, coupled with the financial sector's shift towards sustainable finance, is reshaping market dynamics. Green Mark certified buildings are increasingly attractive for green financing, while research demonstrates their superior performance in rental yields and occupancy rates.

The business case is compelling – green buildings deliver significant life-cycle savings and attractive returns on investment. As carbon pricing mechanisms evolve globally and locally, including the EU's CBAM and Singapore's carbon tax, early movers in building sustainability will gain competitive advantages. The industry's growing commitment to addressing embodied carbon, demonstrated through SGBC's embodied carbon pledge, signals a comprehensive approach to emissions reduction.

These changes present opportunities in the emerging green economy. By embracing sustainable practices now, businesses can avoid future compliance costs while positioning themselves as leaders in the green building movement. Our continued success depends on collective action and innovation as we work together to create a truly sustainable built environment for future generations.

Our SGBMP targets have significantly elevated green building standards in our sector since 2005. And we remain on track to achieving our 80-80-80 targets by 2030.

# **Our Collective Action Ahead**

The built environment is a cornerstone of our national climate aspirations, and achieving our green building ambitions requires bold, collective action. Every stakeholder in the built environment value chain plays an integral role in shaping a sustainable future.

#### **Property Developers & Building Owners**

- Drive adoption of Super Low Energy (SLE) buildings by engaging consultants early to embed sustainability in design and through green retrofits for existing buildings for higher energy efficiency
- Pilot innovative technologies (e.g., ACTs, smart energy systems, low-carbon materials)
- Actively engage tenants through green lease tenant agreements

#### **Green Building Professionals**

- Continuously upskill in green building design and engineering
- Keep pace with evolving codes, standards, and certification frameworks
- Collaborate across disciplines for integrated sustainable solutions

#### **Facilities Managers**

- Implement predictive maintenance for energy-intensive systems
- Optimise HVAC, lighting, and BMS operations through analytics
- Ensure sustainability requirements are met during daily operations

#### Occupants / Tenants

- Practice energy-saving behaviours (e.g., reduce plug loads, manage AC usage)
- Provide feedback on comfort and building performance
- Participate in sustainability campaigns and green lease tenant agreements



[1] Singapore has achieved this pledge - our 2020 emissions of 52.8MtCO2e is equivalent to 32 per cent below its BAU levels, using 2005 as the reference year.

[2] After the completion of Green Mark Assessment, a letter of award will be issued for buildings which successfully meet the criteria and intent of the Green Mark rating. Do note that since 1 April 2025, BCA issues LOA as a "provisional" certificate. The full certificate is only awarded after verification is conducted.

[3] From Green Mark submissions database

[4] From 2023 data in BCA's Building Energy Submission System

#### **Acknowledgements**

The Singapore Green Building Council (SGBC) and the Building and Construction Authority (BCA) extends our deepest appreciation to all who have championed environmental sustainability in Singapore's built environment. The Green Building Masterplans and BCA Green Mark certification scheme have been instrumental in transforming our industry, and as we celebrate two decades of green building excellence, we recognise that our achievements stem from the unwavering support of our industry partners, the dedication of our built environment professionals, and the strong collaboration across government agencies.

