

Building towards a **SUSTAINABLE** Built Environment



Date: 29 Jan 2021, Friday
Time: 2.00pm – 4.30pm
Fee: SCAL /SLOTS member: S\$60
ACF member: S\$80
CIJC member: S\$80
Non-member: S\$100
Venue: Online



Programme

Time	Programme
1.30pm	Registration
2.00pm	Welcome Address <i>Mr Raymond Chan, Chairman, Environmental Sustainability Subcommittee, SCAL & Director (Construction Technology), Teambuild Engineering & Construction Pte Ltd</i>
2.10pm	Opening Address <i>Mr Teng Kwok Kheong, President, Chartered Institute of Building (Singapore)</i>
2.20pm	Low carbon construction – opportunities and challenges for our sector – international perspective <i>Ms Emma Davies, Principal Sustainability Consultant, Greater Cambridge Shared Planning Service, UK</i>
2.40pm	Sustainability for Contractors <i>Mr Hasitha Hearth, Sustainability Specialist – Ted Jacob Engineering Group, Dubai, UAE</i>
3.00pm	Low carbon construction – opportunities and challenges for our sector – local perspective <i>Mr Michael E. Long, Head of Sustainability, Lendlease Asia</i>
3.20pm	Embracing DFMA by adopting green and productive solutions utilising Mass Engineered Timber <i>Mr Kevin James Hill, Member, Environmental Sustainability Subcommittee, SCAL & Managing Director, Venturer Pte Ltd</i>
3.50pm	Panel Discussion Moderator: Mr Raymond Chan
4.30pm	End of Webinar

1. Low carbon construction – opportunities and challenges for our sector – international perspective

The construction, operation and maintenance of the built environment accounts for around 40-45% of the UK's carbon emissions. Planning for the built environment therefore has a significant role to play in achieving the UK's legally binding target to achieve net zero carbon by 2050. Starting with the legislative context for net zero carbon, this presentation will provide an overview of the definition of net zero carbon for the built environment and how this target was reached, before considering the role that England's Planning System has to play in supporting the transition to net zero carbon. Some illustrative examples of what a net zero carbon built environment could look like will also be provided.



Emma Davies

Masters (MSc) in Environmental Biology
Masters in Urban and Regional Planning

*Principal Sustainability Consultant,
Greater Cambridge Shared Planning Service, Cambridge, the United Kingdom*

Emma is a Principal Sustainability Officer at the Greater Cambridge Shared Planning Service. Her role includes developing planning policy related to climate change mitigation and adaptation and provision of technical advice on planning applications and wider corporate projects related to sustainable design and construction. Outside of the planning service, Emma is a member of the Local Adaptation Advisory Panel Steering Group, which provides advice to Government on the role of local authorities in delivering climate change adaptation and is a Board Member of the Good Homes Alliance, who promote higher quality housing and standards via collaborations with industry and government.

2. Sustainability for Contractors

With the increasing awareness of climate change, the importance of Sustainability and sustainable development are discussed across many industries today. The construction industry plays a vital role in sustainable development. The contractor is one of the key stakeholders in the construction industry thus plays a major role in contributing to the sustainability commitments in the industry. The integrated approach suggests bringing project stakeholders including the contractor into the project early to establish and execute the project's sustainability goals and ultimately making a positive impact to the environment

This presentation takes a large-scale LEED-certified project in the Middle East region as a case study and will present the environmental and sustainability challenges faced by the project and the actions contractor took to mitigate those challenges. The key challenges being, mitigating environmental pollution associated with construction works, construction waste management, and procuring sustainable materials with a lower carbon footprint.

In addition to the above, the latest trends in the sustainable construction industry which can be adapted by the contractors will be explored in the presentation.



Hasitha Hearth

MSc, BSc(Hons), CEnv, LEED AP BD+C,
LEED AP O+M, LEED AP Homes, PQP
GREEN SL® AP, MCIOB, MIEEnvSc

Sustainability Specialist – Ted Jacob Engineering Group, Dubai, UAE

Committing to sustainability, Hasitha continues to be engaged in developing low carbon and efficient buildings, greatly reducing the negative environmental and social impacts of the construction.

A graduate of the Sheffield Hallam University, UK, and a post-graduate from the University of Salford, UK, Hasitha holds multiple Royal Charter memberships, Chartered Construction Manager from Chartered Institute of Building UK, and Chartered Environmentalist from the Society for the Environment, UK.

Pioneering in the Middle East and Southern Asia, Hasitha has successfully delivered over 40 commercials, residential and industrial sustainable building projects.

3. Low carbon construction – opportunities and challenges for our sector – local perspective

The UN forecasts that by 2050 over 68% of the world's population will live in cities. With the built environment contributing over 30% of the global emissions, the construction and real estate sector are presented with an urgent decision to either innovate and lead the change or be driven by regulatory compliance, increased competition and financial risk.

While there is no 'silver bullet' for the construction industry, there are measures our sector can take towards limiting global warming to no more than 1.5 degrees. But in doing so, it's important we develop a solid understanding of where we are now so we can better plan for the journey ahead, both in the short term and beyond.

This presentation will share a few of our insights, lessons learnt and aspirations as we strive towards our global target to be net zero carbon by 2025 (scope 1 & 2) and absolute zero by 2040 (including scope 3).



Michael E. Long

Head of Sustainability, Lendlease Asia

Michael is an Environmental Scientist with over 25 years international experience across a range of public and private sectors including infrastructure, defence, utilities, real estate and construction. In his current role as Head of Sustainability for Lendlease Asia, Michael oversee all aspects of ESG (environmental, social and governance) across Lendlease's development, construction, investment management and asset management portfolio.

With Lendlease recently announcing its commitment to be net zero carbon (scope 1 & 2) by 2025, absolute zero carbon by 2040 and create \$250M of social value by 2025, Michael is focused on integrating sustainability into core Business strategy and investment decisions. He believes that understanding physical and transitional risks of climate change presents new opportunities for an organisation to challenge norms, invest in new solutions and strategically partner with investors and the supply chain.

Creating resilient places are at the heart of a sustainable future where communities and the natural environment can continue to thrive.

4. Embracing DFMA by adopting green and productive solutions utilising Mass Engineered Timber

Embracing Design for Manufacturing and Assembly (DfMA) by adopting green and productive solutions utilising Mass Engineered Timber

- How the adoption of Mass Timber in Singapore started, and where we think it is headed
- Global trends in Mass Timber construction
- Opportunities presented by COVID 19 Global Pandemic

Mass Timber is widely considered to be one of the most Sustainable methods of building permanent structures. However, it's adoption in Singapore has faced numerous hurdles including; Regulatory, Climatic and Economic, these have been overcome to realise numerous projects here, however Mr Hill believes that the adoption of the technology here must be "Singapore specific" and blend with other methods of construction.

Driven by its truly sustainable credentials, global growth in Mass Timber is exponentially growing. However, in this COVID era, construction technologies, like Mass Timber, that are fast, productive and efficient present opportunities for both Developers and Builders alike, with the added bonus of boosting the beauty and creativity of our vibrant local design scene.



Kevin James Hill

Member, Environmental Sustainability Subcommittee, SCAL & Managing Director, Venturer Pte Ltd

Kevin Hill is a UK Chartered Builder and an construction professional who has resided in Singapore for nearly 30 years. Mr. Hill has a broad experience within Singapore's Construction Industry going back to his early involvement in Public projects. Kevin is a current member of the BCA Productivity Gateway Advisory Panel, furthermore, he is a regular Guest Lecturer at the BCA academy on Construction Productivity and Design for Manufacturing and Assembly.

Mr Hill is the Managing Director of International Timber Design and Construction company, Venturer Pte Ltd, who were founded by him in the mid-nineties. Venturer are one of the region's leading adopters of Mass Engineered Timber (MET) Construction, together with its partners they pioneered some of the first Mass Engineered Timber Structures in Singapore.

Headquartered in Singapore, Mr. Hill has succeeded in introducing this technology into other markets including the Middle East, Maldives, Indonesia, and Resort destinations near the USA.

Mr. Hill is a past British Chamber of Commerce Entrepreneur of the year winner, and is the founder of Singapore based Double Helix Tracking Technologies, a business that uses scientific methods to secure timber supply chains that promote the legal trade in Timber.