



Post-IBEW Technical Seminar Series #2

EXEMPLARY GREEN BUILDING PROJECTS SHOWCASE

2 Nov 2022 • 2.00pm to 5.15pm • BCA Braddell Campus, Auditorium (T1-1)

HIGHLIGHTS

TIME	TOPICS & SPEAKERS
	Programme Introduction
2.00pm	WorldGBC Asia Pacific Network: Net Zero Readiness Framework Ms Joy Gai, Programmes Head (Asia Pacific), WorldGBC; Founder, Joy of Sustainability
2.15pm	Nanyang Technological University: Striving Towards A Carbon Neutral Campus Mr Paul Chain, CEO (Development & Facilities Management), NTU
2.45pm	Surbana Jurong Campus: A Sustainable, People-centric and Future-ready Workplace Mr Eugene Seah, Managing Director (Smart City Solutions), Senior Director (Special Projects), Director (Threesixty Contract Advisory), SJ Group
3.15pm	Tea Break
3.45pm	Chong Pang Integrated Development Ar Clifford Chua, Associate Director, CIAP Architects
4.15pm	Resort at Mandai Wildlife Reserve: A Super Low Energy Showcase Mr Karan Sinsinwar, Associate, Atelier Ten
4.45pm	Pushing Sustainability Boundary in Public Housing: Punggol Point Crown Ms Farizan d'Avezac de Moran, Senior Partner, GreenA Consultants
5.15pm	End of Seminar



TOPIC 1:**WorldGBC Asia Pacific Network: Net Zero Readiness Framework**

Recruitment to the World Green Building Council (WorldGBC) Net Zero Carbon Buildings commitment is not an easy task, especially in the Asia Pacific region. To address the uncertainty in setting net zero targets, we are preparing a readiness framework to support the industry towards Advancing Net Zero (ANZ). The framework will break down what key elements are needed across different stakeholders. This will help deliver guidance to achieve a decarbonised built environment and signpost where different markets are leading or are perhaps at an earlier stage in their net zero journey, allowing them to focus on action and growing market confidence. Under the vision set by the global movement, the concept of the Net Zero Readiness Framework grew organically from multiple conversations with GBCs and partners in the Asia Pacific Region. Given the breadth of the Framework's coverage including government, technical solutions, finance, data and mindset, it will be developed in a modular fashion with government and technical solutions finalised first and leveraged to attract further insights into the other components. The content will be hosted on the WorldGBC website, allowing for regular updates signposting best practice examples across the region.



Ms Joy Gai
Programmes Head
(Asia Pacific) WGBC
Founder, Joy of
Sustainability

Ms Joy Gai is World Green Building Council's Programmes Head for Asia Pacific Region, focusing on delivering programmes that engage GBCs and deliver impact across WorldGBC's three impact areas. Joy works as part of the WorldGBC Engagement & Networks department, and closely with our Green Building Councils (GBCs) and partners across Asia Pacific. She is a Professional Certified Life Coach practicing positive psychology with the belief that sustainability starts from a sustainable mindset and is sustained with compassion and commitment to drive and empower positive change. Joy works part time with WorldGBC while also leading the Joy of Sustainability LLP — a platform advocating sustainability, offering coaching services to close the gap between sustainability design, delivery and user engagement, helping clients to gain clarity and identify their true sustainability goals.

TOPIC 2:**Nanyang Technological University: Striving Towards A Carbon Neutral Campus**

NTU's Sustainability Manifesto aims to propel its wide-ranging sustainability efforts over the next 15 years and solidify the University's position as a global leader in sustainability. To that end, the University strives to:

- Achieve carbon neutrality by 2035;
- Achieve 100% Green Mark Platinum certification for all eligible buildings on the main NTU campus;
- Reduce by 50 per cent NTU's net energy utilisation, water usage, and waste generation, by March 2026, compared to the baseline levels of 2011.



Paul Chain
CEO
(Development
& Facilities
Management),
NTU

Mr Paul Chain is currently the Chief Executive Officer for NTU Development & Facilities Management. Paul graduated from NUS in 1976 with a B.Eng. (University of Singapore). He has more than 46 years' experience in the built environment sector. Paul was sponsored by Singapore Technologies Construction to do an Executive Course in Harvard in 1990. Paul also has a B.A. (Honours II Upper) in History. Paul started his career with the Changi Airport Development Division of Public Works Department, Singapore. After registration as a Professional Engineer, he ventured out to the private sector. He became the chief executive officer of the then Singapore Technologies Construction, Liang Court Holdings and then Sembcorp Engineers and Constructors before his retirement. He was asked to come out of his retirement in 2011 to expedite the development of NTU based on a new master plan adopted by the Board of Trustees.

TOPIC 3:**Surbana Jurong Campus: A Sustainable, People-centric and Future-ready Workplace**

The campus of the future has arrived. It has been a journey to design and see the building being built and now, moving into a masterpiece. This sharing would include the sustainability, digital and technology strategies and consideration that went into the design and engineering of the building and why, these concepts, will drive office buildings of the future in the ever challenging battle against climate change and decarbonization.



Mr Eugene Seah
 Managing Director
 (Smart City Solutions),
 Senior Director
 (Special Projects),
 Director (Threesixty
 Contract Advisory),
 SJ Group

Mr Eugene Seah joined the Surbana Jurong Group on 1 January 2017 as Senior Director, Group CEO's office, to spearhead and oversee the Group's special projects and strategic initiatives, in particular, the Group's Key Account Management Office, Digital Management Office, and Sustainability and Resilience Office. He is also a Director on the Boards of Threesixty Cost Management and Threesixty Contract Advisory and an Adjudicator in the Singapore Mediation Centre. In 2020, he took office as the Managing Director of Surbana Technologies, the Smart Cities arm of the SJ Group. Apart from his experience in Quantity Surveying, Eugene injects sustainability, value management and green approaches into his work to achieve project efficiency. He is passionate about resilience in cities and how digital and technology can be leveraged to help citizens in these cities have better quality of lives. He is a Green Mark Accredited Professional and Infrastructure Sustainability Accredited Professional and is knowledgeable in the field of sustainable buildings and infrastructure. Eugene works on enhancing productivity in Design and Construction and research on Computational BIM, Visualisation and Imaging and other productivity enhancement topics for the Surbana Jurong Group. His effort has won him several awards, including the RICS Construction Professional of the Year (2019), the Advance Certificate in Learning Program from the Institute of Adult Learning as well as the qualification on the ISO 19650 for BIM and Collaboration. He and his team are continuously embellishing the SJ's platform Common Data Environment platform called 24K, ever increasing its capabilities for City's Services.

TOPIC 4:**Chong Pang Integrated Development**

A sharing session on the proposed Chong Pang Integrated Development, and its efforts in achieving Green Mark Platinum, Super Low Energy (SLE) certification, with a focus on the project's passive environmental sustainability design strategies.



Ar Clifford Chua
 Associate Director,
 CIAP Architects

Ar Clifford Chua is an Associate Director at CIAP Architects Pte Ltd. He obtained his Master of Architecture from the University of California Los Angeles (UCLA) and is a certified GMAAP and GMAAP(FM). An architect with over 20 years of experience, he has been involved in a wide range of development projects, including mixed-use, office, condominium, university and hospital projects. In addition to practising architecture, he teaches part-time at the NUS Department of Architecture, College of Design and Engineering.

TOPIC 5:**Resort at Mandai Wildlife Reserve: A Super Low Energy Showcase**

The new Resort at Mandai Wildlife Reserve is the first Super Low Energy (SLE) resort in Singapore. The building and its systems adopt a biophilic design, by blending into nature and becoming part of it while creating an engaging and comfortable environment for the guests. The design incorporates a host of energy-saving measures including the use of natural ventilation, and mixed mode air-conditioning. The treehouses design features passive displacement ventilation, a solution that cools the air using chilled water rather than traditional air conditioning compressor units.



Mr Karan Sinsinwar
Associate,
Atelier Ten

Mr Karan Sinsinwar is a sustainability consultant for the built environment. He has worked on a series of high-profile and award-winning large-scale mixed-use and master planning projects from planning to certification. He specialises in providing solutions in the field of energy efficiency, thermal comfort, health, and wellbeing. His technical work covers dynamic thermal modelling, energy modelling, daylight, and solar analysis, CFD, carbon footprint analysis, and sustainable design strategies. Karan's capability in the various environmental factors enables him to consider and assess these simultaneously and provide truly sustainable design solutions.

TOPIC 6:**Pushing Sustainability Boundary in Public Housing: Punggol Point Crown**

The move towards a smart and sustainable living starts from our homes. Located within the Punggol Point District, Punggol Point Crown is a public housing project comprising of 9 residential blocks, which attained the BCA Green Mark Super Low Energy (Gold Plus) under the Green Mark for New Residential Building (RB: 2016). Envisioned to be a "Green Heritage" district, this presentation will showcase a range of active and passive design strategies introduced to be a sustainable and eco-friendly residential building.



Ms Farizan d'Avezac de Moran
Senior Partner,
GreenA Consultants

Farizan d'Avezac de Moran is Senior partner of GreenA Consultants, a sustainability building consultancy firm based in Singapore and Africa. She has worked with many organizations as an independent consultant; GIZ, UN Habitat, ICF through USAID programme, Green Global Growth Institute on various works of energy codes and capacity building. She is also instrumental in many government-to-government collaboration in sustainability knowledge management which sees the launch of the Green Minimum Compliance for Rwanda, and Eco protocol for City of Panama. She was conferred the Green Advocate of the Year for BCA-SGBC Green Building Individual Awards in 2015, a Sustainability Leadership Award launched to recognise industry leaders for outstanding contribution in the industry. She is a Board Member of Singapore Green Building Council and Vice President for Singapore Inst Of Building Limited. Trained in both strategic and technical consulting, she has more than 25 years of experience in the build environment and has handled key super low and zero energy projects. She is a LEED, WELL AP, Living Future AP, Green Mark Advanced Accredited Professional (GMAAP) and EDGE Expert.



To download a copy of the presentation materials,
please scan the QR code or access the website:
**[www.bcaa.edu.sg/exemplary-green-building-
projects-showcase](http://www.bcaa.edu.sg/exemplary-green-building-projects-showcase)**