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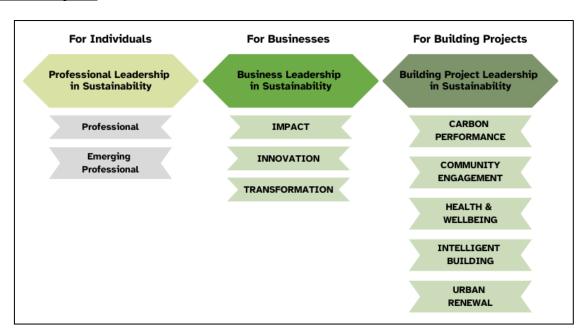
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ANNEX A - ABOUT THE SGBC-BCA LEADERSHIP IN SUSTAINABILITY AWARDS 2024

The SGBC-BCA Leadership in Sustainability Awards are jointly organised by the Singapore Green Building Council (SGBC) and the Building and Construction Authority (BCA) to recognise professionals, organisations and building projects for their contributions and significant achievements in the development of a green and sustainable built environment.

Award Categories



Professional Leadership in Sustainability

The Professional Leadership in Sustainability Award honours the achievements of Singapore's Green Mark Professionals (Green Mark Associates, Green Mark Accredited Professionals, Green Mark Advanced Accredited Professionals). The Award is presented to green building professionals who are driving positive change in built environment sustainability and have made exemplary contributions to green building development.

The Award is open to green building professionals in any related field e.g., Architects, Builders, Engineers, Environmental Sustainability Design Consultants, Facilities Managers and other Green Building Professions. In recognition of accomplishment in the foundational years of their career, winners below the age of 40 (as of 1 Jan. 2024) and not holding a senior leadership position will be presented with the **Emerging Professional** Award.

Business Leadership in Sustainability

The Business Leadership in Sustainability Award spotlights organisations that have integrated sustainability into their business and are contributing to the transition towards a greener, more sustainable built environment. The Award is presented to organisations that have meaningfully embraced sustainability into business operations, products & solutions and are beacons of sustainability leadership within their industry.



Award Sub-Categories:

- **IMPACT** Organisations that have incorporated sustainability into their business models and contributed meaningful impact to the Built Environment sector and stakeholders
- **INNOVATION** Organisations that have developed innovative solutions to address sustainability challenges or facilitated adoption of sustainable practices
- **TRANSFORMATION** Organisations that have undertaken strategic and business transformation to embed sustainability as the organisational core driver

Building Project Leadership in Sustainability

The Building Project Leadership in Sustainability Award celebrates exemplary green building projects that have demonstrated leadership in the areas of carbon performance, health & wellbeing, urban renewal, community engagement and intelligence. The Award is presented to outstanding building projects that have achieved excellence in design, construction and operation, pushing the boundaries of built environment sustainability.

The Building Project must be located in Singapore, have at least one year of verified operating data and must have attained the highest Green Mark rating for the corresponding building project typology (Green Mark Platinum, Green Mark Platinum Super Low Energy, Green Mark Platinum Zero Energy, Green Mark Platinum Positive Energy).

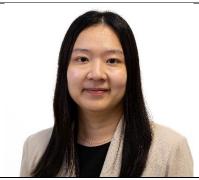
The Award is open to building projects of any typology across five sub-categories:

- CARBON PERFORMANCE Building projects that have undertaken substantial action to minimise its
 operational and embodied carbon emissions, taking steps to reduce its carbon footprint at each stage of
 the project.
- COMMUNITY ENGAGEMENT Building projects that have been developed with the community in mind, blending various features to keep occupants engaged and empowered to undertake their own sustainability initiatives.
- HEALTH & WELLBEING Building projects that have been developed with a keen emphasis on promoting the health and wellbeing of its occupants, taking the necessary steps to create and maintain a healthy indoor environment.
- **INTELLIGENT BUILDING** Building projects with smart building and intelligent features incorporated to help track, manage and optimise energy, carbon and other building performance parameters.
- URBAN RENEWAL Building projects that demonstrate a keen focus on sustainability and adaptive
 reuse of an existing building/space, recognising its heritage but still pursuing a form to best reflect its new
 purpose.



ANNEX A2 - ABOUT THE 2024 AWARD WINNERS

PROFESSIONAL LEADERSHIP IN SUSTAINABILITY



ELAINE TAN

Sustainability Leader

Arup Singapore Pte Ltd

Elaine Tan leads the sustainability team at Arup in Singapore, delivering regional climate and sustainability projects across Southeast Asia. She is a Green Mark Advanced Accredited Professional (GMAAP), Leadership in Energy and Environmental Design (LEED) Accredited Professional and WELL Accredited Professional. Passionate about shaping a sustainable future with every development she contributes to, Elaine emphasises total design delivery, collaborating with clients and design teams to ensure diverse perspectives are integrated to drive innovation and excellence in sustainability. Having worked with a number of public and private developers, consultants and contractors, Elaine has successfully delivered over 100 sustainability-related projects. The projects Elaine has contributed to as the sustainability consultant include award-winning developments CapitaSpring, Paya Lebar Quarter and Guoco Tower.

"Receiving this prestigious award from SGBC-BCA is truly an honour. It is a humbling acknowledgement of both my personal and professional journey towards creating a sustainable future. It also reinforces my beliefs that everyone can make a positive impact, no matter how small. I believe that the long-term sustainability of the built environment, economy and society depends on the collective leadership in partnership with project teams and ultimately, the end users of the development. Looking ahead, I aspire to deepen collaborations and partnerships with industry leaders, and mentor young professionals. Together, I'm excited to continue pushing boundaries to shape a more resilient and sustainable world for generations to come."



PRASANTHA RAVEENTHIRAKUMAR

Head of Technical Optimisation and Asset Enhancement C&W Services (S) Pte Ltd

Prasantha leads the Technical Optimisation and Asset Enhancement team at C&W Services, an SGBC-certified EPC L1 company. He spearheaded the design, installation, and operation of several efficient chiller plants and ventilation systems in Singapore, contributing to sustainability efforts in the built environment. Prasantha's pioneering spirit is evident in his exploration of advanced materials for air-cooled cooling systems, demonstrating heat transfer efficiency and performance. He also developed C&W's Sustainability Building Network digital platform, which was instrumental in helping the office to achieve the Green Mark Healthier Workplace and WELL v2 certifications. The platform's scale and adoption have grown significantly, and it is used to manage energy performance contracts and assets across C&W-managed sites.

"Receiving this SGBC-BCA Leadership in Sustainability Award is a tremendous honour, and it reflects the culmination of 14 years dedicated to transforming buildings into models of energy efficiency. This award is not just a personal achievement but a reflection of the inspiring mentorship and collaboration I've experienced throughout my journey in sustainability. I am deeply passionate about creating a more sustainable built environment, and this recognition fuels my commitment to driving positive change in the years to come."





QIAN XUEJIA

Senior Manager (Technology and Engineering), Green Building, Decarbonisation & Safety
City Developments Limited

A built environment professional with over 16 years of experience in project management and sustainable designs, Qian Xuejia has completed over 10 residential and commercial green building projects. They include some of CDL's Green Mark Platinum developments: City Square Mall (Singapore's first eco-mall), The Brownstone (innovative large-scale PPVC application), 7 & 9 Tampines Grande (extensive solar innovation), and residential projects like H2O Residences, Lush Acres and Volari as well as Green Mark Platinum Super Low Energy projects including Newport Residences and 80 Anson Road. A member of CDL's Green Building and Decarbonisation team, Xuejia collaborates with multiple stakeholders to implement CDL's net-zero goals and carbon strategies. This involves deploying energy-efficient and renewable energy solutions to enhance the environmental performance of CDL's asset portfolio, as well as driving green innovation, certification and green financing.

"I am deeply humbled to receive this award from SGBC-BCA. When I first started my career in the built environment, sustainable development was still in its nascent stages. I am immensely fortunate to have had the opportunity to work alongside many like-minded colleagues and stakeholders to drive innovation across numerous CDL projects, and discover my passion for green building and sustainability. With the steadfast support of CDL's leadership in climate action, we will continue to chart new pathways to our net-zero carbon ambitions."



CHEN WENJIE

Associate Director
Climate Asia Pte Ltd (a subsidiary of BSD)

For more than a decade, Mr. Chen Wenjie has been dedicated to sustainability in the built environment (BE) and has worked with stakeholders to optimise the energy efficiency of buildings and building performance at the local and regional levels. As head of the organisation's environmental sustainability, Wenjie has mentored more than 50 engineers and now runs a spin-off company providing carbon accounting and environmental, social and governance (ESG) reporting services, helping stakeholders with climate reporting and the green transition. Wenjie has also developed carbon course modules and worked with SGBC to develop an embodied carbon calculation guide used to raise awareness and help stakeholders on their decarbonisation journey.

"Receiving the Professional Leadership in Sustainability Award is a great honour and a testament to our collective efforts to create a sustainable future. This recognition reinforces my determination to do my best to be a role model for the new generation of green leaders. We will drive meaningful change in the built environment and beyond to create a world where sustainability is the fundamental principle guiding all decisions. Thank you to everyone I have worked with and to everyone who has recognised the importance of our work. I look forward to continuing to champion sustainability with even more determination and passion."





KEW YUAN CHUN

Vice President, Head, Projects, Sustainability & Safety Frasers Property Singapore

Mr. Kew Yuan Chun, Head of Sustainability & Safety at Frasers Property Singapore, has driven sustainability practices and initiatives, achieving significant improvements. Under his leadership, 98 percent of the asset portfolio was Green Mark certified in 2023, up from 46 percent in 2021, and GRESB ratings leapt from 3 Stars to 5 Stars within two years. All buildings received ISO 14001, ISO 45001, and ISO 50001 certifications, and initiatives like renewable energy solutions, circular economy projects, and centralised data management were implemented. His dedication cultivated a culture of excellence, positioning Frasers Property Singapore as a pioneer in sustainable practices and environmental stewardship.

"I am deeply honoured to receive the Professional Leadership in Sustainability Award. This recognition is a testament of our strong efforts at Frasers Property in driving positive ESG impact and championing sustainability initiatives across our real estate value chain as well as engaging our ecosystem of stakeholders in our decarbonisation journey. This award serves as motivation, inspiring us to persistently push boundaries and drive sustainability innovation. We remain committed to transform the built environment, integrating responsible practices into every aspect of our business and shaping a greener, more resilient future for the enjoyment of many generations to come."



JOSEPH LOH KUM HOONG

Founder & CEO G-Energy Global Pte Ltd

Since 1997, Mr. Joseph Loh has brought a wealth of experience in environmentally sustainable solutions to various industries across the Asia Pacific region, having been involved in more than 400 energy conservation projects. His altruistic approach to knowledge sharing has enabled his team and stakeholders to win numerous prestigious local and regional awards for both his clients' buildings and his company. He is passionate about training and inspiring practitioners to pursue carbon-neutral solutions. Joseph is frequently invited by organisations to conduct speeches, training courses, and serves as an examiner at institutions such as BCA Academy, SEAS, Singapore Polytechnic, NEA, NUS, SIT, and others throughout the Asia Pacific. In 2023, he was invited by Tsinghua University to be a keynote speaker at the 13th International Symposium on HVAC.

"I would like to extend my gratitude to those who nominated me and to the SGBC-BCA award committee for recognising my contributions to green building development over the past 20 years with this accolade. The continuous advancement of high green building standards motivates me to strive for better solutions and greater professionalism. I dedicate this award to my team members for their exceptional efforts in creating many happy customers and for meeting my high expectations. Finally, I thank all my clients and the institutions that believe in me; without their support, I would not have had the opportunity to earn this award."





ROBIN LEOW KWANG PENG

Managing Director, Head of Facilities Management Savills Property Management Pte Ltd

Savills Singapore has demonstrated exemplary leadership in sustainability under the stewardship of Robin Leow, Managing Director and Head of Savills Facilities Management. Robin has driven the team to assist building owners and clients in attaining and maintaining Green Mark certifications as well as sustainability activities in business operations, emphasizing the triple bottom line of people, profit, and planet. This approach not only achieves cost savings but also enhances environmental responsibility. In recognition of these efforts, Savills received the Sustainability Merit Award from the International Facility Management Association in 2022, highlighting the company's proactive integration of sustainable practices across operations. Robin, a fellow of the Royal Institution of Chartered Surveyors and adjunct lecturer at Singapore Polytechnic, frequently speaks at industry events, guiding the focus from "why" to "how" and "when" in contributing to the sustainability goals under the Singapore Green Plan 2030 and international climate commitments.

"Receiving this award is a profound honor, and I extend my sincere gratitude to the judging panel for their time and assessment. While this accolade bears my name, it represents the collective effort and unwavering dedication of the entire Savills Singapore team. It underscores our steadfast commitment to pioneering sustainability and instigating transformative change within the real estate sector. Whether as individuals or as an organization, we are dedicated to championing innovative and sustainable practices that not only benefit our clients but also contribute significantly to global environmental initiatives. This recognition further fuels our determination to establish new industry standards and propel our journey towards a more sustainable and environmentally responsible future. We are deeply humbled to be acknowledged as leaders in sustainability and commend the Singapore Green Building Council and the Building and Construction Authority for their instrumental role in shaping the trajectory of this sustainability journey."





EMERGING PROFESSIONAL LEADERSHIP IN SUSTAINABILITY



RENA FOO

Senior Manager, Innovation & Sustainability
SMM Pte Ltd (A member of Surbana Jurong Group)

As a certified Green Mark AAP (FM), Green Mark AP and Singapore Certified Energy Manager, Rena Foo has been actively contributing her knowledge and expertise in the built environment sector. She has led and completed over 70 local and overseas green building projects, including eight Zero Energy and Super Low Energy projects at Nanyang Technological University. As one of the pioneering consultants in the Sino-Singapore Tianjin Eco-City project, Rena collaborated closely with BCA and Keppel Land, pushing boundaries for the adoption of relevant sustainable practices and technology within the new developments. As Sustainability Lead of SMM's HSEQ committee, Rena also spearheads the SGBC Green Facilities Management Firm certification for the company. She drives the development and implementation of sustainability policies within the organization, ensuring they adhere to both local and global best practices.

"I feel deeply honoured to receive the Emerging Professional award. Sustainability requires everyone to play their part, as it is a shared responsibility. It requires the combination of effort and support from the entire ecosystem of stakeholders. Over the past 14 years, I have had the privilege of working with many like-minded professionals who share the same passion. This award serves as a recognition of the collective efforts and unwavering commitment, of everyone who has supported and inspired me along this journey. I look forward to continue delivering positive sustainability impact across the built environment, driving progress towards a greener and more sustainable future for Singapore and beyond."



BUSINESS LEADERSHIP IN SUSTAINABILITY – IMPACT



CITY DEVELOPMENTS LIMITED (CDL)

Real Estate Developer

Listed on the Singapore Exchange, CDL is a leading global real estate company established in 1963 with 163 locations in 29 countries and regions today. Included in 14 leading global ESG ratings, CDL takes pride in being ranked the world's most sustainable real estate company on the Global 100 Most Sustainable Corporations for the sixth consecutive year. Founded on its ethos 'Conserving as We Construct' since 1995, the impact of CDL's business on the planet and people has always been its priority. CDL's commitment to achieve global Sustainable Development Goals will continue to guide it towards achieving a low-carbon future in harmony with nature.

"To tackle the climate emergency, action and collaboration to create positive impact is key. The building and construction sector account for 37% of global operational energy and process-related CO2 emissions. How we design, construct and operate buildings in cooperation with the entire value chain can make an immense difference towards a low-carbon future. CDL is honoured to receive this distinction under the IMPACT subcategory of the SGBC-BCA Leadership in Sustainability Business Leadership in Sustainability Award Category, and we will continue to push the boundaries through creating positive impact and value for economic prosperity, social well-being, and environmental stewardship."

- Ms Esther An
- Chief Sustainability Officer, City Developments Limited



DP SUSTAINABLE DESIGN

Environmental Sustainability Consultancy

Established in 2013, DP Sustainable Design (DPSD) is a full-fledged ESD consultancy arm within the DPA group of companies. Its diverse team of dedicated professionals comprising architects, environmental engineers, and in-house assessors proficient in Green Mark, LEED, WELL, WiredScore and SmartScore certifications, are on a mission and in the business of combatting climate change. Leveraging this cross-disciplinary strength and harnessing the capacity of sophisticated bioclimatic simulation tools such as NimbleSim, DPSD adopts a synergetic approach complemented by an integrated, iterative work process that is fundamental to green design. Its core objective, in alignment with the DPA group's Green-Well-Tech thrust, is to formulate innovative sustainable design solutions that address environmental impact and deliver better-than-sustainable outcomes.

"DPSD is honoured to be announced as the winner under the Impact sub-category in the Business Leadership in Sustainability Award Category. This award comes as a very encouraging endorsement that we are headed in the right direction. We will continue to hold true to our commitment to combat climate change and address environmental impact through holistic and innovative sustainable design solutions, creating exceptional built products for our clients. As we embark on this exciting journey, we look forward to more industry and institutional partnerships and collaborations to advance sustainability initiatives and drive positive outcomes for the built environment."

- Er. Yong Siew Onn
- Director, DP Sustainable Design





JTC CORPORATION Industrial Developer

An agency under the Ministry of Trade and Industry, JTC plans, develops and manages Singapore's industrial infrastructure and facilities. Its sustainability vision and mission is guided by a comprehensive framework spanning its entire value chain, harnessing its role as a master planner and developer to inculcate a green culture in Singapore's industrial sector. Its holistic approach of embedding sustainability considerations at every stage of its projects and operations paves the way forward in building smart and green estates that support the national climate target of net-zero emissions by 2050.

"This recognition reaffirms JTC's unwavering commitment to integrating sustainability into every aspect of our estates, from planning and development to construction and operation. It is also testament to the collaborative efforts and sustainability-centric partnerships with our valued stakeholders from our staff and customers to companies, service providers, fellow government agencies and academic and research partners."

- Ms Tan Su Chern
- Director, Technical Services Division, JTC



LENDLEASE

Real Estate Developer

Lendlease is an international real estate group with core expertise in shaping cities and creating strong and connected communities. Lendlease is pushing for Absolute Zero emissions by 2040 and is open sourcing its Scope 3 Emissions Protocol to tackle the toughest value chain challenges, advocating for its suppliers to decarbonise hard-to-abate building materials, and for its tenants to go gas-free and switch to renewable electricity. This protocol aims to foster industry-wide collaboration and focus on effectively reducing Scope 3 emissions. This is a race where no one wins, unless we all win, together.

"Organisations within the built environment sector face unique challenges in addressing Scope 3 emissions, the often-overlooked indirect emissions that constitute a significant portion of a company's carbon footprint. The lack of clear guidance on reporting boundaries for these emissions further complicates the issue. In response, we are proud to open source our Scope 3 Emissions Protocol and support our industry in addressing this complex challenge. The protocol allows us to focus on our decarbonization efforts and account for our Scope 3 emissions clearer. It is our first step in working towards Absolute Zero by 2040, and we hope our peers and partners will be inspired to do so the same.

- Mr. Justin Gabbani
- CEO, Lendlease Asia





SEMBCORP SOLAR SINGAPORE

Renewable Energy Developer

Sembcorp Solar Singapore is a wholly-owned subsidiary of Sembcorp Industries, a leading energy and urban solutions provider delivering innovative solutions that support the energy transition and sustainable development. With a total portfolio of over 727MWp of solar capacity across more than 4,300 sites across the island, the organisation is a key contributor to Singapore's 2025 solar target of 1.5GWp. This includes the 60MWp Sembcorp Tengeh Floating Solar Farm - one of the world's largest inland floating solar PV systems when commissioned. Sembcorp Solar Singapore is laying the foundations today by building a solar ecosystem focusing on workforce competencies and establishing industry standards, which will support Singapore in achieving its climate ambitions.

"Sembcorp Solar Singapore is honoured to receive the Business Leadership in Sustainability Awards, Impact category. Beyond developing solar solutions, our capabilities in solar asset management and performance analytics are also key to helping governments and corporates achieve their clean energy goals. This accolade reaffirms our commitment to continue building a robust industry talent pipeline in the renewable energy sector that will accelerate the transition towards a greener and more sustainable built environment."

- Mr. Lai Mun Dart
- General Manager, Sembcorp Solar Singapore



UOB

Financial Institution

UOB's sustainability strategy is underpinned by its corporate purpose and mirrors its business approach of balancing growth with responsibility. It ensures that UOB remains pragmatic and progressive in managing environmental, social and governance risks and opportunities. As a leading bank in Asia, UOB is committed to an orderly and just transition to net zero that continues to support socioeconomic growth and improve energy access across the diverse economies in the region. While the Bank works with clients to drive decarbonisation within the built environment through sustainable financing solutions such as U-Build, UOB is also managing its direct environmental impact through energy efficiency measures and green initiatives for its wholly-owned buildings across the region.

"We are honoured to receive the Business Leadership in Sustainability award which recognises UOB's commitment and efforts in decarbonising the built environment, both for our clients and our operational footprint. UOB continues to drive greater adoption of our suite of sustainable finance solutions such as U-Solar, U-Energy, U-Drive and U-Build - U-Build being Asia's first integrated green building financing platform which we launched last year. Our operations have been carbon neutral since 2021 and we have established a decarbonisation roadmap for our real estate portfolio focusing on deploying of energy efficiency measures and switching to renewable energy. As a leading sustainable bank, we remain committed to catalysing and facilitating decarbonisation in ASEAN and beyond."

- Mr. Marcus Lai
- Head of Group Corporate Real Estate Services, UOB



BUSINESS LEADERSHIP IN SUSTAINABILITY - INNOVATION



GWS LIVING ARTNature-Based Solutions Provider

GWS Living Art specialises in urban green technology, turnkey development and implementation of nature-based solutions. Its strength in its global nurseries will ensure that plants are delivered in great condition and its culture of innovation leads to continuous improvement in its green products. GWS Living Art's mission is to promote and advance the use of nature-based solutions in creating sustainable and liveable communities. The organisation believes that nature provides us with the answers to many of the challenges faced by our cities, and they are dedicated to leveraging this power to create liveable, healthy and thriving environments.

"Winning this award has been an incredible honour - in building my team, I discovered that success isn't about having the smartest or most capable individuals, but about finding the right people for the right roles. Embracing continuous learning is important and keeping an inquisitive and open mind on how to continually improve, how to solve problems and bring more value to the society will be the key. For the next generation of sustainability leaders, acting on your goals with determination and adaptability is key. This recognition reaffirms our commitment to these principles and inspires us to keep pushing boundaries here in GWS Living Art."

- Mr. Zac Toh
- Founder & Director, GWS Living Art



SCHNEIDER ELECTRIC

Smart Building Solutions Provider

Schneider Electric prides itself on pursuing data-driven approaches to advance sustainability while harmonising progress with human-centric and environmentally friendly practices. Kallang Pulse was built and is maintained on the foundation of these principles, further enhanced by its EcoStruxure platform. EcoStruxure is Schneider Electric's IoT-enabled, plug-and-play, open architecture platform for homes, buildings, data centres, infrastructures, and industries. It encompasses three levels of innovation: connected sensors and devices, edge control using real-time monitoring, and cloud-based apps and services that provide operational analytics. Leveraging the full suite of EcoStruxure solutions remains a critical element in its energy management strategy for Kallang Pulse. Over the years, Kallang Pulse has consistently delivered high levels of operational performance across various key metrics. It has improved the health and well-being of its occupants while contributing to a greener built environment for the community and wider society.

"We are honoured to receive this prestigious recognition for our commitment to innovating Singapore's built environment. In Singapore's densely developed landscape, green buildings are essential for decarbonisation. Our EcoStruxure platform, deployed at the Kallang Pulse building, home to our East Asia Headquarters, demonstrates that the buildings of the future must be digital, sustainable, hyper-efficient, and people-centric. With the global push for greener supply chains, the adoption of green buildings is not just desirable but business critical. This will solidify Singapore's position as a sustainable business hub for continued and future prosperity."

- Mr. Yoon Young Kim
- Cluster President Singapore and Brunei, Schneider Electric





BUSINESS LEADERSHIP IN SUSTAINABILITY - TRANSFORMATION



KEPPEL, INFRASTRUCTURE DIVISION

Integrated Power Business

Keppel is a global asset manager and operator with strong expertise in sustainability-related solutions spanning the areas of infrastructure, real estate and connectivity. Headquartered in Singapore, Keppel operates in more than 20 countries worldwide, providing critical infrastructure and services for renewables, clean energy, decarbonisation, sustainable urban renewal and digital connectivity. Keppel's Infrastructure Division offers innovative and reliable sustainable energy, environmental and Energy-as-a-Service infrastructure solutions for cities around the world.

"Keppel's Infrastructure Division is honoured to receive the SGBC-BCA Business Leadership in Sustainability – Transformation Award, which reaffirms our dual approach of running our business sustainably and making sustainability our business. As a global asset manager and operator, Keppel is contributing to a greener, more sustainable built environment through offering cleaner power as well as decarbonisation and sustainability solutions to building owners and businesses."

- Mr. Tan Boon Leng
- Managing Director, Projects, Infrastructure, Keppel Ltd



NATIONAL UNIVERSITY HEALTH SYSTEM

Public Healthcare Institution

The National University Health System is driving environmental sustainability in healthcare through a whole-of-system approach. NUHS has set up the structure, processes and ambitious decarbonisation goals to mitigate the impact of healthcare on climate change. NUHS implemented several innovations, including reduction in the use of medical gases with greenhouse gas effects, air change optimization of ventilation systems in operating theatres, new recycling streams for clinical waste, and reducing the embodied carbon in new facilities. NUHS is committed to enabling a future-ready, resilient and sustainable healthcare system for future generations.

"We are very encouraged that NUHS has been recognised for our commitment to build an environmentally sustainable healthcare system. Our people are working very hard to make sustainable clinical care and healthcare operations a reality in NUHS. We understand that we have both a duty of care to our patients and a duty of care to our planet. We thank the many other people and organizations who generously shared their learning and experience with NUHS."

- A/Prof. Eugene Liu
- Chief Sustainability Officer, National University Health System



BUILDING PROJECT LEADERSHIP IN SUSTAINABILITY - CARBON PERFORMANCE



SAMWOH SMART HUB

Office Building Green Mark Platinum Positive Energy

Building Owner: Samwoh Corporation

ESD Consultant: G-Energy Global Pte Ltd

Architect: AC Consortium

M&E: BELMACS Pte Ltd

• C&S: Engineers Alliance Pte Ltd

Contractor: Hua Siah Construction Pte Ltd

Samwoh Smart Hub is the first positive energy building that produces more than what it utilises in Singapore. To attain this status, several first-of-its-kind technologies were integrated to reduce the energy consumption as low as reasonably practicable while maximising the generation of renewable energy through the investments on high-yield photovoltaic cells. In addition, green and sustainable materials developed in-house were used extensively to construct the building. Overall, Samwoh managed to lower the carbon footprint of the building by 580 kgCO2/m2 as compared to the BCA's reference norm value of 1,000 kgCO2/m2 and produce 25% of energy surplus, avoiding 845 tonnes of operational carbon per year.

"Winning this award underscores our dedication as a responsible corporate citizen. The development of our new headquarters was a multi-faceted endeavour with a primary objective of challenging ourselves in scaling the sustainable development to another new height. Integral to this strive was moving away from the traditional mindsets and design methodologies which truly reflect our culture in continuous innovation. Being a local homegrown company, the successful commissioning of Singapore's first positive energy building signifies not only a milestone for us but also a significant leap forward for the nation's green journey. I am grateful to my colleagues and partners involved for making this achievement possible."

- Mr. Eric Soh
- Chief Executive Officer, Samwoh Corporation Pte. Ltd.





SINGAPORE LAND TOWER

Commercial Building Green Mark Platinum

- Developer: Singapore Land Group Limited
- ESD Consultant: ARUP Singapore Pte Ltd
- Green Mark Consultant: G-Energy Global Pte Ltd
- Architect: AEI Architects 61 Pte Ltd / Maki and Associates
- M&E: J. Roger Preston Limited
- C&S: T.Y.Lin International Pte. Ltd
- Lighting Designer: Lighting Planners Associates
- Builder: Takenaka Corporation

Singapore Land Tower is a 44-year-old office building owned by Singapore Land Group (SingLand). SingLand, by embarking on an extensive asset enhancement initiative (AEI) over a demolish-and-rebuild saw more than 50 percent of embodied carbon emissions avoided for the building. Central to the AEI are concerted efforts to minimise operational carbon, with the installation of a double-glazed curtain wall to reduce heat transfer, energy-efficient lightings and upgrades to the air-conditioning and mechanical ventilation system. Upon completion, the building sets the new benchmark of how older office properties can successfully regenerate and stay relevant to the changing needs of the workforce.

"As a real estate company, we are committed to doing our part to decarbonise the built environment and mitigate climate change. These has seen us take steps to optimise the resource efficiency of our buildings and consider the embodied carbon impact of our redevelopment and regeneration projects. Our asset enhancement initiative for Singapore Land Tower will serve as a viable model for how older commercial office buildings can be transformed and futureproofed through innovative sustainable solutions and features to meet evolving workplace demands."

- Mr. Jonathan Eu
- Chief Executive Officer, Singapore Land Group Limited



BUILDING PROJECT LEADERSHIP IN SUSTAINABILITY - COMMUNITY ENGAGEMENT



BUKIT CANBERRA

Sports & Community Building Green Mark Platinum

- Developer/Owner: Sport Singapore
- Architect: DP Architects
- ESD Consultant: DP Sustainable Design
- M&E Consultant: Aecom Singapore Pte Ltd
- C&S Consultant: T.Y.Lin International Pte Ltd
- Builder: Rich Construction Company Pte Ltd
- Other Project Team Members:
- Landscape Consultant: Henning Larsen Pte Ltd
- Quantity Surveyor: Aecom Cost Consulting & Project Management
- Project Manager: Arcadis Singapore Pte Ltd

Bukit Canberra is a large-scale community, sport and lifestyle development built on a green site that serves the Sembawang community. A living building that thrives with nature, it adopts regenerative design principles, prioritising bio-diversity restoration, enhancement. Designed for equity, inclusivity and wellbeing, it also employs a range of environmentally sensitive and people-focused design strategies and productive building practices from design to construction. Features includes extensive rooftop greenery to reduce sun's heat, bioretention basins, bioswales, ABC water features, DfMA approach using low-carbon construction materials and Mass Engineered Timber (MET). The result is a better-than-sustainable project that progresses towards regenerative urban ecology.

"DP Architects is honoured and delighted to receive this award for Bukit Canberra. Winning in this category validates our vision and design approach, which aims to create synergistic environments that harmonise people, place, programs, and purpose. In close collaboration with local grassroots, SportSG, and various collocating agencies including NParks, MOH, NEA, NHB, NLB, and PA, we have designed Bukit Canberra as an integrated everyday architecture that celebrates biophilia, wellness, equity, inclusivity and better-thansustainable outcomes. This project advances our collective sustainability aspirations to build a shared world where both built and natural environments, people and planet, can co-evolve and flourish as one."

- Ar. Seah Chee Huang
- CEO, DP Architects





SINGAPORE DISCOVERY CENTRE

Museum Green Mark Platinum Positive Energy

- Building Owner: Defence Collective Singapore Ltd
- ESD Consultant: GreenA Consultants Pte Ltd
- M&E: Enwae Engineering Pte Ltd

Topping the charts as Singapore's first Positive Energy Museum, the Singapore Discovery Centre (SDC) achieved Green Mark Platinum Positive Energy Building accreditation in April 2024. This accomplishment underscores its unwavering commitment to their sustainability journey, which aligns with Singapore's Green Plan 2030 and their mission to share the Singapore Story. SDC houses 4,096 solar panels and holds the record for the Longest Sheltered Walkway Fitted with Solar Panels in the Singapore Book of Records. The museum engages the community through tours, programmes, and collaborations with like-minded partners, with an aim to inspire Singaporeans to commit to a greener and more sustainable future.

"We are heartened to achieve this significant milestone and receive the recognition. With the dedication of our team, SDC has integrated sustainability into our spaces, and more importantly fostered a culture of environmental responsibility within our community. Through engaging programmes and interactive exhibits, SDC paths the way as a forerunner and a beacon of green innovation, inspiring future generations to embrace a sustainable future for Singapore. Our commitment to sustainability aligns with the Singapore Green Plan 2030, and we are proud to be doing our part to work towards a greener and more resilient Singapore."

- Mr. Joseph Tan
- Chief Executive Officer, Defence Collective Singapore



BUILDING PROJECT LEADERSHIP IN SUSTAINABILITY - HEALTH & WELLBEING



CAPITASPRING Concept Architect: Bjarke Ingels Group (BIG) in collaboration with Carlo Ratti Associati (CRA) Project Architect: RSP Architects Planners & Engineers (Project QPs) ESD Consultant: Arup Singapore Pte Ltd M&E Consultant: Beca Carter Hollings & Ferner C&S Consultant: Arup Singapore Pte Ltd Facade: Arup Singapore Pte Ltd Acoustic: Arup Singapore Pte Ltd **Commercial Building** Lighting: Nipek **Green Mark Platinum** Landscape: COEN Design International Fire: Ignesis Consultants QS: Asia Infrastructure Solutions Singapore Main contractor: Dragages Singapore Pte Ltd

CapitaSpring is a 51-storey, 280m tall biophilic skyscraper and integrated development, featuring Grade A office spaces, retail and F&B outlets, a serviced residence and a hawker centre. The development boasts a number of naturally-ventilated semi-outdoor spaces, including the building's iconic centrepiece, the Green Oasis, a 35m high and 42,900 sq ft open-air garden mimicking a tropical rainforest, located 100m above ground. Perched on level 51 is the lush Sky Garden with panoramic views and home to the highest urban farm in Singapore, which serves as a sustainable source of ingredients for the building's F&B tenants. The development features a plethora of facilities and partnerships to promote green mobility, active lifestyles, mental wellness and healthy diets. Additionally, the building adopts state-of-the-art research, design and technology to ensure occupant health and comfort, and energy efficiency.

M&E Consultant: Squire Mech (Project QPs)

C&S Consultant: Meinhardt Singapore (Project QPs)

"As the Environmental Sustainability Design (ESD) consultant of the iconic CapitaSpring, we are honoured to be recognised for our contributions to this integrated development. In collaboration with our client CapitaLand and the project team, we managed to overcome various challenges to realise environmentally-sustainable yet innovative designs, whilst prioritising occupant comfort and wellbeing. CapitaSpring, with its acclaimed botanical sanctuary, the Green Oasis, has set new benchmarks for future developments in Singapore and beyond. This prestigious award is a testament to Arup's longstanding commitment to creating social usefulness and dedication to sustainable development. In addition to ESD, Arup is also honoured to be the development's consultant for Civil & Structural. Facade and Acoustic."

- Ms Elaine Tan
- Sustainability Leader, Arup



BUILDING PROJECT LEADERSHIP IN SUSTAINABILITY – URBAN RENEWAL



ST. JAMES POWER STATION

Office Building Green Mark Platinum

- Developer: Mapletree Investment Pte Ltd
- ESD Consultant: G-Energy Global Pte Ltd
- Architect: W Architects Pte Ltd
- Builder: Lum Chang Interior Pte Ltd
- Conservation Specialist: Studio Lapis Pte Ltd
- Operational Efficiency Improvement Team: Mapletree Investment Pte Ltd

From 2018 to 2021, Mapletree undertook the restoration and adaptive reuse of Singapore's first power station built in 1927, St James Power Station (SJPS), for modern office use. Mapletree worked around the national monument's historical features while designing the base building to be as energy-efficient and sustainable as possible. To maintain SJPS' spatial quality, new floating floor slabs, large atriums and strategically placed skylights were introduced. Other restoration efforts included the fair-faced brick façade, expansive steel structure, large window glazing and brickwork chimneys. Mapletree also collaborated closely with the tenant to implement initiatives to reduce the building's operational carbon footprint.

"Mapletree is delighted to receive this Award – it is a testament to our rejuvenation capability, as seen in the restoration and revitalisation of the iconic St James Power Station (SJPS) for modern office use. Through adaptive reuse, we achieved a significant reduction in embodied carbon footprint, compared to constructing a new building. Besides preserving its heritage characteristics, thoughtful solutions were integrated to maximise SJPS' energy efficiency and minimise the impact to the environment. As part of our commitment to achieve net-zero by 2050, Mapletree will continue to explore ways to incorporate sustainability principles across our operations, business decisions and investments."

- Mr. Hiew Yoon Khong
- Group Chief Executive Officer, Mapletree Investments Pte Ltd



ANNEX B – ABOUT THE INTERNATIONAL SUSTAINABLE FINANCE GUIDE FOR THE BUILT ENVIRONMENT

The Financing Transformation: A Guide to Green Building for Green Bonds and Green Loans is a joint effort by an international alliance comprising the following organisations:

- Building Research Establishment (BRE)
- Carbon Risk Real Estate Monitor (CRREM)
- Climate Bonds Initiative (CBI)
- Global Real Estate Sustainability Benchmark (GRESB)
- Green Building Council of Australia (GBCA)
- Singapore Green Building Council (SGBC)
- U.S. Green Building Council (USGBC)

The alliance will work together to ensure investors, property owners, developers and governments have the information they need to enact transformational change in the built environment. A major part of this will be demonstrating the critical role that verification and certification schemes play in supporting environmental, social and governance (ESG) reporting. This will involve raising awareness of green building rating systems such as BREEAM (UK), Green Mark (Singapore), Green Star (Australia) and LEED (US) in the real estate and finance sectors, communities which will play a key role in driving the change required to tackle the climate emergency head-on.

This alliance comes against the backdrop of last year's UN Global Stocktake report, which found that the international community is not on track to reach the goals of the 2015 Paris Accord. Even if all nations achieve their current Paris targets, the UN forecasts warming of 2.5 to 2.9 degrees Celsius over pre-industrial levels by the end of the century, far beyond what scientists consider safe levels.

The first in a series of milestones for the partnership, the alliance will publish next month a practical guide: Financing Transformation: A Guide to Green Building for Green Bonds and Green Loans. The guide will show how verification and certification schemes ensure compliance with multiple sustainable classification frameworks used globally, such as the EU and UK green taxonomies, and how they can be used to put the built environment on a 1.5C trajectory.

The inclusion of three Green Building Councils in the alliance means that rating systems used across every continent will be incorporated within the Guide, showing how these can be used to unlock sustainable finance towards green buildings. Having GRESB and CBI as supporting partners means that the alliance is backed by the key players that investors, banks, and issuers rely on to demonstrate the sustainable credentials of their portfolios and debt instruments. Lastly, CRREM's participation ensures that as the collaboration continues, that there is clear alignment with key science-based decarbonisation trajectories for the built environment.

The Guide will be officially launched during London Climate Action Week on 27 June 2024 – Uniting the Global Built Environment to Drive Climate Action – at The View in The Royal College of Surgeons, London.



ANNEX C - ABOUT THE GREEN MARK FOR INTERIORS SCHEME

Developed in collaboration with BCA, the Green Mark for Interiors (GMI) Scheme is a harmonisation of the current five BCA Green Mark User-Centric schemes namely:

- I. BCA-HPB Green Mark for Healthier Workplaces
- II. BCA Green Mark for Retail
- III. BCA Green Mark for Restaurants
- IV. BCA Green Mark for Supermarkets
- V. BCA Green Mark for Laboratories

SGBC will conduct walkthroughs for the new GMI scheme criteria for interested projects in the coming months and subsequently assist BCA in administering the GMI scheme after its launch in 2025.

The new GMI scheme will appeal to a wider spectrum of interior spaces and will take on a structure similar to Green Mark 2021, whereby energy efficiency is the prerequisite with sustainability badges (Health & Wellbeing, Resource Management, Smart Integration, and Low Carbon) to reflect key sustainability aspects of the certified space. More information on Green Mark 2021 can be found on BCA's website.

More details on the new GMI scheme and the transition from the current BCA User-Centric schemes will be announced by BCA and SGBC in the coming months.



ANNEX D - LIST OF SGBC CERTIFICATIONS RECIPIENTS

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.

List of SGBS Certificate Recipients

S/N	Organisation Name	Certified Service
1	AECOM Singapore Pte Ltd	Environmental Sustainability
2	APM Property Management Pte Ltd	Environmental Sustainability
3	Arup Singapore Pte Ltd	Environmental Sustainability
4	C & W Services (S) Pte Ltd	Green Facilities Management
5	G-Energy Global Pte Ltd	Environmental Sustainability
6	GreenA Consultants Pte Ltd	Environmental Sustainability
7	Keppel DHCS Pte Ltd	EPC Chiller Plant Retrofit
8	L-QUBE PTE LTD	EPC Chiller Plant Retrofit
9	Savills (Singapore) Pte Ltd	Environmental Sustainability

The Singapore Green Building Product (SGBP) certification scheme 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.

List of SGBP Certificate Recipients

S/N	Organisation	Product Category
1	Arcelormittal Singapore Pte Ltd	Structural Steel
2	Carrier Singapore Pte Ltd	Chiller (Centrifugal)
3	Interface Singapore Pte. Ltd.	Carpet
4	Mitsubishi Electric Asia Pte Ltd	Variable Speed Drive
5	NatSteel Holdings Pte Ltd	Reinforcing Steel
6	Nippon Paint (S) Co. Pte Ltd	Paint (Interior)
7	Saint-Gobain (Singapore) Pte Ltd	Coating
8	Schneider Electric Singapore Pte Ltd	Bimetal
9	Seng Choon Engineering Pte Ltd	Pre-Insulated Pipe
10	SKK (S) Pte Ltd	Paint (Exterior)
11	Smardt Chillers Pte Ltd	Chiller (Centrifugal)
12	Technoform Glass Insulation Asia Pacific Pte Ltd	Warm Edge Spacer
13	Wilson Cables Private Limited	Power Cable LSOH
14	Yaskawa Asia Pacific Pte. Ltd.	Variable Speed Drive