Singapore Institute of Building Limited

BUILD NEWS

SIBL Newsletter

FEBRUARY 2022

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BUILDING THE METAVERSE OF THE BUILT ENVIRONMENT

Profile Interview with ALAN GOH

In a world awash with technical information and drawings, there is one thing that stands out most from the affable new CEO of CPG Facilities Management, Mr. Alan Goh, who assumed the appointment in January 2022. His academic background was in Commerce.

Alan started his career 18 years ago in the Human Resources department of CPG Corporation, going on to serve the next 8.5 years at CPG Corporation in the HR function. But he was restless in that position, and eventually went to his boss and mentor, Group CEO of CPG Corporation Ar. Khew Sin Khoon, for advice on his professional development.

"I asked him what else I could do besides HR," he said matter-of-factly, impertinent to the fact this is the sort of question that so many of us middle-aged professionals ask of ourselves when we find ourselves awake in the middle of the night.

He was willing to take the risk to grow his career in a different path. Alan credits his boss Ar. Khew, who supported his switch into the Facilities Management arm of CPG Corporation.

"There was the stigma that an HR guy was telling people what to do and rumors if the Company has shifted its business directions because the Company had to appoint a non-facilities management person to lead the department", he said in good humour, referring to his appointment as a facilities management division head at CPG FM shortly after he made the move to CPG FM in 2013.

There, Alan went through a literal baptism by fire. Shortly after his initial foray in facilities management, he had to deal with a crisis on the job in one of the properties he managed. He successfully overcame the crisis and stabilised the operations.

The client was so impressed, he told Alan's boss: "If only you could clone more people like Alan". This was music to his ears and had spurred him on in his new venture.

It can be so intimidating for a commerce person to lead a facilities management portfolio, but Alan is unfazed. "In anything you do," he advised, "You need 3 Cs to survive. Composed, Communicative, and Competent. Stay calm to overcome (composed), communicate the problem and solution with your team, and assign people with the right technical know-how (competency) to resolve any situation. In this case, I became the strategist."

"I also would like to pay tribute to my former CEO and mentor Mr Seng Joo How. Under his guidance and mentorship in CPG FM when he was CEO, I have gained much from his leadership and wisdom." he said.

Fast forward 9 years later, and today, Mr Alan Goh manages a team of over 450 employees in CPG Facilities Management Pte Ltd, overseeing the facilities management subsidiary of the Group and leading CPG FM's digitization initiatives with his team of digital enthusiasts from the Office for Digitalisation.

Their FM experts manage public buildings, security complexes, offices, educational institutions, as well as townships to ensure that buildings, structures, and spaces under their management are fully functioning, safe, and comfortable for users.

An advocate of continuous professional development, Alan recently received his Professional Diploma in Digitalisation from the Institute of System Science in the National University of Singapore. Modular courses are an advantage for industry professionals, he pointed out, because it allows learners to apply their knowledge and skill immediately in the workplace.

"The way that we acquire knowledge has changed," he said, explaining the reason he chose to obtain the diploma in digitalization.

It is evident that he applied his digitalization skills immediately, for when he set up the Office for Digitalisation at CPG FM. He brought in digital project managers, programmers and digital analysts to spearhead CPG FM's digitalisation agenda, one of them is their Integrated Facilities Management System (iFMS) platform that digitalises and centralises maintenance information and facilitates the processes of maintenance operations. He shared that he is also working on other digital projects with his team.

CPG FM's in-house iFMS has enabled the company to collect data about the operations and maintenance of the facility, which is then used for creating better facilities management outcomes, and allowing their building owner clients to meet their maintenance management and sustainability targets. The data collected during the operations and maintenance phase will be useful for their architectural and engineering consultants so that they can in turn design buildings that are greener and more efficient to maintain.

"Within the FM space, there are elements that we can contribute to the overall design of future buildings, such as the maintainability of components," he said. "The operations and maintenance stage has the largest impact on the lifecycle costing of a building."

In his role as CEO, Alan will focus on ensuring that the company continues to be a leader in the facilities management space, and remain a viable business that delivers profits to shareholders.

"We don't know what we don't know," he said, "so I am guided by the ABCs of my leadership style. A is for Agile - we have to constantly shift our mindset to adapt to a rapidly changing situation. B is for Bold - taking difficult decisions when they need to be made. C is for Collaborative - no one is an expert on everything, so if we share knowledge, we can grow together."

As for grooming more talent for the Built Environment, he points out that the Office of Digitalisation will be an important draw for young people, by breaking down silos in the built environment sector and enabling data to be shared across different stakeholders.

"A lot of the work is about bringing everyone together to create a more attractive environment," he said, "together, we will build the metaverse of the future Built Environment, bringing everyone's dreams together."

Mr. Alan Goh, CEO of CPG Facilities Management (CPG FM), is a member of the Singapore Institute of Building Limited (SIBL). CPG FM is also an Enterprise Member of SIBL and will be supporting the digitisation and sustainability initiatives of the Institute.

UPCOMING SUSTAINABILITY SEMINAR IN MAY 2022

SUSTAINABILITY HAS BECOME A TOP PRIORITY AMONG DECISION MAKERS IN OUR BUILT ENVIRONMENT INDUSTRIES.

Keep an eye out for SIBL's upcoming Sustainability Seminar, coming to you once a month from May 2022.

As a participant, you will learn how to drive a sustainable business model in the Built Environment, by adopting circular economy principles and strategies.

Furthermore, you will gain insights on how to implement effective change management using a stakeholder engagement approach.

Participants will discover how impact investments can realise sustainable growth for the business, by identifying circular economy opportunities in the Built Environment.

At the end of the 3-day seminar you will be able to:

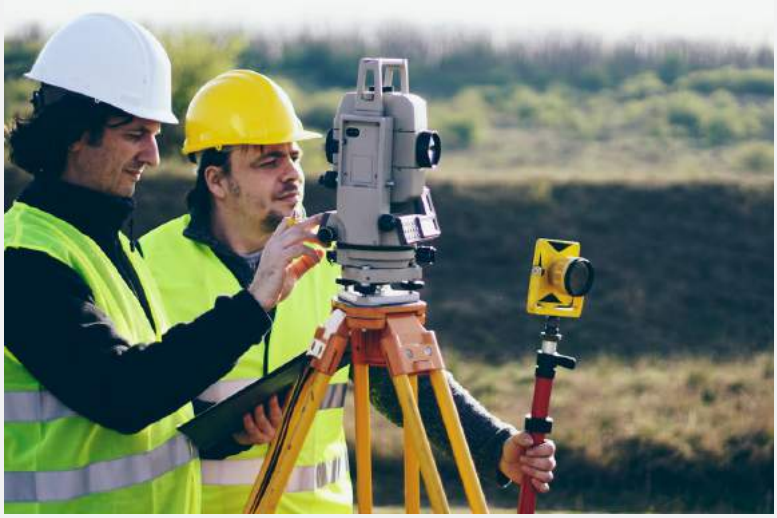
- Describe the 3 dimensions of sustainability and how they interrelate
- Promote a culture of sustainability in the BE Sector
- Demonstrate the value of impactful investments
- Plot the steps for developing a sustainable BE

Programme (4 hours per day):

- Day 1: The Circular Economy & Sustainable Business Model of Built Environment
- Day 2: Building Sustainable Built Environment Organisation
- Day 3: Enablers of Sustainability in the Built Environment Industry

Facilitators: Dr. Sussie Ketit & Dr. Parvathy Subhadra

More details will be sent via the SIBL email updates. See you at our sustainability seminar series!



Quantity Surveying for a Low Carbon Future

The modern Quantity Surveying (QS) profession dates its birth to the Great Fire of London in 1666, which left authorities with the challenge of re-homing almost 90% of the population. In 1785, although trained as an architect, Henry Cooper set up the first QS practice Henry Cooper and Son in England. In that era, it was common for craftsmen to rely on paper sketches and building projects were not costed with any values. This created friction as clients disputed payment claims by craftsmen their job completed, resulting in waste and overclaims. In a nod to the importance of the trade, QS became a registered profession in 1859. A craft that goes by many names, a quantity surveyor is also known as a measurer, estimator, building economist, construction cost consultant and contractual & procurement specialist.

In Singapore, the practice took root when Britishmen David Waters and Eric Watson set up the first QS firm Waters & Watson. The firm operated from 1933 to 1942 (Langdon & Seah Wikipedia), wading through the early war years under Seah Mong Hee – the first Asian chartered quantity surveyor. WW2 in 1946, Waters & Watson was acquired by Horace W Langdon & Every, becoming the precursor Langdon & Seah.

The post-WW2 years proved pivotal the evolution of QS as extensive war reparations made cost control top priority for government. In 1945, Lawrence Miles, purchaser of raw materials for General Electric coined the term 'value analysis'. This methodology was adapted to 'value engineering' in Europe (Designing Buildings)In the UK, the then Ministry of Public Buildings and Works and the Royal Institute of Chartered Surveyors (RICS) began to develop systems of financial control and evaluation for new buildings. This was followed by a milestone in 1957 when the Ministry of Education introduced new principles for cost analysis and cost planning. For the first time, quantity surveyors had to assume the responsibility of managing costs across an entire project life cycle. formulate accurate cost estimates for building works even before tenders are submitted, made the profession a highly valuable asset.

Whole life costing extended beyond 'counting bricks' at the construction phase to cover initial procurement, design costs, operational costs such as maintenance, repairs and energy expenses, and the cost of disposal and building recycling too (Cartlidge 2009). The product and costing expertise of QS, made managing 'value' a natural subject of relevance for them. The profession turned a new chapter in 1987, when the RICS published its report 'A study of Value Engineering and Quantity Surveying Practice'. It affirms the significance of QS in providing different options to realise cost-saving benefits for a project; to make the best of a budget. Although the advent of computer aided design and building information technologies called to question the relevance of the profession, continues to hold will continue to evolve.

Today, the construction supply chain reigns as the 2nd largest by emissions, only to food. Buildings make up 40% of global emissions annually, operational emissions at 28%embodied carbon in materials and construction activities at 11% . In new buildings, upfront embodied carbon can account for as much as 50% of a building's footprint. Just three materials – concrete, steel and aluminium make up 23% of global emissions mostly used in the built environment. Even as 2020 saw emissions dip by 10% from the year before, this was largely due to lockdowns, slowing of economies, energy supply disruption and a fall in construction activity. Decarbonisation efforts of the industry alone minimal impact (UNEP 2020).

As building floor area is expected to double by 2040, integrating embodied carbon with capital cost planning as a framework will offer up opportunities for QS to optimise building value and push the sector closer to its vision of net zero whole life carbon emissions by 2030. Areport Rocky Mountain Institute found that case studies achieved embodied carbon savings of 24–46% at cost premiums of less than 1%. Some have referred to this adapted framework as 'carbon value engineering', based on a new metric that integrates both cost ($) and embodied carbon (kgCO2eq) (Robati 2019). A study conducted based on this adapted framework, found that a 22-storey building was able to enjoy embodied carbon emissions saving in the order of 63-427 kgCO2e/m2 while also obtaining 10% savings in capital cost (Robati 2019).

QS, aided by advanced building information technologies, will support a more holistic view of building 'value' in our carbon-constrained world marked by uptrends in construction electrification, renewable energy adoption, low-carbon building materials, and tradeable environmental assets to name a few. In Singapore, although buildings make up around 20% of emissions, less than the the Singapore Green Plan, Green Building Master Plan and the latest 2022 budget announcement to bring forward Singapore's net zero target to around mid-century, signals a decisive national drive to mitigate and adapt Singapore's economy the long-term impacts of climate change. In the transition to net zero, QS will be foreseeably shaped by industry-wide development Environmental Product Declarations and Material Passports and circular building best practices.

Source

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Author Bio

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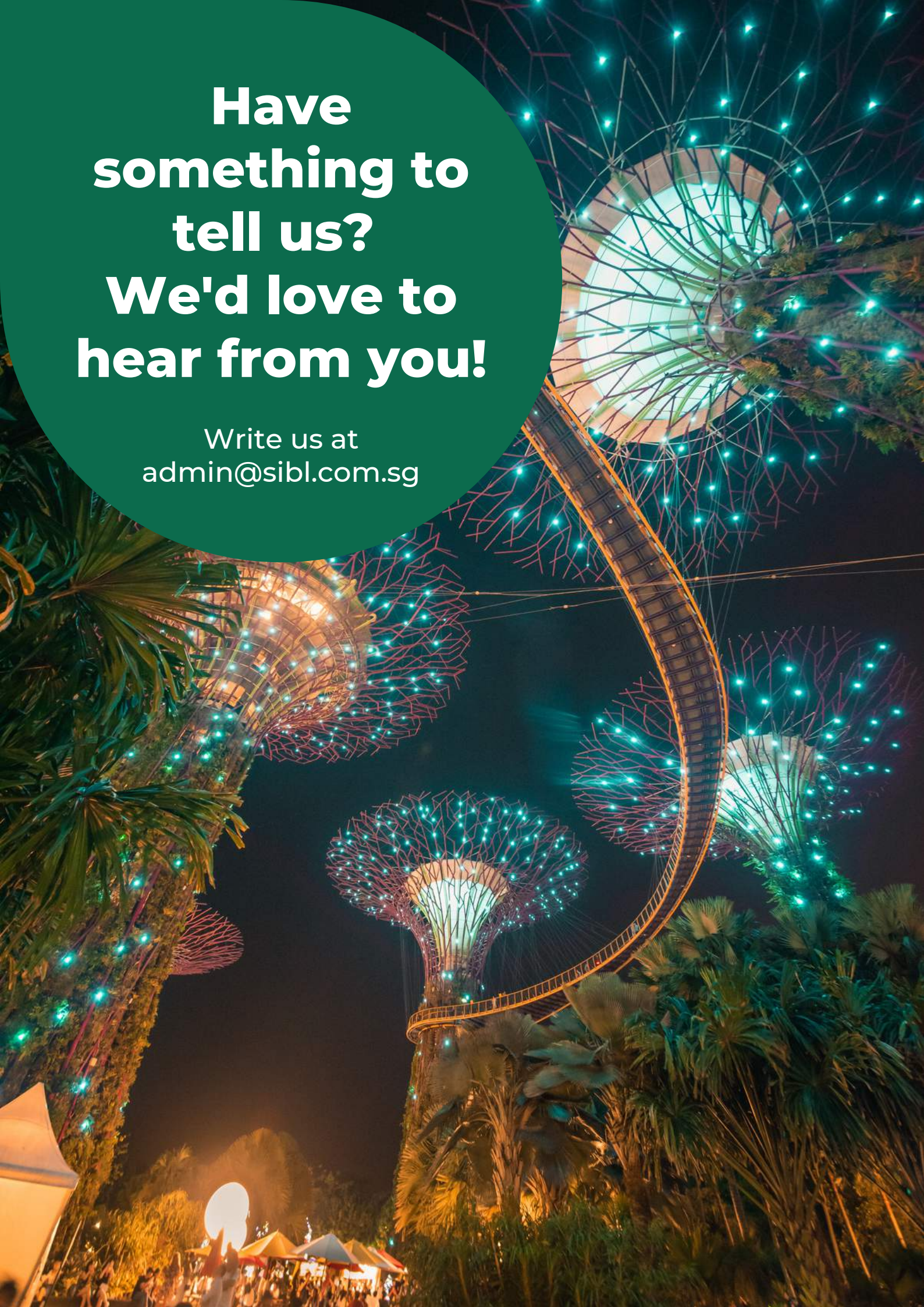

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