



GREENRE TECHNICAL SEMINAR 02-2025

CALCULATING SCOPE 3 EMISSIONS USING THE GHG PROTOCOL FOR PROPERTY DEVELOPMENT



SCAN TO REGISTER



20 MAY
21^{to} 2025



9.00 AM
to 5.00 PM



**Wisma REHDA,
Kelana Jaya
(Hybrid)**

***Certificate of Attendance will be given**
CPD : GreenRE (8), ST & MBOT (TBC)

Course Fee:

RM799 (GreenREAP / REHDA)
RM849 (Non-Member)

COURSE OBJECTIVE

To provide built environment professionals in Malaysia and similar economies with practical knowledge and tools to better understand carbon accounting and reduce Scope 3 emissions across the property development lifecycle, in alignment with the GHG Protocol and national climate targets.

COURSE SCHEDULE

DAY 1 – 20 MAY 2025

9.00AM - 9.30AM

Welcome & Introduction

9.30AM - 10.30AM

Module 1: Climate Change & Built Environment

- The Science of Climate Change: IPCC, Paris Agreement, and 1.5°C target
- Climate Risks in Southeast Asia and Malaysia (flooding, urban heat, etc.)
- Malaysia's Climate Targets (e.g., Net Zero 2050, NDCs, MyHIJAU, TCFD)
- Why Scope 3 Matters for Property Developers? Global Trends and Local Context
- Role of Scope 3 in Achieving Sustainable, Low-Carbon Property Development

10.30AM - 10.45AM

Morning Break

10.45AM - 12.15PM

Module 2: GHG Accounting Fundamentals

- Introduction to GHG accounting and the GHG Protocol
- Definitions and boundaries: Scope 1, 2, and 3
- GHG Protocol's Corporate Value Chain (Scope 3) Standard
- Scope 3 categories and which ones matter most in property development

12.15PM - 01.15PM

Lunch Break

01.15PM - 03.00PM

Module 3: Identifying Relevant Scope 3 Categories

- Detailed walkthrough of relevant categories for Malaysian property projects:
 - Purchased goods and services: cement, steel, timber, glass
 - Capital goods: M&E systems, elevators, heavy machinery
 - Fuel- and energy-related activities
 - Waste handling, construction and demolition waste(with Malaysian waste streams)
 - Employee travel, commuting, subcontractor activities
 - Downstream emissions: leased assets, operations, and tenants
- Lifecycle thinking for emissions across pre-construction, construction, operation, and end-of-life

03.00PM - 03.15PM

Afternoon Break

03.15PM - 05.00PM

Module 4 : Data Collection & Boundary Setting

- Setting organisational and project boundaries
- Mapping emissions sources across the property value chain
- Data types: primary vs. secondary, and data quality
- Malaysian and International sources for emission factors (e.g., SEDA, GreenTech Malaysia, MyCREST, CIDB, ICE, IStructE, TFC)
- Working with contractors, suppliers, and consultants to gather data

COURSE SCHEDULE

DAY 2 – 21 MAY 2025

9.00AM - 9.30AM	Arrival & Recap
9.30AM - 10.30AM	Module 5: Calculating Scope 3 Emissions <ul style="list-style-type: none">• Activity-based vs. spend-based methods: when to use which• Applying emission factors (localised and international)• Material quantification (BQs, BIM, LCA integration)• Local waste and recycling assumptions• Tools relevant to Malaysian context:<ul style="list-style-type: none">- OneClick LCA- WRAP Embodied Carbon Database- IStructE, ICE, GHG Protocol Excel tools
10.30AM - 10.45AM	Morning Break
10.45AM - 12.15PM	Module 6: Case Study Workshop <ul style="list-style-type: none">• Guided Calculation of Scope 3 Emissions For:<ul style="list-style-type: none">- Structural materials- Building services and finishes- Waste from construction and demolition- Operations energy use projections• Interpreting results and identifying carbon hotspots• Reflection: How Scope 3 accounting informs climate-conscious design
12.15PM - 01.15PM	Lunch Break
01.15PM - 03.00PM	Module 7: Reporting & Reduction Strategies <ul style="list-style-type: none">• Aligning with national frameworks: Bursa Malaysia, NSRF, TCFD, SBTi• Reporting formats (CDP, GRESB, ESG reports)• Reducing emissions through:<ul style="list-style-type: none">- Low-carbon materials and suppliers- Circular construction approaches- Green procurement policies- Design for performance and operation
03.00PM - 03.15PM	Afternoon Break
03.15PM - 05.00PM	Module 8 : Future Directions & Regional Collaboration <ul style="list-style-type: none">• Setting organisational and project boundaries• Mapping emissions sources across the property value chain• Data types: primary vs. secondary, and data quality• Malaysian and International sources for emission factors (e.g., SEDA, GreenTech Malaysia, MyCREST, CIDB, ICE, IStructE, TFC)• Working with contractors, suppliers, and consultants to gather data

SPEAKER PROFILE

With over 25 years of experience in consulting and contracting across the design, construction, and management of major multidisciplinary infrastructure projects, Ir. Gandhi brings deep expertise and a global perspective to every initiative. As a Chartered Engineer and Fellow of the Institution of Civil Engineers, he has led the successful delivery of complex transport infrastructure and built environment assets—from concept and design through to construction, lifecycle maintenance, and rehabilitation.

In addition to his professional work, Ir. Gandhi proudly serve as Chair of ICE Malaysia, an ICE Supervising Civil Engineer, Engineering Mentor, and STEM Ambassador. He is currently pursuing a Master's in Sustainability Leadership at the University of Cambridge.



Ir. Gandhi Suppiah
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