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November / December 2025

SEAB

SOUTHEAST ASIA BUILDING

In This Issue

Sports & Recreation Architecture

Hospitality Interior Design • Interview with Industry Experts on Current Issues • Exclusive Content: Passive and Sustainable Strategies in Data Centre Architecture • Project Spotlight: Highlighting Outstanding Regional Projects

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Welcome to the November/ December issue!

A whole year has gone by! It's been an exciting time in architecture and interior design, with new developments emerging every day. Let's take a look at what we have in store for this issue of *SEAB.*

We look at sports & recreation architecture and hospitality interior design. Many different styles shine through, so I hope you enjoy the selection of projects we have this time! We also have a new section, project spotlight, that goes over various incredible regional projects.

In our interview section, we spoke to a variety of industry experts to learn about the latest trends in architecture and more. Our exclusive content section explores sustainability in data centre architecture. I had an enlightening time speaking to these experts, and I hope you have the same experience reading their words.

Thank you for reading! Time really flies. I hope everyone has a wonderful holiday period. See you in the January/ February 2026 issue!

An Jee-Hyun

January/February 2026 Issue

- Architecture: Urban Heritage & Adaptive Reuse
  - *Lead Feature: Breathing New Life into Old Structures—daptive reuse success stories.*
  - *Case study: Revitalised shophouses, temples, and colonial buildings in Southeast Asia*
  - *Expert insight: Navigating conservation laws while innovating design*
- Interior Design: Conservation Projects
- MEP: Retrofitting Historic Buildings
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Industry Partners of SEAB

Asscociation of Myanmar Architects

Bangladesh Green Building Council

Design Council – Sri Lanka

Emirates Green Building Council

Foundation for Futuristic Cities

Myanmar Green Building Society

Green Building Council Indonesia

Green Building Council Italia

Green Building Council Mauritius

Green Building Council Namibia

Green Building Council Sri Lanka

Hong Kong Green Building Council

Interior Design Confederation of Singapore

Jordan Green Building Council

Earthna (Member of Qatar Foundation)

Philippine Green Building Council

Singapore Green Building Council

Society of Interior Designers (Singapore)

The Hong Kong Institute of Architects

Vietnam Green Building Council

Green Institute Nepal

Interior Designers Association of Nepal

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Abu Dhabi and Singapore Strengthen Bilateral Infrastructure Ties, Signing Seven Strategic Partnerships to Advance Urban Development

The Abu Dhabi Projects and Infrastructure Centre (ADPIC) concluded a highly successful two-day visit to Singapore, signing seven Memoranda of Understanding (MoUs) with Singapore's leading construction, engineering, architecture firms, and associations at the Abu Dhabi Infrastructure Summit (ADIS) International Roadshow, advancing infrastructure innovation, smart city planning, and modular construction across Abu Dhabi's USD 54+ billion infrastructure pipeline.

Group Shot MOU (L–R): Mr Tiah Nan Chyuan (SIA), Mr. Sean Chiao (SJ), Dr. Shahzad Nasim (Meinhardt Group), H.E. Maysarah Mahmoud Eid (DG of ADPIC), Vincent Loh (CPG Corp), Beh Swee Chiew (RSP Architects), Pavithra V (TOMS), John Tan (BCAI)

Led by H.E. Eng. Maysarah Mahmoud Salim Eid, Director General of ADPIC, the Abu Dhabi delegation comprised senior government officials and representatives from Abu Dhabi's leading entities, including the Abu Dhabi Department of Municipalities and Transport (DMT), Abu Dhabi Investment Office, LEAD Development, Aldar, Modon, Bloom Holding, and Gridora. The delegation engaged in high-level meetings with Singapore's top architecture firms, engineering consultants, modular construction specialists, and government agencies, exploring collaboration opportunities in prefabricated construction, digital twins, sustainable infrastructure, and innovative delivery models.

The Abu Dhabi delegation comprised H.E. Ambassador Jamal Abdullah AlSuwaidi, Ambassador of the United Arab Emirates to the Republic of Singapore; H.E. Adel Salem Al Nuaimi, Executive Director of Capital Projects Contractual Affairs Sector at ADPIC; Eng. Khulood Al Marzouqi, Acting Executive Director of Infrastructure Regulation & Support at DMT; Khadija Khalifa Mubarak Saif Al Rubaei, Director, Strategic Development & Integration at ADPIC; Eid Alobeidli, Director of Musataha & Public-Private Partnerships at ADIO; Adel Albreiki, Chief Executive Officer of Aldar Project; Ibrahim Almaghribi, Chief Executive Officer of Modon; Carlos Wakim, Chief Executive Officer of Bloom Holding; Mounir Haidar, Managing Partner of LEAD Development; and Marc Milosevic, Chief Executive Officer of Gridora.

The delegation was joined by Dr. Brian Shegar, Chair of the UAE Singapore Business Council; Kelvin Wong, Chief Executive Officer of the Building and Construction Authority (BCA); Tiah Nan Chyuan, President of the Singapore Institute of Architects (SIA); Calvin Chua, Deputy Director of Enterprise Singapore; and over 400

Opening Keynote by H.E. Maysarah Mahmoud Eid, Director General, ADPIC

senior industry leaders from Singapore.

ADPIC signed strategic agreements with BCA International for built environment excellence, Surbana Jurong for master planning and urban development, Meinhardt Group for engineering consultancy, Singapore Institute of Architects for design collaboration, CPG Corporation for infrastructure solutions, Tech Onshore MEP Prefabricators (TOM Singapore) for advanced MEP systems, and RSP Architects for design solutions. Collectively, the MoUs strengthen Abu Dhabi's partnerships with Singapore's built environment leaders to advance innovation, knowledge transfer, and sustainability in capital project delivery, laying a foundation for future-ready, Net Zero infrastructure and smart city development in the Emirate.

H.E. Eng. Eid said, "Singapore represents the pinnacle of smart city innovation and advanced construction methodologies. This roadshow has opened concrete pathways for Singaporean expertise to contribute to Abu Dhabi's ambitious infrastructure agenda. The seven MoUs signed today are the foundation for long-term partnerships that will bring cutting-edge technologies, digital planning tools, and sustainable design principles to our projects. The roadshow marks a major step in advancing global partnerships to co-create the blueprint for liveable, resilient cities of the future."

Hosted in partnership with Enterprise Singapore, the Building and Construction Authority (BCA), Singapore Institute of Architects (SIA), and the UAE Singapore Business Council, the roadshow showcased Abu Dhabi's PPP frameworks, investment incentives, and regulatory environment while facilitating dialogue on Singapore's globally recognised best practices in developing built environments and its world-class construction capabilities and innovation ecosystem.

Heng Teck Thai, Deputy CEO of BCA and Executive Director of BCA International, commented, "Our collaboration

Panel 1 — Introduction to Major Abu Dhabi Infrastructure Projects and Partnership Opportunities

with ADPIC reinforces Singapore's commitment to global built environment excellence. Through BCA's Green Mark framework, Singapore's strong DfMA and IDD digitalisation capabilities, and quality construction, we aim to accelerate capacity building and promote sustainable and innovative construction that shapes resilient and energy-efficient cities across Abu Dhabi and beyond."

Abu Dhabi developers presented their project pipelines and partnership opportunities during dedicated sessions that outlined specific collaboration areas across mixed-use developments, residential communities, and integrated urban districts. Supported by the Department of Municipalities and Transport (DMT) as Government Partner and Abu Dhabi Investment Office as Ecosystem Partner, the roadshow hosted extensive B2B networking sessions and private meetings between Abu Dhabi entities and Singaporean firms, exploring joint ventures to build greener, faster, and better.

Eng. Khulood Al Marzouqi, Acting Executive Director,

Sharing by Mr. John Tan, Director (Corporate), BCA International

Infrastructure Regulation & Support, Department of Municipalities and Transport (DMT), said, "These strategic agreements exemplify Abu Dhabi's commitment to utilising global expertise to shape the Emirate's future-ready urban landscape. We look forward to leveraging the extensive experience of Singaporean firms in developing resilient and sustainable infrastructure that meaningfully contributes to the quality of life of those benefiting from it."

Eid Alobeidli, Director of Musataha and Public-Private Partnerships at the Abu Dhabi Investment Office (ADIO), noted, "Singapore and Abu Dhabi share a strong foundation of excellence in infrastructure development, with this latest milestone in our partnership fostering new opportunities for co-investment, technology transfer, and knowledge exchange that will shape the future of infrastructure across both regions. In Abu Dhabi, what we're building goes beyond individual projects; we're developing an integrated ecosystem that leverages world-class infrastructure, digital innovation, and proven PPP delivery models to accelerate Abu Dhabi's transformation into a future-ready global capital."

Following strategic engagements at the Shangri-La Hotel, the Abu Dhabi delegation visited the Urban Redevelopment Authority (URA) and Singapore City Gallery, and conducted site visits to Surbana Jurong Campus and Teambuild ICPH's modular construction facilities. The visits highlight cooperation opportunities and the role of Abu Dhabi's infrastructure vision in accelerating the transition towards smart, resilient, and sustainable urban development.

Singapore and the UAE have maintained strong bilateral ties across the infrastructure and construction sectors, with Singaporean firms bringing world-class expertise in urban

Ahmed Al Shaikh Al Zaabi, Acting Chief Delivery Officer, Modon Real Estate 2

planning, sustainable design, and construction innovation. The ADIS Singapore Roadshow marks a significant milestone in deepening this partnership, creating new avenues for technology transfer, knowledge exchange, and co-investment in next-generation infrastructure projects.

Following the inaugural Abu Dhabi Infrastructure Summit in June 2025, the roadshow is part of ADPIC's international engagement strategy. It was attended by H.H. Sheikh Khaled bin Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, and welcomed over 4,100 participants from more than 100 countries. The ADIS International Roadshow will continue with strategic missions to China (Shenzhen and Shanghai) and Turkey (Ankara and Istanbul) throughout October and November 2025.

Bridge Data Centres and BCA International Collaborate to Champion Green Digital Infrastructure Leadership from Singapore to Global Markets

Bridge Data Centres (BDC) and BCA International (BCAI) announced a new partnership to advance sustainable data centre practices across global markets and support Singapore's ambitions as a global leader in green digital infrastructure. The Memorandum of Understanding (MoU) was signed on 4 September 2025 at the International Built Environment Week (IBEW) 2025 event in Singapore.

The partnership will leverage BDC's leadership in energy efficiency and environmentally responsible operations, recognised by the recent award of BCA's Green Mark Platinum Award—the highest rating achievable under the framework set out by Singapore's Building and Construction Authority (BCA) and Infocomm Media Development Authority (IMDA).

Mr Eric Fan, CEO of Bridge Data Centres, said, "Our partnership with BCA International underscores a shared commitment to sustainable, future-ready data infrastructure as we address the region's growing demand for hyperscale capacity. We look forward to working with Singapore's built environment firms to advance green data centre practices and to build partnerships that support our ongoing commitment to achieving 100% renewable energy usage."

Mr. Heng Teck Thai, Executive Director of BCA International and Deputy CEO of Building and Construction Authority, said, "We are pleased to partner with Bridge Data Centres to support sustainability across the region. Through knowledge exchange and collaboration with Singapore's built environment firms, we are pleased to help BDC advance towards their net zero goals whilst sharing best practices globally."

The partnership with BCAI, a subsidiary of BCA, will focus on

BDC was awarded the Green Mark Platinum (Provisional) certification under the BCA-IMDA Green Mark for Data Centres, and was presented the Green Mark Platinum plaque by Mr. Heng Teck Thai, Executive Director of BCA International and Deputy CEO of BCA.

promoting sustainability and innovative construction methods in green and smart data centre development. Key areas include knowledge exchange, capacity building, and best practice sharing. The collaboration also creates new opportunities for Singapore-based built environment firms to expand internationally. These initiatives will support BDC's regional data centre projects, promote sustainability through the BCA Green Mark certification, develop industry talent, and strengthen collaboration to advance innovative digital infrastructure worldwide.

Setting new benchmarks in sustainability and energy efficiency

BDC was awarded the Provisional BCA Green Mark Platinum Award for its MY06 Campus (Building 1) in Johor, Malaysia. Granted under the BCA-IMDA Green Mark International for Data Centres 2024 (GMDC: 2024) framework, the award recognises BDC's ability to build faster to meet growing demand for data centre capacity while minimising environmental impact. MY06 is one of the first data centres in the region to incorporate Prefabricated Prefinished Volumetric Construction (PPVC), a method that assembles large building sections off-site. This enabled BDC to complete the facility within eight months—40 per cent faster than traditional methods—while reducing on-site dust, waste, and noise.

Designed for efficient performance in tropical climates, the facility will add more than 100 megawatts (MW) to BDC's total planned capacity of 600MW across all facilities by end-2025, supporting the growing needs of large-scale cloud and technology customers in the region, including Singapore.

Other key sustainability features include:

Advanced cooling technologies, such as cold plate liquid cooling and indirect evaporative cooling that improve Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE).

Eco-friendly infrastructure, including carbon monitoring, low-impact fire suppression, indoor green spaces, and advanced air filtration.

Smart operations with central dashboards, secure remote access, and asset tracking.

Mr Fan added, "Sustainability is a core responsibility we embrace at every stage of our work. The Green Mark Platinum Award recognises our commitment to setting new benchmarks in sustainability and energy efficiency for hyperscale facilities in the region. This milestone also reinforces BDC's contribution to advancing sustainable growth in the data centre industry, while aligning with Singapore's vision to be a global leader in green, future-ready infrastructure that delivers lasting positive impact."

The Asia-Pacific data centre sector is forecast to grow by around US$116 billion (S$155 billion) over the next five to seven years. In 2024, Singapore announced plans to add at least 300 megawatts (MW) of new capacity, a significant increase from the 80MW allocated in 2023.

BDC is aligning with this trajectory by embedding environmental, social, and governance (ESG) principles into its growth strategy. This includes renewable energy adoption, efficiency optimisation and circular economy practices. In Johor, BDC has built Southeast Asia's first large-scale water reclamation plant and pipe network to cool its upcoming 400MW campus in Ulu Tiram, reducing dependence on freshwater while improving overall water use efficiency.

Successful CBA Expo 2025 and Concrete Expo Asia 2025 Gathered 2,325 Guests and 110 Million Baht in Trade Transactions

CBA Expo 2025, the third edition of the Thailand International Construction & Mining Technology Expo, and Concrete Expo Asia 2025, the second edition of the Thailand International Concrete Expo & Conference, were held from September 24–26 at BITEC Bangna in Thailand.

Mr. Paul Chanthrathim, Director of Exhibition Business at BMEX Ltd., provided an overview of the events: over 100 world-class brands of machinery, tools, equipment, spare parts, and novel technologies were showcased at the events, enabling Thai and adjacent construction, mining, and concrete enterprises to meet and negotiate. Contractors, engineers, students, and other interested parties were also invited to watch equipment demonstrations and attend a variety of seminars.

This year's festivities were tremendously successful; over 2,325 guests attended, 88% from Thailand and 12% international tourists. Despite the overall economic downturn, the event generated more than 110 million baht in negotiated sales, demonstrating the construction industry's sustained expansion from late this year into next year. The construction industry has adapted and transformed, utilising efficient machinery and technology to cut prices, time, labour, and other expenses while maintaining high-quality work. This ensures the continued success of construction, mining, and concrete machinery and technology businesses.

BMEX is optimistic about the expansion of the construction, mining, and concrete industries, as well as the ongoing development of breakthrough machinery technologies, and plans to host both events again next year. The events will continue to support growth in Thailand and the region's construction, mining, and concrete industries by showcasing leading machinery brands. The event will also feature the introduction of new technical items and entertaining activities.

The event will take place on 23–25 September 2026 at Hall EH100, BITEC Bangna, and admission is free. **For updates, please visit www.cba-expo.com and www.concrete-expoasia.com.**

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Design Democracy 2025: A Celebration Of Heritage, Sustainability, And Future-Forward Design

Design Democracy 2025, which took place from 5 to 7 September at the HITEX Exhibition Centre, transformed Hyderabad into a living canvas of ideas, innovation, and imagination. The third edition of India's newest design festival went beyond exhibitions, offering conversations, experiences, and provocations that marked the city's definitive arrival on the global design map.

At the heart of the festival were four special curations that redefined the boundaries of contemporary Indian design. Stone and Shade (Museum of Telangana), curated by Supraja Rao, reimagined shelter as an ecological embrace, blurring the lines between home and landscape. Farah Ahmed Mathias' Precious Objects turned rarity into resonance, proving that design can be both personal and poetic. The Gallery of Sustainability, co-curated by Abin Chaudhuri and Snehashri Nandi, advanced the dialogue on culture and ecology, while Nuru Karim's sculptural walkway, FLOW, transformed a transitional corridor into an architectural rhythm of light and shadow.

FLOW. Photo credit: YNotUs.

Each installation moved beyond spectacle with thought-provoking questions: What makes an object precious? Can sustainability be cultural? Can a passage become a story of connection?

Hyderabad's own culinary and cultural legacies were infused in the festival. Concept kitchens, craft bars, and experiential cafés invited visitors to "taste design", turning gastronomy into storytelling. The result was a festival that was not only seen and heard, but felt, savoured, and remembered.

Beyond its exhibitions, the festival became a meeting ground where designers, brands, students, and global voices engaged in a dialogue that bridged heritage and the future, and local and international perspectives. DD Talks, the two-day summit powered by the knowledge partnership of Alekhya Homes, brought together diverse voices and fresh perspectives on interior design, urbanism, sustainability, and design innovation, with visionaries like Madhav Raman, Sussanne Khan, Chitra Vishwanath, Swanzal Kak Kapoor, Samuel Barclay, and Akshat Bhatt adding urgency and depth.

Complementing this, DD Focus featured intimate, on-the-floor conversations in exhibitor spaces, where India's design vanguard shared authentic insights into studio cultures, processes, and material explorations. Booths turned into platforms for exchange with voices such as Gowri Adappa, Kalyani Chawla, Ali Baldiwala, and Sona Reddy, bridging practice and philosophy.

"This edition has proven that design in India is not just about products but about ideas, connections, and futures," said Arjun Rathi, co-founder & curator. "Hyderabad has emerged as a city

The Gallery of Sustainability. Photo credit: YNotUs

where these conversations find both resonance and reach."

Pallika Sreewastav, co-founder, added, "Design Democracy was born from instinct, not strategy—a feeling that design should belong to everyone. What I've found in Hyderabad is a city willing to dream with us."

For Shailja Patwari, co-founder, the city offered more than just a stage. "Hyderabad has a remarkable way of making space for people from all backgrounds. My own upbringing was not in this city, yet my roots now feel strongly connected to Hyderabad."

Design Democracy 2025 was made possible by its collaborators, bringing vision and vitality to the festival. Title Sponsor, The Charcoal Project, brought bold interpretations of living, joined by Beautiful Homes by Asian Paints as Platinum Sponsor, which shaped immersive storytelling environments. ANCA and Bondtite come on board as Gold Sponsors, with Bondtite also contributing through its Innovation Gallery—curated by Compartment S4 under the theme "Shifting Urbanisms"—serving as a dynamic space for dialogue on urban adaptation, featuring experimental furniture and sculptures by designers like Abin Design Studio and Andblack Design Studio that innovatively incorporate Bondtite adhesives to explore materiality, repair, and improvisation in cityscapes. Associate sponsors FIMA, Osum, Dimore, Tabu Veneers, MCI, and West Elm turned pavilions into spaces of collaboration.

Stone and Shade (Museum of Telangana). Photo credit: YNotUs

What defined this edition was its ability to blur boundaries—between commerce and culture, product and idea, aspiration and accessibility. For India's design fraternity, it was a place of connection; for international visitors, a site of discovery; for Hyderabad, a declaration of its new role as India's creative capital.

Though the installations have faded, Design Democracy has evolved into a meaningful movement—one that places Indian design on the global stage while remaining deeply rooted in craft, culture, and community.

Precious Objects. Photo credit: YNotUs

Singapore Polytechnic Partners with ESGpedia in Support of its Sustainability Capability Development Programme

SINGAPORE, 4 September 2025—Singapore Polytechnic (SP) has partnered with Asia's leading Environmental, Social, Governance (ESG) data and technology company, ESGpedia. The partnership aims to support the sustainability capability development of local companies while leveraging ESGpedia's digital platform to enable local companies to achieve carbon accounting and improved energy efficiency.

Beyond sustainability capability development and carbon accounting, the programme also involves the Energy Efficiency Grant (EEG) (Advanced Tier). SP has been whitelisted by the Building and Construction Authority (BCA) and the National Environment Agency (NEA) as a third-party assessor for companies to purchase energy-efficient equipment of up to S$350,000. The EEG helps businesses transition towards lowering their carbon emissions by co-funding investments in energy-efficient equipment.

The programme has two main components to help businesses build capability and capacity in sustainability and take steps towards decarbonisation:

- ESGpedia will be providing its standards-aligned carbon accounting and sustainability reporting solutions to help businesses accurately quantify and track their greenhouse gas (GHG) emissions.
- SP will deliver sustainability learning journeys, training, and consultancy projects to companies using ESGpedia's carbon accounting and sustainability reporting platform, while providing their energy efficiency assessment under the EEG Grant to help businesses decarbonise.

Lam Kok Seng, Centre Director, Centre for Environmental Sustainability & Energy Efficiency at Singapore Polytechnic, said, "Singapore Polytechnic's (SP) partnership with ESGpedia enhances the development of our staff's capability in delivering joint industry trainings and consultancy projects. This opportunity also allows SP to expand its ecosystem and leverage the business network for sustainability initiatives, including joint industry engagements to enable knowledge sharing and the opportunity for SP's students to work on real-world sustainability projects."

Benjamin Soh, Founder and Managing Director at ESGpedia, said, "Energy efficiency is key in the pursuit of a more sustainable and economically viable future. We are delighted to be partnering with Singapore Polytechnic to help businesses like LBD Engineering establish and track their greenhouse gas emissions, embark on standards-aligned sustainability reporting, and tap on energy efficiency services through the Energy Efficiency Grant (EEG) to decarbonise their value chains."

As of today, successful implementations include LBD Engineering. As a leading builder (BCA Grade A1) with diverse construction capabilities, particularly in public housing programmes, foundation works, and heavy machinery support, LBD Engineering has adopted ESGpedia to effectively calculate and track its Scope 1, 2, and 3 GHG emissions and credibly generate its GRI-aligned Sustainability Report.

As a next step to having established their baseline E, S, and G metrics, LBD Engineering has utilised Singapore Polytechnic's assessor services for energy efficiency under the EEG Grant to assess the eligibility of Infinity Cube's Battery Energy Storage System (BESS) for sustainable construction. This will improve their operational efficiency, decarbonise their value chain, and reduce their environmental impact.

This has had a positive financial impact on LBD Engineering by strengthening its competitiveness in securing project tenders, given the growing demand for greener buildings in both the public and private sectors. The Singapore government will start including environmental criteria for government projects in 2024.

Lim Boon Huat, CEO at LBD Engineering, commented, "Beyond corporate responsibility, LBD Engineering believes that improving our sustainability posture leads to better business growth. We have hence worked with ESGpedia to utilise their digital platform to calculate our carbon emissions and generate our Sustainability Report in accordance with the Global Reporting Initiative (GRI). We are pleased to be able to take active steps to improve our energy efficiency through Singapore Polytechnic and the Energy Efficiency Grant, to achieve further cost-savings and build stakeholders' trust."

Oh Jun Rong, CEO at Infinity Cube, added, "At Infinity Cube, we see Battery Energy Storage Systems as an essential enabler of Singapore's decarbonisation drive in the construction and built environment. By replacing or hybridising diesel generator use, our systems directly reduce emissions, improve fuel efficiency, and enhance power reliability. We are committed to working with institutes of higher learning such as Singapore Polytechnic to advance technical education, support pilot deployments, and equip local businesses with both knowledge and solutions to meet future carbon neutrality goals."

With the synergistic sustainability solutions, ESGpedia and SP will continue to drive a low-carbon, smart energy future in line with the Singapore Green Plan 2030 and accelerate local businesses' sustainability journeys to help them better meet today's evolving demands.

Goettsch Partners Celebrates the Completion of the Four Seasons Hotel Hangzhou at Hangzhou Center

Photo credit: CreatAR

Global architecture firm Goettsch Partners (GP) announced the completion of the Four Seasons Hotel Hangzhou at Hangzhou Center, a landmark project that redefines the intersection of luxury, landscape, and modern urban hospitality in the historic Chinese capital city of Hangzhou.

The project was developed by Greentown China Holdings in collaboration with China Resources Land Limited (CR Land) and Hangzhou Metro Development Company.

The 214-key hotel is the signature hospitality component of Hangzhou Center, a major twin-tower, 150,000-square-metre mixed-use development in the heart of the city, designed by GP and retail architect Lead8.

Photo credit: CreatAR

Strategically located near the Qiantang River and northeast of the historic West Lake, the project bridges Hangzhou's contemporary energy and spiritual heritage.

"Our goal was to create a sanctuary in the middle of a thriving urban center—a place where design elevates stillness and nature becomes a defining part of the guest experience," said James Zheng, AIA, LEED AP, CEO and President of GP. "This hotel is not only about luxury; it's about refinement, restraint, and immersion in context."

The hotel's architecture draws inspiration from the poetic serenity of West Lake, a UNESCO World Heritage Site. Nestled between Wuhan Square and Cultural Square, the project offers direct access to an active subway line while maintaining a distinctly secluded character. The hotel's pinwheel tower configuration enables column-free guestroom corners with expansive, floor-to-ceiling glass—creating floating, panoramic views of the surrounding city and riverscape.

The design of the arrival sequence exemplifies GP's commitment to experiential architecture. Guest vehicles approach via a private, landscaped lane that buffers the energy of the surrounding city. A 9-metre-deep steel-and-glass canopy marks the entry, with facades of polished Jet Mist granite and transparent glass layered with patterned frits creating a calm, tactile threshold. Internally illuminated metal portals and softly filtered lighting complete the sense of intimate arrival.

Paul De Santis, Assoc. AIA, LEED AP, partner and design director at GP, commented, "The hotel embodies a new standard for urban luxury—defined not by grandeur but by refinement, tranquillity, and a deep connection to place. The project stands as a testament to the power of transforming urban density into moments of calm and beauty."

A defining feature of the hotel is its two elevated gardens. Lush, multi-functional landscapes, designed in collaboration with P Landscape, create immersive outdoor environments in an urban setting. The Level 8 Garden, at 3,300 sqm, is a shared landscape with a private enclave for the hotel's Chinese restaurant, designed as an intimate retreat amid the city's bustle. On level 10, the 4,700 sqm Sky Garden is reserved exclusively for hotel guests. This rooftop sanctuary adjoins the check-in lobby and key amenity areas and includes over 2,000 sqm of mature garden "rooms" for events, reflection, and relaxation, with skylights bringing daylight into ballrooms below.

The hotel's interiors, designed by Avalon Collective, with restaurants by AB Concept and a rooftop bar by Kokaistudios, extend the surrounding natural elements into the guest experience. The Level 1 lobby offers a contemplative introduction with low-iron glass walls revealing the gardens beyond. Guestrooms, ranging from 51.5 to 63 square metres, take full advantage of the tower's geometry, offering unobstructed views that reinforce a feeling of quiet elevation. The rooftop garden lounge and cocktail bar crown the hotel with sweeping views back toward West Lake.

Sustainability is integral to the project's identity:

- Seamless connection to public transit minimises vehicle use.
- Elevated gardens reduce stormwater runoff and urban heat gain.
- Operable windows and low-reflectivity glass improve ventilation and thermal performance.


Photo credit: Ken Seet

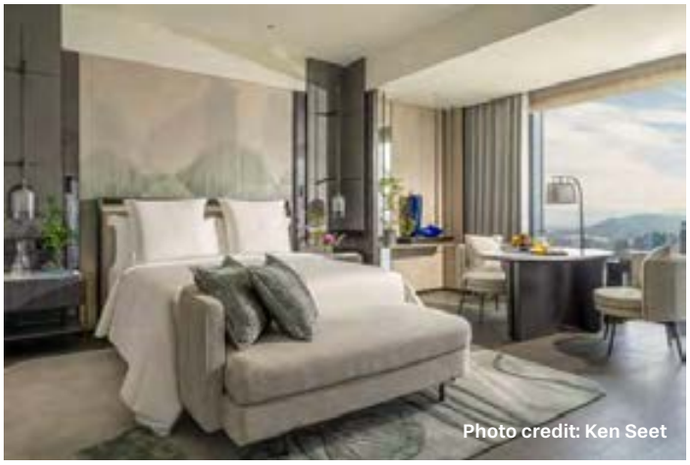
Photo credit: Ken Seet


Photo credit: Ken Seet

With the hotel's soft opening in September 2024, the project marks GP's second Four Seasons property to date. It continues a series of recent luxury hotel projects designed by the firm, including the Conrad Shenzhen in 2023 and the Shangri-La Nanning Hotel at Guangxi China Resources Tower in 2021.

Groundup.ai Officially Launches the World's First Agentic AI for Cognitive Maintenance

Groundup.ai, a fast-growing leader in AI-powered industrial reliability in Asia and the Middle East, announced the official launch of the World's First Agentic AI for Cognitive Maintenance at the Industrial Transformation Asia-Pacific (ITAP) event in Singapore.

This breakthrough technology is designed to help asset-heavy industries eliminate unplanned downtime, cut maintenance costs, unlock new levels of operational resilience, and achieve sustainability goals.

Unlike traditional predictive maintenance systems that only forecast when equipment might fail, Cognitive Maintenance goes a significant step further: it tells operators what's wrong, why it's happening, and how to fix it. By embedding Agentic AI into this process, Groundup.ai's solution now enables machines to act as self-learning agents, capable of diagnosing root causes, learning how maintenance crews treat each anomaly, recommending solutions, and continuously improving based on outcomes.

"This is a reinvention of maintenance," said Leon Lim, CEO & Founder of Groundup.ai. "We're not just predicting problems; we've built a system with agentic AI that acts as a virtual machine expert, providing proactive guidance.

"By utilising and rearranging data from various streams, our platform delivers insights that drive a clear return on investment. This allows businesses to scale their operations and reliability strategies with zero false alarms and faster interventions. Our AI learns, reasons, and guides engineers with actionable steps, significantly reducing the guesswork, stress, and wasted effort that costs industries billions every year."

Groundup.ai's Cognitive Maintenance solution is already trusted by leading organisations across maritime, manufacturing, aviation, and rail, including:

- The Republic of Singapore Navy: strengthening defence readiness through smarter vessel reliability
- Coca-Cola Bottling Saudi Arabia: achieving measurable ROI in production line efficiency
- Hamad International Airport: boosting uptime across critical infrastructure
- Doha Metro: ensuring uninterrupted rail operations

By integrating diverse data streams, autonomous AI agents, and deep domain expertise, Groundup.ai transforms maintenance into a sustainability-driven circular economy. The solution helps asset operators predict failures, guide precise fixes, extend asset lifespan, and reduce waste and energy use, saving money and resources.

The launch of this technology positions Groundup.ai at the forefront of the Industry 5.0 transformation. With the asset-intensive manufacturing sector losing an estimated $50 billion globally each year to unplanned downtime, Groundup.ai's solution addresses this challenge head-on by creating an intelligent, adaptive maintenance ecosystem where machines do more than generate data; they generate decisions.

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Hilton Announces Partnership with INSPIRE Entertainment Resort in South Korea

Hilton (NYSE: HLT) announced on 2 October 2025 the signing of a landmark agreement between its flagship brand, Hilton Hotels & Resorts, and INSPIRE Entertainment Resort, one of Asia's premier leisure destinations. INSPIRE Entertainment Resort will continue to manage the property under a franchise agreement.

South Korea is a premier destination for leisure travel within Asia, attracting a growing number of visitors each year. The nation's vibrant tourism industry shows no signs of slowing down, with increasing interest from domestic and international travellers.

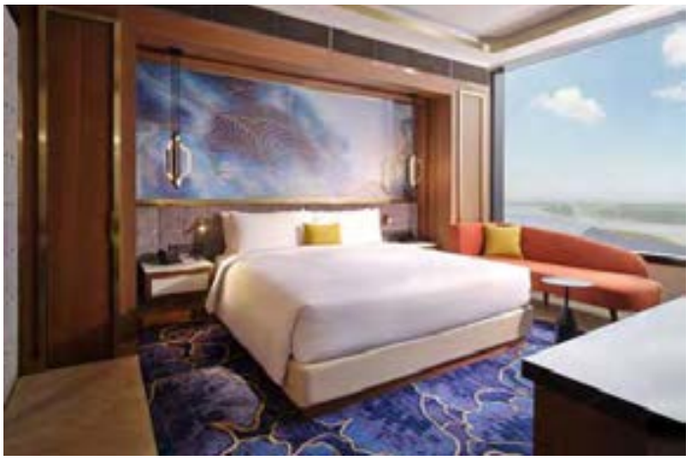
This strategic partnership introduces Hilton to one of South Korea's most dynamic destinations and is poised to further accelerate South Korea's tourism sector, drawing a diverse array of guests and elevating the country's appeal as a world-class travel hotspot.

INSPIRE, an expansive integrated entertainment resort featuring 1,275 rooms, is ideally situated just a 15-minute drive from Incheon International Airport. The property boasts three uniquely themed hotel towers, South Korea's first 15,000-seat performance arena, an indoor water park beneath a stunning glass dome, extensive MICE facilities, a vibrant outdoor entertainment park, a casino, a 150-metre digital entertainment street, and a lively selection of shopping, dining, and entertainment options.

Hilton Hotels & Resorts is renowned for hosting some of the world's most iconic experiences and events, making guests feel connected and reinvigorated. Guests will have the opportunity to discover INSPIRE's distinctive resort experience, nestled in the scenic Yeongjong Island area of Incheon, where five-star hospitality and a wide array of entertainment options are offered within a single integrated destination.

"This partnership highlights our unwavering commitment to expanding Hilton's footprint across South Korea, while introducing our largest property in the Asia Pacific region.

Chen Si, president of INSPIRE Entertainment Resort (L) and Clarence Tan, senior vice president, Development, Asia Pacific, Hilton (R) at the signing ceremony



By uniting Hilton's century-long legacy of exceptional hospitality with INSPIRE's visionary destination, we are poised to redefine the guest experience—delivering unforgettable moments for both international travellers and local guests alike," said Clarence Tan, senior vice president, Development, Asia Pacific, Hilton.

"We are thrilled to partner with Hilton, a hospitality leader with a global reputation and powerful loyalty ecosystem, which will enable INSPIRE to connect more deeply with travellers across Asia and beyond," said Chen Si, president of INSPIRE Entertainment Resort. "This collaboration will mark a crucial milestone in INSPIRE's journey to becoming a world-class entertainment destination, delivering extraordinary experiences that transcend borders and generations."

"Hilton was one of the first international hotel brands to enter South Korea in 1983. For over 40 years, Hilton has set international hospitality standards for the country, as well as contributing significantly to the growth of tourism. Our partnership with INSPIRE continues Hilton's journey and momentum to provide unparalleled travel experiences for guests from South Korea and abroad," said Joseph Khairallah, area vice president, head of Japan, Korea & Micronesia, Hilton.

INSPIRE Entertainment Resort, A Hilton Partner Hotel, will participate in Hilton Honors, the award-winning guest loyalty program for Hilton's 24 distinct hotel brands.

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Hilton and YTL Hotels Partnership Expands with Four Luxury and Lifestyle Hotels

Hilton (NYSE: HLT) and YTL Hotels announced multiple property agreements to bring LXR Hotels & Resorts to Thailand and Tapestry Collection by Hilton to Japan.

The Rawai Phuket and Kasara Niseko Village will join Hilton's LXR Hotels & Resorts portfolio, The Green Leaf Niseko Village will join Hilton's Tapestry Collection by Hilton pipeline, and the Hinode Hills Niseko Village is slated to join Curio Collection by Hilton. The Japan properties are conversions and are set to join Hilton's portfolio by the end of this year.

Debuting on the southern tip of Phuket, the Rawai Phuket will offer a secluded beachfront setting with easy access to island excursions. Expected to open by 2027, the 275-room hotel strengthens Hilton's luxury footprint in the region and provides a unique and compelling option for luxury travellers to Phuket.

Kasara Niseko Village, The Green Leaf Niseko Village, and Hinode Hills Niseko Village are all located within Niseko Village Ski Resort at the foot of Mount Annupuri, offering guests easy access to Niseko's exceptional ski slopes. The Kasara Niseko Village is a conversion of the eight-villa Kasara Niseko Village Townhouse, while The Green Leaf Niseko Village is a conversion of the existing 200-bedroom hotel of the same name. The Hinode Hills Niseko Village is slated to be the second Curio Collection by Hilton property in Japan. The hotels are set to open at the end of 2025.

"The signing of these hotels with our existing partner, YTL Hotels, demonstrates the strong conversion appeal of our luxury and lifestyle brands and our proven track record in repositioning assets to deliver exceptional returns backed by our industry-leading commercial engine. The new hotels also tap into rising consumer demand for adventure and excitement in highly sought-after locations in Asia Pacific," said Clarence Tan, Senior Vice President, Development, Asia Pacific, Hilton.

The Rawai Phuket and Kasara Niseko Village join LXR Hotels & Resorts' global portfolio of nearly 20 trading and pipeline properties worldwide, a hand-picked collection of independent, spirited destinations that celebrate


Kasara NV

the timeless pursuit of adventure. LXR properties offer personalised attention and luxurious yet locally immersive experiences for guests through the brand's 'Pursuit of Adventure' programme, rooted in the quest for personal exploration and building deeper connections with colourful characters of the destination.

The Green Leaf Niseko Village joins more than 170 Tapestry Collection by Hilton hotels worldwide, each with a vibrant personality shaped by elevated design and locally inspired food and beverage. Hinode Hills Niseko Village, Curio Collection by Hilton, is set to join more than 180 Curio Collection properties globally, hotels in sought-after destinations characterised by distinctive, high-end architecture and locally inspired design evoking each property's unique story.

Dato' Mark Yeoh Seok Kah, Executive Director, YTL Hotels, said, "These hotels will each transform the potential of their destinations, offering new stay options for visitors and each well-positioned to provide an elevated hospitality experience. With Hilton's industry-leading brands and international distribution, our hotels are well-positioned to capture growing tourism arrivals in these thriving locations."

LXR Hotels & Resorts, Tapestry Collection by Hilton and Curio Collection by Hilton hotels participate in Hilton Honors, the award-winning guest loyalty programme for Hilton's 24 distinct hotel brands.


Hinode Hills NV


Green Leaf

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American Hardwood Export Council and Hendro Hadinata Present the KARANA Collection at IDW 2025

The American Hardwood Export Council (AHEC) is delighted to collaborate with leading Indonesian designer Hendro Hadinata, unveiling the KARANA Collection at Indonesia Design Week (IDW), September 2025.

Drawing on the Balinese philosophy of Tri Hita Karana—which means harmony between people, nature, and spirit—Hadinata has created three striking furniture pieces: the Kuta Bench, Sanur Lounge Chair, and Ubud Light. Inspired by the sculptural works of Ida Bagus Nyana in the 1930s, the collection blends elongated, flowing forms with contemporary function, offering culturally rooted and globally resonant design.

What makes this collaboration unique is Hadinata's fresh engagement with American hardwoods. Though an established voice in Indonesian design, this is his first major exploration of working in American hardwood timber, with a collection created from American red oak and cherry. Known for their strength, sustainability, and expressive character, these hardwoods have allowed Hadinata to push form and proportion while honouring his cultural inspirations.

American red oak (Quercus rubra), the most abundant species in US hardwood forests, is celebrated for its strength, durability, and bold, open grain with warm pinkish-red tones. It is highly workable, easy to machine, and responds beautifully to finishing techniques. American cherry (Prunus serotina), unique to North America, is prized for its smooth texture and rich, warm reddish-brown colour that deepens with age and exposure to light. Both species bring expressive beauty and versatility, enabling Hadinata to achieve sculptural curves while retaining the natural character of the wood.

American hardwoods are among the world's most sustainable design materials. They grow in the vast, naturally regenerating forests of the United States—the largest and most diverse temperate hardwood resource in the world. The forest has been managed for generations through selective harvesting. Forest volume has more than doubled since the 1950s, and annual growth consistently exceeds harvest, meaning the resource is expanding year on year.

Independent studies confirm a less than 1% risk of illegal wood entering the supply chain. Life Cycle Assessment (LCA) data further prove that American hardwoods are materials with a low environmental impact, with the carbon they store outweighing emissions generated during harvest, processing, and

transport.

For Hadinata, the project was also a chance to reflect on how new materials can inform his design process. Having previously worked mainly with locally sourced timbers, American cherry and red oak brought fresh challenges in terms of hardness, grain and colour, but also expanded the possibilities for future projects. "Our previous projects mostly used locally sourced timber, so working with American cherry and red oak has been an insightful experience," he explained.

"We had to learn more deeply about their unique characteristics, especially hardness, grain patterns, and colour. Still, this pushed us to explore further possibilities and think about how American hardwoods can be elevated in future indoor and outdoor furniture projects."

Equally important to the collection's success was the collaboration with Indonesian manufacturer Omega Mas. The craftsmen's skill and commitment gave the designs depth and precision. Hadinata commented, "Their team is highly cooperative, with a strong sense of dedication and work ethic. They are familiar with American timbers and their infinite possibilities. What stood out most is how they approach every project wholeheartedly, not just as a job, but as a craft they truly care about. We are grateful to collaborate with them and learnt that great design is only possible when craftsmen are equally invested in the process."

Together, the material and the craftsmanship came into their own when tackling the collection's most complex elements. While the Ubud Light initially seemed the most technically demanding because of its slim, organic form, it was in fact the bench and lounger that proved most challenging due to their continuous flowing lines. Achieving those curves required both precision and experience, which Omega Mas delivered through their manufacturing expertise.

"By combining the unique qualities of American hardwoods with the craftsmen's skills, the result was more than just finished products," said Hadinata. "It became a new design approach that could expand how Indonesian design engages with global materials and techniques.

"American hardwoods bring a new dimension to my work. Their uniformity, scale, and beauty make them ideal for sculptural expression, while the philosophy of Tri Hita Karana ensures the pieces carry both cultural memory and contemporary value."

The collaboration reflects AHEC's ongoing commitment to supporting creative experimentation with sustainable American hardwoods, bringing together global designers and local craftsmanship.

KARANA can be seen from 12–20 September for Indonesia Design Week 2025 at Townhall Area, Indonesia Design District (IDD), PIK2, Tangerang, Banten.

Lift Motor Developed by Ziehl-Abegg Operates without Rare Earth Magnets, Ensuring Sustainable Production

Ziehl-Abegg's new lift motor, which uses ferrite magnets, eliminates the need for critical raw materials such as neodymium and dysprosium. The so-called rare-earth elements have traditionally been considered indispensable for high-performance drives due to their power density and are almost exclusively sourced from China, a country that has recently tightened its export regulations significantly.

"We've solved not only a technological challenge but also a strategic one," explained Joachim Ley, CEO of Ziehl-Abegg.

Despite foregoing high-performance rare-earth magnets, the new motor delivers identical performance within the same dimensions. This marks a major advancement, particularly for high-torque lift applications where smooth operation and energy efficiency are critical. The achievement was made possible by Ziehl-Abegg's profound expertise in electric motor development. A patent application has already been filed.

The new size 200 lift motor will be presented to an international professional audience for the first time at this year's Interlift trade fair in Nuremberg. A series expansion that includes additional sizes is scheduled for 2026. This further reinforces Ziehl-Abegg's pioneering role in electric drive technology.

"And we are safeguarding our production from potential disruptions caused by shortages of rare earth magnets," CEO Ley emphasised.

With this development, Ziehl-Abegg reaffirms its position as a technology leader. For decades, the company has been setting industry benchmarks—whether through biomimetically optimised fan geometries that ensure exceptionally quiet and energy-efficient airflow, or through its targeted use of modern media formats to engage the next generation of skilled professionals. Ziehl-Abegg further strengthens its leadership in the field of drive technology with the introduction of this new motor for lift applications.

Rare earth magnets like these have long been standard in many lift drives. "At Interlift, we are showcasing a motor that relies solely on ferrite magnets," said Ziehl-Abegg CEO Joachim Ley.

CPG Consultants Launches Book on Mandai North Crematorium, Extending Its Legacy in Crematoria Design

CPG Consultants (CPG) has launched The Making of Mandai North Crematorium, a book chronicling the design and making of Singapore's newest public crematorium, Mandai North Crematorium (MNC). CPG provided consultancy services for architecture, mechanical and electrical engineering, and quantity surveying, leveraging its multidisciplinary expertise to deliver a facility that is both emotionally resonant and technically robust.

The book launch follows the commencement of operations at MNC in August 2025. MNC recently received a Singapore Institute of Architects (SIA) Design Award (Merit) in the Religious Buildings category for 2025, as well as the Green Mark (Platinum) by the Building and Construction Authority for sustainability efforts in building design.

For decades, CPG has helped shape Singapore's funerary landscape, creating spaces where dignity, tradition, and thoughtful design converge. In 2004, the firm completed the original Mandai Crematorium, enhancing capacity and improving the experience for mourners. Building on this legacy, the Mandai North Crematorium—completed in 2025 and featured in The Making of Mandai North Crematorium—continues this vision with a design that restores the intimacy of farewells while ensuring smooth and respectful operations.

Evocative and thoughtful design choices bring meaning to MNC Taking cues from the original land profile, the building's form rises from the lowest part of the site on the west to the forested hill on the east. Layers of greenery are incorporated into the rising form, creating a man-made landscape that visually merges with the natural landscape beyond. The form of the building synchronises with the building's internal functions, allowing the two-storey cremator spaces to occupy the tallest part of the building.

Central to the MNC project is CPG's application of biophilic design principles to create a dignified and restorative environment.

"Recognising its importance as a symbolic gateway between life and death, the crematorium is designed to provide a peaceful backdrop for the final farewell rituals. Elements of nature are brought into the key spaces in the form of greenery, daylighting

and natural materials to provide a comforting environment for the bereaved," said Ar. Pauline Ang from CPG Consultants, the Lead Architect of the MNC project.

Right from arrival, visitors are immediately connected to nature. Urban greening strategies such as sunken gardens, hanging greenery and a roof garden create a sense of being surrounded by greenery in the key spaces from the arrival lobby in the basement, through the Main Foyers and within the Service Halls.

In the Service Hall, daylight filters through the large clerestory windows—draped with hanging vines—creating an interplay of light, shadow, and greenery. The swaying vines cast shifting patterns on the floor at certain times of the day, complemented by the warmth of timber finishes. These biophilic touches are carefully integrated not only to enhance the visual environment but also to support emotional healing for families and friends during the farewell ritual. The ascending roof culminates in a double-volume space bathed in natural light, evoking a sense of awe.

The building layout is designed to minimise walking distances, especially for elderly visitors. A one-way visitor circulation flow caters to back-to-back cremation services, minimising the need for arriving and departing groups to cross paths. This arrangement provides a degree of privacy for each group of visitors and facilitates a sense of closure for the bereaved.

MNC integrates innovative design with technology to boost operational efficiency and deliver a seamless visitor experience, featuring automated coffin transport, a self-help ash collection system, and a centralised process control for reliable services.

Singapore's second inland ash scattering facility, the Garden of Serenity (GOS), sits beside the MNC building. Designed as an open garden, it features dedicated walkways and ash scattering lanes, along with a stormwater detention pond styled as a natural water feature. The facility expands capacity to meet the growing demand for inland ash scattering services.

A purposeful milestone

CPG's legacy and expertise in crematoria design have shaped dignified spaces where Singaporeans commemorate their loved ones. The Making of Mandai North Crematorium documents this milestone, while charting the future of funerary design—humane, sustainable, and quietly transformative.

An excerpt from The Making of Mandai North Crematorium is available to read online here: https://www.yumpu.com/xx/document/view/70745807/the-making-of-mandai-north-crematorium-excerpt.

The book is priced at SGD 52 (inclusive of GST) and may be purchased at CPG's office by completing this form: https://forms.office.com/pages/responsepage.aspx?id=nTBpevyOT0WpA4c__4HVAY2ILytkfm9CvZjX_j_ilXNUQjQxNE1VSzVGOTU1S1hNRVJNSzFCMko1Mi4u&origin=lprLink&route=shorturl.

It is also available for borrowing at all public libraries in Singapore.

Photo credit: Finbarr Fallon

Mapletree to Develop New Flagship Commercial Project in the Greater Southern Waterfront

HarbourFront Precinct view

Mapletree Investments ("Mapletree" or "the Group") announced plans for its new 123,000 sqm flagship commercial project in Singapore's Greater Southern Waterfront ("GSW"). As part of its latest HarbourFront Precinct's rejuvenation, HarbourFront Centre will be transformed into a landmark that redefines Singapore's southern skyline. Mapletree's new premium integrated development is set to enhance the HarbourFront Precinct and further anchor it as a vibrant business and lifestyle hub in southern Singapore.

The new 33-storey landmark pairs upscale retail with premium best-in-class office space at an established waterfront address with full-fledged amenities. It comprises 26 floors of Grade A office specifications (Levels 8 to 33) and 5 floors of engaging spaces for an experiential visit (Basement 2 to Level 3).

The premium office tower welcomes tenants through an exclusive lobby featuring 16-metre-high ceilings and bespoke finishes. Its column-free layout maximises space efficiency and flexibility, complemented by expansive floor-to-ceiling windows. The retail podium will offer shoppers curated fresh concepts alongside interactive brand experiences.

With a green tapestry cascading from the office tower into a 13,000 sqm elevated verdant park and located adjacent to a newly created stretch of waterfront promenade, tenants and visitors can enjoy sunset views of the Singapore Strait, as well as waterfront walks and activities.

Mr Hiew Yoon Khong, Group Chief Executive Officer, Mapletree, said, "The reimagined HarbourFront Centre reflects the Group's broader vision

Elevated Verdant Park

of rejuvenating the HarbourFront Precinct, further establishing it as a vibrant business and lifestyle hub in southern Singapore. As a leading real estate developer, Mapletree sees a compelling opportunity to unlock greater value by transforming HarbourFront Centre to better serve the needs of our tenants, visitors, and residents in the precinct. Leveraging 25 years of proven development expertise, this flagship commercial project marks another milestone for Mapletree, and we look forward to creating another development well-positioned for the future."

Ms Amy Ng, Regional Chief Executive Officer, South East Asia and Group Retail, Mapletree, added, "We are pleased to introduce this transformative project to create an upscale destination in the heart of the GSW. This project will anchor the HarbourFront Precinct as a Southern Waterfront gateway hub. Our commitment to anticipating market needs drives our efforts to reposition our assets for long-term performance and maximise value for our stakeholders."

Strategically located within the 24-hectare HarbourFront Precinct, the premium integrated development is flanked by VivoCity in the east, HarbourFront Towers One and Two, and the new two-storey cruise and ferry terminal in the west. The terminal will commence operations at the new premises next to the existing HarbourFront Centre around 2H 2026. It also offers unparalleled connectivity within HarbourFront Precinct and is directly connected to HarbourFront MRT station, with access to the North East and Circle Lines. Connectivity will be further strengthened with the completion of the Circle Line loop in 1H 2026, benefiting tenants, visitors, and residents.

Additionally, the flagship commercial project will be complemented with full-height glazing and refined horizontal louvres to improve passive shading for energy efficiency, while also optimising the 360-degree panoramic views of the sea in the south, the Southern Ridges, and the city in the north.

To promote sustainable and green commuting via the coastal cycling network in the GSW, the new development will offer ample bicycle parking and end-of-trip facilities. A range of sustainable elements, including a solar photovoltaic system to reduce reliance on grid energy, sustainable water management practices, a smart lighting system, and electric vehicle charging stations, will be included.

View from Mount Faber

The premium integrated development prioritises energy efficiency and environmental responsibility, aiming to achieve the BCA Green Mark 2021 Platinum SLE and LEED Platinum certifications, reflecting Mapletree's strong commitment to sustainability and climate resilience.

The new development is also well-positioned to support the approximately 100,000 existing homes in the Bukit Merah, Queenstown, and Sentosa areas, as well as the emerging communities of about 10,000 public and private homes in the new residential enclave of Berlayar Estate. It is also conveniently located near 13 interconnected green spaces, accessible through curated trails within the South-Western Parks and Connectivity Network. This strategic position enhances the development's appeal to a growing community of residents, tourists, and global businesses.

To pave the way for the transformative works, HarbourFront Centre is slated for closure in 2H 2026, and the new development is expected to be completed by 1H 2031.

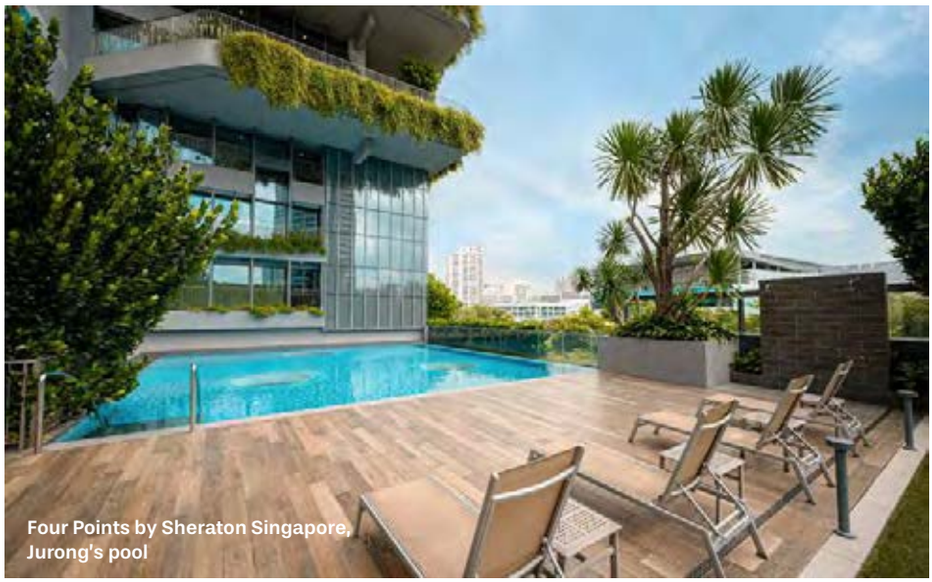
Photo credit: Mapletree

Marriott International Signs Agreement with Resorts World Sentosa to Open Four Points by Sheraton Singapore, Jurong

Marriott International, Inc. and Resorts World Sentosa (RWS) have announced a signed agreement to open Four Points by Sheraton Singapore, Jurong. Expected to open early 2026, the signing marks Marriott's continued growth in one of Asia's most dynamic travel markets.

Strategically located within the Jurong Gateway precinct of the Jurong Lake District (JLD), Singapore's largest planned mixed-use business district outside the city centre, the hotel offers easy access to Jurong East MRT Station and major expressways. The location is ideal for corporate travellers given its proximity to key industrial estates, retail malls such as JEM, Westgate, and IMM, and popular attractions, including the Science Centre Singapore and Snow City. Accessibility will be further enhanced by upcoming MRT expansions, including the Jurong Region Line in 2028 and the Cross-Island Line by 2032.

Gautam Bhandari, Senior Vice President, Hotel Development & Operations for Singapore & Maldives, Marriott International, commented, "We are pleased to collaborate once again with RWS as we continue to grow our presence in Singapore with the addition of Four Points by Sheraton Singapore, Jurong. This signing reflects our strategic focus on expanding thoughtfully across key gateway cities and underscores the strong demand we see for well-positioned, globally recognised brands that cater to both business and leisure travellers.



Four Points by Sheraton Singapore, Jurong's pool

"With its emphasis on balanced comfort and local experiences, Four Points by Sheraton aligns well with the evolving needs of today's guests. This announcement also builds on our recent strategic collaboration with RWS to introduce The Laurus, a Luxury Collection Resort, as we continue to diversify and strengthen our brand portfolio in the market."

Mr Andreas Oliver Reich, Senior Vice President, Hospitality General Management, RWS, shared, "Our collaboration with Marriott to debut Four Points by Sheraton Singapore, Jurong, marks a significant milestone in our ongoing commitment to delivering exceptional value to the local business ecosystem. This strategic collaboration enhances accommodation offerings for business travellers in the vicinity, enriches lifestyle amenities for residents of the Jurong Lake District (JLD), and supports the continued growth of adjacent enterprises.

"Rebranding our property under the globally recognised Four Points by Sheraton brand elevates the hotel's market positioning and enables us to better serve our guests with a strengthened identity. Backed by our deep-rooted expertise in hospitality and MICE and bolstered by years of operational experience in the JLD, we are confident that Four Points by Sheraton Singapore, Jurong, will remain a key contributor to the district's transformation into a dynamic, lakeside business and leisure destination."

Four Points by Sheraton Singapore, Jurong is slated to offer a range of amenities, including an outdoor pool, an all-day dining restaurant, the brand's signature Best Brews™ programme featuring local craft beers, a fitness centre, and 720 square metres of versatile function space designed for corporate meetings and social events.

Four Points by Sheraton Singapore, Jurong's rooftop garden

The Countdown Begins: R+T Asia Prepares to Welcome Global Industry Leaders to Its 2026 Edition

R+T Asia is preparing for its 21st edition in 2026, marking over two decades of industry leadership. The show will gather the global sun shading and door industry from 27–29 May 2026 at the National Exhibition and Convention Center (NECC) in Shanghai.

Building on the success of its previous edition, which attracted over 750 brands, the upcoming show is expected to maintain the same high level of participation. According to the organisers, R+T Asia 2026 will feature a strong mix of returning international leaders alongside new market entrants, who will be introduced through dedicated pre-show promotions across R+T Asia's communication channels.

A Comprehensive Showcase of the Industry

Each edition of R+T Asia strengthens its position as the leading business and innovation platform for the sun shading, door, gate, and automation industries. Bringing together the entire value chain—from raw materials and components to advanced systems and automation technologies—the show offers an unparalleled environment for sourcing, partnership, and product discovery.

At the 2026 edition, visitors can expect a comprehensive showcase featuring components, fittings, technical textiles, fabrics, automation solutions, and premium finished products. Among the many exhibitors, leading Asian brands will present their latest innovations. This includes Yuma, MYT Shutters, YFA, Wintom, Raex, Zhejiang General Light Curtain, Zhejiang Xianfeng Machinery, and Zhejiang Joytech Electronics.

Exhibitors consistently highlight R+T Asia's unique ability to gather a high concentration of quality, export-oriented buyers and provide access to a truly international audience. Companies such as A-OK emphasise that the event's comprehensive ecosystem—connecting suppliers, manufacturers, and technology providers—offers efficiency and exposure that are difficult to replicate elsewhere.

For global suppliers like Xidamen New Material, the Shanghai event has become a key driver for international growth. The company reports that its participation in past editions led to valuable visibility and new partnerships across diverse markets, strengthening its position in the global sun shading supply chain.

Automation leader Dooya also recognises the show's impact on international expansion. The company attributes part of its growing export network to the quality of professional visitors at R+T Asia, particularly from Asia, Europe, and the Middle East. The 2026 edition will again allow Dooya to present its latest smart automation technologies to a forward-thinking professional audience.

These perspectives underscore R+T Asia's defining strength: its capacity to connect technology, innovation, and market demand within one dynamic, international platform.

Last Chance to Enjoy Preferred Exhibiting Rates

With preparations for the 2026 edition well underway, R+T Asia has announced a final opportunity for exhibitors to secure early registration discounts. Companies that confirm participation by 10 November 2025 will be eligible for a 3% discount for one-year participation or a 10%

discount for a two-year commitment, covering both the 2026 and 2027 editions.

The initiative supports long-term cooperation and provides exhibitors with planning advantages. Early registration ensures preferred booth locations and advance visibility in the show's international communication campaigns. Further details are available on the official R+T Asia website.

R+T Asia Buyer Club Returns in 2026 to Strengthen Global Business Connections

The R+T Asia Buyer Club will return in 2026 as one of the show's most distinctive features, reinforcing its role as a hub for professional exchange and high-level sourcing in the sun shading and door/gate sectors.

Developed for senior professionals, including manufacturers, importers, distributors, and franchise buyers, the programme facilitates direct connections with leading global suppliers through tailored matchmaking and curated networking opportunities. Members also gain access to exclusive business lounges and events, designed to provide a focused and efficient environment for building partnerships.

Complementary accommodation and additional benefits further enhance the experience, offering participants an effective way to maximise their visit to Shanghai. Applications for the R+T Asia 2026 Buyer Club are now open at https://en.rtasia.net/buyer-club.html.

Policy Momentum and Market Growth Reinforce R+T Asia's Leadership

Supported by government initiatives that stimulate consumer demand and promote energy-efficient upgrades, China's building and home improvement industries are entering a new stage of growth. National programmes such as the Consumer Goods Trade-in Plan and Green Building Materials to the Countryside campaign, combined with local incentives in cities like Shanghai and Guangzhou, are accelerating renovation projects and encouraging the adoption of sustainable building materials.

These policies are creating strong opportunities for manufacturers of sun-shading systems, doors, and intelligent façades, reinforcing China's role as a vital sourcing hub in Asia. Reflecting this momentum, R+T Asia continues to serve as the leading large-scale event in the Asia-Pacific region for sun shading, roller shutters, doors, gates, and automation—connecting technology, innovation, and sustainability under one roof.

Each edition of R+T Asia sets new benchmarks in attendance and international engagement, demonstrating the event's resilience and ability to adapt to shifting market dynamics. The 2025 edition, held in May, hosted over 750 exhibitors and welcomed 55,200+ visitors from 115 countries—a 10% increase year-on-year. With this continued growth, R+T Asia 2026 reaffirms its position as the key meeting point for sourcing, innovation, and collaboration across the global sun shading and door sectors.

For more information, please visit https://en.rtasia.net/.

Photo credit: R+T Asia

SJ Group Celebrates 10th Anniversary, Expands Ecosystem with SUTD, Bringing Nature, Technology, and People Together

Surbana Jurong (SJ Group) marked its 10th anniversary by deepening its commitment to catalysing the transition to a regenerative future through new partnerships that bring nature, technology, and people together.

In partnership with the National Parks Board (NParks), SJ will support Singapore's City in Nature vision with an SGD1 million donation to NParks' registered charity and IPC the Garden City Fund. SJ will also contribute up to SGD1 million in in-kind consultancy support, leveraging the Group's expertise in nature-based solutions and climate resilience to create more liveable, sustainable spaces.

SJ has undertaken several meaningful projects with NParks islandwide as its appointed consultant, including feasibility studies, coastal protection, and biodiversity restoration for Pulau Ubin, East Coast, and Changi shorelines. With valuable experience and knowledge about the environmental challenges and needs of the changing climate, the contribution further deepens the partnership in designing nature-positive, climate-resilient solutions for a sustainable future.

In recognition of SJ's support and partnership, NParks dedicated an orchid, the Vanda Surbana, on 14 October 2025 in the presence of Mr Chee Hong Tat, Minister of National Development, Guest-of-Honour of SJ Client Day.

The long-standing tradition from Singapore Botanic Garden's Orchid Hybridisation Programme under NParks has registered more than 700 Garden hybrids since 1932, including Singapore's national flower, Vanda Miss Joaquim (Papilionanthe Miss Joaquim).

The Vanda Surbana Jurong hybrid is an emblem of resilience, reflecting SJ's enduring commitment to supporting transformative projects and applying its expertise to building a climate-resilient future.

Hwang Yu-Ning, CEO, NParks, said, "We appreciate SJ's support and contribution towards greater nature-positive climate resilience in Singapore. We are heartened to see growing awareness and interest in the community and welcome more of such partnerships as we work together to fulfil our City in Nature vision."

SJ's global headquarters—the award-winning SJ Campus that opened in March 2024—is a 742,000 square-foot biophilic flagship in Singapore's Jurong Innovation District. It reimagines the workplace as a space where community, nature, and technology come together.

Serving as a living laboratory for sustainability and innovation, SJ Campus tests new technology in its live environment, such as smart diffusers, under-floor air distribution, and digital twin systems.

SJ is expanding its innovation ecosystem on Campus with the SJ Digital Experience Centre (SJDEC) and the Singapore University of Technology and Design (SUTD) Design

and Artificial Intelligence (D•AI) Fab Lab @ SJ.

The SJDEC serves as a Centre of Digital Excellence for integrated digital delivery, offering an interactive environment where clients, partners, and industry stakeholders can see how strategy, technology and design intelligence converge to unlock value across the entire asset lifecycle. By integrating real-world data with design and engineering insights, the Centre showcases how digital ecosystems drive sustainability, efficiency, and long-term performance.

The Centre integrates SJ's most advanced tools and platforms, including:

- Building Information Modelling (BIM): enabling coordinated design, multidisciplinary collaboration, and unified project data management.
- Digital Twins: allowing real-time visualisation, monitoring, and performance optimisation of assets.
- Virtual and Augmented Reality (VR/AR): creating immersive design reviews, stakeholder engagement, and scenario simulations.
- Internet of Things (IoT) and AI-driven analytics: delivering predictive maintenance, performance optimisation, and data-based decision-making.

Beyond demonstrating technology in action, the SJDEC is a collaborative environment where clients co-develop digital strategies with SJ's multidisciplinary teams. It empowers asset owners, developers, and operators to make more informed decisions on performance, cost, and carbon, while closing the feedback loop between design and operations.

Ultimately, the SJDEC strengthens SJ's commitment to advancing digital capability in the built environment, helping partners turn data into strategic advantage and shaping the future of sustainable, intelligent cities.

Alfred Fox, Chief Executive, Integrated Solutions, SJ, said, "The Digital Experience Centre is built for our clients. With AI at the core, we are reimagining operational processes and disrupting traditional workflows to manage costs, tackle labour shortages, and drive more value for their assets."

Established through an MOU between SJ Group and SUTD, the D•AI Fab Lab @ SJ will be the first of its kind hosted by a private-sector organisation.

Located within the SJ Campus, the D•AI Fab Lab @ SJ will bring together industry and academia to nurture 'trilingual' talent—innovators skilled in combining design, AI, and domain expertise—to create value for their organisations.

Grounded in SUTD's 16 years of nurturing design innovators and SJ's global experience in design excellence, engineering, and technology innovation, both parties will accelerate prototyping and innovation to tackle complex urban, infrastructure, and environmental challenges.

Professor Tai Lee Siang, Deputy President and Chief Innovation & Enterprise Officer, SUTD, said, "The AI future that once seemed so remote has arrived. It will be a new world where humans work in partnership

with machines to co-create. As the first Design AI University in the new world, SUTD is poised for this future. Our collaboration with SJ through the SUTD D•AI Fab Lab embodies this vision—where educators, innovators, and industry players converge to redefine how we design, build, and operate the built environment. Together, we are empowering a new generation to harness Design AI to shape the future of the world."

Jason Vollen, Global Head of Innovation, SJ, added, "The partnership with SUTD reflects our shared belief that innovation happens where ideas and disciplines intersect. By combining design, data, and artificial intelligence, the D•AI Fab Lab @ SJ will give our people and partners a space to experiment, prototype, and learn together. It's about turning imagination into impact. It's about creating solutions that are as intelligent as they are humane."

Commenting on the two partnerships, Sean Chiao, Group Chief Executive Officer, SJ, remarked, "These partnerships may look different, but they are guided by the same belief, that the future will be shaped by bringing nature, technology, and people together. It is what defines the next chapter of SJ."

Mr Chiao added, "As a company born from Singapore's nation-building journey, we carry forward a spirit of intentional design, building with purpose, discipline, and imagination. Our partnership with NParks strengthens our commitment to the environment and future generations, while our collaboration with SUTD redefines how design

and AI can serve humanity. Together, they reflect who we are and what we aspire to be: a company that leads with care, that dares to reimagine and that creates futures worth inheriting."

With these partnerships, SJ builds on its decade-long foundation to deliver the next generation of digitally driven, sustainable solutions that scale beyond Singapore. Together, they will generate research, insights, and innovations that strengthen Singapore's and SJ's shared sustainability and innovation landscape, ensuring that knowledge created here continues to unlock real impact for cities and communities worldwide.

UOL, SingLand, CapitaLand Development, and Kheng Leong to Launch Skye at Holland; First Major Residential Launch in Holland Village in 5 years

A consortium of developers comprising UOL Group Limited (UOL), Singapore Land Group Limited (SingLand), CapitaLand Development Pte. Ltd. (CLD), and Kheng Leong Company is set to launch Skye at Holland, a 666-unit high-end residential development at Holland Drive in prime District 10. This marks the first major private residential launch in Holland Village since the end of 2019.

The development is a joint venture between UOL-SingLand, CLD, and Kheng Leong, respectively. Public previews began at 4pm on 26 September 2025, with the official launch scheduled for 11 October 2025.

The 99-year leasehold development occupies approximately 133,343 sq ft of land and comprises two 40-storey residential towers, featuring a variety of indoor and outdoor facilities nestled within the surrounding Good Class Bungalow (GCB) areas. When completed, Skye at Holland will be the tallest development in the Holland Village area.

The apartments at Skye at Holland, with spacious layouts across a wide range of unit types, are priced:

- $1.51 million for a two-bedroom unit (581 sq ft)
- $2.40 million for a three-bedroom unit (915 sq ft)
- $3.34 million for a four-bedroom unit with a private lift (1,238 sq ft)

UOL Chief Corporate and Development Officer Yvonne Tan said, "Skye at Holland will be the first large-scale and tallest residential launch in more than five years within the highly sought-after Holland Village precinct, underscoring the rarity of such a prime District 10 site. The development appeals to aspirational upgraders as well as buyers with strong ties to this neighbourhood, distilling the charm of Holland Village into homes elevated with well-planned layouts, premium finishes, and refined detailing. Beyond its prestigious address, Skye at Holland appeals to the way homeowners aspire to live today, balancing connectivity, heritage, and modern convenience."

Located in the heart of Holland Village, one of Singapore's most coveted and established residential enclaves, Skye at Holland is surrounded by 29 of Singapore's 39 GCB areas within a three-kilometre radius. The development offers beautiful, unobstructed views of these estates, an attribute rarely found in exclusive city living, along with panoramic vistas of nature and the city skyline that stretch all the way to Marina Bay Sands.

CLD Singapore Managing Director, Investment and Development, Chew Peet Mun said, "Demand for well-situated homes in prime districts remains resilient as buyers prefer established neighbourhoods with

enduring appeal. Holland Village stands out as one of these coveted addresses, combining heritage charm with excellent connectivity to business and education hubs. Against this backdrop, Skye at Holland is positioned to offer long-term value for discerning homeowners and investors seeking both exclusivity and growth potential."

Residents at Skye at Holland will enjoy the convenience of a 1:1 carpark ratio, complemented by an extensive suite of resort-style facilities. The facilities are anchored by the double-storey Skye Clubhouse with a 122 sqm main function room and a 140 sqm fully equipped gym, crowned with a roof terrace Sky Lounge. Surrounded by open lawns and courtyards, the Skye Clubhouse offers a sense of expansive, GCB bungalow-like living while providing spaces for private gatherings and community interaction. Other facilities include a 50-metre lap pool, a leisure pool, children's splash and play zone, entertainment and game rooms, two private gyms, fitness garden, pets' play area, yoga sanctuary, reading nook, and two barbecue pavilions.

UOL Senior General Manager (Residential Marketing) Anson Lim commented, "Singapore's private residential market has shown remarkable resilience, and we continue to see healthy demand for attractively priced developments in desirable locations. Launches with strong locational attributes will continue to gain traction. Skye at Holland, with its timeless design and proximity to lifestyle offerings, represents a compelling opportunity for discerning buyers who value both quality living and long-term investment potential."

Skye at Holland is just a short walk from Holland Village MRT station and is well connected to other parts of the island via the Ayer Rajah Expressway and Pan-Island Expressway. It is surrounded by vibrant enclaves such as One Holland Village, Chip Bee Gardens, and Dempsey Hill, home to artisanal cafes, fine dining restaurants, and boutiques. Everyday conveniences can be found at the nearby Holland Drive Market and Food Centre.

Holland Village, with its unique blend of heritage charm and cosmopolitan vibe, remains one of Singapore's most distinctive lifestyle destinations, popular with both locals and expatriates. Nature lovers are just minutes' drive away from the Singapore Botanic Gardens, a UNESCO World Heritage Site, and Bukit Timah Nature Reserve. Families will also benefit from proximity to popular schools, including Henry Park Primary School, Nanyang Primary School, Singapore Polytechnic, and the National University of Singapore. Skye at Holland is expected to achieve its Temporary Occupation Permit in 2029.

Sol Awards 2025 Shines Spotlight on Trailblazers Powering Singapore's Furniture and Furnishing Industry

Group photos of Sol Awards 2025 winners with SFIC President Joshua Koh, Sol Awards Chairman Mark Yong, Workforce Singapore, Chief Juror Chew Mok Lee, and Juror Andrew Sng

On 28 October 2025, the Singapore Furniture Industries Council (SFIC) announced the recipients of the Sol Awards 2025, celebrating the brightest talents and most forward-thinking enterprises in Singapore's furniture and furnishing sectors.

Now in its second edition, the Sol Awards continues to honour not only success stories but also the values that drive the sector forward with innovation, sustainability, and people development. The Awards act as a catalyst for industry transformation, championing collaboration and forward-thinking practices that elevate Singapore's furniture ecosystem on both regional and global stages.

In alignment with SFIC's newly launched 2026–2030 Industry Roadmap, the Awards spotlight companies and individuals turning the industry's vision into reality through purposeful design and enterprise.

"The Sol Awards is a reflection of how far our industry has come, and how much potential still lies ahead," said Joshua Koh, President of SFIC. "Our winners exemplify the principles of our new roadmap, and their achievements show how Singapore enterprises are scaling new frontiers, strengthening capabilities, and competing confidently on the world stage."

This year's awards span five key categories—All-Star Enterprise, Experiential Excellence, New Entrant, Outstanding Individual, and Sustainability Leaders Recognition—each representing a ray in the Sol Awards emblem, inspired by the sun as a symbol of energy and renewal. The Workforce Transformation Award, presented in partnership with Workforce Singapore, also recognises companies that champion job redesign and employee reskilling.

Redwood Interior Pte Ltd took home the All-Star Enterprise Award (Gold) for its strong international growth and strategic expansion. Under the leadership of Director Soh Jun Wei, 30, the company achieved significant growth between 2022 and 2024, supported by the establishment of new facilities in China. Redwood's performance reflects Singapore's growing strength in design-led

Joshua Koh, President, Singapore Furniture Industries Council, delivering his opening speech

Workforce Singapore representative (right) presenting the Workforce Transformation Award to Julian Lim (left), CEO, Nova Furnishing Holdings Pte Ltd

All Star Enterprise Trophy presented by Joshua Koh (right), Singapore Furniture Industries Council President, to Soh Jun Wei (left), Operations Director, Redwood Interior Pte Ltd

Experiential Excellence Gold Award presented by Mark Yong (right), Sol Awards Chairman, to Jerald Tew (left), Managing Director, SPIN Pte Ltd

manufacturing on the global stage.

At SPIN Pte Ltd, winner of the Experiential Excellence Gold Award, customers shopped outside the box with its innovative Immersive Lab. This art gallery–inspired space brought ceiling fans "back down to earth" and into the customer's line of sight. This approach eliminates guesswork, allowing buyers to experience airflow, test noise levels, understand features like reverse functions and smart home connectivity, and compare models side-by-side in a realistic home environment.

New Entrants are also charting new growth in the industry. S–Team Services Pte Ltd, founded by Simon Goh, has built a reputation for its hands-on approach to both heritage building conservation and hospitality maintenance. From restoring landmark shophouses to keeping large properties like Marina Bay Sands running seamlessly, the company takes pride in preserving original materials and details and ensuring that every restoration respects the building's history. As modular systems gain traction in today's small, urban living spaces, Fraction Design Studio uses data-driven algorithms and digital tools to design adaptable and visually appealing solutions that suit clients from retail fit-outs to exhibition displays.

Speco International Pte Ltd, one of the four companies honoured under the Sustainability Leaders Recognition category, stood out for turning marine waste into sustainable air-cleaning technology. Its innovation, BlueBond™, exemplifies how science and circular design can improve both human health and environmental outcomes.

Not all innovators start in design. Former computer forensics analyst Doreen Tan, now Associate Director at Benel Singapore, has been instrumental in steering the company's pivot into the fast-growing healthcare sector. Drawing on her analytical background and personal commitment to understand client needs, she worked closely with hospitals to develop solutions like the LINK chair, a common sight in hospitals and polyclinics today, designed for easy cleaning in high-traffic environments. Since then, healthcare furniture has grown to become one of Benel's largest revenue segments.

The Workforce Transformation Award went to Nova Furnishing Holdings Pte Ltd, recognised for its skills-first hiring, job redesign, and AI-assisted workplace initiatives that prepare employees for a rapidly evolving industry.

Winners were selected by an independent jury panel comprising prominent leaders from government, design, sustainability, innovation, and enterprise development. The 2025 panel included Ms Chew Mok Lee, Ms Sarah Ler (Enterprise Singapore), Mr Kenneth Wong (Workforce Singapore), Ar. Tan Szue Hann (Keppel Ltd), Ar. Rita Soh (RDC Architects), Ar. Tiah Nan Chyuan (Singapore Institute of Architects), and Mr Andrew Sng (DPI Asia).

Together, the jury represents decades of experience spanning public policy, ESG leadership, architecture, and strategic transformation. Their combined expertise ensured a rigorous selection process grounded in both creative excellence and business acumen, reflecting the Awards' commitment to integrity and meaningful recognition.

As SFIC looks toward the next five years, the Sol Awards will continue to champion enterprises and individuals shaping the future of the furniture industry that is purposeful, people-centric, and globally relevant. By recognising those who innovate with empathy and lead with impact, the Awards highlight how Singapore's furniture and furnishing community is evolving from makers of products into creators of experiences that enrich the way people live, work, and connect.

The 2025 Sol Awards winners will be officially celebrated at SFIC's 44th Gala Dinner on 30th October 2025.

Taiwan Industry Week 2025 in Taichung: A 4-in-1 Exhibition for Global Manufacturing Innovation and Solutions

Taiwan Industry Week (TIW) 2025 opened its doors at the Taichung International Exhibition Center from 14–16 October 2025, relocating this premier industrial event to the epicentre of Taiwan's manufacturing hub. This year's edition continued the tradition of showcasing Taiwan's industrial strength and readiness to lead global manufacturing responsibly and sustainably for future generations.

TIW welcomed over 310 exhibitors who presented 5,000 products across 13,000 square metres of venue space. Over 28,000 visitors were expected to arrive from more than 60 countries, including key participants from China, Germany, India, Indonesia, Italy, Japan, South Korea, Turkey, the United States, and Vietnam.

By relocating to Taichung, Taiwan's central manufacturing hub, TIW 2025 strategically connected visitors with the country's industrial heartland, offering easier accessibility, a richer ecosystem of suppliers, and opportunities for global collaborations. TIW's 2025 edition looked ahead, showcasing the core contemporary drivers behind industrial evolution: AI, ESG, Sustainability, and Smart Manufacturing.

Vision 2025: Innovation with Purpose

Leading international exhibitions with over 46 years of expertise, TIW 2025 was organised by Kaigo Co., Ltd., reflecting their mission to connect global industries, foster innovation, and promote responsible manufacturing.

Alexander Keim, CEO of Kaigo Co., Ltd., commented, "At Taiwan Industry Week 2025, we're not just showcasing machinery or tools, we're showcasing machinery or tools, we're showcasing the people and ideas driving the next era of manufacturing. Our goal is to create an ecosystem where Taiwan's innovation meets global demand, turning every encounter into a potential breakthrough."

This year's theme, Sustainability, ESG, Smart Manufacturing and AI-Driven Environmental Innovation, highlights the event's commitment to practical solutions that align with global priorities.

Through curated exhibitions, knowledge-sharing sessions, and networking opportunities, TIW 2025 positioned itself as a solution-driven platform where tech, sustainability, and business strategy connect and flourish. TIW 2025 encouraged industries to shape future growth through responsibility and innovation.

The 4-In-1 Platform

TIW 2025 brought together four leading exhibitions under one roof, offering a complete view of today's industrial landscape.

- Taiwan Hardware Show (THS): With 24 years of global presence, THS remains Asia's premier destination for robust supply chain and sourcing solutions.
- International Metal Technology Taiwan (iMT Taiwan): In its 10th edition, iMT Taiwan focuses on innovation across the metal supply chain, materials, and processing technologies.
- Occupational Safety Taiwan (T-SAFE): A key event for safety innovations, PPE, and workplace protection technologies.
- Refrigeration & HVAC Taiwan (RHVAC Taiwan): Dedicated to energy-efficient HVAC systems and smart building technology.

These four exhibitions formed an integrated ecosystem where manufacturing, technology, and sustainability meet, connecting suppliers, innovators, and buyers across sectors and industries.

What's New in 2025: Thematic Zones and ESG Innovation

TIW 2025 introduced new and expanded exhibition zones focused on sustainability and intelligent manufacturing.

Highlights included: the ESG Innovation Hall, Hardware & Hand Tools Innovation Area, Smart Building Materials Area, and dedicated sections for Plumbing, Garden, Safety Protection, Fasteners, Auto Repair & Parts, Hardware Machinery & Factory Equipment, and an Air Conditioning Tools Experience Area.

These areas showcased how modern manufacturing aligns with ESG principles and digital transformation, emphasising carbon reduction, energy efficiency, and circular-economy design. Each zone demonstrated TIW's ongoing evolution and dedication in a marketplace where innovation meets responsibility.

Knowledge Hub: Insight Meets Action

Beyond the exhibition floor, TIW 2025 delivered a comprehensive programme of seminars and forums designed to turn thoughts and ideas into actionable strategies. The Knowledge Hub brought together leading voices from industry, academia, and policy to explore the trends reshaping manufacturing and trade.

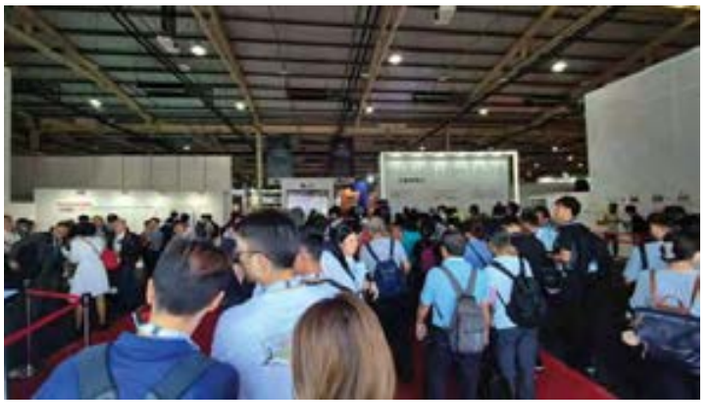
Key topics included: the Carbon Border Adjustment Mechanism (CBAM), net-zero strategies, global DIY and hardware trends, digital transformation, AI in manufacturing, and sustainability leadership. Each session focused on how these forces can be applied directly to business operations, helping firms be efficient and market-ready.

The programme drew on expertise from all four shows, featuring case studies and technical sessions that connected innovation with implementation—from ESG-aligned materials and smart production systems to next-generation workplace safety. By linking thought leadership with real-world solutions, the Knowledge Hub strategically aligned with TIW 2025's mission to help industries evolve responsibly and competitively.

Global Reach and Networking

With participants from Europe, ASEAN, and the Middle East, TIW 2025 became a global meeting point for industry collaboration. Over 20 international delegation groups representing 10 countries took part alongside trade associations, and business leaders from more than 60 countries convened in Taichung, reflecting the event's global role as a hub for international partnerships and investment.

Delegation groups included EDRA/GHIN (Europe's notable retail and hardware federation); Assofermet (Italy's leading hardware association); Japan DIY Homecenter Association;



key industrial bodies from Indonesia, such as the Federation of Indonesian Metalworks & Machinery Industries Association (GAMMA); and the Indonesian Network of Occupational Safety and Health Professionals (INOSHPRO). Regional partners from Malaysia (PPBLM, FMHMBA); Thailand (Thai Tool and Die Industry Association, Thai Subcontracting Promotion Association); South Korea (KRAIA); India (CBRI); and Canada (ASHB, a leading HVAC industry association) further strengthened the event's cross-regional collaboration.

Also in attendance was the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and its international chapters—including Brazil, Indonesia, Hong Kong, Korea, and Malaysia—representing the global HVAC community.

Over 45 media representatives from major trade outlets across 21 nations reported on-site, including Bricomag (France); Heat Processing (Germany); Forgings Today (India); Hello T (South Korea); Trade Link Media (Singapore); and Jordan Daily (Jordan). This ensured innovations and insights from the show received worldwide visibility.

Attendees had the opportunity to network and benefit from over 80 dedicated business matchmaking sessions, designed to connect international buyers and suppliers. The Exhibitor & VIP Night further enhanced this experience, offering an exclusive environment for exhibitors, partners, and buyers to build new relationships and strengthen existing ones.

With international mindedness at heart, TIW 2025 connected global professionals with practical, sustainable, tech-driven solutions.

Exhibitor Highlights: Practical Solutions from Industry Leaders

The strength of TIW 2025 lay in its exhibitors, whose products and technologies reflected the event's emphasis on innovation and sustainability.

- THS: 3M, BADGER, and IMPERIAL featured advanced, eco-efficient hardware and hand-tool solutions.
- iMT Taiwan: KURITA and TDK presented high-performance metal processing and materials innovations.
- TSAFE: 3M and Rothoblaas showcased next-generation PPE and workplace safety systems.
- RHVAC Taiwan: HITACHI and GRUNDFOS highlight energy-saving HVAC and smart environmental control technologies.

These global brands demonstrated how intelligent design and sustainability drive industrial performance and market leadership.

A Platform for Industrial Transformation

As global industries accelerate toward digital and sustainable operations, Taiwan Industry Week 2025 stood as a definitive platform for progress.

The event unites technology, sustainability, and business strategy, turning global ambitions such as AI integration, ESG alignment, and smart manufacturing into responsible, concrete outcomes in a competitive market.

Exhibitions, seminars, and international networking came together at TIW 2025 to create more than a traditional trade show, delivering a complete ecosystem for collaboration and growth. Every hall and programme was guided by a purposeful vision: helping businesses innovate responsibly, grow sustainably, and lead the new era of manufacturing.

Innovation in Taichung, Taiwan's manufacturing heartland, is part of everyday industry, supported by a network of world-class suppliers, engineers, and technology leaders. TIW 2025 brought that spirit to life on a global stage, where the future of manufacturing was discussed, built, and shared with the world.

As industries worldwide accelerate toward smarter and more sustainable production, Taiwan Industry Week 2025 stood as a junction where innovation and implementation collided, and businesses were empowered to build a responsible future.

Building on this year's success, Taiwan Industry Week will return to Taipei from 20–22 October 2026, at the Taipei Nangang Exhibition Center. Global innovators, manufacturers, and industry leaders are invited to be part of the movement, where ideas continue to become action, and partnerships are forged that shape the future of industry.

For more information, visit: https://taiwanindustryweek.com.tw/en/

BCA Honours Outstanding Designs for An Inclusive & Age-Friendly Built Environment with the Universal Design Excellence Award

The Building and Construction Authority (BCA) has conferred five outstanding projects with the Universal Design Excellence Award (UDEA) this year. These projects have gone the extra mile to incorporate user-centric designs, where everyone, regardless of age or ability, can work, play, and live together. They have set a new benchmark for creating a built environment that fosters an inclusive and integrated community life.

A notable awardee, Punggol Coast Station, is the first MRT station to receive this award in Singapore. As the new terminus of the North East Line (NEL), Punggol Coast Station exemplifies how modern public transport infrastructure can seamlessly integrate accessibility with social needs. With level entry points, there are no ramps or barriers to slow down wheelchair users, parents with strollers, or travellers with luggage. An intuitive wayfinding system that incorporates clear sightlines, pictograms for signage, strategic lighting, and colours helps commuters find their way quickly, while generous circulation spaces accommodate both fast-moving and slow-moving commuters.

The Passenger Service Centre is designed for inclusivity, featuring Hearing Enhancement Systems and lowered counters, ensuring assistance for hearing-impaired commuters and wheelchair users. Family-friendly amenities include a dedicated family toilet equipped with a diaper-changing station, as well as dual-height child and adult toilet seats and basins. Ambulant disabled cubicles in the common toilets feature grab bars for those with mobility difficulties.

"Over the years, the Land Transport Authority (LTA) consulted various social service agencies and enhanced the barrier-free features in stations in accordance

From left to right: Mr Michael Ong (Deputy Director, Architecture of LTA), Ms Lim Shu Ling (Principal Manager, Architecture of LTA), Mr Kelvin Wong (CEO, Building and Construction Authority), Mr Yee Boon Cheow (Deputy Chief Executive (Infrastructure & Development) of LTA), Mr Chang Kin Boon (Senior Group Director, Rail (Civil)/ Group Director, Rail Infrastructure & Expansion of LTA)

From left to right: Mr Gerry Wee (Associate Vice President, Estates of Singapore Institute of Technology), Mr Ronnie Tay (Deputy President (Administration) & Chief Financial Officer of Singapore Institute of Technology), Mr Kelvin Wong (CEO, Building and Construction Authority), Mr Beh Swee Chiew (CEO of RSP Architects Planners & Engineers), Mr Chew Chee Kai (Project Director, RSP Architects Planners & Engineers)

From left to right: Mr Christopher Wijatno (Senior Architectural Designer of WOHA Architects Pte Ltd), Mr Kelvin Wong (CEO, Building and Construction Authority), Mr Ronnie Tay (Deputy President (Administration) & Chief Financial Officer of Singapore Institute of Technology), Mr Gerry Wee (Associate Vice President, Estates of Singapore Institute of Technology)

From left to right: Ms Fiona Chua (Vice President, Project Development & Management of CapitaLand Development), Mr Gregory Chua (Head, Project Development & Management (Business Parks/Data Centre/ Industrial/Logistics) of CapitaLand Development), Mr Kelvin Wong (CEO, Building and Construction Authority), Ar Siah Puay Lin (Director, Architecture + Design, SJ Group), Ms Ivy Koh (Director, Architecture + Design Singapore Lead, SJ Group)

From left to right: Ar Lim Yin Chao (Project Director of WOW Architects Pte Ltd), Ar James Tan (Senior Director of WOW Architects Pte Ltd), Mr Kelvin Wong (CEO, Building and Construction Authority), Mr David Goh (Project Director of Mandai Wildlife Group), Ms Janice Tham (Deputy Vice President of Mandai Wildlife Group)

with their needs. The Universal Design Excellence Award recognises our efforts to transform this space into a social infrastructure that enhances the commuting experience for everyone and anchors the station as the heart of the community. The universal design features in Punggol Coast Station align with our vision in making Singapore's public transport system accessible and welcoming for all," said Ar. Michael Ong, Qualified Person (LTA Architecture).

Two other winning projects are from SIT's new campus, demonstrating excellence in educational space design. Named Campus Court and Campus Heart, the two campus plots are seamlessly connected within JTC's Punggol Digital District (PDD), creating vibrant public–academic spaces that welcome everyone from students and staff to residents and families.

A standout feature in PDD is the 2km-long Collaboration Loop, a red bridge that doesn't just link campus buildings; the bridge provides seamless, direct access to JTC's business park, opening doors for academia to connect easily with industry.

The campus also incorporates thoughtfully designed elements, including wide pathways with innovative foldable seats, purpose-built nursing rooms, accessible toilets, and height-adjustable tables to cater to diverse needs.

At Campus Court, families and seniors can enjoy waterfront spaces linked to the Park Connector Network, while the auditorium offers wheelchair-friendly seating spaces. At Campus Heart, classrooms are all equipped with Hearing Enhancement System induction loops and have ample space for wheelchair users, ensuring no one is left out of the learning experience.

"Our campus design reflects SIT's commitment to serving not only our students and staff, but also the wider Punggol community," said Gerry Wee, Associate Vice President (Estates), SIT. "Working closely with partners such as JTC for the Collaboration Loop, and WOHA and RSP for inclusive design features, we have created a campus that is seamlessly integrated with PDD. This integration naturally brings together and fosters interactions between SIT students and staff, working professionals, and residents of all ages. This award affirms our efforts and inspires us to keep pushing boundaries in designing spaces that enable learning, innovation, and community bonding for everyone."

The remaining two UDEA winners are Mandai Rainforest Resort by Banyan Tree and Geneo at 7 Science Park Drive, both showcasing how user-centric design generates more welcoming guest and workplace experiences.

Geneo applied Universal Design principles across its mixed-use development to serve business travellers, working professionals, and individuals with mobility needs through accessible and family-friendly guest rooms that exceeded minimum Code standards. Such voluntary efforts in private sector projects are encouraging and demonstrate how accessibility enhances user experience whilst creating commercial advantages.

BCA's Director for the Building Plan and Universal Design Department, Ar. Tan Jwu Yih, emphasised the significance of this year's awards. "Universal Design is central to building a safe, inclusive, and liveable Singapore. Its impact is most meaningful when experienced in everyday life—whether it's a student moving easily across campus, a family navigating an MRT station, or a senior enjoying community spaces. By embedding these universal design principles one project and one district at a time, we are shaping an inclusive built environment which fosters community integration and enables active participation by users of all ages and abilities."

Bosch Presents End-to-end Safety and Surveillance Integration for Indonesia's Oil & Gas Operations

Hosted by Bosch Audio & Video Systems in collaboration with Tecnovideo, the EnergySecure 2025: Communication & Security Innovation for Oil & Gas Industry event brought together leading system integrators, consultants, and Oil & Gas operators at Fairmont Jakarta.

The event aimed to address a growing demand for reliable safety communication and intelligent monitoring systems across Indonesia's energy sector, where safety and continuity are critical to national operations.

Strengthening Industrial Safety through Smarter Communication

Safety in the Oil & Gas environment starts with clear communication. Bosch's PRAESENSA Public Address and Voice Alarm (PAVA) system, a fully IP-based solution, has been trusted worldwide for delivering reliability and centralised control in the most demanding industrial environments.

Built for large-scale operations such as refineries and offshore rigs, PRAESENSA ensures redundant network architecture, so messages are delivered even during partial system failure. The system allows operators to broadcast targeted voice announcements across multiple zones, supporting both emergency alerts and routine communications in real time.

"Oil & Gas sites require communication systems that are as resilient as the operations they support," said Mr. Ronald Rusli, Managing Director of Keenfinity Indonesia, representing Bosch Audio Brands. "PRAESENSA offers end-to-end reliability, from control room to the farthest field station."

Bosch experts also emphasised how digitalisation in public address systems enables seamless integration with safety management and monitoring platforms, paving the way for unified command during emergencies.

From Visibility to Control—Intelligent Surveillance in Hazardous Zones

Complementing the communication system, Bosch presented the Intelligent Video Analytics (IVA)—offering predictive-ready solutions designed to support smarter, data-driven decisions to enhance business efficiency and performance in Oil & Gas operations. Equipped with AI-based detection capabilities, the system can automatically identify incidents such as intrusion or unauthorised movement in restricted zones, allowing operators to respond proactively.

To ensure reliable video performance in hazardous areas,

Bosch partnered with Tecnovideo, an Italian manufacturer specialising in explosion-proof camera housings certified under ATEX and IECEx standards. Tecnovideo's rugged enclosures protect high-performance Bosch cameras from heat, corrosion, and explosion risks, ensuring continuous operation even in offshore or refinery environments.

"In extreme sites like compressor stations or offshore decks, cameras must endure the same conditions as the crew," noted a Tecnovideo representative. "Our housings allow Bosch's analytics to function safely, where visibility often saves lives."

Together, Bosch and Tecnovideo demonstrated how smart video and durable protection form a unified monitoring solution for Indonesia's challenging industrial landscapes.

Demonstrating Integrated Safety in Action

The highlight of EnergySecure 2025 was the live demo session, where Bosch engineers simulated real-world safety events typical in Oil & Gas facilities. In a demonstration of the PRAESENSA system, the team triggered an emergency alarm scenario across multiple zones. Attendees observed how the system maintained communication continuity even when a key node was disconnected, illustrating true redundancy in network design.

The session then transitioned to Bosch's Intelligent Video Analytics, integrated with Tecnovideo explosion-proof housings. In a simulated hazard event, the system detected abnormal activity and triggered simultaneous visual and voice alerts, showcasing how audio, video, and analytics converge to create a coordinated safety response. The interactive format sparked detailed discussions among system integrators and end users, who explored integration options with existing control systems and plant safety networks, underscoring strong interest from Indonesia's Oil & Gas sector.

Advancing Safety Standards for Indonesia's Energy Future

The event concluded with a shared message: integrated safety technology is essential to sustainable energy operations. As Indonesia expands its energy infrastructure, the need for systems that combine communication, visibility, and automation becomes increasingly vital. Bosch and Tecnovideo's solutions demonstrate how technology can minimise human risk, ensure regulatory compliance, and improve overall operational uptime.

By bridging safety communication with intelligent monitoring, Bosch is reinforcing its commitment to empowering Indonesia's Oil & Gas industry with the tools to protect both people and performance—paving the way for safer and more resilient industrial operations.

Aravest, Hilton, and Wee Hur Partner to Debut DoubleTree by Hilton in Singapore's Robertson Quay

Aravest, Hilton (NYSE: HLT), and Wee Hur Property Pte. Ltd., a subsidiary of Wee Hur Holdings Ltd. (SGX: E3B), announced on 3 November 2025 a landmark agreement to bring the DoubleTree by Hilton brand to Singapore with the reimagining of Hotel Miramar at Robertson Quay, introducing the award-winning brand's signature warmth and hospitality to one of Asia Pacific's leading business and tourism destinations.

Scheduled to open in 2026, the 344-key riverfront property will mark DoubleTree by Hilton's debut in Singapore, combining Hilton's global hospitality expertise with Aravest's hospitality real estate investment and asset management strategy and Wee Hur's long-standing development capabilities in Singapore.

A rebrand of Hotel Miramar, the hotel will undergo a comprehensive upgrade to revitalise guestrooms, meeting spaces, an all-day dining restaurant, and lobby lounge, with enhancements to the arrival experience, fitness centre, and pool deck. Select areas will also be refreshed to introduce new amenities, including a kids' club and pickleball courts, delivering the thoughtful, comfortable hospitality synonymous with the DoubleTree by Hilton brand.

Located along the Singapore River in historic Robertson Quay, the property will be steps away from vibrant riverside dining, bars, and cultural venues, all within easy reach of Clarke Quay, Boat Quay, and Orchard Road. An ideal base for both business and leisure travellers, it will also offer convenient access to the CBD and a variety of cultural landmarks, including Fort Canning Park, Arab Street, Bugis, and Chinatown.

DoubleTree by Hilton is known for delivering warm hospitality to travellers across the spectrum, with contemporary accommodation, comfort food, and thoughtful amenities—including its signature chocolate chip cookie, a lasting trademark for more than 55 years. Known for its ability to adapt to diverse market needs while delivering industry-leading performance, DoubleTree by Hilton is also an ideal conversion brand for owners seeking to tap into Hilton's commercial engine and unlock the full value-add potential of a full-service property.

Moses K Song, CEO, Aravest, said, "The acquisition of Hotel Miramar, together with Wee Hur as our trusted partner, marks Aravest's first foray into the Singapore hospitality sector and reflects our high conviction in Singapore's attractiveness as both a commercial and leisure destination. Partnering with Hilton to open the first DoubleTree by Hilton property in Singapore marks an exciting new chapter for this prime riverfront property. We are confident that the hotel's refreshed design, uplifted spaces, and thoughtful amenities will be further enhanced by DoubleTree's signature warmth and hospitality, creating memorable stays for every guest. We look forward to working with Hilton and Wee Hur to position the property as a standout destination in Robertson Quay and a preferred choice for travellers to Singapore."

DoubleTree by Hilton; Singapore Robertson Quay. Copyright: Aravest

Maria Ariizumi, Vice President, Development, South East Asia, Hilton, commented, "Hilton is proud to collaborate with Aravest and Wee Hur on this milestone project, having extensive experience in hotel conversions in Singapore. Rebranding this primely located property as DoubleTree by Hilton is another chance to show how Hilton helps owners efficiently refresh and reposition assets, while leveraging the power of Hilton's brands and commercial engine. This signing will expand the property's market reach and unlock greater long-term returns, while contributing to the vibrancy of Robertson Quay. It reflects our strategic and purposeful expansion approach—bringing the right brand to the right place with the right partners."

Goh Chengyu, CEO, Wee Hur Property Pte. Ltd., noted, "Wee Hur is excited to play a key role in the transformation of this well-known property. Our track record in development and construction, combined with Hilton's operational expertise and Aravest's investment vision, ensures that DoubleTree by Hilton Singapore Robertson Quay will set a new benchmark for hospitality in the area. This partnership reflects our commitment to working with like-minded partners to deliver high-quality developments that enhance Singapore's hospitality landscape and create long-term value for all stakeholders."

With this opening, Hilton will add to its Singapore pipeline of more than 500 rooms, including the upcoming NoMad Singapore. For Aravest and Wee Hur, the project underscores the owners' shared focus on enhancing Singapore's hospitality landscape through innovative asset enhancement initiatives and trusted global partnerships. DoubleTree by Hilton hotels also participate in Hilton Honors, the award-winning guest loyalty programme for Hilton's 24 distinct hotel brands.

Keenfinity (Thailand) Limited and Frigate Technology Co., Ltd. Collaborate on Smart Security and Communication Solutions for Industrial Safety in Rayong Province

Keenfinity (Thailand) Limited, in collaboration with Frigate Technology Co., Ltd., successfully hosted the seminar "Smart Security and Safety Communication Solutions for Industries" at the Novotel Rayong Star Convention Centre. The event showcased Bosch's IP-based Public Address and Voice Alarm Systems, enhanced with AI-enabled Video Systems, to demonstrate a fully integrated approach to industrial safety and communication.

The event brought together industry professionals, system integrators, and safety experts to exchange insights and explore practical applications of smart security solutions in the oil, gas, and petrochemical fields. The active engagement and positive feedback from participants reaffirm Keenfinity's dedication to developing solutions that raise safety and security standards across industries.

Bosch's IP-based Public Address and Voice Alarm Systems deliver reliable, crystal-clear communication that ensures the right message reaches the right people at the right time, especially in emergencies. Fully EN 54-16 certified and compliant with local evacuation standards, these systems guarantee dependable voice guidance and safety assurance in high-risk environments such as oil, gas, and petrochemical facilities.

Keenfinity and Frigate Technology Team

Working together with Bosch's AI-enabled Video Systems, the solution enhances situational awareness and enables faster, coordinated responses during critical incidents. The "Power to Predict" capability in Bosch's video technology empowers organisations to move from reactive to proactive safety management, identifying potential threats before they escalate.

"We believe that clear communication saves lives. Our IP-based Public Address and Voice Alarm Systems are designed to ensure reliable operation and compliance under all conditions," said Mr. Ekarin Watcharayingyong, Managing Director, Keenfinity (Thailand) Limited. "Together with our partner, Frigate Technology Co., Ltd., we're proud to deliver intelligent safety solutions that help Thailand's industries operate more securely and efficiently."

Johnson Controls Introduces Scalable Liquid Cooling Solution for Asia Pacific's High-Density Data Centres

On 8 October 2025, Johnson Controls (NYSE: JCI), the global leader in smart, safe, healthy, and sustainable buildings, announced the launch of its Silent-Aire Coolant Distribution platform at Data Centre World Asia 2025 in Singapore. The new addition expands its thermal management portfolio to meet the growing demands of high-density data centres.

The new CDUs offer scalable cooling capacities ranging from 500kW to over 10MW, with flexible configurations that suit any data centre deployment. Units can be installed in-row or along the whitespace perimeter, supporting diverse liquid-cooling and hybrid designs. This versatility ensures precise, efficient cooling across a spectrum of high-performance environments, from edge-based inference to full-scale AI factories.

To maximise uptime, efficiency, and space constraints, the system offers built-in component redundancy with up to three heat exchangers and three pumps in one system—an innovation that minimises the need for additional units, saving valuable space and supporting the "five nines" uptime needs of data centre professionals.

Advanced control capabilities further bolster system performance, enabling each unit to operate independently or in unison, automatically adapting to rapid fluctuations in cooling demand or component failures without manual intervention. These features represent a significant advantage over other options and the perfect solution in land-constrained markets like Singapore.

"As AI accelerates, denser chips are generating unprecedented heat, making cooling innovation a critical priority. The launch of this expanded series of CDU technology marks a pivotal step in our commitment to advance data centre cooling," said Ali Badreddine, vice president, Data Centre Solutions and Project Delivery, Asia Pacific, Johnson Controls. "By collaborating with leading ecosystem players in the hyperscale, colocation, and semiconductor industry, we've engineered an innovative and scalable platform that meets the demands of next-generation AI training and inference hardware."

This launch builds on Johnson Controls' broad portfolio of existing Silent-Aire, York, and M&M Carnot thermal management products that serve data centres worldwide. By adopting Johnson Controls' comprehensive thermal management solutions, owners and operators can significantly improve total facility efficiency through the company's innovation, scalability, and consistency. Since 2020, large data centres have typically had to divert more than 30% of their energy consumption to cooling and other non-IT functions. Johnson Controls' solutions can reduce non-IT energy consumption by nearly 50% even in the Asia Pacific data centre hubs with the warmest climates.

Johnson Controls delivers an integrated approach for data centre customers, supporting the full lifecycle

of building operations. From thermal management and building automation to fire protection, physical security, energy efficiency, and digitally connected services, the company's solutions work seamlessly together to enable intelligent, high-performance environments. This technology is backed by a global network of more than 40,000 field and service technicians, ensuring dependable maintenance, rapid parts delivery, and consistent service worldwide.

Johnson Controls manufactures the Silent-Aire CDUs at facilities across Asia Pacific, North America, and Europe. With more than 1.8 million square feet of production floorspace, this global footprint helps to increase the capacity needed to meet the accelerated pace of data centre development.

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JU•Basketball Park

Photo credit: SS Co., Ltd.

In Mandarin, Yichang, Hubei, JU•Basketball Park is located on Development Avenue—the most vigorous part of Yichang.

Once used as an urban gathering stage, the underpass of the urban main road presented a circular grandstand with 12 steps, which is rarely used now. Due to the lack of ramps, people gave up trying to access the area. Set on the solid lithosphere, digging was impossible,

and green space could only be added to an existing flower bed. To the east, a dark tunnel connecting to Wanda Square was also depressed and lacked popularity.

The overhauled design aims to empower the space with new functions and a fresh image, meeting the needs of people of all ages by making the underpass space more attractive. To that end, the design project created an appealing all-age theme park by the free street court.

The story—"a colourful mandarin and other coloured fruit fall into the

field"—was used as the design's vision, changing the colour and texture of fruit into the functional lines of a basketball field, dividing the space into three standard half-court basketball spaces and a playful basketball court.

The 12-step was transformed into a multi-functional stand, including a court grandstand, a booth, a disabled ramp, a slope for children, a fast-access step, a step booth, and a counter.

Integrated with the underpass passage, the site features a colourful art business area, providing goods, light meals, and a rest place.

The sinking space is no longer a simple underpass, but a diverse and inclusive area based on street basketball games and children playing.

› PROJECT DETAILS

Project Name: JU•Basketball Park
Location: Yichang, Hubei Province
Design Period: May 2023–November 2023
Completion Date: January 2024
Design Area: Approx. 3,000 sqm
Landscape Design: HID Landscape Architecture
Project Photography: IMA

Tianjin 4A Sports Park

An unconventional, action-packed urban landscape in China, Tianjin 4A Sports Park won the landscape project of the year title at the 16th Grand Prix du Design Awards in Canada, and received recognition at the Architizer A+ Awards for its innovative approach to embedding learning environments in public spaces through play.

"In this project, we were initially very taken with the site's

history, which included a temple and a small town called Yixing town," recalled Daniel Gass, co-founder at Ballistic Architecture Machine (BAM).

The site is a modern city built over the remains of historical Yixing, a town with a remarkable connection to another Yixing town in Jiangsu province. With the construction of the Grand Canal, the residents of Yixing moved their entire village and reconstructed a facsimile to the north of Tianjin city. While this historical town was destroyed, BAM utilised the urban plan of the original Yixing as a palimpsest, resurfacing the lost history and giving it back to the community in a contemporary form.

The project is roughly divided into 4 overlapping plots. These quadrants are defined by a central axis that runs northwest to southeast, connecting with the residential district through the mall to the metro. The other axis is a large central plaza, an open space for activities and events.

Each quadrant takes on a unique programmatic identity. The northern quadrant is sports-focused due to its proximity and connectedness to the residential district to the north. The eastern quadrant is food-oriented and connects to the B1 and the metro, where the main food and beverage facilities are. The food landscapes in the park consist of a beer garden and outdoor eating areas, and spill across the axis to the southern quadrant, which is heavily programmed with different forms of play environments. The southern quadrant connects to the interior family-based programmes of the retail area, which in turn spills across the central plaza to create an active water feature: the water maze.

The water maze is one of four mazes that define the western quadrant. The hedge maze, the earth maze, and the wood maze areas all interconnect, providing a variety of different maze environments for families to enjoy, with ample onlooking space.

The four quadrants break down further into micro-environments with unique spaces and programmes. The spaces are highly curated, balancing between the landscape, retail, housing, and metro.

"This park is designed to be a highly active 24-hour space, with something for everyone," added Guan Jingwen, partner at BAM.

The maze was an integral part of the design, connecting spatial and thematic aspects. "Both historic Yixing Towns were organised around a central temple and 'Teacher's Street'," explained Gass. "The idea of teachers, children, and education is all linked to the various programmes of the site, as play and athletics, is an important aspect in education." Spatially, the maze echoes the feel of the ancient town with its meandering streets. Symbolically, the maze represents the journey of learning, reminding visitors that, in life, we continually seek our own unique path.

"All of BAM's designs are responsible with respect to the ecological functions of any site, like rainwater collection and flood management, but also the contribution of trees to the reduction of the heat island effect," noted Jake Walker, co-founder of BAM. "However, in this project, we're dealing with a relatively small site, and we were able to fit the programmes of a much larger park into a much smaller space."

As such, the park fulfills its main ecological function by generating greater awareness of environmental issues through two key features—a geothermal chimney and an interactive hydrological model water feature.

Functioning as a steam exhaust for the naturally occurring heated water in this region, the enormous chimney within the project site was transformed by the BAM design team into the park's brightest highlight—a yellow eye-catcher during the day, and a shimmering watchtower at night.

The other, more interactive environmental element on site is the play and learn "Water Mountain". This water feature is an interactive hydrology model—a miniature of the Yangtze River delta landscape, the Three Gorges Reservoir, and the ancient Dujiangyan irrigation system. Children can activate water sources in the miniature mountains and use dams placed in certain locations along the water's route to create reservoirs. However, if the water is not carefully managed, it will spill over into other waterways and continue its path to the ocean.

This water feature reflects the Chinese landscape, agricultural and cultural development, and heritage on the surface. Looking deeper, the design speaks to humanity's role in the heavy manipulation of the landscape and waterways. This feature turns an idea, potentially far too large and abstract for a child to comprehend, into a play environment where learning is inherent in the play. Through these unique and interactive forms of play, BAM brings awareness to children about big environmental issues in the hopes of raising a new generation of people with the minds to fix them.

"Besides key ecological benefits, one of the fundamental purposes of a park is to connect to humans' inherent desire for what people consider more 'natural' environments," explained Walker. "The scale of infrastructure and architecture can be dehumanising, and that is where park spaces shine."

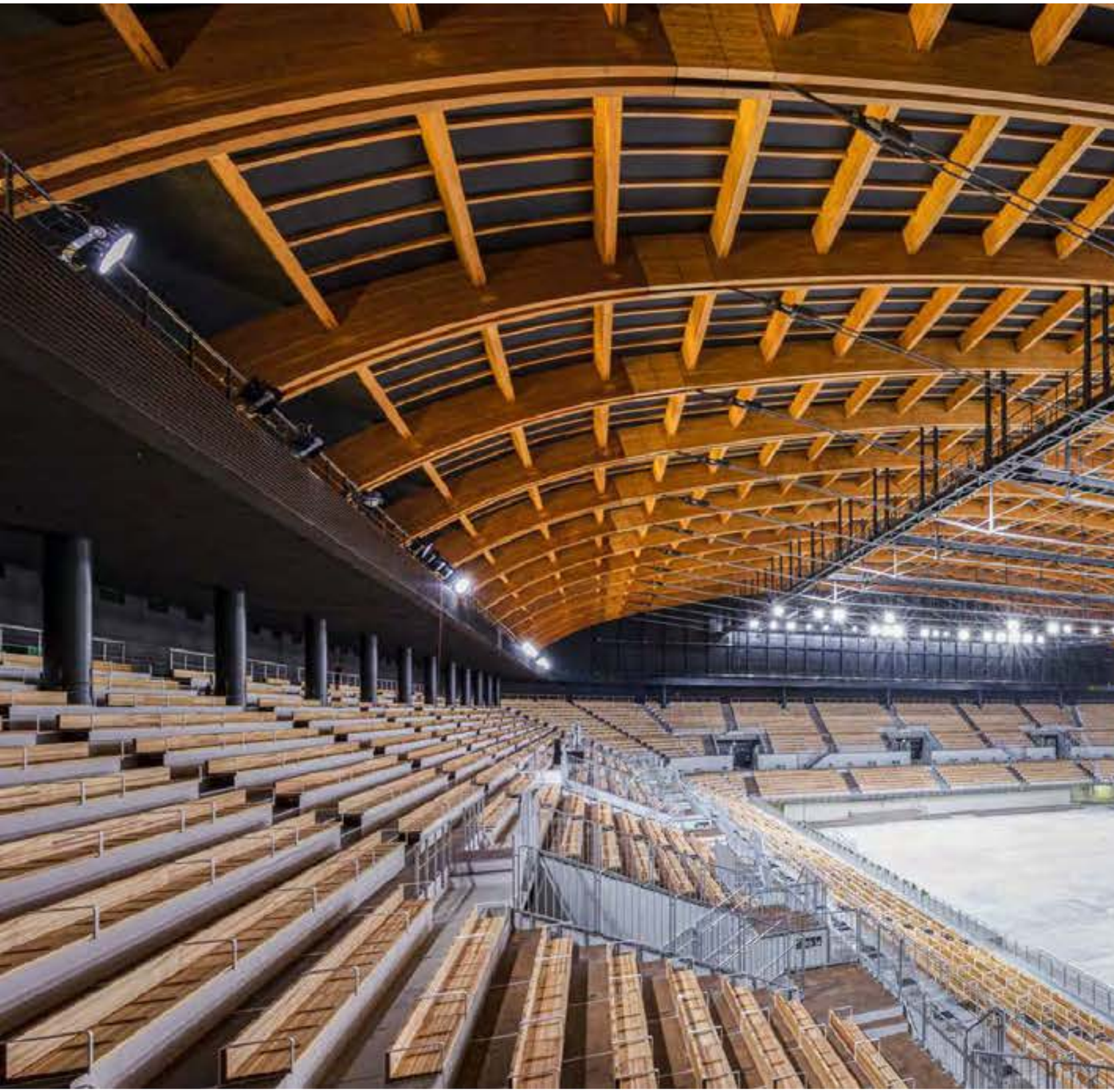
Guan added, "An urban park is not really a 'natural' condition, but rather is as constructed as the skyscrapers and towers of the city centre. It may look green and full of trees and birds, but it is not necessarily nature in the same sense as the nature of the wilderness."

"That's why BAM's slogan is 'Nature is an Idea'. The value of a park is to connect to our projection of what nature is and what nature feels like," concluded Gass.

BAM took Tianjin 4A Sports Park to another level, elevating sports courts of various kinds to become the aesthetic language of the project. By layering the design further with patterns of trees, plants, street furniture, and lights, and playfully marking various activity zones with stripes, colours, and geometric elements, BAM created a hyper-efficient park that offers something enjoyable for everyone. Tianjin 4A Sports Park is a thought-provoking play with the boundaries of landscape, architecture, and the contemporary city—a design aimed at creating a shared retreat for urbanites.

› PROJECT DETAILS

Location: Tianjin
Design Area: 42,000 sqm
Design Firm: Ballistic Architecture Machine (BAM)
Client: Sino Ocean
Photo credit: Wu Qingshan



The Ariake Gymnastics Centre

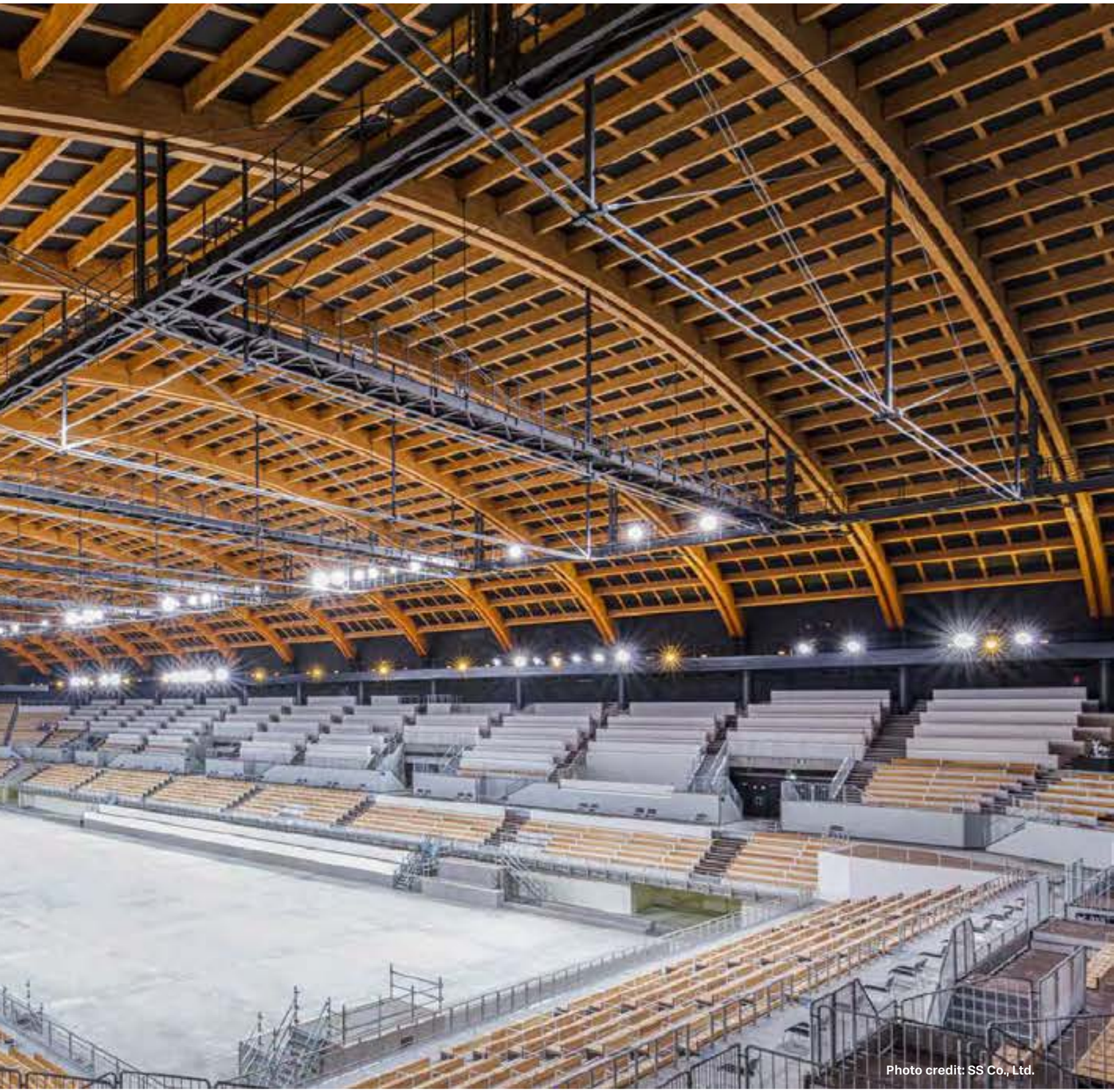


Photo credit: SS Co., Ltd.

The Ariake Gymnastics Centre was uniquely designed to function in two phases. Initially, as a temporary international sports competition facility. After removing the temporary spectator stands, it will be converted into a permanent exhibition hall.

A distinct feature of the facility is its extensive and generous use of timber throughout the building—a positive realisation of "wooden facilities" and "sustainability" announced in the Tokyo 2020 Olympic and Paralympic candidature file. The material was also deliberately selected to express the memory of the district, which was once a timber storage pond. Based on the concept, "A Wooden Vessel Floating in the Bay Area", timber was used wherever possible while carefully considering the characteristics of

Photo credit: SS Co., Ltd.

Photo credit: Ken'ichi Suzuki

Photo credit: Ken'ichi Suzuki

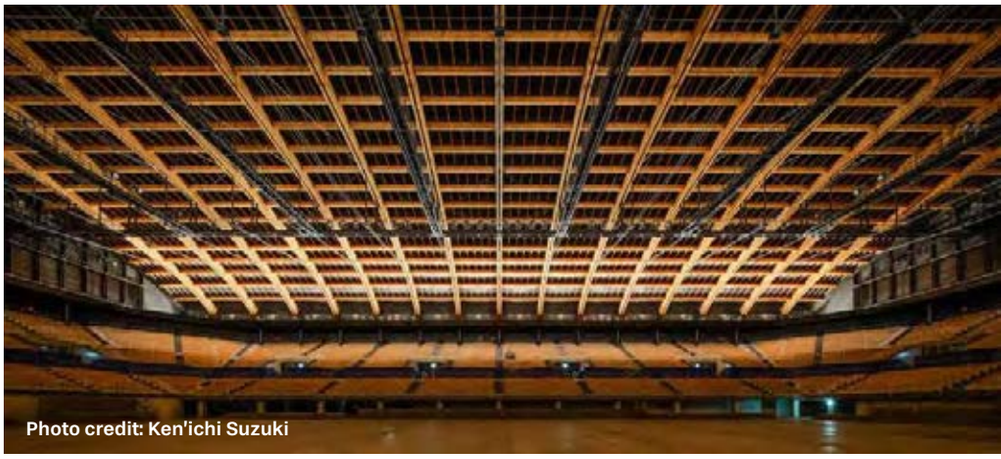


Photo credit: Ken'ichi Suzuki

Photo credit: Ken'ichi Suzuki

wood in each application. This can be seen in the roof frame structure, façade, spectator seats, exterior walls, and more.

The arena ceiling is supported by a wood frame designed to reduce the weight of the overall structure. The concourse space, where spectators approach the arena, is intentionally placed outdoors. The wood façade takes into account acoustic and thermal insulation properties. Function, structure, and space are tightly combined to achieve beauty and richness in simplicity—the essence of Japanese traditional wood architecture that the designers hope spectators and athletes from all over the world will experience.

The site, located in the midst of a vast, wide-open landscape along a canal, took the residential environment of the medium-rise and high-rise condominium buildings in the vicinity into account. The horizontally long and flowing lines were achieved by keeping the building height as low as possible, reducing the overall volume, and controlling the height of the eaves. By positioning the circulation concourse outside the building and creating an open and broad approach space, the design avoids the impenetrable exterior typically found on large-scale sports facilities created by the monolithic walls.

The use of wood for the roof lightens the weight of the structure and is effective for buildings constructed on sites with poor soil conditions. A simple structure was adopted for this project that used single members of large glued laminated timber with high heat capacity to achieve both fire resistance performance and structural stability. Japan's first complex structural system using Timber Beam String Structure and Cantilever Trusses created a large wood-frame space that dynamically covers the arena.

With its use of wood, Ariake Gymnastics Centre carries a light air that is rarely found in its counterparts. Open and dynamic, Ariake Gymnastics Centre is an adaptable facility that will serve locals and foreigners alike for years to come.

› PROJECT DETAILS

Facility Name: Ariake Gymnastics Centre
Location: Ariake, Koto-ku, Tokyo, Japan
Principal Use: Exhibition hall
Client: The Tokyo Organising Committee of the Olympic and Paralympic Games
Architect: NIKKEN SEKKEI LTD + SHIMIZU CORPORATION
Concept Design / Developed Design Supervision: Nikken Sekkei Ltd
Developed Design: Shimizu Corporation, Masao Saitoh (engineering adviser)
Site Area: Approx. 93,400 sqm
Total Floor Area: 39,194.30 sqm (at the time of games)
Number of Floors: 3 above ground
Height: Approx. 30m at the highest
Construction Period: 13 Nov 2017–31 Oct 2019
Construction: Shimizu Corporation

Photo credit: Ken'ichi Suzuki

Ferdinand E. Marcos Stadium

The façade of the stadium is inspired by the native Ilokano Abel fabric.

Serving as the primary social space for the people of Ilocos Norte, the Ferdinand E. Marcos (FEM) Stadium is a 12,000-capacity track and field stadium located in the heart of Laoag City. It is adjacent to Mariano Marcos State University and opposite Rizal Park, making it easily accessible and interconnected.

FEM Stadium's primary feature is its open southern end, where an open amphitheatre and sloping lawn lead towards Rizal Park. The open stadium structure allows for free and unfettered access, critically expanding the existing public open space inside the city by 200%. This enables it to serve as both a sports and events venue and an extension of the park, acting as a daily destination for both students and residents alike.

A proudly Filipino cultural icon.

A 4-Lane Tack can also be found beyond the sporting grounds, giving people a glimpse of what to expect once they enter.

Revitalisation was a key aspect of FEM Stadium, having undergone a remarkable urban regeneration that shines through its transformation. Originally decayed and desolate, the stadium is now a bustling park for sports and leisure, honouring local talents and historical significance. The project catalysed a renewal—not just of physical structures, but of community vitality.

The eastern side, which used to be a road, is now a promenade that connects to the university, where students can freely enter and turn the stadium into part of the campus. The underside of the seats covers warm-up tracks that are free for public use.

On weekdays, students from Mariano Marcos University now gravitate towards it before and after class, while weekends draw in families for picnics and leisurely strolls. FEM Stadium is a perfect example of how such spaces can revitalise neighbourhoods, acting as bridges connecting urban and rural inhabitants.

The minimalist and distinct geometry of an open bowl is defined by the corrugated PVC exterior wall and canopy, reflecting the corrugated metal roofs of most local homes.

The stadium is an expansive space for the community.

Perennially Open View

This is carried by clean-cut curving steel columns that bend and narrow into the canopy rafters.

The external skin is a celebration of the Ilokano Abel fabric, considered an essential part of the local life cycle. From birth, infants are wrapped in an Abel; in adulthood, they use it in weddings; in death, they use it to wrap the departed ones. The process of making this fabric is passed down from generation to generation and preserves the Ilokanos' character and identity.

The "Binakol", or whirlwind pattern, creates a human scale that can be easily recognised by its uniform interlocking geometric patterns, resulting in a traditional optical illusion that represents the waves of the sea and protects against malevolent spirits.

The FEM Stadium now stands proud as the linchpin for Ilocos Norte's sports tourism programme. It is part of a 12-hectare sports complex, featuring the INSPIRE sports training centre, the Centennial Arena, an aquatics centre, and the INSPIRE sports education facility and dormitory. As a public sports facility that symbolises a future open and accessible to every Ilokano, FEM Stadium is one that truly belongs to the people.

› PROJECT DETAILS

Project Name: Ferdinand E. Marcos Stadium
Design Team: WTA Architecture and Design Studio
Completion Year: 2023
Gross Built Area: 61,668.5 sqm
Project Location: Laoag, Ilocos Norte, Philippines
Program: Recreational
Lead Architect: William Ti, Jr.

An Open Stadium. A People's Stadium. A Stadium Park.

The aerial view, showcasing the basic geometry of the stadium.

Innovations for Tomorrow's Green Data Centres

In this issue, ***Southeast Asia Building*** asked industry experts to discuss the latest trends and innovations in data centre design and technology. Join us as we delve into expert industry insights and discover how data centres are evolving for a sustainable future.

Interview with **Chinmay Kulkarni,** Product Manager, Data Centres, Danfoss

Interview with **Daniel Wiesenfeller,** Global Director, Data Centres, Danfoss

Chinmay is an accomplished Product Manager at Danfoss, specialising in data centre liquid cooling products. With a strong focus on innovation and efficiency, he has collaborated with global Cloud Service Provider (CSP) customers and Original Design Manufacturers (ODMs) to deliver cutting-edge cooling solutions that meet the industry's evolving needs.

Daniel has worked in the data centre industry for 4 years, starting in Business Development and Sales. Since March 2025, he has headed a team focused on global data centre OEMs, power conversion, and drive technologies relevant to data centres, anchored in the Danfoss Power Electronics & Drives segment.

Q: Please introduce yourself and Danfoss's work in data centre technology.

Wiesenfeller: My name is Daniel Wiesenfeller, and I'm the Global Director for Data Centres in our Danfoss Drives and Power Electronics Division based in Frankfurt, Germany.

Kulkarni: My name is Chinmay Kulkarni. I'm based in Singapore and look after Danfoss's Fluid Conveyance Portfolio used in liquid cooling data centres—hoses, connectors, manifolds, etc.

Wiesenfeller: In 2018, I was a Global Key Account Manager for big global cooling and HVAC companies operating out of Germany and the US. My boss at the time said, "Why don't you start looking into data centres? I think it's going to be very relevant for us at Danfoss." Despite Danfoss being more of an HVAC and refrigeration company in the traditional sense, he already had the intuition that we needed to position ourselves in the data centre industry.

Kulkarni: In my case, I started with the Fluid Conveyance Group back in 2018. We were very much into the hydraulic business, construction equipment, and mining; we were not particularly connected to data centres or IT companies. I have a background in working with HVAC, having worked for Honeywell and other such companies.

In 2019, we started to see a shift towards liquid cooling in data centres. While it was not a full-on adoption, data centres began to explore liquid cooling technologies. That's when we started product development, and when I became a product manager for this product line. Our portfolio started with just one product; now we've got a full, ever-evolving portfolio.

Q: Are there any key practical considerations or adoption barriers to liquid cooling in the region?

Kulkarni: Asia is at the forefront of liquid cooling evolution. However, it still lacks a lot of things. Resources are lacking on both sides—knowledge and maturity of the ecosystem.

The first issue is material

compatibility. In Asia, we have different countries with different standards. Materials get mixed, but we rely predominantly on heterogeneous materials. In other words, mix-and-matching is not recommended. It is a learning curve for the industry.

Second is reliability and maintenance. In terms of knowledge, because technology development is being divested elsewhere, we are not at an adequate level yet. For example, in Asia (specifically Johor or Batam), liquid-cooled data centres are using our products without our prior knowledge. We started seeing queries from the customer's side, and we had to build resources to tackle the problem. So when it comes to maintenance and serviceability of the product and application, it requires more attention from global stakeholders.

Similarly, manufacturing scalability and quality control are other pressing issues. Most of these products are either manufactured somewhere else or in China. Thus, we needed to develop our own ecosystem of suppliers and manufacturing that have to scale up quickly to keep up with the fast-paced industry.

There are a couple of things I appreciate in Singapore—the access to knowledge and the collaboration between academia and the industry. Having partnered with NUS, I can say that professors are very open and understanding, helping us reach our goals and expectations with clarity and timeliness. It is quick, transparent, and accessible.

Q: What are the ways data centres can manage and save on energy consumption? What are the different aspects to consider when implementing such solutions in the Asia Pacific?

Wiesenfeller: It is important to consider the full chain, from the beginning to the end. Starting from the grid, we look into power sources such as renewable energy. An example is solar energy—we can utilise a solar farm connected closely to the data centre to power the grid.

Within the data centre itself, we need to differentiate between grey and white spaces. Is the best solution to use liquid-cooling because of high density, or can we go air-cooled? Do we need a mechanical cooling system? Do we need chillers? In my opinion, no one solution is the most energy-saving; there are many considerations to be made on the different aspects and sectors of data centres. In the end, it is about considering the step-by-step process and also looking beyond.

Q: What ways can data centres utilise the excess heat generated?

Wiesenfeller: The problem with using excess heat, not just in Asia, is that we start thinking too big. In Europe, people tend to propose ideas such as, "Let's heat the full district of hundreds of households with our district heating network." That leads to the issue of managing the various stakeholders, such as the data centre, the consumers, the authorities, and the municipality. Everyone wants to have a say in the process and generate money. While it is for a good cause, it is still a business. We need to align and discuss with all the stakeholders, bringing everyone to one table.

In Southeast Asia, heating isn't necessary for the climate. But what about hot water, or a swimming pool? Or even heating for farming? In such cases, we need to think on a smaller scale. Instead of large-scale uses of excess heat, we can take a whole sector coupling approach into consideration.

I recall an example where a farmer extended his asparagus season by connecting with a data centre and heating the ground, pushing the farming season back from July to August. If you need additional heat from farming, why not get it from a data centre?

Q: How can operators use Danfoss's solutions to monitor and maintain important infrastructure, ensuring safety protocols are met?

Wiesenfeller: As a predominantly product and component supplier, we have certain features integrated into our products that allow monitoring beyond the product itself. For example, you can take the drives for a chilled water distribution pump and use the features to monitor the health of the motor and the load envelope. This can indicate certain malfunctions in the application. Malfunctions can lead to failure, which results in downtime. That is not acceptable in a data centre.

What monitoring function is available is product-dependent. On the whole, Danfoss has certain software features within a compressor and drive, or even in the heat exchanger. That is our way of keeping the application healthy and maintaining the key competence from a product perspective—catching the problem early and fixing it preventively.

Q: With countries like Malaysia and Thailand emerging as key data centre hubs, what specific local and regional challenges related to energy and water are they facing, and how can technology help address them?

Kulkarni: We see growth on two sides in Southeast Asia. One is the OEM channel, the typical manufacturability. This is happening in Vietnam, and somewhat in Thailand. After setting up a manufacturing facility, let's say for semiconductors or laptops, it goes through the regulatory process. At the end, it provides job opportunities and establishes a local ecosystem.

The second side is the end projects, the water and energy data centres consume. Singapore stopped having new data centres a few years back because it's a black box. Once the installments are done, data centres run on their own. You'd have a small maintenance team of 10 to 15 people running a 100 megawatt data centre.

There are some concerns. In most of Malaysia, liquid-cooled data centres are the majority. A 100 megawatt data centre consumes 4.2 million litres of water a day. In perspective, there are 101 data centre projects approved for infrastructure. However, out of 101, only 17 received water approval and were able to secure a water supply—less than 17% of the total demand.

Electricity demand is also a huge topic. TNB (Tenaga Nasional Berhad), a Malaysian body, estimated a demand of 5,000 megawatts of electricity consumed by data centres by 2035. However, the application for electricity has already surpassed 11,000 megawatts. That would be 40% of the total consumption in Malaysia.

Demand will always be there; people are pushing for data centres and pouring money into the industry. Therefore, we have to control and manage energy efficiency in the pipeline. We need the right partners and technologies.

Wiesenfeller: Energy and water are the most relevant resources. Especially in the Asia Pacific, where water scarcity is an issue. If we decided not to use fresh water every time, we would need to create a water treatment closed system that, in itself, consumes energy. Therefore, it is once again about finding a balance between water and energy consumption.

Q: Are there any other concerns in data centre architecture that Danfoss is working towards?

Wiesenfeller: Our main target in Danfoss is to provide the most energy-efficient products and solutions for data centres and applications. On the power side, we are considering how we can manage different power sources, find sustainable power sources, and how we can reduce conversion steps in the process. With increasing power on the rack level, the current infrastructure is coming to a limit. We have to look into more energy-efficient means, such as working from medium voltage AC to low voltage DC by reducing power conversion steps.

We also have a gigantic portfolio of products. We are always trying to learn from other industries, taking technology like district energy, district heating, and trying to transfer it into the data centre business. The processes and applications are similar to data centres, so why don't we use them? We combine things that are already efficient and make them even better for data centres.

Q: From your perspectives, what is a key technology or innovation that will shape the design of future-proof data centres in Asia?

Wiesenfeller: Looking from front to end, and case-by-case, will make the most efficient application. The right approach is to consider every project as a new one; it is not always the same transformer or the same surroundings or infrastructure. Taking the bigger effort and putting more work into it will lead to the logically correct solution. That is an obstacle we are seeing—the matter of convenience.

Kulkarni: When it comes to data centres, the Asia-Pacific region is seeing unprecedented growth. This will continue because of the population and the high demands. Many people want to have access to data, and there are untapped populations in Indonesia, Malaysia, and India.

As Wiesenfeller said, it's business. As the industry evolves, you have to be concerned about profitability. When we connect that profitability to technology, we have to care about PUE (power utilisation effectiveness), CUE, and WUE (water utilisation effectiveness). How can we limit water usage and make it more efficient? It connects back to cooling.

With increased computing needs, chip capacity and heat emissions are increasing exponentially. 10 years ago, a big data centre would be one megawatt. Today, people are discussing building a one-gigawatt data centre. To support the infrastructure, cooling had to be improved. Thus, we saw the shift from air to liquid cooling. What we are doing now is direct-to-chip liquid cooling, wherein we supply connectors and hoses. That is the first generation of development. The second generation is two-phase with refrigeration. When you marry these two generations, you're introducing a coolant or liquid to the chip, which is a dangerous combination that needs to be managed properly.

The industry is looking for answers, but there are no standardisations at the moment. Associations like OCP (Open Computer Project), which we

are a part of, are trying to introduce an open standard. More and more people are participating and learning from open industry knowledge. Still, formal standardistion is required. But the pace of innovation is so fast, it is difficult to put it all down on paper.

In the last couple of years, we have expanded our portfolio. A lot of our products are part of a harmonised ecosystem, because no one supplier can serve the whole market. Cross-collaboration and knowledge sharing are vital to making data centres thrive.

Interview with **Rahul Bahl,** Managing Director of Krishna Buildestates Pvt. Ltd.

With over 17 years of experience in the construction and real estate industry, **Rahul Bahl** serves as the Managing Director of Krishna Buildestates Pvt. Ltd. (KBE). A third-generation leader, Rahul has played a pivotal role in steering KBE's growth into one of India's most successful construction companies, known for its commitment to Building Trust at Every Level. His expertise in project management and client relations has positioned KBE as a trusted partner across a wide range of sectors, including Real Estate (Residential and Commercial), Infrastructure (Data centres, Roads), and Institutional (Schools & Universities).

Q: Please introduce yourself and your work in data centre technology.

A: Krishna Buildestates Pvt. Ltd. (KBE) has been at the forefront of constructing advanced infrastructure projects across India. This year, we delivered the Trillium Data Centre in Noida for Sify through AIPL Housing & Urban Infrastructure Limited (AHUIL). Our role in such projects is to translate complex and ever-evolving digital demands into resilient, scalable, and sustainable built structures. This means developing structural systems that enable adaptation, and environmental strategies that reduce impact without compromising building performance.

Q: Please tell us about the Trillium Data Centre. What were the key considerations during its design process?

A: The Trillium Data Centre stands as one of Delhi NCR's largest and most future-ready data facilities. It spans 500,000 sq ft across eight storeys, with capacity for further expansion up to one million sq ft. The key considerations, which also translated into construction challenges for us, included supporting six times the load of a conventional building of similar size, flexibility (with modular 10.8m x 10.8m grids to adapt server layouts), and strict adherence to international standards of safety, data security, and environmental sustainability. The nature of the building demanded that we address both today's operational requirements and tomorrow's scalability needs.

Q: How did you ensure that Trillium Data Centre would be sustainable, both during construction and in its life cycle?

A: While the architects approached the design with suitable sustainability measures, we ensured responsible construction with environmentally conscious material selection. Sustainability was foundational throughout: we used high UV-resistant, reflective glass facades to reduce HVAC demand and lightweight AAC blocks to improve thermal efficiency. We prioritised fly-ash concrete mixes and steel couplers in place of traditional methods, reducing scrap generation and environmental footprint. Our waste management and resource allocation were designed to meet global green building benchmarks, ensuring that Trillium's long-term environmental impact remains minimal, extending well beyond initial construction into the building's full lifecycle.

Q: What are the ways data centres can manage and save on energy consumption? What are the different aspects to consider when implementing such

solutions in the Asia Pacific?

A: Energy management starts with a holistic approach, combining smart architecture with operational optimisation. Passive design measures, such as reflective facades and high-performance insulation, limit heat intrusion and HVAC demand. Efficient cooling systems, adaptive control technology, and high operating temperature setpoints are now best practices in the Asia-Pacific, where tropical climates pose unique challenges.

It's also increasingly common for centres to adopt modular or closed-loop cooling solutions and alternative energy sources to reduce dependence on the grid. Considering water use, regulatory standards (such as Singapore's new sustainability guidelines), and future scalability is vital for the region's rapid digital growth.

Q: What cooling solutions does Trillium Data Centre have?

A: Trillium leverages a hybrid combination of passive and active cooling approaches. The high-reflective facade significantly reduces solar load, lowering the need for mechanical cooling. Internally, efficient HVAC systems are augmented by strategic partitioning (using AAC blocks) to retain cool air and prevent hotspots. The facility is structurally calibrated to facilitate next-generation cooling retrofits—be it liquid cooling or adaptive airflow systems—as technology and operational needs advance. This flexibility ensures that, as densities increase, cooling

solutions remain both efficient and sustainable.

Q: What is the maintenance procedure like for operators to ensure safety protocols are met?

A: Maintenance in such buildings is guided by proactive risk management, emphasising regular inspections of structural stability, HVAC performance, and safety systems. Operational schedules typically include routine checks, real-time monitoring, and built-in redundancies to ensure quick detection and resolution of issues. Comprehensive documentation and adherence to international safety standards are essential, supported by periodic drills and ongoing skill development for maintenance teams to uphold consistent safety and performance across all facilities.

Q: Were there any challenges in such a large-scale data centre project? How were they overcome?

A: Delivering a facility of this magnitude comes with logistical and structural complexity. We overcame challenges such as vertical material movement and large-scale assembly by deploying two floor-standing tower cranes and specialised hydraulic cranes for prefabricated steel structures. Single-pour concrete technology (up to 6 metres) enabled us to achieve uniformity and strength at scale. Most importantly, meticulous pre-planning and close collaboration with our partners allowed us to uphold the highest standards without compromising on project delivery timelines.

Q: From your perspective, what is a key technology or innovation that will shape the design of future-proof data centres in Asia?

A: The future will revolve around adaptive, high-density cooling infrastructure—closed-loop liquid cooling, thermal energy storage, and AI-driven building management systems are set to become mainstream, especially in tropical Asia-Pacific climates. The ability for data centres to operate safely at higher temperatures, as encouraged by new regional standards, will drive both efficiency and sustainability.

Ultimately, a facility's capacity to integrate passive measures early, while leaving pathways for active and modular upgrades, remains the key to building future-proof digital infrastructure.

Interview with **Austin Domenici,** Vice President and General Manager, Data Centre Solutions at Johnson Controls

Interview with **Mihir Nandkeolyar,** Business Development and Technology Strategy Manager, Thermal Management at Johnson Controls

For 140 years, Johnson Controls has been a world leader in smart buildings—creating safe, healthy, and sustainable spaces. Offering the world's largest portfolio of building technology, software, and services, the company uses artificial intelligence and data-driven solutions to provide insight into buildings' health, sustainability, and performance.

Recently, at Data Centre World Asia (8–9 Oct 2025), Johnson Controls unveiled its Silent-Aire CDU platform, built for high-performance, sustainable data centre environments. Vice President of Global Data Centre Solutions, **Austin Domenici,** and Business Development and Technology Strategy Manager, Thermal Management, **Mihir Nandkeolyar,** shared their perspectives on how AI-driven workloads, advanced cooling innovations, and sustainable facility design are shaping the future of high-performance, green data centres, converging to meet ESG goals and enable sustainable growth.

Q: Please introduce yourselves and Johnson Controls' work in data centre technology.

Domenici: I'm Austin Dominici. I run our global data centre solutions business across all domains and lines of business.

Nandkeolyar: I'm Mihir Nandkeolyar, and I'm within the global data centre business. My responsibility is managing our products globally.

Domenici: For data centres, we have a lot of different brands and offerings, but we really focus on thermal—across the cold chain, heat rejection, heat transfer, and control systems. We also work on other areas related to physical security, fire suppression, fire detection, and our silent air business. With that, we will build modular data centres in a factory and deploy them. Some are entire modular data centres in one container, others are built as different modules and assembled on site, bringing down the construction time.

Q: What are Johnson Controls' cooling and heat transfer innovations? What are their key considerations?

Domenici: We have a couple; the coolant distribution unit [at Data Centre World Asia] enables liquid cooling for AI. With the rise of AI, chips are getting more powerful. These chips are generating more heat, which requires more cooling. Typically, data centre racks were 10 kW to 40 kW, which can be cooled with air. But with chips becoming more advanced, rack densities are surpassing a hundred kW. For data centres to have chips that enable AI applications, you need liquid cooling. Thus, we have a coolant distribution unit that gets the liquid to the chip, takes the heat, and brings it back. Our other cooling solutions are our air-cooled and water-cooled chillers. The consideration there is how powerful you can make these in the smallest square foot possible.

For the access heat, we have products called absorption chillers and steam chillers; we're one of the only companies that designs and

makes them. The product captures heat waste, and our thought is, "How can I use it in different applications?" We are currently working with chip makers to create reference designs for waste heat capture and reuse.

Nandkeolyar: The primary problem statement for chip makers is, "How can I get the chip to do all these AI functions?" Reusing heat isn't required in that process, and it becomes a second thought. That's probably why heat reuse is lagging in adoption as compared to other data centre innovations. At Johnson Controls, sustainability, healthy buildings, and a healthy planet are in our DNA. For a while, we were the only ones discussing this process. Now, more people are coming to us, asking about heat reuse, and that shift in public sentiment is encouraging.

Domenici: There are also region-specific differences to consider. Power, land, water, and the regulatory environment all come into play; every region has its trade-offs. For example, the outdoor ambient temperature matters a lot. In Southeast Asia, where it is hotter, it takes more effort to reject heat from data centres. Therefore, it is especially important in this region to build solutions that use less power and water but still allow you to reject that heat. Additionally, if you can make the chillers more powerful, they also occupy less space. So we're working on using less water, using less power, and taking up less space.

Nandkeolyar: You're seeing a lot of growth potential in this region, which has a lot of highly dense areas. Not a lot of land, but a fair bit of water and power, which enable us to use more dense and more powerful equipment to provide cooling and heat rejection

Q: What sustainable solutions does Johnson Controls provide for data centre management, and how can they benefit the industry in the long term?

Domenici: We have a few; the coolant distribution unit I mentioned previously uses half as much power as an air solution to cool. Some of our chillers are much more efficient and don't use water. An example is our newest air-cooled chiller model, which uses about 40% less power compared to similar products. We also use low-GWP refrigerants in all our products and study our embodied carbon, looking at how the product performs on site and what went into making it. Additionally, we've taken out all the PFAS in our fire suppression products. We're focused on optimising our equipment and data centre operations overall.

Since certain regions have power constraints, if you can solve power usage, you're solving the sustainability problem, their data centre problem, and if you can deliver a liquid cooling solution that doesn't lose water, you can even solve their water problem.

Q: What are the different aspects to consider when implementing energy-saving solutions in the Asia Pacific?

Domenici: Specific local regulations, using less water and space, and making greener data centres. For operations, we have control tools that don't just enable more efficient operations, but also provide predictive analytics on the data centre so you can intervene earlier.

Nandkeolyar: The transition to liquid cooling sees an interesting trend— the closer you get to the heat-generating silicon, the warmer you can raise water. This allows outdoor equipment to be more dense and use less power per unit of cooling. These are the design changes we're seeing in APAC. Having a future-proofed product that can accommodate warmer temperatures will also lend itself to increased efficiency.

Domenici: These are big equipments. We need a local footprint—engineering and manufacturing teams—so we're not spending carbon making a complex machine that can't be managed by the operations team. We focus on serving local markets with local workers to keep the data centres up and running.

Nandkeolyar: In Singapore, while land is more scarce, the regulatory environment is stable. Its neighbours have their own differences that are regulatory-based, temperature-based, water availability-based, and power availability-based. There is also the appetite of the local population to consider. And despite these differences, there is a desire for equipment that can efficiently manage the spectrum of differences and is repeatable. The more consistency we can deliver with a common frame, the more preferred it is as a solution.

Domenici: That repeatability becomes really important because the more consistent a data centre is, the easier it is to service and the more leverage you can get from your technology. Doing the engineering work a small

The YORK® YVAM chiller consumes 40% less power annually while still delivering the same cooling capacity as other available solutions. In addition, YVAM offers the widest operating range, allowing for chiller operation from -29°C up to +55°C ambient temperature while producing chilled water temperatures between +15°C up to 30°C.]

number of times and leveraging it for your global designs is absolutely vital.

Q: Please share about Johnson Controls' AI-driven workloads and their benefits to data centres.

Domenici: Our company, Johnson Controls, enables AI with our thermal equipment and controls, but we also develop AI solutions. Our intelligent open blue platform enables you to run buildings sustainably and efficiently with predictive sensing, responding, and maintenance. Having more predictive insights on your equipment and how it's functioning allows customers to intervene to prevent failure. It can also be applied to product servicing. In a large data centre, the built-in intelligence will be able to indicate which machine needs attention, saving a lot of time for our maintenance crew. Especially in mission-critical sites like data centres, being able to pinpoint the exact problem for intervention is a massive leap forward from previous brute-force approaches.

Q: How can operators use Johnson Controls' products to monitor and maintain important infrastructure, ensuring safety protocols are met?

Domenici: In terms of safety protocols, we deploy fire suppression, fire detection, security access, and video control. As data centre racks become more dense and expensive, the question becomes, "How do you protect this machinery from physical security and other hazards, such as fires?" From a safety perspective, we have many well-trained technicians—about 30 to 40,000 around the

world—who have specialised data centre training that we can deploy, and many of these people are locals. They can show up immediately, follow local regulations, and do installations safely and effectively.

In the end, data centres are buildings, and Johnson Controls has been in the building business for over a century. We can imagine the machines as the data centre's occupants, but in this scenario, keeping the building healthy and cooled is vital. If you can't cool the chips, they won't be able to compute correctly, or they can become damaged.

We've done a lot of innovation to ensure our safety-first mindset is met. We have people specialised in fire detection and suppression; we even have a factory where we set fires and research how to put them out. But what are we trying to accomplish with this fire suppression? Typically, for data centres, it would be to suppress the fire while minimising the damage to the rest of the equipment.

Nandkeolyar: There are also nuances to the method in which suppression agent you use. In the case of a typical building fire, the priority would be to save human lives, so you would douse the fire with water. But in a data centre, especially an unmanned one, the application changes. Your goal would be to put out the fire while protecting as many of the assets as possible.

Domenici: There is also the factor of what type of data centre is affected. Data centres range from Tier 1 to Tier 4, and that indicates the job the data centre was doing and what type of redundancy it has. A Tier 4 data centre would have 2n+1 redundancy—for every one machine, you need to have two times that, plus another one. This is a data centre that, no matter what, can't go down.

Inversely, what is the value of getting a data centre back up and running? Especially for those that can't afford to be down for extended periods of time, how do you help data centre operators restore operations to the data centre? These are the considerations that go into preventive safety protocols.

Q: What are the other concerns in data centre architecture that Johnson Controls is working towards?

Domenici: We're really interested in the future, so we're investing across the thermal chain. For example, we placed an investment in a company called Accelsius, a two-phase liquid cooling company that does CEUs and cold plates, which could be a cooling modality in the near future.

Another area we're innovating is business models. We're working on cooling as a service or simplifying this process for data centre companies. On the heat rejection side, we're entering new product lines.

We aim to play across the entire thermal chain and have different country-specific solutions catering to different needs. We are always looking at where our customers are going and how we can be ready with solutions through our creative innovations.

That is what is so unique about this industry. Different domains—thermal, power, computing, and building designs—all intersect and fit together to advance technology and the future.

Q: From your perspectives, what is a key technology or innovation that will shape the design of future-proof data centres in Asia?

Nandkeolyar: Community integration is key. For example, can we find a good purpose near the data centre to reuse the excess heat? We've seen municipalities that use heat from the data centre to warm up a swimming pool or school. We've even seen greenhouses use the heat for vegetation.

It truly is about providing something back to the community, because there is a sense that the more data centres come, the more you're taking resources away from that community. But if that data centre can not only develop AI tools that enhance our day-to-day lives, but also provide some physical or tangible benefit to the community, it would be an evolution in the right direction in solving these problems holistically.

Additionally, there is a need to analyse the embodied and operating carbon. It's not just about how much carbon is on the grid, because we cannot lose sight of the fact that data centres are buildings. You are inheriting a certain amount of carbon when constructing the building and moving equipment in. As a result, we're starting to see creative means of lowering carbon footprint, such as low-carbon steel inputs that drive down the embodied carbon. This way, the end user isn't inheriting an extremely high carbon footprint embodied in the building. I believe how data centres grow in sustainable and community-friendly ways will be important in the region.

ALAN Resort

Project Name: ALAN Resort

Project Location: Jinghong, Xishuanbanna, China

Project Area: 3500 sqm

Completion Time: March 2024

Design Firm: Funs Creative

Design Consultant Chief Designer: Robin Luo

Implementation of Soft Furnishings Installation: CHIC Design

Lighting Design: OWAY Lighting

Project Photography: Chuan HE from Herespace

Located by the Lancang River, ALAN Resort is nestled in the tranquil embrace of mountains and water. Nature extends its touch, and solace is promised amid misty peaks and serene lakes.

Drawing inspiration from the raw beauty of the natural world, design firm Funs Creative Design Consultant has woven architecture into the

surrounding landscape, creating a harmonious dialogue with the region's cultural and environmental context. With a design that translates natural imagery into spatial experience, a resort is born—one that completely immerses guests into nature, sanctuary, and experience.

The architecture follows the natural contours of the mountains, integrating seamlessly into the rainforest. Like scattered stones resting amid the wild terrain, the buildings emerge in layered volumes across three levels, at times appearing near, at times receding into the forest.

Creative Design Consultant embraced a minimalist, symmetrical approach to the spatial layout. The central swimming pool serves as the focal point, with "mountain-shaped" structures unfolding on either side. Water flows between them, merging the built environment with nature, allowing the landscape to organically weave through the space.

At the entrance, a series of cascading steps leads inward, flanked by lush greenery that sways gently in the rainforest breeze, drawing visitors into the immersive natural setting. As the humid air lingers, the landscape unfolds—atop the hillside, shimmering water surfaces ripple with movement. Expansive water features breathe freely, dispelling the heaviness of the tropical heat.

Two-tiered swimming pools cascade over the terrain, with sunlight skipping playfully across the varying elevations, casting an interplay of light and shadow that blurs the boundaries of reality. Moving between dappled shade and bright openness, sunlight filters through the corridor's slatted openings, creating a shifting dance of shadows.

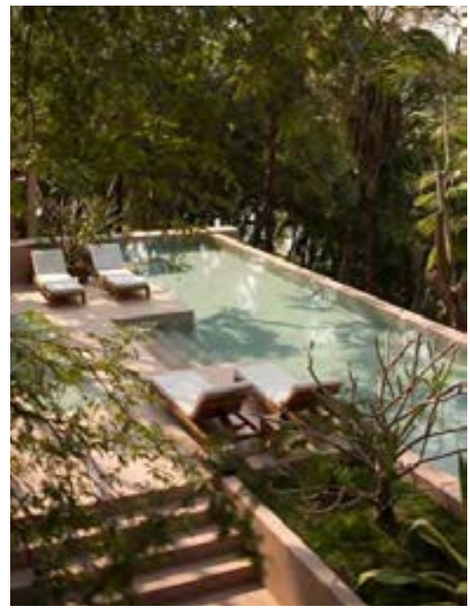
The dining area unfolds in an airy, open expanse, where the designers skillfully balance spatial emotions with the dynamics of light and shadow. Vast streams of natural light are drawn into the space, fostering an atmosphere that is bright and uplifting.

The ground-floor guest rooms open onto private gardens, offering each visitor a secluded retreat. In the morning, golden sunlight filters through the dense rainforest, illuminating the distant surface of the Lancang River, rippling waves shimmering in the light. The water's gentle appearance invites guests to step into the pool and feel the rhythm of nature's quiet pulse.

On the upper levels, expansive floor-to-ceiling windows invite abundant natural light, connecting the inner world with the vastness beyond. Through these frames, the soul finds its quiet meditation in nature. Aged wooden furniture, bearing the patina of time, enriches the space with an understated historical elegance. The interplay of rustic textures and thoughtful design fosters a profound sense of grounding while amplifying the presence of the natural world.

Suspended above rugged cliffs, embraced by ancient trees, the world's clamour fades into the distance. Beneath a sky of setting suns and luminous constellations, the spirit transcends the mundane, seeking only a place of quiet refuge.

Inspired by the purity of the landscape, a minimalist yet poetic sanctuary was crafted, allowing those who dwell within to dissolve into the essence of nature, shedding the weight of the material world. The self is returned to its quiet, unburdened state—balanced, still, and at peace.



Hilton Shanghai City Center

Project name: Hilton Shanghai City Center

Client: Shanghai Yuchang Real Estate Development Co., Ltd.

Project location: 488 Yan'an West Road, Changning District, Shanghai

Architectural design: P&H Architects International Co. (Canada)

Interior design, lighting design, & art consulting: CCD / Cheng Chung Design (HK)

Landscape design: Lacime Landscape Studio

Project area: 40,000 sqm

Completion time: September 2024

Photographer: TOPIA

At the bustling crossroads of Huashan Road in 1988, the iconic Hilton Shanghai hotel was unveiled. It marked Hilton's debut in mainland China and, more notably, became the pioneering international five-star hotel under a foreign brand, signifying a significant milestone in the evolution of China's hospitality landscape.

In early 2018, the hotel bid farewell to its guests after three decades of distinguished service when its management contract concluded. Seven years later, Hilton rekindled its legacy with the grand debut of Hilton Shanghai City Center, reestablishing its presence in the heart of the metropolis.

Inspired by the hotel's iconic pipe organ and the melodies of J.S. Bach's Toccata and Fugue in F Major, CCD orchestrated a timeless narrative that resonates beyond geographical boundaries. Through artistic exploration, the design harmonises music with spatial dialogue, bridging past and present, tradition and innovation. As a "sequel" to Hilton's story in Shanghai, the hotel reimagines a legend for a new era.

Nestled in the city's vibrant core, the hotel embodies the philosophy of "urban sanctuary," blending the sycamore-lined serenity of Yuyuan Road with the Art Deco elegance of Wukang Mansion.

The hotel lobby comes to life with its intricate floor motif inspired by organ sheet music, coupled with the timeless melody of Bach's Toccata and Fugue in F Major. Guests are invited into an immersive symphony of sight and sound—a tribute to the musical heritage of the former Hilton Jing'an.

A semi-circular double-height ceiling bathes the lobby in natural light, while curved reception desks synthesise with gilded Oriental Gongbi screens and cascading crystal chandeliers. This interplay of East and West epitomises Shanghai's haipai culture; a celebration of fusion and inclusivity.

The lobby retained two cherished hallmarks of its legacy—Venus et Violoncelle, a sculpture by French École de Nice artist Arman, and the signature spiral staircase. Fluid lines reinterpret classic Shanghai architectural elements into contemporary motifs, weaving cultural memory into every surface.

The spiral staircase winds gracefully upward, its sinuous contours echoing the rhythmic tubular forms of the banquet hall's pipe-organ-inspired design. The ascending metal handrails, reminiscent of musical staves, weave a sculptural symphony. Nearby, a curved lounge area is enriched with gentle lighting and artful decor, offering a sanctuary imbued with a sense of quiet poetry.

Osteria Twelve 16, the Italian restaurant, is envisioned as a "modern parlour across time and space," weaving the poetic tapestry of Shanghai's architectural legacy over the

past century. A sweeping mural wall, elegantly merging Chinese and Western motifs, unfolds like a cinematic montage, evoking the poetic allure of 20th-century Shanghai salons in a contemporary setting.

In the spirit of architectural deconstructivism, the space emerges as a sculptural narrative. The walls are elegantly sculpted through parametric modelling, featuring tubular textures reminiscent of organ pipes. These tubular lines stretch from the floor to the soaring ceiling, rendered in a unified matte micro-cement finish, where the austere industrial grey reveals an unexpected touch of silk-like refinement.

Micro-cement and terrazzo sweep across the walls, their subdued gray textures evoking the passage of time, contrasting the warmth of dark-toned walnut finishes. Light filters through like vibrating strings, dancing gracefully across the preserved concrete beams and columns, continuing the melodic motif and orchestrating a poetic "symphony of strength and softness".

The space transitions seamlessly with the rhythm of the day. During daylight hours, it serves as a refined coffee salon, featuring semi-enclosed seating booths and a sweeping built-in bookshelf. The soft furnishings,

rendered in an understated palette, exude refined elegance and poise, while wooden lattice screens cast dappled light onto the textured micro-cement walls. As night falls, the space transforms magically into a bar, where Shanghai's timeless charm lingers in an endless, dreamlike reverie.

The open kitchen island becomes a canvas for an enchanting interplay of colours and textures, with vibrant flowers, greenery, and decorations composing a visual symphony. The glossy sheen of glazed ceramic plates engages in a gentle dialogue with the weathered patina of oxidised copperware, while suspended cooking utensils revive the lively soundscape of Shikumen alleyways from a bygone era.

In the bar area, industrial aesthetics are reimagined through a deconstructionist lens. Exposed fair-faced concrete columns and ceilings reveal the raw, tactile imprint of their original casting, with rough textures and visible scratches evoking the sense of an architectural prototype still in formation. At the junction where ceiling and wall converge, suspended floral installations form a dramatic interplay with austere concrete finishes—a subtle nod to the balance of strength and softness inherent in haipai culture.

The banquet hall design pays tribute to Pythagoras' philosophy: symmetry as the foundation of beauty. As the sole hotel banquet hall in Shanghai featuring a pipe organ, its soaring vaulted dome and vertically stretched screen walls create a dignified axial symmetry. This structural rhythm echoes the cadence of classical music, while its precise symmetry evokes the grandeur of French court architecture, radiating an aura of splendour and enduring elegance.

Guestrooms feature a refined palette of white and grey, where curated furnishings and balanced accents define an aesthetic of understated luxury. Modern sleek lines blend gracefully with classical decor, embodying the spirit of Shanghai's historic Western villas. Expansive floor-to-ceiling windows open up to sweeping cityscapes, emphasising the understated luxury of the experience.

Wang Ting

Kimpton Aqeos Hainan

Developer: Hainan Zhenbo Property Co., Ltd.

Project Location: No. 3 Haisi Road, Lingshui Li Autonomous County, Hainan Province

Design Contractor: YANG & Associates Group

Architectural Renovation: YOSAAN by YANG

Interior Design: YANG & Associates Group

FF&E Design: MSA by YANG

FF&E Installation: MSA by YANG (Public Areas)

Art Design & Installation: Hong Kong DCA + INWOO ART CONSULTING by YANG + 57ART

Project Area: 61,000 sqm

Opening Date: 25 May 2025

Project Photography: As You See - Wang Ting & Kimpton Aqeos Hainan

Nestled in Clear Water Bay, Lingshui County, Hainan, is Kimpton Aqeos Hainan—the first Kimpton-branded resort in Greater China. Boasting pristine beaches, coconut groves, and breathtaking ocean views, Clear Water Bay stands out for its untouched natural environment. The area features well-preserved tropical rainforest ecosystems, diverse marine habitats, and rare native coastal landscapes, making it Hainan's most naturally enchanting luxury resort.

Wang Ting

While initially planned as a flagship property for an international five-star brand, the hotel was a long-abandoned, unfinished structure that spanned over 83,000 square metres and 500 guest rooms. When YANG & Associates Group took over, the team took on a holistic design approach, transforming it into a resort paradise distinguished by its avant-garde aesthetics and compelling social magnetism.

The project was conceived within a dual-brand spatial framework. Kimpton's concept draws inspiration from a fictional muse: a global traveller, art collector, and dedicated environmentalist. Employing a simple design language and contemporary living philosophy, the space cultivates an atmosphere of private discovery, unhurried wandering, and indulgent relaxation.

Defying conventional hotel programming, the lobby was redefined as an "Art Atrium", "Living Room", and "Leisure Balcony". The reception zone, centred around a fireplace and encircled by organic curved furniture, creates a welcoming and open social environment. Seven infinity water features, numerous art pieces, and scattered tropical greenery invite guests to slow their pace and immerse themselves in the present.

The all-day dining restaurant, Chinese restaurant, Japanese restaurant, and two bars each manifest unique aesthetic realms tailored to their culinary themes, resonating deeply with the Kimpton brand DNA. The Games Chamber, integrating chess, billiards, and a screening room,

Wang Ting

Kimpton Aqeos Hainan

Wang Ting

offers tranquil yet socially engaging leisure spaces.

An e-sports centre specifically addresses the lifestyle preferences of the younger generations. Guestroom furnishings extend the muse's collecting sensibilities, featuring personalised bespoke pieces imbued with narrative depth. Easily overlooked "grey" spaces are likewise meticulously designed, ensuring guests continually encounter unexpected moments of delight while wandering, pausing, and observing.

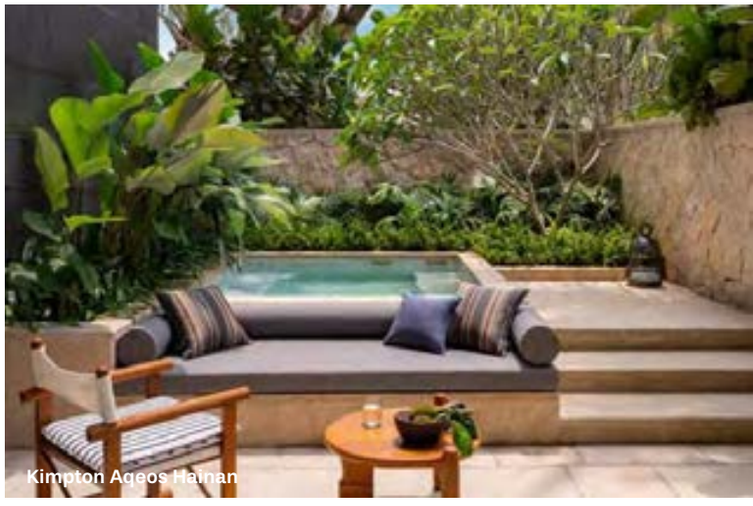
To overcome constraints like low ceilings, limited natural light, and obstructed views, the design team introduced a triangular grid structure in the atrium, enhancing axial rhythm while preserving open areas for layered exploration.

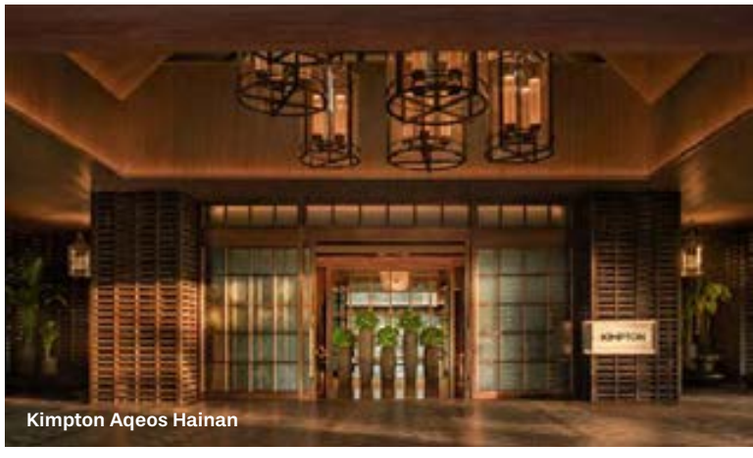
Skylights were added to the lobby canopy and atrium to maximise natural light and ventilation, transforming the atrium into a non-temperature-controlled zone. This reduced reliance on artificial lighting and HVAC systems, lowering energy consumption while enhancing spatial experience and environmental sustainability.

Luxury transcends traditional material opulence and stylistic labels at Kimpton Aqeos Hainan. Manifesting as an inward journey exploring culture, physical well-being, and the soul, it forges a compelling new narrative of "contemporary luxury".


Kimpton Aqeos Hainan


Kimpton Aqeos Hainan


Kimpton Aqeos Hainan


Kimpton Aqeos Hainan

MGM Shenzhen

Project name: MGM Shenzhen

Client: Shenzhen SDG Xiaomeisha Investment & Development Co., Ltd.

Location: Xiaomeisha, Yantian District, Shenzhen

Interior design: CCD / Cheng Chung Design (HK)

Art consulting: CCD · WOWU Art Consultancy

Lighting design: CCD / Cheng Chung Design (HK)

Area: 67,500 sqm

Photographer: Ting Wang

Rising from the land where the former Xiaomeisha Hotel stood, MGM Shenzhen was reborn through demolition and reconstruction. As the first MGM property in Guangdong, it pays tribute to its predecessor by retaining the iconic trapezoidal structure, as if growing organically from the original building.

Inspired by the themes of "Sky Curtain", "Sea Veil", and "Azure Horizon", the lobby and lounge capture the dynamic rhythm of ocean waves, where time

becomes the measure of space—fluid, expansive, and pure—immersing guests in a realm of motion and transformation.

The space resonates in harmony with the ocean, and when sunlight filters in, surfaces shimmer with shifting hues, like clouds drifting across the sky or the iridescent glow of pearl shells kissed by the tide. Curved surfaces wrap the space, resolving the constraints of the lobby's limited depth and symmetrical columns. Elegant, continuous lines cascade like a lyrical variation, their play with light and shadow composing a harmonious visual symphony.

At the heart of the lobby, renowned artist Gao Xiaowu's sculpture, "Rebirth – Carp", evokes a profound reverence for nature, awakening a dreamlike longing for the primal purity of the natural world. A mirrored spiral staircase becomes a sculptural centrepiece, anchoring the space. As light dances across its gleaming surface, it unfurls a dreamlike narrative that is both poetic and romantic.

Following the spatial flow, guests arrive at the lobby lounge, where a consistent design language beckons guests in. Crescent-shaped blue screens subtly partition the space into intimate alcoves, each accented


Festival

with curated artworks and floral arrangements in the corners.

The Weilong House, a quintessential emblem of Guangdong Hakka heritage, is a sanctuary of family living and generational continuity, rooted in kinship and tradition. This heritage is reimagined as a central architectural motif in the Chinese restaurant, embracing Eastern philosophy and paying tribute to traditional culture. The design employs three-dimensional spatial decomposition and staggered elevations, capturing the quintessence of the semi-enclosed Hakka Weilong House—intimate clustering, circular flow, and progressive rhythm.

Bamboo weaving and red bricks, unadorned yet expressive, quietly echo the essence of nature and life. Amid the interplay of light and shadow, a whisper lingers and reveals the spatial poetry woven through layered rhythms.

Lingnan window lattices, artisanal bamboo weaving, and the nostalgic charm of old streets breathe local soul into the all-day dining restaurant. Amid the warm hum of everyday rhythms, a quiet sense of ease settles in.

Inspired by the graceful contours of a yacht, the executive lounge unfolds with a dynamic interplay of order and fluidity. Curved lines weave a fluid spatial rhythm that echoes the natural scenery beyond the windows, where sunlight drapes every corner in a warm, embracing glow.

Guest rooms capture the intimate dialogue between architecture and sea, embracing the rhythms of nature. The shifting glow of sun and moon, the ebb and flow of waves; each becomes a design motif, where gentle curves resonate with distant glimmers and drifting clouds. Fluted glass and wood veneers evoke the sea's gentle ripples, translating nature's rhythm into tactile expression. A white circular

bathtub and a crimson round table mirror the descent of the sun and the moon. Sunlight mingles with seawater in shades of red and blue, infusing the tranquil retreat with the ocean's vivid, spirited charm.

Subtle and serene, this sanctuary nestles quietly, welcoming guests with gentle grace. Here, space grows with nature, unfolding a timeless rhythm of life.

The Soaltee Kathmandu, Lobby

Name of Project: The Soaltee - Autograph Collection

Location: Kathmandu, Nepal
Name of Client: Soaltee Hotel Ltd.

Address: Tahachal Marg, Kathmandu 44600, Nepal

Principal Architect: Vijay Dahiya

Design Team: Sonali Narula, Harshit Sethia, Manpreet Mandhan, Riya Choudhury

Built-Up: 15,500 sqft

Start Date: 2020

Completion Date: March 2023

Photographer: Avesh Gaur

Serving as gateways to culture, hospitality spaces offer visitors an immersive experience that captures the essence, history, and spirit of a place. Over the years, the Soaltee Hotel in Kathmandu has stood as a landmark of cultural and historical significance, welcoming travellers from around the world.

After nearly six decades, the hotel's lobby—guests' first impression of their stay—required a transformation to meet contemporary hospitality standards while honouring its legacy. The challenge: reimagining the space to enhance functionality, visual openness, and luxury while working within its structural constraints.

The original lobby design was enclosed and outdated, with a limiting column grid of four-metre spacing, massive columns, and a single-floor height that restricted visual and spatial openness. Poor natural light and ventilation further impacted the ambience, while the centrally placed reception desk obstructed movement, making circulation inefficient. Additionally, the bar area remained underutilised due to its hidden placement, and the interiors, with mirrored columns and outdated elements, lacked the refinement associated with the modern hospitality experience. The redesign aimed to address these challenges by introducing a more fluid layout, enhancing visual connection, and elevating the overall sense of arrival.

A key aspect of the transformation was redefining the spatial organisation. The reception area was repositioned behind a row of columns, defining the space while allowing for an uninterrupted flow through the lobby. The bar area, called the Rodi Bar and Lounge, has been relocated opposite the reception, giving it greater visibility and prominence within the space. These strategic shifts not only optimise circulation but also create distinct zones that enhance the overall functionality of the lobby.

To counter the lack of natural light and create a more inviting ambience, the redesign embraces a predominantly white palette, amplifying brightness and enhancing the perception of space. Combined with a refined material selection, this approach ensures a sense of understated sophistication. The material palette is rich and textured, featuring Statuario stone, Black Marquina stone, and stone tiles with brass inlays. The ceiling design, with its brass chain elements and champagne-painted finishes, adds layers of warmth and elegance, reinforcing the balance between tradition and modernity.

As guests approach the reception, the atmosphere subtly shifts. This zone is designed in a deeper, grounding black, setting it apart as a focal point. This transition is reinforced by bold geometric flooring patterns, which reinterpret traditional Nepalese motifs in a modern material language and subtly transition the white marble flooring to black.

Set against a sculptural Mountain Wall, the reception desk becomes a striking focal point, its intricate detailing and contours drawing inspiration from Nepal's breathtaking landscapes. The textured surface plays with light and shadow, echoing the dramatic terrain of the Himalayas, Mount Everest, and Mount Annapurna, imbuing a sense of depth and dimension. This intentional contrast in colour and materiality grounds the reception zone and

acts as a symbolic bridge between tradition and modernity, offering guests a tangible connection to the spirit of the mountains from the moment they step inside.

Continuing this narrative of layered experiences, the Rodi Bar and Lounge was envisioned as a refined retreat within the lobby. Located opposite the reception, it offers a complementary spatial experience, distinctly modern in its expression. The flooring transitions from the light-toned palette of the lobby to a darker composition of black marble with brass inlays, subtly redefining the mood and purpose of the space. A finely detailed jaali partition frames the space, balancing openness with a quiet sense of seclusion and intrigue.

The ambience inside is defined by elegant chain-link chandeliers that add warmth and sophistication. The bar transforms fluidly from a relaxed coffee spot during the day to a refined lounge in the evening, with lighting that adjusts to the changing mood. The bar counter, finished in rich copper patina, is detailed with subtle brass accents and floral patterns, showcasing fine craftsmanship while adding a layer of visual richness. Together, these elements lend the Rodi bar a refined and contemporary identity within the larger hospitality experience.

The revitalised Soaltee Hotel lobby is a testament to the power of design in shaping hospitality experiences. The transformation enhances functionality, enriches the spatial experience, and deepens the connection between visitors and Nepal's cultural landscape. By blending contemporary luxury with tradition, the lobby's redesign continues to offer an immersive experience—one that not only welcomes guests but also leaves them with a lasting impression of the history, grandeur, and spirit of Kathmandu.

Taj Sawai

Name of Project: Taj Sawai

Location: Ranthambore, Sawai Madhopur, Rajasthan

Name of Client: Arvind Jain

Design Firm: Studio Lotus

Design Team: Asha Sairam, Insiya Pithawala, Suryansh Agarwal, Vartika Sood

Photographer: Avesh Gaur

Site Area: 6.5 acres

Built-Up Area: 2.89 acres

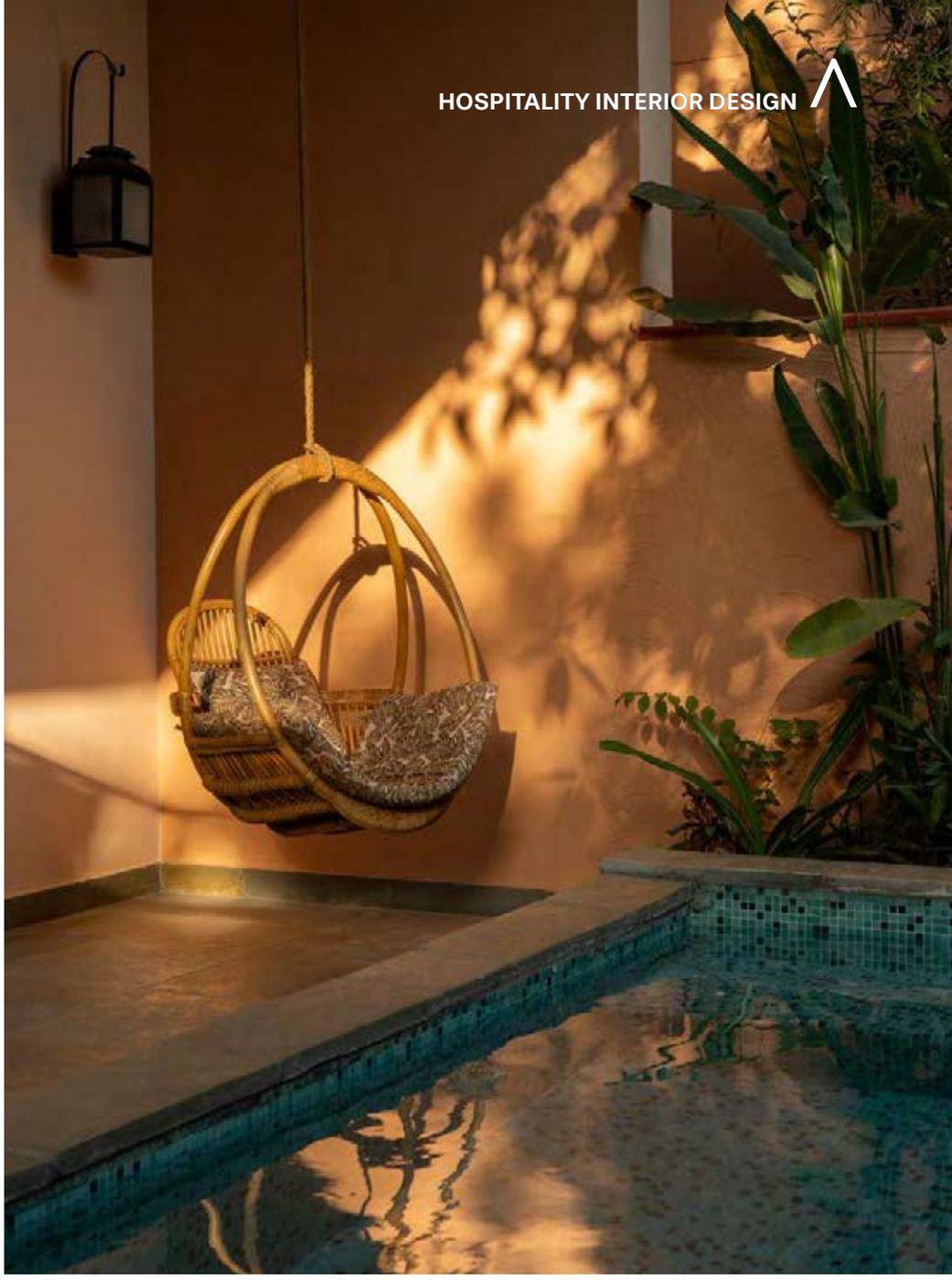
Start Date: April 2022

Completion Date: Jan 2024

Taj Sawai, a sixty-key wildlife retreat abutting the Ranthambore National Park, underwent redevelopment by Studio Lotus. The new design seamlessly combines the Taj Group's trademark hospitality with an immersive experience that celebrates the region's rich biodiversity, age-old crafts, and layers of history.

A thorough study of the site and surroundings revealed key shortcomings in the functional programme and the potential for a substantial overhaul to root the guest experience in the regional context.

For instance, excessive hardscaping had undermined the property's connection to its forested setting. The absence of optimal privacy and shade resulted in significantly underutilised external spaces. Despite the colonial-inspired proportions and classic black and white marble floors, the communal areas lacked visual cohesion and failed to evoke elements of surprise. The disorganised planning of critical public areas—



including the arrival, retail shop, bar, and pool—had diminished their utility, diluting the hospitality experience.

The overarching design approach was to reconnect the property with its natural setting. Strategic site-level and programmatic interventions optimised the resort's circulation patterns and functional efficiency within the existing footprint. By introducing dense native vegetation bordering the edges of a meandering boardwalk, the arrival experience was revived, establishing an intimate approach that belies the property's scale. The public buildings were conceptualised as a series of pavilions, each designed to offer views of terraces, water features, or surrounding landscapes.

Beyond the arrival pavilion, a former transitional space was converted into a landscaped visual court, beckoning guests to explore the reconfigured safari shop and a new library-cum-lounge. A third pavilion houses the bar and lounge. The space was opened by clearing a dead wall, and the previously underutilised lounge section was reconfigured into a semi-open area enclosed by a water feature.

The pool, originally a kund (stepwell), and its surroundings were brought to life by activating existing vestigial structures, creating pockets of activity. They connect to the pool on the lower level and the lawn on the upper level.

One of the pavilions houses a specialty restaurant with an open-air grill and an alfresco bar on the lower level. The upper level, accessed via the central lawn, hosts a whisky lounge.

One pavilion is a dedicated games lounge, serving as an extension to a lower-level multipurpose hall. Another provides spillover space for the gym and indoor games on the same level, and includes a banquet hall and meeting rooms.

The gentle shift in landscape from the upper to the lower levels is achieved through lush greenery in the form of foliage trees, flowering shrubs, and trailing creepers. This layer offers visual relief from the stone masonry walls and creates shaded poolside lounging spots for comfortable use throughout the year.

The all-day terrace overlooks the pool and boasts multiple curated functions, including outdoor dining, small social clusters, and exclusive private dining options. Low-height planters are utilised as discreet partitions, and

tented canopies featuring nature-inspired artwork shade the private dining areas, transforming the previously overlooked space into a vibrant hub for unwinding and socialising.

The gesture of scaling down is extended to the expansive central lawn, where smaller landscaped pockets are created for various functions such as kids' outdoor play, events, gatherings, and a mini island forest. The lawn's edges are lined with dense vegetation to provide a natural screen for the luxury villas that flank its perimeter. Every corner of this space is reimagined to encourage engagement and exploration.

The public blocks, distinguished by high inherited volumes and white-plastered interiors reminiscent of colonial-era hunting lodges, are layered with natural materials, tactile finishes, and hand-crafted elements that celebrate the regional context. Wooden millwork and custom-designed furniture, in diverse combinations of wenge, walnut, and oak, and soft furnishings in earthy beige-brown tones, nod to the surrounding forest, infusing the spaces with warmth and texture.

The bar is designed to evoke the charm of a secluded cabin in the woods. Dark wenge flooring and walnut furniture, complemented by warm, earth-toned furnishings, welcome guests to unwind and relax in a space that feels at once intimate and luxurious.

The bar backdrop features intricately carved wooden panels, while the ceiling in the all-day dining area is a canvas inspired by Rajasthani miniature paintings. The use of native flora and fauna extends as a leitmotif throughout the property in various tactile and experiential forms.

The last custodians of Sawai Madhopur's rare black pottery tradition—a family of local artisans—were commissioned to craft three thousand clay tiles to create a backdrop for the poolside grill. Similarly, their artistry shines through in other handmade pieces, celebrated as accents throughout the property.

The existing villas, despite being generously sized, were characterised by excessive hardscaping and a lack of privacy. Thus, primary design interventions focused on creating airy habitable areas, and enhancing privacy and shade. The nondescript pathway leading to the villas was reimagined as a nature trail, while hidden corners are converted into lush private courtyards and back gardens. A wooden portal, intentionally installed near the entrance to each villa, establishes a welcoming sense of arrival. The original interior layouts were reconfigured to maximise connection with the surroundings and dissolve the distinction between the built and the landscape.

Existing courtyards and gardens were enhanced to create private cocoons where guests can socialise or relax amidst nature. Strategic landscaping interventions in the verandahs and gardens not only amplify the sense of space, but also maintain the distinction between private functions and public areas. This ensures fluid movement between the spaces while preserving each area's distinct sense of privacy.

The interior design scheme attempts to capture the spirit of Ranthambore's characteristic deciduous landscape. Inherited river-washed Kota flooring is retained and paired with timber furniture, bamboo mat false ceiling, soft furnishings, and warm colours to create an intimate, home-like atmosphere for guests.

Regional craftsmanship is also celebrated throughout the space. Bone inlay detailing adorns the minibar, while the headboard, wardrobe shutters, and panels are CNC-carved and hand-finished. Some carvings depict an abstraction of tiger stripes, and the furnishings showcase block prints and weaves inspired by the textures of cross-sectional logs.

Taj Sawai's revitalisation aims to establish an authentic, contextually appropriate identity for the project. By preserving certain original features and sensitively developing new add-ons, linkages, and experiences, Studio Lotus managed to merge Ranthambore's multifaceted experiences with the signature luxury of the Taj brand.

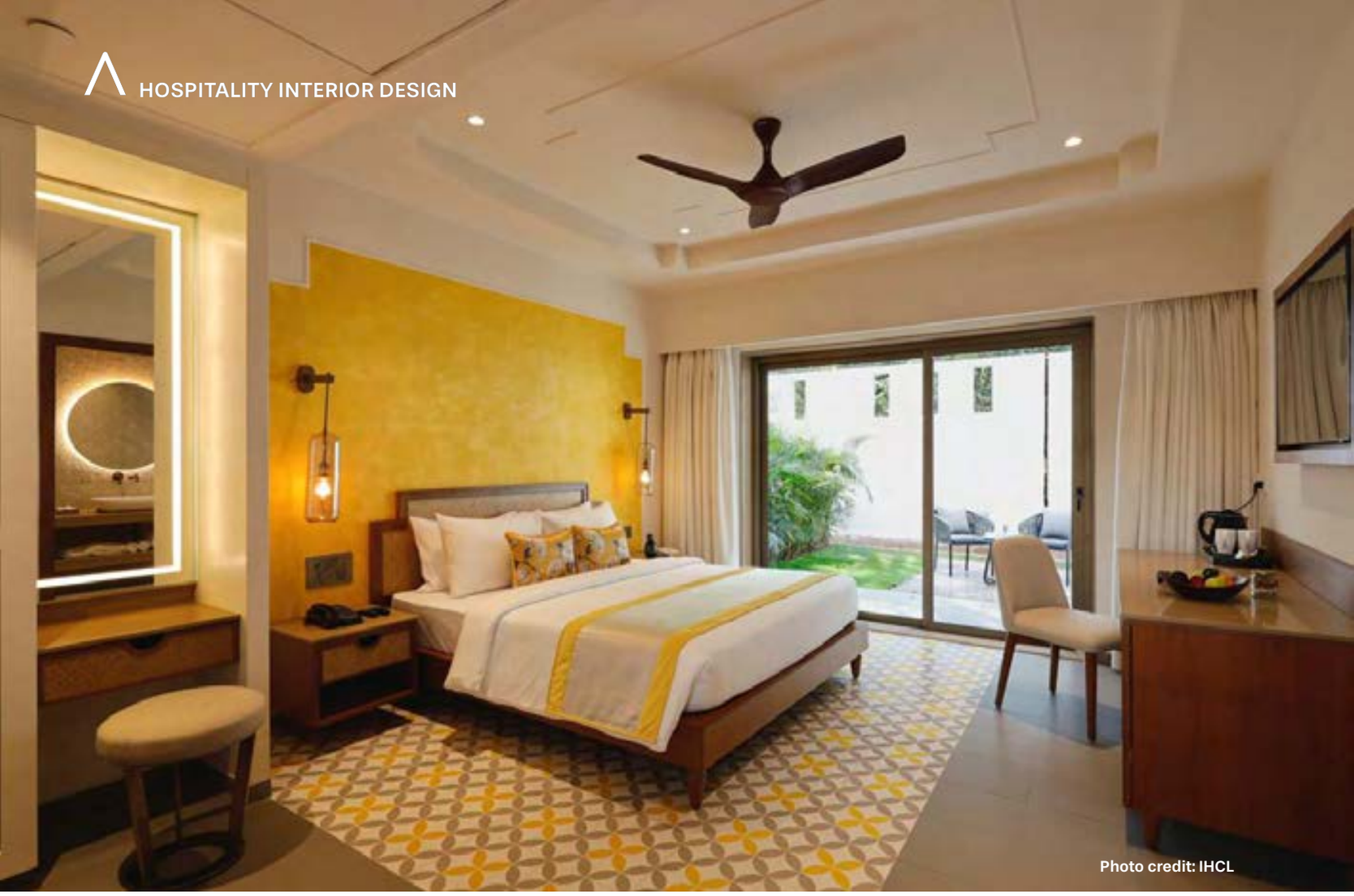


Photo credit: IHCL

The Yellow House

Project Name: The Yellow House

Typology: Hospitality

Location: Goa

Principal Designer: Sonali Rastogi

Design Team: Nishtha Dewan, Dhamini Bansal, Stuti Jasoria

Site Area: 5000 sqm

Built-Up Area: 2655 sqm.

Start Date: 2016

Completion Date: 29 March 2023

Photographers: Avesh Gaur and IHCL

Goa's historical ties to Portuguese architecture have left an indelible mark on its landscape. Characterised by vibrant colours, intricate floral patterns, decorative mouldings, and geometric tiles, this architectural style stands as a testament to the region's rich heritage. Beyond remnants of colonial influence, these

Photo credit: IHCL

structures have come to reflect a distinct Goan identity.

At the heart of Goa lies the concept of susegad, which transcends mere lifestyle to become a philosophy permeating every aspect of life, including architecture. Derived from the Portuguese word sossegado, meaning tranquil, susegad embodies a relaxed, unhurried approach to life that cherishes leisure, comfort, and a deep connection with nature. This ethos is vividly reflected in traditional Goan homes, where architectural elements are thoughtfully designed to foster serenity and calm.

The brief was to convert an old Portuguese bungalow in North Goa into a resort while preserving its original charm. The Yellow House is the result of this remodelling task, reviving a traditional villa into a contemporary hospitality destination.


Photo credit: IHCL

Design conceptualisation

The design encourages social interaction while preserving cultural heritage. Built interventions include a spa to the east of the existing property and a contemporary wing with suites to the west, featuring private gardens and courts.

A meandering driveway leads visitors through the spa and ends at the villa's entrance porch. The brownfield intervention reimagines the villa, accommodating a reception area, restaurant, bar, bakery, and additional spaces. The courtyard has been developed into an extended waiting lounge with communal seating around a central tree.

The bakery and the all-day dining section of the restaurant extend into alfresco dining areas, each tailored to the space's intimacy. The larger dining area seamlessly transitions to the pool, deck, and open landscape, ensuring a gradual flow from indoors to outdoors. Lush greenery envelops the suites, which are equipped with balconies on upper floors, offering views of the verdant surroundings. Deluxe rooms along the southern edge boast outdoor spaces with jacuzzis, a comfortable setting with flexibility in seating arrangements, and a children's play area. The flow of the design leads guests throughout its spaces, allowing contemplative exploration of the premises.


Photo credit: IHCL

A key planning strategy focused on reducing excavation and integrating structures with the undulating terrain of the site. As part of this approach, many trees were conserved, with one tree in particular standing out: an ancient tree as old as the owners' house itself. It has come to symbolise endurance and bridging the past with the present.

Sustainability is further emphasised through the use of local materials, the restoration of historical elements, and the integration of Goan cultural motifs, ensuring the villa remains a vibrant testament to the region's rich history.

Adaptive reuse

Efforts to minimise structural changes are evident in the refurbishing of three spacious bedrooms within the original structure, creating airy and luxurious suites. The guestroom block is positioned laterally to maximise glare-free northern light, enhancing

Photo credit: Avesh Gaur

comfort and energy efficiency. The entrance's unconventional design, achieved through staggered walls, adds an element of intrigue. A central water feature breaks the monotony of the circulation spine, visually connecting all floors.

Preserving the villa's original charm, the trussed roof over the bar is reinforced and highlighted with a lush green hue. Painstakingly restored ornamental mouldings and terracotta roof tiles, along with refurbished arched windows and doors, maintain the historical connection. Handcrafted terrazzo tiles, featuring reimagined geometric motifs, offer a unique aesthetic.

A cultural narrative

Local materials played a pivotal role in grounding the project within its rich cultural context while emphasising the unique nature of each space. Rattan screens form the wooden cladding in the reception and are also used as a frieze detail in the all-day dining area. Bespoke furniture, crafted with local artisans, employs an earthy colour palette, infusing a tropical charm into the space. The result is a visually cohesive experience, with each area boasting its unique charms.

The public areas come alive with vibrant colours, harmonising with the spirited visual palette and echoing the romance of a Portuguese-inspired villa. Private rooms feature cheerful yellows, calming blues, and lush greens, creating a sanctuary that feels both exotic and intimate. Curated artworks evoke enchanting Goan architectural scenes.

The all-day dining area features mirrored walls that add depth and a touch of mystery, while a glazed shorter wall offers captivating views of the lush landscape. The bar's wall is adorned with exquisite green Udaipur stone. Custom lamps with a lustrous brass finish, crafted by local artisans, cast a warm, golden glow, enhancing the ambiance. The restroom vanity, with its sturdy base and antique bronze-finished mirror sourced from an heirloom market, adds a touch of timeless charm.

In a poetic departure from conventional design, jaali patterns were added to the corridors in the guestroom block, creating a dramatic interplay of light and shadow. Handmade printed terrazzo tiles, contrasting with the heritage rooms' beige Italian marble, lend a touch of artisanal magic to the guest room flooring. This careful selection of local materials and traditional design elements ensures that The Yellow House not only preserves but also celebrates the spirit of Goa.

Restoration efforts

The Yellow House started as a boutique hotel project and ultimately became affiliated with the Taj Group after its completion. The Morphogenesis approach prioritises sustainability while paying homage to the property's original architecture, celebrating it in a new avatar. The design interventions culminate in a serene retreat nestled in the lap of nature.

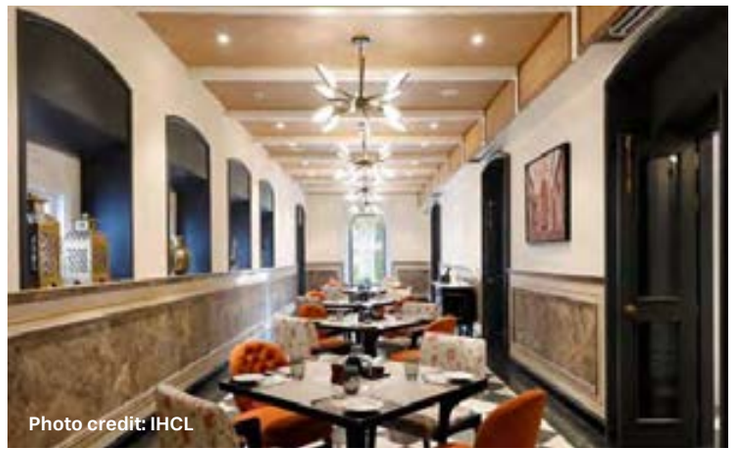


Photo credit: IHCL


Photo credit: IHCL


Photo credit: IHCL


Photo credit: Avesh Gaur

Valley Homestay in Linggen Village

Project name: Valley Homestay in Linggen Village

Design firm: y.ad studio

Design team: Yan Yang, Zhao Siyuan, Yan Yu

Building area: 326.58 sqm

Design phase: December 2021 – May 2022

Construction phase: June 2022 – January 2024

Photography: SCHRAN

In the mountainous northwest of Aojiang Town, Zhejiang Province, lies Linggen Village—a quintessential rural mountain settlement.

The project sits deep in a valley within the village. After winding along a meandering mountain road, with scattered village houses occasionally coming into view, a turn reveals an unexpectedly open view.

Amidst this serene and secluded valley is a seemingly solitary building. Integrated

with the mountain, it ascends step by step with the slope, forming a natural, staggered rhythm that echoes the terrain.

Panoramic views stretch across the farmland and nearby reservoir from the top-level terrace and guestrooms. Behind the building, a grove of ginkgo trees cascades beneath the mountain ridges, its golden glow in autumn creating a warm, serene backdrop.

The original retaining stone walls and patterned brickwork were preserved from the existing structure, casting a delicate interplay of light and shadow. Their raw, tactile textures spark a cascade of visual and creative inspiration.

Originally, the building's vertical circulation was fragmented and incoherent. Design team y.ad studio reconfigured the spatial relationship by introducing a sculptural staircase on the east side, connecting all three floors in a continuous flow. This intervention recognises functional logic while orchestrating a fluid spatial journey where views shift constantly. Interior and exterior interweave, transitional spaces unfold in sequence, and the interplay of footsteps and breezes compose the rhythm of the space.

The entrance features a coffee bar and reception area, creating an open and welcoming gesture to visitors. A book lounge and dining area on the south side draws the landscape into the interior. The kitchen, located on the east side, connects seamlessly with the back-of-house area, streamlining functional circulation. Guestrooms are layered across levels, featuring loft-style family suites

on the third floor. Outdoor spaces, such as the swimming pool and children's sandpit, foster interaction, while the reimagined terrace invites moments of stillness, scenic appreciation, and quiet conversations.

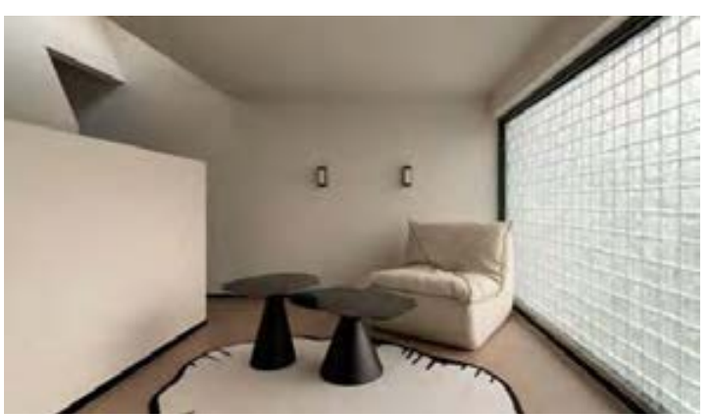
The outdoor corridors, constructed with lightweight structures, offer more than just shelter from wind and rain—they act as sensory and visual transitions, connecting physical spaces and the emotional flow of guests moving throughout the site.

The original single-slope roof felt visually unbalanced, and the early floor plan rendered the guestrooms somewhat monotonous. To rectify this, y.ad studio removed and raised the third-floor roof to create a double-height loft suite. The North-facing floor-to-ceiling windows offer uninterrupted views of the ginkgo grove, while a children's loft evokes the charm of a treehouse in the woods, bringing balance to the structural form while enriching the guest experience. A once dim retaining wall zone on the ground floor was transformed by cutting through the second-floor slab, allowing sunlight to pour in and reveal the raw tension of the exposed stone texture.

The original perforated-brick walls were preserved, inviting sunlight to filter through and cast unique patterns. On the third floor, the folded wall design delicately interplays warm and cool light within a single space. Along the corridor, grille canopies and glass-brick windows guide natural light, etching the passage of time into the architecture.

This project underwent a shift—from unplanned renovation to intentional transformation. Initially, the construction process began without any plan in place. Fortunately, y.ad studio was allowed time to reawaken this forgotten gem nestled in the quiet valley.

Standing before the building—mountain at its back, water at its feet, ginkgo trees and distant peaks in view—guests are reminded that architecture is not merely the reorganisation of space, but a language of dialogue between people and nature.



Ye Xiao Xiao

Project Name: Ye Xiao Xiao

Project Location: Mengzi, Yunnan, China

Project Area: 240 sqm

Design Firm: Aurora Design

Chief Designer: Yang Xuewan

Lighting design: Uniimport

Cloth Vine Device: Knight art lab

Design Date: April 2023

Completion Date: October 2023

Photography: Na Xin from INSPACE

Video: WM STUDIO

The Baipu, an ancient extinct people from Yunnan province of Southwestern China, were the earliest group to start tea-drinking and engage in tea trade. Tea farming and culture thrived in Yunnan Province thousands of years ago; therefore, Yunnan Province was considered the birthplace of tea culture. The stories of Tea Horse Road and Waste Water Bowl (Jian Shui) have been passed down through the years amidst the hawking and the sounds of rolling wheels, instilling new vigour and vitality to the spirit of Tea Culture.

As one of the representatives of the "new tea brands", AURORA DESIGN chose an emotional approach to depict the space by projecting different types of "emotions" in a tangible way. These emotions converge into the taste of tea, transforming into fragrant experiences.

Capturing the emotions from Tea Horse Road in the culture of South Yunnan, the designer created a space that enables customers to immerse themselves in a sense of peace, sitting beside the floor-to-ceiling windows and leisurely strolling along the winding paths within the space. Like a traveller through time, they can glimpse fragments of history. The space is divided by circles of varying sizes, creating a fluid and interwoven path that guides people through different emotional experiences.

The main material used for the entrance bar counter is infused with the emotion from Tea Horse Road. The experience was deepened within the space by using a primitive "earth tone", making it a more textured space with a sense of nature. Serenity and simplicity serve as the emotional keynotes of the space, where the emotion changes with the curving path and different emotional expressions unfold within the shared memory.

The rustling of the scattered leaves echoes like the whispers of history. When customers step into the space wrapped with white curtains, a seed of "emotion" is planted. It sprouts and grows up with the aroma of tea. The interplay between curtains and wood alcoves, softness and hardness, mirrors the tension between reality and illusion, striking a harmonious balance within the entire space.

A raised platform captures attention in the centre of the room, surrounded by curved walls that create white spaces. Warm fabric curtains cascade down like a waterfall, creating a flowing effect. This creates a richer experiential journey where life and emotions intersect, offering a more diverse scene experience.

Ascending the staircase, guests enter a curved interior, arriving at a spacious tea-drinking area. The entire space presents an embracing posture, where customers can deeply feel a sense of familiarity and warmth as they

immerse themselves within it. Simple yet elegant indoor plants and well-placed decorative arrangements allow for a holistic experience. The fusion of clouds, scenery, mountains, water, and the human emotional experience reaches its pinnacle in this setting.

The whole space, softly enveloped by curtains, makes the whole space more comfortable. "Fabric" touches the soul with its soft texture and form. Here, visitors can totally free themselves from the outside world, experiencing love and serenity in the gentle space.

Decorative arrangements also follow the organic forms that have been emotionally deconstructed by the designer, achieved through a variety of different plant types, such as bonsai and a single cluster of plants. The technique of active white space design is employed to enhance the tranquil atmosphere. Organic forms, such as the solid wood furniture and flowing patterns on the stone, are extracted from the natural landscapes, completing the emotional purpose in the design.

Warm tones dominate the space, with colours ranging from pure white, beige, and dark brown. The shifting colours impact the journey, guiding guests from the state of tranquillity to deep contemplation. The gentle scent of tea intertwines with the subtle colour changes, gradually occupying guests' hearts, allowing them to experience a wide range of emotions.

AURORA DESIGN adopted organic forms to shape the layout and build "emotional islands" in the context of modern society. The design puts focus on the connection between nature and humanity, and the interplay between emotion and inner thoughts. The physical surroundings and inner emotions coexist in perfect harmony through visual cues, emotional resonance, and imaginative exploration.

In this warm space, the design team wishes the visitors could focus on their inner heart and emotions instead of physical feelings, reconstructing the worldview when confronted with the complexities of modern life.

Iconic Singapore Projects from DP Architects

Founded in 1967, DP Architects (DPA) is a multidisciplinary design practice that has contributed greatly to Singapore's ever-changing built environment. With their commitment to design excellence and sustainability, DPA has championed long-term socio-economic and environmental values throughout their various local projects.

Southeast Asia Building is proud to present just a snippet of DPA's portfolio in this issue. The following projects, NUS University Town Master Plan, Esplanade – Theatres on the Bay, Our Tampines Hub, Singapore Sports Hub, and Golden Mile Complex, exemplify Singapore's heritage and culture, reflecting the country's development since independence.

NUS University Town Master Plan

Year of Completion: 2007
Gross Floor Area: 229,200 sqm

Designed in collaboration with Skidmore, Owings and Merrill LLP, USA

There has been growing diversity consciousness in institutions of higher learning, where education is not only made equitable to people of all ages, races, and genders, but also facilitates cross-cultural bonding. Greater importance has, therefore, been placed on the availability of connecting and negative spaces that allow accessibility to resources and a thoroughfare that fosters cultural and multi-disciplinary exchanges among its occupants.

Rory Daniel, courtesy of DP Architects

Conceived as an international campus and town centre embedded along a green corridor, the NUS (National University of Singapore) University Town (UTown) Master Plan delivers a uniquely Singaporean interpretation of the residential college system for a holistic educational experience.

Redeveloping a golf course into a campus and town centre, the project's design celebrates the pedestrian experience by redirecting vehicular roads to the site perimeter and transforming the land into a network of walkways that respond to the existing site context. Applying an integrated and multidisciplinary approach to the residential college system, the master plan expansion derived an organisational pattern of university living that increases academic activity and socio-cultural interchanges within a community setting of students and faculty.

Marc Tey, courtesy of DP Architects

To establish an intimate campus environment, the master plan situates high-rise residential towers along an outer 'ring road' with low-rise buildings at the site's interior, along the central pedestrian green. Building location and massing adapt to the landscape: the internal green corridor accentuates the site's varied topography with buildings positioned sequentially, and a town centre is located atop the highest contour. Academic, recreational, and social anchors are strung along the length of the green, drawing users to specific destinations and filtering noises from the surrounding highway. Eight residential colleges—each designed with a degree of architectural autonomy and identity—are located on the

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northern end, offset from the high-frequency town plan while bringing together students and faculty in support of a holistic educational experience.

Crucial to the increase in social interactions among the increasingly diverse student population are the variety of social spaces (e.g. spaces for shared meals and group collaborative activities) injected and dispersed throughout, and the replacement of the traditional dormitory with a group-living plan comprising six-bedroom apartment suites centred on a common living room and ensuite bathroom. Adding to the dynamism and facilitating the development of genuine and enduring relationships, each college is supplemented by seminar rooms, theme rooms, a multi-purpose hall, and a dining hall on the lower levels.

To ensure that the overall environment caters to user comfort and well-being, environmental design strategies were also employed. This includes orientating the buildings on a north-south axis to minimise solar heat gain and maximise natural ventilation, which reduces reliance on air-conditioning without compromising indoor comfort. Detailed biodiversity analysis was also conducted, allowing the master plan to preserve the topography, hydrology, and vegetation within the campus site. The result is a low-carbon campus that respects its surrounding ecological biodiversity.

Designed in collaboration with American architecture firm Skidmore, Owings and Merrill LLP, NUS UTown embraces the future of pedagogy and research in higher learning, intertwined with a strong progressive orientation towards sustainability and the nurturing of a diverse student community.

Read more in Design in Print Vol. 12.2[1].

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[1] *https://issuu.com/dparchitects/docs/issuu_designinprint_12.2-20210811.*

Esplanade – Theatres on the Bay

Year of Completion: 2002
Gross Floor Area: 111,000 sqm

Designed in collaboration with Michael Wilford & Partners, UK

Fondly referred to as "The Durian", Esplanade – Theatres on the Bay was a major civic project that DPA undertook in partnership with Michael Wilford & Partners (London) till 1995 and saw it to completion thereafter. The key to its design success lies in delivering a localised design solution for a global platform.

Contemporary but Asian without resorting to ethnic archetypes, this enduring landmark is everything its original design brief envisioned it to be: iconic, all-representing, and timeless. This is best exemplified by the architecture's most prominent feature—its façade.

The two rounded envelopes over the primary performance venues provide the dominating legible form. These lightweight, curved space-frames are fitted with triangular glass and a system of champagne-coloured sunshades that offer an optimised trade-off between solar shading and outward panoramic views. Together with the base structural geometry of a mesh folding over the dome, the final design provides filtered natural light and a dramatic transformation of shadow and texture throughout the day; at night, the form glows back onto the city as lanterns by the bay.

Today, the Esplanade embodies the civic heart of downtown, an element that projects the creative energy of the performing arts in Singapore, exploring the continuity of public and performance space. In addition to this, it serves as a space that renders local traditions visible, becoming a nexus for the regional and the international.

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Rory Daniel, courtesy of DP Architects

Our Tampines Hub

Year of Completion: 2018
Gross Floor Area: 120,400 sqm

A people-centric and inclusive community hub, Our Tampines Hub (OTH) is a pioneering model of an integrated community, sports, and lifestyle hub, purposefully designed through an intense participatory and engagement process with 13 public-sector stakeholders and residents of all ages and interest groups in Tampines.

This refreshing concept of integration brings about new dynamics in notions of shared economies, optimisation, and productivity, as well as immense opportunities for inclusivity, richness, and new synergies in the design of communal and social settings for Tampines residents.

OTH has been purposefully designed to have multiple community spaces for residents to gather and bond. Borderless and porous, especially on the ground floor, its spaces are designed as a continuation of the surrounding streets, void decks, and terraces—inviting residents in from various parts of the site. Open and programmable, the spaces encourage and enable spontaneous activities such as tai-chi, zumba, aerobics, study group discussions, and even card games, thus enlivening the hub.

Housing correlated agencies and their facilities under one roof, OTH testbeds a more collaborative whole-of-government approach where it serves as a one-stop destination that provides for a wide range of users, interests, and age groups. This relates to its core aspiration to be an inclusive meeting and bonding place for the entire Tampines community.

OTH's key design exploration involved proposing an alternative spatial organisation of clustering stakeholders and their facilities by programmatic synergies, expressed as interlocking volumes of differentiated materiality, woven together by flowing streetscapes and green terraces.

iRideToDrone, courtesy of DP Architects

Read more in Design in Vol. 8.2 (Pg 8 to 15)[2] : Interview with key members of the architecture team on the partnerships with the community and stakeholders that were critical to the building of this community hub.

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[2] *https://issuu.com/dparchitects/docs/design_in_print_8.2_-_people___part*

Singapore Sports Hub

Year of Completion: 2014
Gross Floor Area: 274,300 sqm

Designed in collaboration with Arup Associates

Singapore Sports Hub addresses the changing definition and role of sports in Singapore society, exemplifying how a unique centralised mixed-use ecosystem can be successfully developed, integrating sports, leisure, entertainment, and lifestyle destinations. It is a unique take on sports legacy, with a huge emphasis on the everyday and creating a sense of place.

Deeply informed by the specifics of Singapore's context, climate, and culture, the Singapore Sports Hub is a key project in Singapore's urban redevelopment and sports facilities master plan. Located on a 35ha waterfront site, the Singapore Sports Hub occupies a strategic position adjacent to the heart of Singapore, an unusual location for a sports infrastructure. To justify the use of the prized land, one of the key principles was to develop a dynamic sports-driven hub ecosystem that will continue to be purposeful, even without major sporting events.

Celebrating openness and public engagement, the hub aims to fuse the experience of a world-class sports centre with everyday participation. It seeks to generate active public life in this ecosystem, stitching together various sporting facilities, public spaces, and the adjacent neighbourhood. Not just a key part of the city, the Singapore Sports Hub is an integral part of the surrounding community and residential fabric. It also links to local pedestrian and cycle networks, and to Singapore's island-wide park connectors, making it a destination for active Singaporeans, a focal point that links East Coast Park, MacRitchie Reservoir, and the Marina Bay loop. The sports hub also created a series of facilities and public spaces, providing amenities for everyday public

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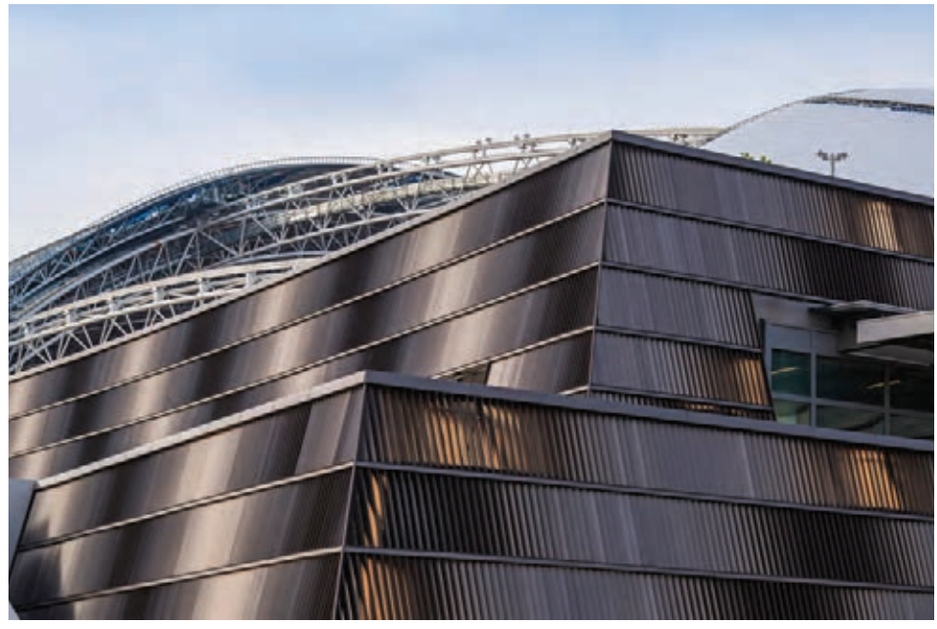
participation and activating the space throughout the day and night.

Working with the challenges of a compact site, the design team had to conceive the best way to fit the diverse programmes—comparable to the range in an Olympic Park—into the tight site, but also to provide recreational opportunities for a vibrant environment on non-event days. Envisioning the role of a national sports hub to be more than just a single venue, the design team has created an iconic destination that is more than just a static set-piece, but one that actively engages with the country.

The overall master plan for Sports Hub comprises the 50,000-seater National Stadium as the nucleus, complemented by two other competitive sports venues—the OCBC Aquatic Centre and the OCBC Arena, a multi-purpose sports hall. Respecting the Japanese architect Kenzo Tange's iconic Indoor Stadium, the National Stadium's dome was designed to complement the skyline while standing out in its own right. Its retractable roof not only frames sweeping city views but also opens the stadium to the waterfront, reconnecting it with the city. Positioned westward, it provides spectacular vistas for events like the National Day Parade, while the open form lets the classic "Kallang Roar" resonate across the arena. As the world's largest free-spanning dome, National Stadium is also the first custom-designed venue for athletics, football, rugby, and cricket, capable of converting between modes within two days.



Rory Daniel, courtesy of DP Architects

Read more in Design in Print Vol. 5.3 (Pg 8 to 23).[3]

[3] *https://issuu.com/dparchitects/docs/vol5no3_20140918*

Golden Mile Complex

Year of Completion: 1973
Gross Floor Area: 68,000 sqm

Golden Mile Complex (GMC) is a residential and commercial development in Singapore's central area completed by Design Partnership (succeeded by DP Architects) in 1973. It was gazetted by the Urban Redevelopment Authority of Singapore in October 2021 as a conserved building, making it the "first modern, large-scale, strata-tilted development to be conserved in Singapore", as announced by Minister for National Development Desmond Lee.

GMC was built during an era of widespread experimentation in architecture and urbanism, aimed at solving the demands of high-density living in the years of post-war rebuilding. Influenced by the Metabolist and 'linear city' movements, the development was designed as a self-contained 16-storey "vertical city" that included all the amenities needed for urban life, from a commercial centre to shared outdoor recreational spaces.

The complex was among the first public-private, mixed-use buildings

DP Architects

Rory Daniel, courtesy of DP Architects

of its scale in Singapore, and proved fundamental in setting standards for the nation's modern architectural movement. Sited on 1.3 hectares of land and 89 metres tall, it offered residential, commercial, entertainment, and office spaces within a single structure. The lower floors comprised three storeys of commercial space that included kiosks, coffee bars, a bank, department store, supermarket, 360 shopping units, and office studios—all located within a central atrium.

Over the last 50 years, Golden Mile Complex has remained a successful gathering space for people of different nationalities, proving to be a flexible building, adaptive to a changing user base and needs. Its ground atrium served as a dynamic space that functioned day and night, while additions and alterations to individual residential units transformed the structure's exterior, permitting the type of organic growth that was central to its design as an open platform for city living.

Following its en bloc sale to a consortium comprising Far East Organisation, Perennial Holdings, and Sino Land in May 2022, DP Architects was appointed the architect for the rejuvenation of GMC. Renamed The Golden Mile, the next chapter of this iconic building draws on its original version as a mega-city room—a high-density, human-centric structure. The conserved complex will be complemented by a new 45-storey residential tower, Aurea. The total site area will be 13,462 sqm, and the maximum gross floor area will be 75,389sqm with a plot ratio of 5.60.

DP Architects

Forever Objects Designed by Six Australian Architects: Furniture in American Red Oak, Cherry, and Maple

KEEP brought together six acclaimed Australian architects to design new furniture pieces that embody permanence. Each piece was made in Australia from sustainable American red oak, cherry, or maple, underlining the importance of good material in creating fine furniture.

Curated by David Clark, the exhibition aimed to counter notions of careless consumption, material disposability, overly complicated supply chains, and the prevalence of waste in contemporary culture.

"Historically, and in other places, it is more commonplace for architects to design furniture, for their own projects or for companies by commission. In the nascent Australian furniture industry, it is less so. I thought it would be interesting to see what prominent and successful architects might design outside their usual focus, and perhaps, in the process and conversation, what they might bring to the texture and layers of the Australian design ecosystem," commented Clark.

The resulting pieces are diverse in form and function, yet united by a shared commitment to longevity, craftsmanship, and material honesty.

Kennedy Nolan

'David' Console — American cherry

When approaching the brief for this project, Rachel and Patrick discussed what they sometimes like to do in their architecture. As a way of making an object or a building that people have a connection to and a human interaction with, they will anthropomorphise or zoomorphise the thing, making the form or memory of a creature.

This console has distinctly animal qualities—with a head, tail, and flank—all rendered in different finishes to the timber: scraped, gouged, laminated, or coated. The interior is stained in reds and pinks, like insides. The piece will ultimately serve its purpose in the studio's conference room, holding glassware and ceramics.

Virginia Kerridge

'Pax' Table — American cherry

Virginia Kerridge's table is an interpretation of a traditional woodworking technique that uses butterfly joints to connect two pieces of split timber. Brass joints span across a recessed groove that follows the natural line of the grain in a central section of timber. Cuts at either end are 'held' by butterflies on the vertical edge and finished in timber. Butterfly (or bow tie) joints date back to ancient times. In contemporary furniture making, they were a feature of the Japanese American master, George Nakashima.

This table is designed to be removed from its slotted base, which also comes apart to be flat-packed and more easily transported. The feet of the angular legs are stained a deep red, with brass strips at the very base occasionally capturing glimmers of light. "Pax" is the name of Virginia's dog, and refers to the 'X' table base and a place where people come together.

Lineburg Wang

'Pedal' Lamp — American cherry

Lynn and Michael were interested in making something that initially looked like a block of timber, but upon closer inspection, revealed itself in more detail. They were interested in a movable piece—in balance, counterbalance, and operability.

In the end, the idea came from the daily use of the foot pedal mechanism of a pedestal bin. Pressing the pedal opens a 'block' of timber at the top and turns on a hidden light source. The mechanisms of movement and opening are all hidden and embedded internally. The hinges are beautifully constructed out of timber. A subtle curve to the face of the light is only noticeable up close and revealed in shadows when the lid is open. The interior face of the lid has a high gloss finish to be as reflective as possible, enhancing the glow of light from the top of the timber monolith.

Richards Stanisich (with Meg Ashforth)

'Lamella' Chair — American maple

A Lamella is a small, thin, plate-like structure usually referenced in biology and armour. Kirsten and Jonathan's inspiration for this chair cited Japanese medieval armour, and was conceived as a covering over an existing found or discarded chair. In this case, a nondescript 1980s metal-framed chair with curvilinear arms.

Hundreds of timber tiles were painstakingly hand-sewn together, taken apart, and reapplied in a time-consuming and complicated exploration of the best way to drape them. A chance encounter with Meg Ashforth, a prominent costume designer on films such as Mad Max: Fury Road, who also has an interest in Japanese historical armour, led to a collaboration—a further six weeks of hand sewing and making, and a piece of furniture that encompasses design, craft, and art.

Edition Office

'Twin' Bench — American red oak

The Edition Office studio designed some furniture for a renovation project of a house in rural Victoria by Melbourne modernist architect Paul Couch. The house was oriented around four water tanks, and the pieces were to sit within these repurposed spaces.

This bench is an extension of that series, designed as a seat for two that allows plenty of space for each. Aaron and Kim also admired a set of late 20th-century photographs by German duo Bernd and Hilla Becher, who were highly influential photographers of industrial architecture. Interested in the structural language of timber water tanks, the pair moved away from creating form out of plastic materials and investigated the process of assembly. In particular, the aesthetic expression that comes from holding a curve against a straight piece of structure, and how joints might 'slip past each other'. The back of this bench expresses that most clearly.

Neil Durbach

'Small Slide' Table – American red oak

The side table is a developmental prototype of a side table that Neil has worked on before. It is a diminutive and curious interpretation of a more conventional sliding table. The slide is just a few centimetres, enough to reveal a metallic finish in the separation and cast "shadows that seem to be like smiles". The plan shape is conceived as being a more geometric version of a cross-section of a tree.

For the vase, Neil referred to the classic Aalto Vase, which he collects obsessively. The 13-sided outline is a shape that was discovered by a group of mathematicians in 2022–2023. It is an 'aperiodic tiling', a shape that can be put together without ever repeating the overall pattern. The internal line of the vase is looser. This is a prototypical experiment in timber, a material that is not conducive to holding water. The still-developing interior is ultimately to be a highly reflective metallic.

At the heart of KEEP is the use of three American hardwoods:

- American red oak (Quercus rubra): Abundant and versatile, with strength and distinctive grain.
- American hard maple (Acer saccharum): Creamy white, exceptionally durable, and capable of a refined finish.
- American cherry (Prunus serotina): Warm-toned, easy to work with, and deepens in colour with age.

All three are sustainably grown in the vast hardwood forests of the United States, where growth outpaces harvest. Independent life-cycle assessment confirms that American hardwoods store more carbon than is released during their processing and transport from the hardwood forests in the USA to the shores of Australia.

"KEEP is a reminder that the things we choose to live with can carry meaning and memory. These works are made to endure, not just in use, but in the stories they can hold. We are thrilled to have been able to introduce the architects to three of the most beautiful species of American hardwood to realise their designs. These three species represent a significant percentage of the available hardwood growing stock, and it is important that the Australian design community is able to learn about them and experiment with them," said Rod Wiles, Regional Director, The American Hardwood Export Council.

Kueh Kueh at Katong

As part of Singapore Archifest 2025 island-wide activations and under SAA Architects' (SAA) *Our Common Good* initiative—the firm's ongoing commitment to Urbanistic, Humanistic, and Optimistic designs that bolster social resilience, community belonging, and overall well-being—*Kueh Kueh at Katong* opened on 30 Aug 2025 at Katong in Singapore.

Open to the public for two years, the project is a semi-permanent public installation that explores the intersection of food and architecture as vessels of cultural memory and community identity in one of Singapore's most vibrant and historically rich neighbourhoods. *Kueh Kueh at Katong* invites residents to reconnect with familiar traditions while offering visitors a gateway into the precinct's culture, transforming the open lawn of Hotel Indigo Singapore Katong by IHG into a welcoming gathering space that celebrates local heritage.

Highlighting the shared rituals of preparation, presentation, and sharing, *Kueh Kueh at Katong* reframes these often-overlooked acts as meaningful practices that foster a sense of belonging and community—preserving heritage through form and material.

Jean-Pierre Khim, Associate, SAA Architects, and Andrew Lee, Senior Director, SAA Architects, spoke to *Southeast Asia Building* about the

process of bringing the installation to life.

Jean-Pierre Khim, a senior designer at SAA Architects with ten years of industry experience, was the industry partner and lead designer for this collaboration, guiding the student team in translating their initial vision into a built reality and ensuring that the design intent was carried through from concept to technical development and construction.

As the Senior Director at SAA Architects and Adjunct Professor at the Singapore University of Technology and Design (SUTD), Andrew Lee developed the brief for the "In-Between Katong" urban design studio, which paved the way for the "Wild Katong / Kueh Kueh" detail design studio.

"The studio challenged students to reimagine Katong's precinct identity through small-scale urban interventions that celebrate its layered heritage," said Andrew Lee.

The installation consists of three pavilions modelled after Peranakan kuehs and are made of materials associated with local architecture, such as ventilation and glass blocks, chosen for both their climate suitability and evocative qualities. Much like how kuehs, made from local ingredients, invoke a sense of nostalgia, the use of familiar materials strengthens the emotional connection to a collective identity.

The Pulut Tekan Pavilion consists of concrete ventilation blocks with rich blue accents, referencing the blue pea flowers used in Pulut Tekan. Inspired by the playful and translucent layers of Kueh Lapis, coloured glass blocks make up the aptly named Kueh Lapis Pavilion. Finally, as a nod to earlier *Our Common Good* iterations, the Kueh Talam section incorporates upcycled perforated drainage cells, painted in the kueh's creamy white and pandan green.

The original concept and design of the pavilions were proposed by then-final year students Tan Jiayue, Poon Jun Zhe, and Yeo Hai Feng from the Singapore University of Technology and Design's (SUTD) Architecture

and Sustainable Design Pillar, as part of their Option Studio across two academic terms.

A collaboration between SAA, RSP Architects, SUTD, and URA, the studio initially explored speculative building-scale interventions along the Katong-Joo Chiat corridor before zooming into installation-scale insertions that focused on buildability in the second term. The first term was led by Andrew Lee and SAA's Architectural Executive Sean Lee; the second by RSP Architects' Associate Director Khoo Teik Rong, with SAA as a valued collaborator.

The various designs went through rigorous development from January to April 2024 and were presented to a jury of practitioners and academics. SAA then adapted the students' proposals into a semi-permanent installation for Singapore Archifest 2025.

When asked why this particular proposal was chosen, Jean-Pierre Khim commended the proposal's use of traditional confectionery as a metaphor for community and shared memories. "Its premise captured the studio's brief to create a 'strangely familiar' architecture and Katong's distinct cultural identity," said Jean-Pierre Khim.

"We were drawn to its simplicity, conceptual clarity, and emotional nuances. Building on those strengths, we helped refine and enrich the design by incorporating local materials, construction methods, and tactile accents that evoked the texture, colour, and layered essence of kuehs—deepening the sense of familiarity and nostalgia."

Since the installation is intended for two years, SAA had to rework the construction system from the original design to enhance durability and ease of maintenance. Jean-Pierre Khim explained how they worked closely with the authorities to meet conservation and regulatory compliance, given its placement in front of Hotel Indigo Singapore, a heritage building.

"The process was a careful balance of design integrity, technical feasibility, and cost efficiency to ensure the concept was faithfully realised," Jean-Pierre Khim noted.

With its location within Hotel

Group photo with Andrew Lee and Jean-Pierre Khim.

Indigo's grounds, the project presented logistical and operational challenges; site access, noise management, and installation timings had to be carefully coordinated to minimise disruption for hotel guests and visitors. Additionally, considering the project's ambitious timeline, sourcing the right materials required resourcefulness and ingenuity.

"A spirit of collaboration between the design, fabrication, and construction teams allowed the project to successfully navigate local availability, cost, and the desired design outcome," said Jean-Pierre Khim.

This effort was part of SAA's ongoing partnership with SUTD since June 2023, founded on a forward-thinking collaborative model rooted in shared values of innovation, design excellence, and nurturing future-ready talent. Andrew Lee explained SAA's commitment to bridging the gap between academic exploration and professional practice, providing students with a platform to test ideas within the material, social, and regulatory complexities of the built environment.

"*Kueh Kueh at Katong* exemplifies this ethos. It offers students the invaluable opportunity to see their designs move from conceptual drawings to realised form. Such initiatives are part of our commitment to building up Singapore's talent pipeline, cultivating the curiosity, empathy, and rigour needed to shape our future urban landscape," commented Andrew Lee.

"*Kueh Kueh at Katong* is both an homage and an exploration of social memory. It celebrates Katong's rich culture while inviting residents and visitors to reflect on how local food shapes a collective sense of identity and belonging.

"For the public, the installation encourages them to reconnect with familiar traditions and learn about Katong's many stories. For designers, it demonstrates how architecture can translate cultural references into tangible spatial experiences for civic engagement," concluded Andrew Lee.

Celebrating the 2025 Universal Design Excellence Award Projects

On 11 September 2025, the Building and Construction Authority (BCA) conferred five outstanding projects with the Universal Design Excellence Award (UDEA), recognising their efforts to incorporate user-friendly designs for a more integrated built environment. These projects went above and beyond, setting new benchmarks for what inclusive architecture should look like.

Southeast Asia Building had the opportunity to visit some of these projects and learn from designers and users about the different features and design considerations that earned these projects the recognition they deserve.

SIT Campus Court and Campus Heart

RSP Architects Planners & Engineers & WOHA Architects

SIT's new campuses, Campus Court and Campus Heart, are standouts in the educational design space, incorporating thoughtful design in every nook and cranny. These small yet considerate design choices come together to uplift the experiences of students and staff alike.

One such feature is the lactation rooms, fully equipped to support nursing mothers with hot water, a changing station, and a fridge for storage. There is ample space for working mothers while providing the necessary privacy to ensure respite.

In the Ho Bee Auditorium in Campus Court, wheelchair accessibility was a large factor that played into its design. From wheelchair-accessible spaces at different levels, to stage accessibility and water coolers of different heights, the auditorium was purposefully designed to assist wheelchair users at every stage. Additionally, the auditorium is equipped with a hearing enhancement system, covering a wide range that caters to everyone's needs.

Similarly, the multipurpose hall has wheelchair spaces on both spectator levels. Inside the toilets nearby are wide stalls, two ambulant urinals, and child-friendly wash basins. This space, meant for hosting a wide range of events, is pre-built with the necessary accommodations to elevate the user experience.

Connected to the garden terrace, the food court in Campus Court boasts a wide array of community-building and sustainable features. There are no fixed tables and chairs, allowing for greater flexibility in seating arrangements. This assists in both fostering the campus community and giving space for wheelchair users to sit wherever they desire. Furthermore, the food court utilises hybrid cooling and natural ventilation. The sliding doors can be opened to allow fresh air into the space, connecting people with nature and reducing their carbon footprint.

Moving from Campus Court to Campus Heart, the Forum provides students with a gathering space. Seamlessly connected to the Punggol Coast MRT station, the area has wide ramps and paths, seats with grab bars, and accessible drop-off points for incoming vehicles.

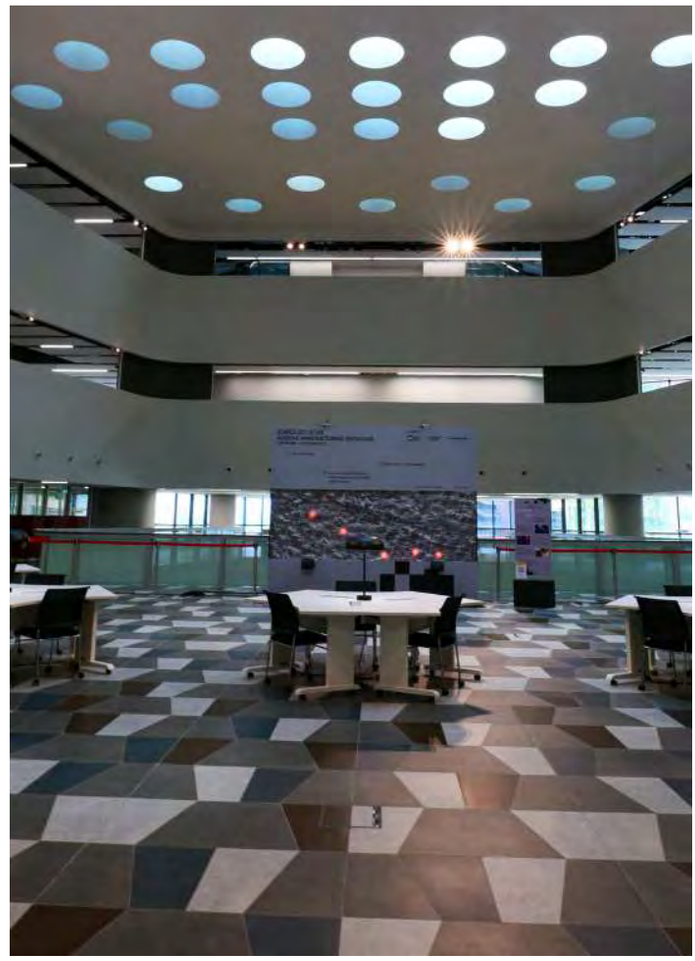
An unmissable aspect of the campuses is the Collaboration Loop: a red, two-kilometre bridge that links campus buildings and provides direct access to JTC's business park. Even here, accessibility is a stand-out point. The paths are wide and adorned with flip-up seats to provide rest areas while keeping the area clear.

Connected to the bridge is the Ngee Ann Kongsi Library. The ceiling, with its circular openings, allows natural light to pour in. Students can find loose furniture for flexible seating arrangements, accessible lifts integrated with lift lanterns and full-height mirrors, and nursing rooms—the whole package for students and staff alike.

The academic block in Campus Heart has wide corridors and a sky terrace decorated with greenery, acting as a perfect spot to rest between classes. It has an open view of the community park, serving as an intuitive means of wayfinding for those who aren't familiar with the campus.

In the lectorial rooms, once again, many features are present to give students the best learning experience possible. The rooms are equipped with a hearing enhancement system, plentiful space between tables for wheelchair users, and height-adjustable tables at the ends of each row.

When asked about the various accessibility features, Yeo Hwee Hua Alina, Director at WOHA Architects, told SEAB



that the vision was the most important part of the design process. People-centric design was a focal point during the master planning stage, and this vision was what drove the process to its successful conclusion. This is evident in the seamless execution and implementation of the universal design features; in their quiet subtlety, the features come together to support all in the community regardless of standing.

An often overlooked part of the design process is the terrain. SIT sits upon a hill with plenty of preexisting greenery. Yeo Hwee Hua Alina explained how these limitations were all turned into strengths in the campus architecture. The architects designed around the fauna, keeping plenty of the greenery intact and incorporating it into the scenic parts of SIT's pedestrian pathways. The elevation was hardly felt—a masterful aspect of the architectural design.

Working with RSP was a combined effort. Especially for the Collaboration Loop, WOHA Architects and RSP had to cross borders many times to create the connective bridges. This collaboration is a testament to the efforts put in by both firms to make SIT an inclusive and connected place where students can learn and thrive, regardless of background.

Punggol Coast MRT Station

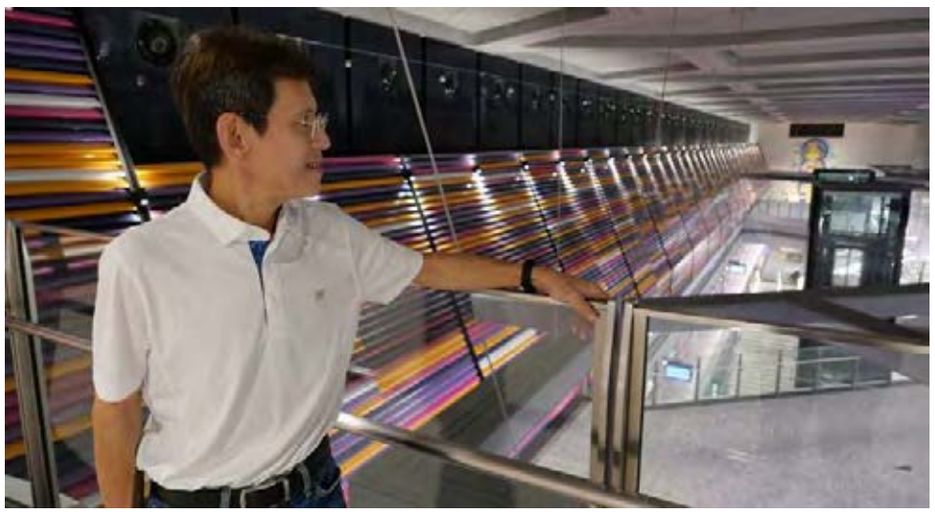
Land Transport Authority

Another notable awardee is the aforementioned Punggol Coast MRT Station. As the new terminus of the North East Line (NEL), Punggol Coast Station exemplifies how modern public transport infrastructure can seamlessly integrate accessibility with social needs.

Punggol Coast MRT Station has two exits on opposite sides, making it easy for commuters to find their way. Exit 2 leads to indoor and outdoor civic common spaces, perfect for hosting events and livening the station's atmosphere. The indoor civic common space, in particular, is connected to an accessible lift and toilet. Within the toilets, families have access to a dedicated family toilet, equipped with a diaper changing station, and dual-height toilet seats and basins. Ambulant disabled cubicles in the common toilets feature grab bars for those with mobility difficulties. On the other side, Exit 1 has direct access to Punggol Coast Mall and seamless, sheltered connections to the bus interchange and drop-off point.

The indoor civic common space overlooks the station's concourse, easing navigation for travellers. LTA has designed the station with an intuitive wayfinding system, incorporating clear sightlines, pictograms for signage, strategic lighting and colours for quick navigation, and generous circulation spaces to accommodate various travelling speeds.

The Passenger Service Centre is in a centralised location, with overhead lights leading commuters to it from both exits. Designed for inclusivity, the Passenger Service Centre features hearing enhancement systems and lowered counters, ensuring assistance for both hearing-impaired commuters and wheelchair users. The lift to the station is likewise centralised, with staircases leading directly to the platform. A standardised tactile system continues to guide commuters throughout the platform.



Towards Exit 2 is a beautiful artwork by local artist Zul Othman. "TRAJECTORIES" represents the past, present, and future of Punggol through his eyes, a fellow Punggol resident. Punggol Coast MRT Station is sleek, modern, and ready-made to support commuters throughout their journey.

SEAB spoke to Mike Tan, a senior commuter who frequents Punggol Coast MRT Station regularly with his family. According to Mike, Punggol Coast is an active hub thanks to its proximity to SIT, hawker centres, and various heritage trails and parks. Since its opening in 2024, Mike has visited almost every month to take part in a slew of activities, including visiting Coney Island.

"Punggol Coast MRT Station is romantic because of its ambiance," noted Mike Tan. He pointed out the intuitive nature of the station—the view from the indoor civic common,

where the discussion took place, had the whole concourse in sight. He praised the station's light design, from the overhanging lights that charted the path to the coloured directional lights on the escalators. The exit signs are numbered instead of the traditional alphabet system, and the pictorial signage was easy to decipher. "It's great for people with vision issues," he explained. The former was especially noteworthy for him, and he said he wished to see more numerical exits in other stations.

Adding to this point, Mike talked about the lifts in the station. "The buttons in the lift are large and light up when pressed. The space is big for easy movement in and out."

Mike's favourite aspect of Punggol Coast MRT Station is its senior-friendliness. "The elderly-friendly design helps me feel more comfortable coming to explore and spend my time here." He has encouraged his friends and relatives to visit as well. "There are so many wonderful areas to explore around here. Whether you want to explore the parks or the buildings, such as the integrated shopping mall, it's all very convenient."

In comparison to older stations, Punggol Coast MRT Station had all the facilities needed for a smooth journey. "The older MRT stations had minimal facilities, sufficient for transportation. But the newer MRT stations, like Punggol Coast MRT station, have so many wonderful safety features. They take care of all kinds of passengers—from the young, all the way to the elderly."

Punggol Coast MRT Station has proven to be a great step forward in public transportation design. Many details are intuitive, gently guiding and supporting commuters throughout, transforming the station into a destination of its own.

Geneo at 7 Science Park Drive

Surbana Jurong Consultants

The last awardee highlight is Geneo at 7 Science Park Drive. Geneo applied Universal Design principles across its mixed-use development to serve business travellers, working professionals, and individuals with mobility needs through accessible and family-friendly guest rooms that exceeded minimum Code standards. These voluntary efforts in the private sector demonstrate how accessibility enhances the user experience whilst creating commercial advantages.

Geneo is connected to Kent Ridge MRT, bus stops at AYE, and Science Park Drive via sheltered linkways. The covered connections extend between buildings and the broader Singapore Science Park precinct. The drop-off point is similarly sheltered and accessible, with wide gaps to allow wheelchair space.

In the Business Park Main Lobby, the reception counter can be found at an accessible height, equipped with a hearing enhancement system. Loose furniture allows for flexible seating, with seats of varying heights. The turnstile is wide and accessible, and the lifts are adorned with full-height mirrors. Within the bicycle parking section, features such as accessible toilets, ample showers, locker space, and resting facilities elevate the user experience.

At the serviced residence on level 10, the reception desk boasts features similar to the reception counter on the ground floor. The counter is at an accessible height and also has a hearing enhancement system attached. On the same floor are a nursing room and accessible toilets. The nursing room has a hot water dispenser, a fridge, a diaper changing station, and a table and sofa for nursing mothers to utilise. The toilets are quite large and come with shower facilities and handlebars, catering to a wide range of needs.

The hallway to the rooms is curved with low-glare signage, making it both easy wayfinding and stress-free. Each of the five floors has one accessible room and one elderly-friendly room. These rooms make use of low-glare materials and provide generous manoeuvring space. The pull-down wardrobes make it easier for those with mobility



issues to access their clothes. The bathrooms come with grab bars and night lights. These individually small details coalesce into rooms that go beyond the code of compliance, making Geneo a leading example of what accessibility in the private sector can look like.

SEAB spoke to Siah Puay Lin, Director for Architecture + Design with SJ Group. Siah Puay Lin was the Qualified Person for Geneo and led the local Delivery Architect team. When asked about the design process, Siah Puay Lin explained, "Geneo was envisioned as a vibrant, connected hub designed to foster interaction among young entrepreneurs, senior researchers, and families from the surrounding precinct. We integrated Universal Design (UD) features from the outset of the design to ensure they were intuitive and inherent to the spaces, achieving accessibility without compromising visual coherence. These elements promote convenience, autonomy, and independence, while remaining seamlessly woven into the overall architectural design.

"Universal accessibility often requires space that might otherwise be used for commercial purposes, such as leasable areas or more hotel rooms. By addressing these considerations early in the design process, we were able to better balance inclusivity and the developer's requirements."

Siah Puay Lin commented on the UD features in Geneo, explaining that, while the Code for Accessibility serves as a useful benchmark, it is the articulation and integration of these provisions into the architectural language that distinguishes great design.

"Some of the most impactful UD considerations often go unnoticed, such as ample drop-off clearances for easy disembarking, manoeuvrable pathways for strollers and wheelchairs, non-glare lighting, acoustic comfort, and greenery for wellbeing. These measures are not exclusive to Persons with Disabilities but benefit all users."

Siah Puay Lin also provided insight into inclusive design as a whole. "Inclusive design begins with empathy. Architects and designers have to move beyond code compliance and understand the needs of a broad spectrum of users, therefore expanding the repertoire of UD provisions and shaping more equitable environments.

"Our understanding of inclusivity also needs to be dynamic. A key challenge is the lack of integrated data on how spaces are used and experienced over time. The advent of smart technologies provides us with a prime opportunity to capture real-time feedback on accessibility, creating a continuous design loop."

SEAB ended the discussion with Siah Puay Lin by asking about the future of Universal Design and what SJ Group's goals are in this field. "The future of [Universal] Design lies in harnessing digital innovation to respond more precisely to diverse user needs. Beyond collecting existing data from operators, SJ is actively co-developing digital tools such as Podium (formerly "Lendlease Digital"), contributing our design expertise and user feedback to refine its algorithms and workflows. These platforms allow faster, data-driven design iterations, and we see potential in adapting them for UD. By building a library of inclusive design solutions, we can accelerate early-stage decisions and embed them across our projects.

"The [Universal Design Excellence Award] affirms our commitment to inclusive, future-ready design. It highlights the collaborative efforts and shared priorities in addressing the evolving needs of the R&D workforce and surrounding communities. With the increasing diversity within the R&D sector, including more elderly researchers, nursing mothers, and Persons with Disabilities, we integrated thoughtful features and amenities to enhance accessibility and support well-being, which contributes to talent recruitment and retention," concluded Siah Puay Lin.

Throughout these three projects, we can see how inclusive design accumulates, making user experience better for not just those with disabilities, but for people from all walks of life. UDEA champions these projects for being pioneers in their fields, paving the way for more designers to think deeper and implement these aspects into their own projects.

Sports Infrastructure as Symbols of the Nation

AECOM's Ross Wimer explains the importance of multi-purpose sports venues in building society and international recognition

Ross Wimer, Architecture Lead, AECOM's Americas and Asia regions

In recent years, Singapore has become a leading hub for concerts in the region, with leading acts such as Coldplay and Taylor Swift attracting fans from other countries to the city-state to attend their sold-out shows at the National Stadium.

Likewise, Singapore's Sports Facilities Master Plan has laid the groundwork for a more active, connected, and vibrant society by 2030. The country now has the opportunity to champion world-class, multi-purpose sports infrastructure that serves not just athletes, but the entire nation. Singapore's global ambitions demand that such infrastructure be more than just accessible—it needs to be versatile, sustainable, and iconic in design too.

Southeast Asia Building discussed the topic with Ross Wimer, Architecture Lead for AECOM's Americas and Asia regions, who shared his expertise on green, multi-purpose sports venues that act as icons of the city and venues for the community and tourists.

Q: Please introduce yourself and your role in AECOM. What projects have you been involved in locally?

A: My name is Ross Weimer, and I'm one of our global design leaders in AECOM's architecture practice. I've been working on projects in Singapore since the 1980s; I worked on Suntec City, the Marina Bay Master Plan, One George Street, and even did the design for Changi Terminal 3 and Changi Station. I've had many great opportunities to learn about Singapore, and it's been amazing to see how much the country has transformed over the years.

Q: What was the design philosophy behind the Singapore Sports Hub's iconic design? What considerations were made during the design process?

A: We've got a great Singapore team that was heavily involved in the planning of the project. In fact, you can overlook the project from our office building in Singapore. The National Stadium has an amazing presence—partly because of its scale, and partly because of its machine-like movable roof. There's a lot of activity around it, and it feels alive.

From an engineering perspective, a lot of the building's form is

Golden 1 Center, Sacramento

Intuit Dome Court Experience. Photo Credit: Tim Griffith

derived from the shell's structural engineering. While I did not contribute to this project myself, I've personally worked on large venues that use diagonalised grid shell structures. The way the structural engineering was handled is an important aspect of the building that gives it that strong presence.

Q: What is the best way to create sports venues with world-class amenities that can double as concert arenas, cultural venues, and community spaces?

A: This is a trend we are seeing worldwide currently. For example, in the United States, venues are enclosed arenas with a relatively standard size. Their main tenants are ice hockey or basketball, at about 18,000 seats, and are built for the local team that plays there. As a result, they are mostly active during the winter season.

Over time, owners have come to understand that these arenas are some of the best venues for concerts and other big events. In order to fill out the event calendar, concerts have become a huge aspect of venues of this size. Thus, the ability to transform a building made for basketball into a concert venue has become important for the US market.

This trend of flexible venues can be seen globally. We place retractable seating that allows you to have a field of play that varies in dimension, but can also be transformed quickly for incoming musical acts. We just completed the Inuit Dome in Los Angeles, where the LA Clippers play. Thanks to the high capacity and high-end amenities, it is also the best concert venue in Los Angeles. It can be transformed quickly, allowing acts to move in their sound and lighting systems and take it down easily.

Flexibility is a huge aspect that encompasses the design of our sports hubs. Another event type we are seeing on the rise is gaming; large crowds gather to watch game tournaments, and we need the flexibility to accommodate the facilities needed to host such events. We are always trying to look into the future, ensuring the infrastructure is future-proofed for multiple uses.

Q: With sustainability and climate challenges at the forefront of design, how can architects best integrate green building technologies and future-proof infrastructure that adapts to evolving needs?

A: Currently, Singapore is a great proving ground for green architecture. One of the projects I mentioned working on, Changi Terminal 3, is a prime example of this.

One of the goals was to bring in as much natural daylight in as possible to deliver a more pleasant airport experience. Normally, airports are closed environments, which can make travellers and guests more nervous. We thought it would be beneficial for passengers to be exposed to natural daylight, which led us to the idea of integrating landscape inside. Once daylight is inside, you don't need to implement lights to keep the plants active. That, in turn, improves the air quality inside the airport.

What we are witnessing is a move to integrate nature, fresh air, daylight, and landscapes into the building experience. That will make for healthier occupants and better experiences. Instead of relying solely on technology, we are looking towards passive ways of introducing natural elements, while simultaneously using digital tools to get a read on the environmental performance of a building before it is built. In essence, we are using new technology to test old techniques, saving time in the planning process.

In terms of sports hubs, the Inuit Dome is a great example of this process. Many circulation spaces are open to the outdoors, and we have lightweight membranes that create shade and allow for airflow. We are able to determine the comfort levels throughout the year even without air conditioning.

Another example is an NBA arena in Sacramento we completed a few years ago. It has enormous operable doors that bring in fresh air and daylight. These 20-metre doors also have transparent glass that lifts up, opening the venue to the neighbourhood. It's been a catalyst for new development and for people to share in the experience.

Sustainable approaches can influence how a building works out and how the community receives it. In a way, it becomes a community member itself.

Q: How can architectural landmarks in Singapore serve the local community's needs

Intuit Dome Exterior. Photo Credit: Tim Griffith

while reflecting Singapore's values and identity?

A: There is an ambitious sentiment in Singapore when it comes to landmarks. The idea is that, if there is a significant investment in a building, it should contribute to the landscape somehow. It has to be a unique concept that's never been done before. This ambition mirrors the state of Singapore—always evolving, always challenging the status quo.

What is interesting is that the concept of landmarks is changing, from sustainability, to the look of a building, to its performance. It is not entirely image-driven; we use digital tools to enhance and measure the performance of a building, ensuring the unique forms can weave in environmental awareness. These were not priorities in the past.

Q: Many concerts are held in Singapore, which boosts tourism. How do sports facilities support such events and accommodate visitors safely?

A: Whether it's for sports or concerts, security requirements are built in. As designers, we want everything set in place to ease flow in and out of the venue.

For instance, in the US, bag size limits require the need for a place to check in bags near the security line. With advanced planning and permanent lines of security, venues can be flexible and easy to use. In Singapore, we aim to have sufficient security positions to guide guests seamlessly, reducing the likelihood of queues forming.

One of the challenges in venue conversion is nailing the atmosphere and design; you wouldn't want a concert to feel like a sporting event. This can be as minute as the seat design. We started to change our specifications for seats to account for a wide range of audiences. Additionally, we transform the feel through lighting and colour changes. LED lighting gives us a lot to work with, changing it from an artist's colours to a sports team colours. We focus on these aspects to make a big difference in the transformation of a single space.

Q: How do you foresee Singapore's built environment evolving in the coming years, specifically pertaining to architectural landmarks and large sports venues?

A: We are at an interesting moment in the world of architecture. We've passed the phase of ambitious, complex forms. It was a very client-driven process. Now, the success of a building is not entirely dependent on the client. It is also the experience of everybody who uses the building, who lives in the neighbourhood, and who sees the building. The emerging sensibility of how a building contributes to the larger community is something the profession is looking at closely now.

Singapore is an interesting place that changes quickly. I believe it is partly due to its compact size—every decision about the built environment is meaningful, because there is not much land to experiment on. Therefore, each choice is valued to a high degree. It is a great privilege to have a chance to design in that context.

Balancing AI with Environmental Sustainability

Eric Fan of Bridge Data Centres shares about the company's growth and innovations in data centre technology

Eric Fan, CEO, Bridge Data Centres

With the rapid rise of AI technology and its adoption, data centres are facing the ever-increasing need to adapt and evolve. Bridge Data Centres has been pioneering solutions for the industry, ensuring important resources such as energy and water are used sustainably.

The company oversaw the region's first Water Reclamation Plant in Johor, and earned the BCA Green Mark Platinum Award, reflecting its commitment to building future-ready, environmentally responsible infrastructure. Most recently, Bridge Data Centres signed an MoU to facilitate collaboration with progressive Singapore companies in the built environment sector and accelerate environmental goals.

Eric Fan, CEO of Bridge Data Centres, spoke to *Southeast Asia Building* about the company's commitment to sustainability, Singapore's policies, and the significance of the MoU—highlighting the importance of technological progression alongside environmental protection.

Q: Please introduce yourself and Bridge Data Centres to SEAB's readers.

A: I'm Eric Fan, and I'm the CEO of Bridge Data Centres (BDC) and a key member of the senior management team. I oversee critical operations, including development and delivery, R&D, and drive strategic initiatives for the company's growth. I have over a decade of leadership in technology and engineering, specialising in investment and supply chain management.

BDC is one of the fastest-growing digital infrastructure platforms in the Asia Pacific. Our focus is on building and operating next-generation data centres that give enterprises and

Mr. Eric Fan, CEO of Bridge Data Centres (right), and Mr. Heng Teck Thai, Executive Director of BCA International and Deputy CEO of the Building and Construction Authority (left), at the presentation of BDC's Green Mark Platinum (Provisional) certification under the BCA-IMDA Green Mark for Data Centres

hyperscalers the capacity, reliability, and sustainability they need to grow.

We support the digital economy in very tangible ways. Whether it's powering cloud services, enabling e-commerce, or supporting the rise of AI, our campuses are the backbone that keeps digital services always-on and future-ready.

Today, we operate across key growth markets like Malaysia, India, and Thailand, and we're continuing to expand in line with where our customers need us most. Our role is simple but critical—to provide the infrastructure that lets businesses innovate, scale, and compete in the digital era.

Visual mock-up of the MY06 campus in Johor, Malaysia

Q: Recently, BDC signed a Memorandum of Understanding (MoU) with BCA International (BCAI) at IBEW 2025. Why is this MoU important, and what does this partnership entail for data centre development in Singapore?

A: BDC's MoU with BCAI will advance sustainable data centre practices across global markets and support Singapore's ambitions as a global leader in green digital infrastructure. This is an example of how we anchor our sustainability commitments with respected Singapore institutions, and we are open to joint ventures or strategic partnerships that enhance Singapore's position as a green, resilient digital hub.

Our partnership will focus on promoting sustainability and innovative construction methods in green and smart data centre development. Key areas include knowledge exchange, capacity building, and best practice sharing. The collaboration also creates new opportunities for Singapore-based built environment firms to expand internationally. These initiatives will support BDC's regional data centre projects, promote sustainability through the BCA Green Mark certification, develop industry talent, and strengthen collaboration to advance innovative digital infrastructure worldwide.

Our partnership with BCA International underscores a shared commitment to sustainable, future-ready data infrastructure as we address the region's growing demand for hyperscale capacity. We look forward to working with Singapore's built environment firms to advance green data centre practices and to build partnerships that support our ongoing commitment to achieving 100% renewable energy usage.

Partnership is central to how we work. In Malaysia, India, and Thailand, we have built strong collaborations with government agencies, utilities, and local suppliers. In Singapore, we would adopt the same approach, working with local partners in construction, sustainability, and connectivity to ensure that our project contributes meaningfully to the ecosystem.

We are ready to collaborate with power producers, grid operators, and industrial partners to co-develop cutting-edge solutions in areas such as renewable integration, waste heat recovery, and energy efficiency.

For BDC, this is not just about building capacity but about embedding ourselves in Singapore's broader energy and digital ecosystem, helping create synergies that will allow the next generation of data centres to operate more sustainably while delivering strategic value to the country.

Q: BDC was also awarded the BCA Green Mark Platinum Award for its achievements in Malaysia. How does BDC innovate and advance its sustainability technologies to ensure its data centres are environmentally friendly?

A: At BDC, innovation and sustainability go hand in hand. We design every facility with a focus on reducing environmental impact while meeting the performance needs of our clients. This includes integrating advanced cooling technologies, such as immersion and cold-plate liquid cooling, that deliver best-in-class energy efficiency, with operating PUEs in our subtropical sites already below 1.2. We also built the region's first Water Reclamation Plant in Johor, enabling us to use purified sewage effluent for cooling, reducing pressure on local drinking water supplies.

We are also investing heavily in renewable energy, securing nearly 2 GW of clean power through agreements signed with multiple partners, and advancing on our RE100 commitment to achieve 100% renewable electricity by 2040. In parallel, we have joined the Science Based Targets initiative (SBTi) to align our decarbonisation roadmap with the Paris Agreement's 1.5°C ambition.

On the water side, we've implemented recycling and on-site treatment systems, as well as rainwater harvesting and smart metering, to optimise Water Usage Effectiveness (WUE) and reduce strain

on local resources.

Importantly, our innovation is not just about single technologies, but about building an integrated, future-ready blueprint. From modular prefabricated construction that shortens build time and cuts waste, to AI-enabled smart operations that continuously optimise energy and cooling, we are embedding sustainability throughout the data centre lifecycle. This holistic approach ensures our facilities remain both environmentally responsible and technologically advanced as demand for digital infrastructure grows.

Q: Are there any challenges in implementing green infrastructure in data centres? How can BDC lead the way in implementing sustainable data centres?

A: Implementing green infrastructure in data centres brings challenges such as high upfront investment, ensuring a reliable renewable energy supply, and operating sustainably within land and water constraints. Balancing these realities with the industry's demand for scale and resilience requires both innovation and discipline.

BDC leads by holding itself accountable to clear sustainability targets and independent certifications. We have mapped out a net-zero life-cycle roadmap, embedding sustainability at every stage — from scientific site selection and green design models to responsible construction, pollution and waste management, and renewable energy integration. BDC has also committed to achieving world-class efficiency standards, such as PUE levels below 1.2, and continues to pursue the highest ratings, like the BCA-IMDA Green Mark Platinum award, as an external validation of progress.

We are also pioneering innovations such as cold plate liquid cooling and AI-driven operational management to further reduce environmental impact. In parallel, we have developed policies on water usage effectiveness and closed-loop systems, ensuring resources are managed responsibly.

We are not only implementing these practices but also setting out transparent roadmaps and measurable goals, published in our annual ESG report, to drive ourselves and the industry forward. By holding ourselves to global best practices, we aim to demonstrate that sustainable, high-performance digital infrastructure is both possible and scalable, and in doing so, help lead the transition for the wider industry.

Q: In a resource-scarce country like Singapore, how can companies such as BDC support its efforts to become an AI and data centre regional hub?

A: In a resource-scarce country like Singapore, data centre providers can play a critical role in enabling growth without straining limited land, water, and energy. This means maximising efficiency through advanced cooling systems, AI-driven energy management, and modular, high-density designs that use less space and power per unit of compute. It also requires building with sustainability in mind—integrating renewable energy, recycling water, and adopting life-cycle carbon management to reduce long-term impact.

Equally important is aligning with national roadmaps and policy frameworks. By setting transparent targets and demonstrating accountability, providers can show that digital infrastructure can expand in a way that strengthens, rather than competes with, Singapore's resource resilience. Done right, these efforts make Singapore not just a host for data centres, but a model of how sustainability and hub status can go hand in hand.

Q: How are Singapore's policies influencing hyperscale infrastructure across Asia?

A: Singapore's policies are shaping hyperscale infrastructure across Asia by setting guardrails and benchmarks. On one hand, the government has been clear about the need to balance digital growth with sustainability. The Green Data Centre Roadmap, for example, establishes strict requirements on energy efficiency, renewable energy integration, and carbon abatement. These guidelines influence not only projects within Singapore but also how operators design and manage facilities regionally, since many multinationals standardise their builds and operations to meet the city-state's requirements.

t the same time, Singapore is positioning itself as a trusted AI and data hub for the region through cross-border frameworks, talent development, and strong digital infrastructure standards. Policies that emphasise grid reliability, renewable power procurement, and low Power Usage Effectiveness (PUE) targets are encouraging operators to invest in innovations such as liquid cooling, advanced heat reuse, and water recycling.

Q: What are BDC's upcoming growth plans to meet the demands of the rise of AI and rapidly growing technology?

A: BDC is constructing large-scale hyperscale campuses, such as the newly launched QHI01 facility in Chonburi, Thailand, which will provide up to 200 megawatts (MW) of capacity and is designed specifically to support cloud providers and AI-driven applications. We also continue expanding our network in Malaysia, including the 110MW MY06 Campus in Johor and new clusters in Kuala Lumpur's MRANTI Park, all equipped to meet energy, cooling, and compute demands of next-generation AI workloads.

Our APAC expansion plans are backed by a landmark US$2.8 billion financing secured in March 2025. We aim to deliver up to 3 gigawatts of capacity by 2030, positioning BDC as a leading digital infrastructure partner for AI, cloud, and technology giants across the region.

Our expansion will support tech companies in APAC and also internationally, as our facilities are part of Bain Capital's global network, linking platforms in this region, the US, Europe, and China.

Designing with Data, Building with Heart

How Smart Community Design Can Nurture a We-First Society

Associate Professor Chong Keng Hua, Nanyang Academy of Fine Arts, University of the Arts Singapore

In this issue of *Southeast Asia Building,* we had the opportunity to speak with Associate Professor Chong Keng Hua, Provost and Vice President (Academic) at Nanyang Academy of Fine Arts, University of the Arts Singapore (NAFA–UAS).

Dr. Chong's expertise and research on ageing, health, and data-driven collaborative design have contributed significantly to social architecture and community design. He has published widely on these topics, including three notable books: Creative Ageing Cities (Routledge, 2018), Second Beginnings (Lien Foundation, 2018), and Data-driven Smart Community Design (Routledge, 2025).

Dr. Chong is Founding Partner of COLOURS: Collectively Ours, an award-winning design consultancy specialising in public space and social impact. Dr. Chong has also advocated for social architecture and participatory community design in the region, initiating PARK(ing) Day Singapore in 2013 together with his students, and led students to work on community development projects in Vietnam, Cambodia, Thailand, and China. He is active in several international organisations, including the Pacific Rim Community Design Network and the Design for the Common Good International Network. He recently launched Communityze—a collective of community architects, designers, researchers, placemakers, and artists in Singapore that advocates community design for the social good.

As Provost of NAFA|UAS, Dr. Chong champions interdisciplinary art and design education, fostering inclusivity in society and innovation in research. His work bridges academia, industry, and policy, shaping people-centric and climate-positive urban futures.

We welcomed Dr. Chong to discuss the importance of combining community design with technology, building a more inclusive and resilient society.

We now live in a FRAPI world—one that is increasingly fragmented, radical, accelerated, precarious, and also intelligent. From climate crises and demographic shifts to political polarisation and the transformative force of Artificial Intelligence (AI), the future we face is nothing but disruptive. Singapore is not exempt. Our compact city-state sits at the intersection of these global trends. The challenges of ageing, mental health, and the digital divide are playing out daily in the corridors and void decks of our public housing estates.

Yet, within this uncertainty lies opportunity. At the recent National Day Rally, Prime Minister Lawrence Wong urged us to place community ahead of individual interests. How can we harness evolving social norms and transformative technology to nurture a "we-first society"?

With increased access to a vast amount of data and advanced analytic tools while building on past experience on participatory design and community development, we can begin to reimagine how data, technology, behavioural science, and design can converge—not to control life, but to enable communities to become more inclusive, resilient, and empowered.

This isn't just about smart cities or flashy apps. It's about turning neighbourhoods into platforms for collaboration. In an era where global systems feel increasingly out of reach, the neighbourhood is where trust is built, where differences meet, and where belonging can be renewed. How can we do that?

Reclaiming Community in a Fragmented World

To transform neighbourhoods is to look at what we can do in public housing, since this is where the majority of the residents in Singapore reside. Public housing in Singapore has achieved global acclaim, but faces new realities—smaller households, rising loneliness, widening inequalities, and increasingly complex identities. As the "kampung spirit" of earlier decades fades off with urbanisation and digital proliferation, top-down

strategies no longer suffice.

Echoing PM Wong's speech, instead of designing for communities, we must design with them.

Here, resilience is a collective social capital to adapt, collaborate, and grow. The COVID-19 pandemic has shown us that the most effective responses often arise from neighbourhood-level action. The lesson is clear: investing in local, mutual support systems isn't just good social policy, it's national insurance.

Enquire. Envision. Enable.

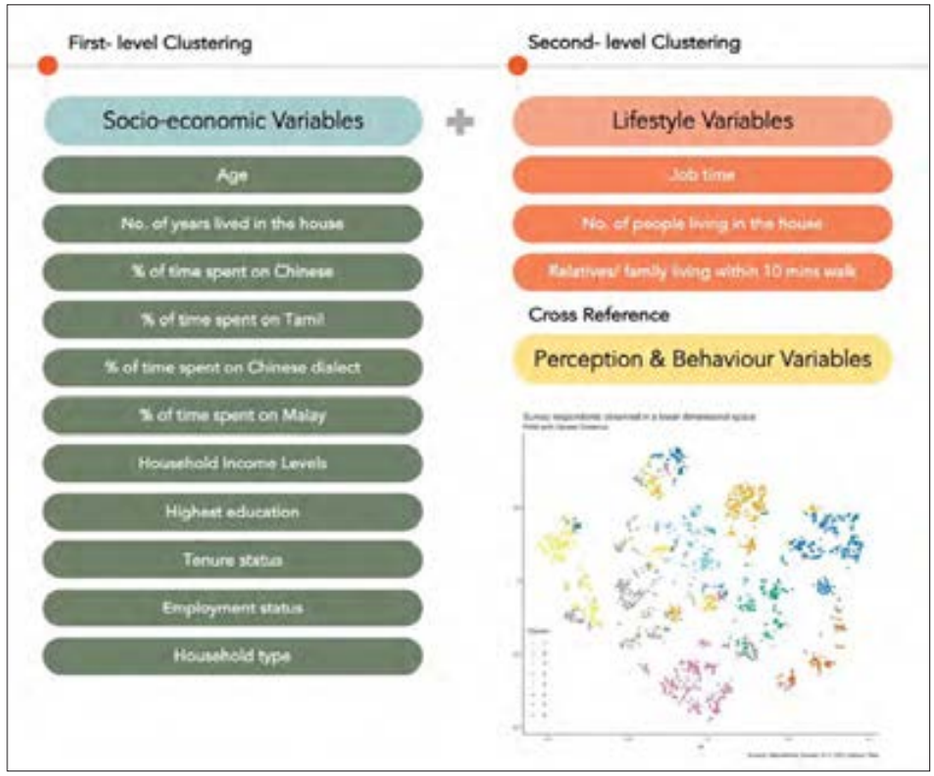
Drawing on six years of interdisciplinary action research across Singapore's heartlands, the New Urban Kampung Research Programme, which I led as the Principal Investigator, proposes a three-part framework: Enquiring diversity, Envisioning opportunity, and Enabling inclusivity.

Enquiring diversity

Who lives in our neighbourhoods, and what are their needs and aspirations? Our research presents a resident segmentation model with eight unique resident archetypes, such as the "Silver Contributor"---older adults nearing retirement with good income, education, and strong community engagement. We also developed a neighbourhood-level Quality of Life and Quality of Place framework, combining objective and subjective indicators. This richer lens helps planners design more targeted, contextual responses to residents' needs.

Envisioning opportunities

With robust data, we can identify opportunity zones—places where social interaction among certain resident archetypes thrives or where mobility is high, such as a void deck beside a playground along the route to the market. We worked with international partner EDF Lab to develop new analytic tools within a digital planning platform, helping planners and stakeholders simulate and forecast needs at both town and precinct scales.



Resident segmentation

HDB QoL Framework

Urban analytical tools

Enabling inclusivity

Ultimately, data is only useful if it translates into community actions. Through case studies and fieldwork, we developed a Community Enablement Playbook to guide local stakeholders, grassroots leaders, and community champions in catalysing co-creation and co-management with residents. Blending offline placemaking initiatives with online engagement, the playbook advocates success by community agency rather than compliance.

Human-Centred Design in the Age of Intelligence

Singapore is already one of the world's smartest cities. But being smart is not the same as being wise.

In today's digital landscape, AI and data platforms are increasingly embedded in our daily routines—from transport systems and healthcare access to community apps. These technologies promise optimisation, but often struggle with empathy. If we are not careful, algorithmic decision-making may deepen exclusion: stereotyping the marginalised, automating away trust, or reinforcing biases hidden in our datasets.

This is why human-centred data applications and design practices are critical.

During the research, two pilot initiatives that drew from the three-part framework demonstrated how community design can be data-driven and deeply human-centred, and transform void decks into "Social Decks".

In Yuhua, a mature estate, we leveraged the assets of local community champions with a "Senior Contributor" profile to co-create Social Deck—a modular, reconfigurable placemaking modules that transform highly frequented void decks into various resident-driven campaigns, such as exchange of pre-loved items and distribution of rescued food. What began as modest interventions became places of interaction, illustrating how well-placed targeted design interventions can catalyse latent community energy.

In the younger estate of Cascadia, Cascadia Our Secret Yard (COSY) was a more extensive adaptation of the social deck, designed to meet the needs of newly moved-in residents. Working with grassroots volunteers, we transformed a second-level void deck into a multipurpose public space, offering cosy areas for co-working, studying, and chilling out for families and neighbours.

These examples show that when data is used not just to automate functions, but to match residents' needs with community assets, design becomes an instrument of empowerment.

Designing the Next Chapter of Singapore

As Singapore celebrates its 60 years of independence and moves into its next phase of development – one that demands care for climate, age, identity, and mental health – we need more than new buildings or sensors. We need to cultivate new civic habits and new forms of collective intelligence.

Here is what our playbook can offer: build on evidence, start with local champions, ground it in community assets, co-create with wider local stakeholders, and co-manage with those who live the outcomes.

Our research also opens new questions for design education: how do we train future designers, planners, artists, and technologists to engage data critically, ethically, and inclusively? How do we shift from technical competence to civic fluency? If communities are the new frontier of innovation, then education must equip learners not just with skills to code or render, but with the sensitivity to listen and the courage to create.

A group of Nanyang Academy of Fine Arts (NAFA) final

nukampung & Social Deck

year students of the BA (Honours) Design Practice did just that. With their project "A Sip of Kopi", the students show how everyday memories at a kopitiam (coffeeshop) can bridge generations. Through prompt cards, short films, and a zine, they turn conversations with seniors into creative expressions, blending empathy with bold design to celebrate community life.

As we look ahead, Singapore's next edge may not come from creating the fastest broadband or the tallest buildings, but from becoming the most creative and the most connected—emotionally, socially, and civically. And in this endeavour, there is much that creatives as smart community designers can do to foster an inclusive, resilient, we-first society.

Community Enablement Playbook

Designing Transit-Oriented Developments for High-Density Cities

Büro Ole Scheeren's Connie Wan shares her expertise in architecture and urban design

Connie Wan, Senior Associate and Studio Lead, Büro Ole Scheeren, Hong Kong

With the rapidly increasing rate of urbanisation across cities in Asia, architects and designers have had to adapt and evolve, working within the confines of limited space while ensuring the highest standards of sustainability, liveability, and social inclusivity are met.

Southeast Asia Building had the pleasure of discussing the topic of high-density cities with Connie Wan, Senior Associate and Studio Lead at Büro Ole Scheeren in Hong Kong, where she leads regional projects under the creative direction of Ole Scheeren, the firm's Founder and Chief Designer.

Connie's expertise is vast, having years of experience in shaping some of the region's most ambitious TODs (transit-oriented developments) and mixed-use projects across Hong Kong, Shenzhen, Shanghai, and more. Below, Connie shares her thoughts on TODs and Büro Ole Scheeren's approach to achieve environmental ambitions, economic pragmatism, and cultural specificity—encouraging architects and planners to design with the public good in mind.

Q: Please introduce yourself and your work to SEAB's readers. What areas of architecture do you specialise in?

A: Büro Ole Scheeren is a global architecture firm founded and led by Ole Scheeren, with four offices across the world. I lead the Hong Kong studio, overseeing our projects across South China and broader Asia. Recently, our focus has been on mixed-use developments, including headquarter campuses for technology companies, as these are increasingly integrating more lifestyle components. These projects blur traditional programmatic boundaries and create forward-looking spaces.

As Chief Designer, Ole Scheeren continually inspires us to rethink and challenge assumptions. Because large-scale developments take years to realise, it's crucial that our designs remain relevant, purposeful, and meaningful by the time they are built, and long after completion.

Q: How did you get into architecture, specifically high-density planning? How have you adapted to changes in the field over the years?

A: I've always had a deep appreciation for art and drawing – they were my creative outlets growing up. At the same time, I was drawn to the challenges of problem-solving and loved building things and making models. Architecture was a natural pathway for me – a discipline that combines visual creativity and the structured logic of construction and functionality. Over time, it has become a career that continues to challenge and inspire me in both dimensions.

Having spent a significant amount of time in Hong Kong, a city shaped by high-density tall buildings, I had the opportunity to work on projects across China and Asia during the region's building boom. The fast-paced nature of these developments, combined with Ole's drive to explore new ideas, continues to keep me inspired – where each project is different and never the same.

Q: What defines TODs? Can you give us an example of work you've done involving TODs?

A: TODs were once primarily transit-focused, designed as gateways rather than destinations. Under Ole Scheeren's broader vision of city-making, we see TODs serving as vibrant hubs where people live, work, and gather – going beyond just facilitating transit. There are a lot of people passing through these buildings, but the goal is to also design them as destinations that

Photos above & right: Houhai Hybrid Campus by Büro Ole Scheeren. Photo credit: Büro Ole Scheeren

thrive, and where people go to spend time and create experiences. For that reason, many TODs are mixed-use—integrating urban living, working, and recreation for around-the-clock activation. TODs are no longer singular; they're progressive and becoming much more dynamic in the way they interact and connect with people and the city.

Ole Scheeren's design for the Houhai Hybrid Campus in Shenzhen is a recent example that reflects this vision. Connected directly to the subway, it integrates elevated pedestrian links into a larger urban network, encouraging people to not only walk within the campus, but also throughout the wider neighbourhood and district.

Q: Why should urban planning move in the direction of TODs? How can architects contribute to this shift, whether it be community- or policy-based?
A: It's a very sustainable approach to development, both socially and economically. By concentrating activity around transit, they maximise efficiency and connectivity while reducing the carbon footprint. Buildings and sites are no longer isolated entities, and Büro Ole Scheeren often designs TODs as mixed-use developments that serve multiple functions.

Architects play a critical role in ensuring spaces are both functional and inviting. Beautifully landscaped, naturally ventilated, pedestrian-centric layouts encourage people to explore, connect, and build community in these everyday urban spaces.

Q: In your experience, what are the challenges in implementing TODs, and how have you overcome them?
A: Given the complex mix of transport infrastructure, top-side developments, and multiple stakeholders, large-scale TOD projects risk losing their coherence over time. Maintaining a clear and

unified design vision is essential. This is one of Büro Ole Scheeren's key strengths and a responsibility we take on as lead architect. We establish guiding principles that all parties commit to, ensuring decisions across years of development stay aligned with the original design intent.

Q: How can architects ensure flexibility and liveability when it comes to high-density urbanism?

A: Ole Scheeren's design for Urban Glen in Hangzhou is a great example. Situated on a compact site, we combined hotels, offices, retail, and transit into a cohesive design that connects seamlessly with the wider master plan. The hierarchy is clear: the ground floor has large, open, public spaces, while more private programmes occupy the upper levels. This vertical gradation allows diverse functions to coexist, while the development remains walkable, flexible, and human-scaled.

Q: How can older buildings coexist with newer developments?

A: It depends on the site context and given design parameters. Some projects call for adaptive reuse of existing structures, while others require designs that anticipate future connections and expansion. Flexibility and connectivity are key principles in both scenarios, with the intention of respecting the heritage of the site and its urban context.

Q: What is your experience working in Büro Ole Scheeren, and how does it innovate and set itself apart from other international architecture firms?

A: Büro Ole Scheeren is a global firm, operating out of Hong Kong, Beijing, Berlin, and London. Uniquely, we work as one connected practice under Ole's leadership, with constant cross-collaboration and knowledge sharing across the regions. Even before the pandemic, our team was equipped with the tools and skills needed to work online, discussing projects in different time zones. This works to our advantage, as projects can progress around the clock with work shared between regions. It's different, but it has been highly effective – both for efficiency and creativity.

Ole Scheeren has built the practice around narrative-driven architecture, merging global expertise with local insight. His belief that architecture must tell meaningful human stories deeply informs everything we do. From the Guardian Art Center in Beijing to DUO in Singapore and MahaNakhon in Bangkok, Ole Scheeren's designs consistently marry bold architectural form with human experience.

Q: How do you foresee the future of high-density cities

Scenic City by Büro Ole Scheeren. Photo credit: Büro Ole Scheeren

Photos above & left: Urban Glen by Büro Ole Scheeren. Photo credit: Büro Ole Scheeren

changing over the years, specifically in Asia? Please also share how architects can adapt their skills to the different circumstances in each Asian country.

A: Asia, and China in particular, is very bold with the development of high-speed rail and TOD integration. Developments are no longer confined to a single typology; you can take a train from a station and exit in the middle of a park. Everything is becoming more seamless, and people don't register projects as individual entities.

The emphasis is also shifting toward human-scale, warm materials, and spaces designed for comfort as much as transport. While design codes and regulations vary between countries, the universal goal is the same: creating places that resonate with people on a human level.

Ole Scheeren, Founder & Chief Designer. Photo credit: Felix Grünschloss

Championing People-First Design Across India

DFI's Anand Sharma shares about the importance of placing people at the centre of design

Anand Sharma, founding partner, Design Forum International

Anand Sharma is a founding partner of Design Forum International (DFI), an architecture and design collective that has shaped India's built environment for over three decades. In 1995, Anand co-founded DFI with Anoj Tevatia and Goonmeet Singh Chauhan, driven by a shared vision to craft architecture that is contextually grounded, technologically forward, and socially responsive.

From the outset, DFI embraced a People-First approach to design—an ethos that places people at the centre of every design. This foundational principle continues to guide the firm's work across typologies and geographies, shaping spaces that are intuitive, inclusive, and attuned to the needs of a rapidly evolving world.

Southeast Asia Building had the pleasure of speaking to Anand Sharma about his work in DFI over the decades, discussing the practice's contributions in advancing India's built environment, ultimately building stronger communities and more inclusive experiences for users.

Q: Please introduce yourself and Design Forum International to SEAB's readers.

A: I'm Anand Sharma, Founding Partner at Design Forum International (DFI), an architecture and urban design practice established in 1995 with my partners, Anoj Tevatia and Goonmeet Singh Chauhan.

For three decades, DFI has been guided by a People-First philosophy, which places human experience at the heart of design. Our work spans across luxury residential, commercial, institutional, and public infrastructure projects across India. A few of our landmark projects include the Select CityWalk Mall and ITO Skywalk in Delhi to airports, workplaces, and educational campuses nationwide.

What defines us is not just the scale or diversity of our portfolio, but our commitment to creating environments that are inclusive, contextually grounded, and people-focused. As cities evolve, our goal remains to design spaces that elevate everyday life—where design becomes a tool for connection, resilience, and progress.

Q: What led you to become a founding member of DFI? Why is people-centric design so important to DFI's approach?
A: DFI was born from a shared belief that architecture must serve people before form or fashion. When we started in 1995, India's urban landscape was on the cusp of transformation, and we saw an opportunity to shape it with empathy and purpose. The idea was to create a design practice that listens to context, to community, and to change. People-centric design is important because buildings are ultimately about experience. A well-designed space can influence behaviour, enhance well-being, and foster a sense of belonging. This belief forms the foundation of every decision we make, from planning large-scale civic projects to designing intimate living environments. At DFI, people are not an afterthought; they are the starting point of design.

Q: You have a wide range of projects in your portfolio. Please share a few examples of how you conceptualised and implemented people-centred design in these projects.
A: Across our projects, people-centred design manifests in both spatial and social dimensions. At the ITO Skywalk in Delhi, we redefined pedestrian movement through layered connectivity, ensuring safety, accessibility, and comfort in a highly congested zone. In the Eldeco Centre, we integrated retail and workplace with meaningful public interfaces that enliven the streetscape, making the building an active part of the urban fabric.

Similarly, in projects like WoCO One in Gurugram, flexibility and wellness drive workplace design, spaces that adapt to people, not the other way around. The result is always visible: enhanced usability, a sense of ownership among users, and environments that are embraced rather than endured. These outcomes

reaffirm that people-first design is humane, pragmatic, and enduring.

Q: With technology on the rise, how have you utilised it to drive people-centric design?
A: Technology, for us, is an enabler of empathy. We use advanced modelling and simulation tools to study light, movement, and interactions related to user behaviour. This helps us design spaces that feel intuitive and responsive. Parametric design aligns form with function, while BIM ensures coordination and efficiency across disciplines.

Beyond process, technology also informs experience: our workplace designs integrate smart systems for comfort and energy management; touchless technologies enhance hygiene and inclusivity; and data-driven insights shape more resilient environments. Yet, technology never replaces intuition; in fact, it amplifies it. At DFI, we see it as a bridge between human need and built response, allowing design to remain people-centred even as it evolves in complexity.

Q: What is the correlation between sustainable design and people-centred design? How can both aspects be incorporated into a design project?
A: Sustainability and people-centric design are deeply interlinked—each reinforces the other. A sustainable building ultimately improves human well-being, while a people-first approach naturally encourages sustainable choices.

At DFI, we view sustainability beyond metrics; it's about designing for longevity, adaptability, and relevance. Passive design strategies, sourcing local materials, and energy-efficient systems are woven into our process, but equally important are user comfort, health, and emotional resonance and experience in the space. When people connect with their environment, they care for it—creating a cycle of stewardship.

Projects like The Legacy by Silverglades and WoCO exemplify this balance, where environmental performance and human experience coexist seamlessly. In our view, true sustainability begins with empathy—for both people and the planet.

Q: Please tell us how the industry and the sentiments towards people-centric design have changed over the years.

A: When we began, architecture in India was largely seen as product-driven; focused on structures rather than stories. Over the years, a profound shift has occurred. Clients, users, and policymakers now recognise that good design is not cosmetic; it's behavioural, experiential, and transformative. The rise of mixed-use developments, wellness-driven workplaces, and inclusive public infrastructure signals this change.

At DFI, we've witnessed how collaboration and dialogue have become central to the design process, replacing the architect's monologue with a shared narrative. Today, there's greater awareness of how spaces influence quality of lifeand people-centric design has evolved from an ideology to an imperative. It's a change we're proud to have championed.

Q: How do you foresee design and its philosophies evolving in the future?

A: The future of design will be shaped by the convergence of technology, sustainability, yet it needs to be human-centred. As our cities grow denser and more digital, architecture must remain grounded in empathy. We will see a move toward adaptable, inclusive environments that respond to changing lifestyles, climates, and technologies. The next frontier lies in designing experiences that are more than just enclosures, spaces that learn, evolve, and nurture connection.

At DFI, we believe the architect's role will expand from creator to curator of systems that empower people and communities. The essence of design will remain timeless: understanding human behaviour and shaping the built environment to enhance it. In every sense, the future will belong to People-First design.

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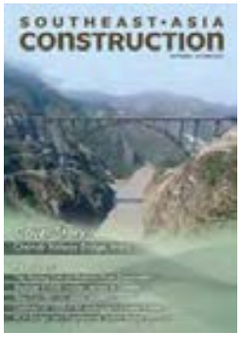

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