WORKSHOP SERIES



Decarbonizing the Built Environment – Pragmatic Renewal & New Energy Solutions & Strategies

WORKSHOP OVERVIEW

Fossil fuels are still a critical component of our energy systems. The world is facing a daunting challenge: how to transition to a low-carbon energy system that can meet the needs of a growing global population while also addressing the urgent threat of climate change. While it's clear that we need to transition away from fossil fuels and work towards a cleaner energy future, the reality is that oil and gas still play a critical role in our energy mix and it will take time to develop and scale up alternative energy sources.

As per the current Green Mark standards, A Super low energy building in Singapore is defined as the best-in-class energy performing Green Mark building that can achieve 60% energy savings with reference to 2005 building codes. To achieve such steep energy savings will require all the building systems to be designed to perform optimally with the least energy consumption as possible and the energy production through renewables to be maximised both spatially and in terms of system performance. In the tropical climate condition, ACMV systems which consumes 40% of the overall building energy then becomes the most critical building system for the 60% energy savings target to be achieved.

LEARNING OUTCOMES

The workshop will discuss selected examples of renewable and new energy solutions to ensure that our energy systems remain secure and reliable. Participants will

- * Achieve the faster progress on energy efficiency that is needed to address today's global energy crisis and pressing climate imperatives.
- * Gain experience on the design philosophy and critical performance criteria to be met by the ACMV systems to achieve the super–low energy status for commercial buildings in Singapore.
- * Gain insights on strategies and technologies to achieve the required savings.

In Association with Surbana Jurong Consultants Pte. Ltd.

EDUCATION PARTNERS

Tan Wooi LeongManaging Director,
Energy & Industrial

Praveen Hassan Chandrashekar Director, Sustainability & Resilience Office

DATE

7 August 2023, Monday

TIME

9:30am to 12:30pm

VENUE

REDAS Boardroom 190 Clemenceau Avenue, #07-01 Singapore Shopping Centre, Singapore 239924

FEES (inclusive of GST)

- * **\$200** (REDAS Member)
- * \$250 (Non-REDAS Member)

REGISTRATION

Registration will be closed on <u>1 August 2023</u>

CPD ACCREDITATION

BOA-SIA: Pending PEB: Pending SISV: 2 pts

TRAINERS' PROFILE



Tan Wooi Leong
Managing Director, Energy & Industrial
Surbana Jurong

As Managing Director, Energy & Industrial Division, of Surbana Jurong Group and Functional Lead (ASEAN) for Power & Energy at Surbana Jurong & SMEC, Wooi Leong is also the SJ2.0 Global Focus Area Leader for

Renewables & part of the Global Sustainability Council for the Group. He has performed roles involving strategy advisory, project delivery leadership, technical consultancy & R&D development for power & energy infrastructure & technologies, renewables, energy storage system, hydrogen, ammonia, low carbon alternatives and CCUS related projects in APAC, ME & LATAM.

Specifically, Wooi Leong had led the development of GW scale solar/wind/geothermal projects integrated with GWh scale energy storage system, intercontinental HV power transmission, underground storage caverns & infrastructure, specialized industrial clusters & buildings, floating infrastructure, hydrogen & ammonia specialist energy studies & advanced research activities in cryogenic energy, carbon capture & carbon utilization technologies. Currently, he is also developing energy transition & decarbonization roadmaps for industrial clusters in UK, Malaysia (Sarawak & Johor) & China. He was nominated as Who's Who of Engineering in Singapore in 2020 and has also won awards and accolades for his contribution to various engineering feats in Singapore and in the region.



Praveen Hassan Chandrashekar
Director, Sustainability & Resilience Office
Surbana Jurong

As head of the Sustainability & Resilience Office (SRO) at Surbana Jurong, Praveen Hassan Chandrashekar possesses a strong passion for sustainability and environmentally conscious Passive and

Active Design. Praveen has more than 11 years' experience in the field of environmentally sustainable design and building performance assessment. He holds a Master's Degree in Building Performance and Sustainability from National University of Singapore and Bachelor's degree in Mechanical Engineering. Prior to this, Praveen has worked as a Mechanical Engineer for 7 years and involved in many high-profile projects.

Praveen is a Certified Green Mark Advanced Accredited Professional (GMAAP), LEED Accredited Professional, EDGE Expert, and GRI Certified Sustainability Professional with experience ranging across different typologies for projects including in

CONTACT

Please email enquiries to:

- Jojo Wong jojo@redas.com
- Seeto Kin Meng kinmeng@redas.com

Singapore and across the region. He was part of the design team that oversaw the planning, design and supervision of Asia's first high-rise rotatable laboratory located at BCA Academy. He played a key role and lead the ESD, Mechanical and BMS design. The project received "2017 Minister's Award" and "IES Prestigious Engineering Achievement Award 2017". He was the project lead for formulating the new standards on "Design for maintainability" involving Govt. agencies, designers, and built environment stakeholders. Praveen and his team are pushing the boundaries of Sustainable Design and have spearheaded the Net Zero Energy and Super Low Energy designs in Surbana Jurong.

Real Estate Developers' Association of Singapore (REDAS)

190 Clemenceau Avenue, #07-01 Singapore Shopping Centre, Singapore 239924 Tel: 6336 6655 Email: redas.secretariat@redas.com URL: www.redas.com



Membership

REGISTRATION FORM

Decarbonizing the Built Environment – Pragmatic Renewal & New Energy Solutions & Strategies 7 August 2023, Monday; REDAS Boardroom; 9.30am – 12.30pm

<u>Participants</u> <u>will be entitled to CPD Accreditation</u>. Kindly email Registration Form to redas_secretariat@redas.com. Your favourable response on or before Tuesday, 1 August 2023 would be much appreciated. For enquiries, please contact REDAS Secretariat Tel: 6336 6655. Thank you.

□ REDAS Member	□ Non REDAS Member			
Information				
Company Name :				
Billing Address:				
Contact Person :	Designation :			
Contact No :	Email :			
Participants' Details				
	(1)		(2)	(3)
Full Name	(+)		(2)	(3)
Designation				
Email				
Contact No.	ntact No.			
** If you are registering for more participants, please email the names to redas_secretariat@redas.com				
Registration Fees				
(Inclusive of 8% GST)		No. of	Participants	Amount (S\$)
□ REDAS Member @ S\$200.00				
□ Non-REDAS Member @ \$\$250.0				
Total = S\$				
CPD Accreditation	E -Invoice (for statutory boards/govt only)			
BOA-SIA: Pending PEB: Pending SGBC: Pending SISV: 2 Points	Sub-BU Code :			
	Department :			
	Attention to :			
□ Bank Transfer Name of Bank: United Overseas Bank (UOB), 1 Coleman Street, #01-14 The Adelphi, Singapore 179803 Account Number: 501-301-727-2 Account Name: Real Estate Developers' Association of Singapore Swift Code: UOVBSGSG II Bank Code: 7375 II Branch Code: 046 *Any bank charges incurred as a result of bank/telegraphic transfers will have to be borne by your company. □ Cheque				
Please issue cheque to "REDAS" and mail the crossed cheque to 190 Clemenceau Avenue, #07-01, Singapore Shopping Centre, Singapore 239924.				
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