

# 2-Days Workshop on GHG Emissions Accounting & Management

(Based on ISO 14064-1:2018)

19 - 20 February 2025 (Physical - KL/Putrajaya)  
24 - 25 June 2025 (Online)  
28 - 29 October 2025 (Physical - KL/Putrajaya)  
Time: 8:30 am - 5:00 pm

\*Date subject to changes. For latest date, refer to website.

RM3,200 per pax (Normal Rate)  
RM3,100 per pax (Register 30 days  
before workshop, or Group of 3)

\*Price excluding 8% SST charges



Drive Energy-Emissions Management  
to Net Zero



Identify, Quantify, Analyse &  
Report GHG Emissions



Monitor and Reduce Energy  
and Emissions



Register Now!

<https://shorturl.at/yzsPX>

Organized by:



Featuring: GHG Software

**LCOS**

Low Carbon Operating System



MyHS00015/22-E002

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# OVERVIEW

Are you ready to take your organisation's sustainability and ESG efforts to the next level? Join our upcoming training on GHG accounting and energy-emissions management with a 3-in-1 package of *training, case study and working sessions* as well as *software demonstration*.

Over the course of two days, you'll have the chance to learn and apply the techniques for GHG accounting and reporting, from principles and inventory boundaries to emission quantification and reporting based on the ISO 14064-1:2018 standards. We will also demonstrate how to use a GHG accounting software to streamline your reporting process.

Wait, there are more. You will also be exposed to the Science-Based Target Initiative (SBTI) to establish corporate emissions target, and a systematic hierarchical approach for energy and emissions management reduce energy and emissions.

Don't miss out on this valuable opportunity to gain the knowledge and skills you need to transform your organization's sustainability and ESG efforts. Register today and join our 3-in-1 training program!

# LEARNING OUTCOMES

At the end of this training, participants will be able to:

- Drive and plan
  - Gain awareness and drive to synergise energy and emissions management.
  - Pave the way toward net-zero carbon emissions.
- Identify, quantify, analyse and report
  - Understand the concept and principles of GHG accounting and reporting, including the inventory boundary, GHG emission identification and reporting.
  - Quantify GHG emissions.
  - Use LCOS GHG accounting software.
  - Report the results based on ISO 14064 standards.
- Target, evaluate and mitigate
  - Establish Science-Based Target Initiative (SBTI Targets)
  - Evaluate emission reduction options
  - Systematically mitigate GHG emissions

# TARGET AUDIENCE

Sustainability or ESG managers, energy and environmental engineers and managers, consultants and professionals interested in implementing sustainable practices.

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# WORKSHOP SCHEDULE

Day 1	
8:30am - 9:00am	Registration and Breakfast
9:00 am - 10:15 am	Road to Net-Zero: Integrated Energy-Emission Management
10.15 am - 10.30 am	Break
10:30 am - 11:00 am	GHG Accounting and Reporting Principles
11:15am – 13:00 pm	GHG Inventory Boundary
13:00 pm - 14:15 pm	Lunch
14:15pm - 16:00pm	GHG Management Practice
16:00pm - 16:15pm	Break
16:15pm - 17:00pm	GHG Emission Quantification Methodology and Calculation – part 1

Day 2	
8:30am - 9:00am	Participants arrival and Breakfast
9:00am - 10:45am	GHG Emission Quantification Methodology and Calculation – Part 2
10:45am - 11:00am	Break
11:00am - 13:00pm	GHG Emission Quantification Methodology and Calculation – Part 3
13:00pm - 14:15pm	Lunch
14:15pm - 15:00pm	GHG Emission Quantification Methodology and Calculation – Part 4
15:00pm - 16:00pm	Demo on the GHG accounting software
16:00pm - 16:15pm	Break
16:15pm - 17:00pm	GHG inventory reporting based on ISO 14064 standard

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# SPEAKERS' PROFILE



**SPEAKER 1**

## **ASSOCIATE PROF IR DR LIM JENG SHIUN**

**PEng, CEng, MChemE, CEM, REEM, CEA, AEMVP**

Associate Professor Ir Dr Lim Jeng Shiun is the Director of Products and Service, Optimal Systems Engineering Sdn Bhd, a UTM spin-off company specialising in providing solutions related to energy conservation and GHG emissions reduction. He is also the Deputy Director of Process Systems Engineering Centre (PROSPECT), Universiti Teknologi Malaysia. His core expertise is in the area of innovative development and application of process systems engineering techniques for resource conservation, and energy and carbon planning.

He is also a professionally Certified Energy Manager, Certified Energy Auditor, Accredited Energy Measurement & Verification Professional and a Registered Electrical Energy Manager certified by the Energy Commission of Malaysia. He is the trainer of the Energy Management Trainer Course conducted by MGTC to certify the Energy Manager. He is also the instructor for MSc Energy Management in UTM, sharing knowledge related to energy efficiency and energy management.

As an engineer in practice, he has applied the output of his research work to consultancy projects for the industrial community. He has been extensively involved in more than 35 industrial-based projects for various companies and government agencies. The key clients include local industries and multinational companies such as BERNAS, FABER MEDISERVE, SHELL, OLEON in Malaysia and PERTAMINA in Indonesia. He has assisted those companies to identify energy-saving opportunities worth millions of dollars and GHG reduction opportunities through the use of process integration and process systems engineering approaches in the energy audit and GHG emissions accounting projects. He has shared his project experience in his co-authored book titled Pinch Analysis for Energy and Carbon Footprint Reduction, published by the Institution of Chemical Engineers (IChemE). He has been invited to share his experience on Net Zero carbon for industry and facilities, including on Net Zero Carbon for Palm Oil Industry organised by IChemE.

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# SPEAKERS' PROFILE



SPEAKER 2

## **PROF IR TS DR ZAINUDDIN ABDUL MANAN**

**FASc, FIChemE, PEng, Professional Technologists, CEng, CEM, REEM, Certified CEM Trainer, Certified HRD Trainer**

Prof Ir Ts Dr Zainuddin Abdul Manan is a professor of chemical and energy engineering, the founding director of UTM Process Systems Engineering Centre (PROSPECT), founding Dean of UTM Faculty of Chemical and Energy Engineering, founder of UTM Sustainable Energy Management Program and the CEO and founder of the UTM spin-off company OPTIMISE Sdn Bhd. He began his career as an engineer in PETRONAS and Hume Industries and has been an academic leader, educator, researcher, consultant and professional coach for over 25 years.

He completed over 100 R&D & consultancy projects serving local and multinational companies, has numerous patents and over 450 publications that include 20 books/ chapters, 230 refereed journals and 250 conference proceedings on energy and resource conservation using process integration techniques. He is a co-author of the globally referred Book on Process Integration and Intensification – Saving Energy, Water and Resources. Zain is a UK/EU chartered engineer, a Fellow IChemE (UK), Fellow of Academy of Sciences Malaysia, a professional engineer, a professional technologist, a certified energy manager, a registered electrical energy manager and a certified trainer for ASEAN energy managers.

He has coached professionals from over 500 organisations and delivered over 400 invited talks in professional courses, conferences and seminars worldwide. Dr. Zain is the Chair of Academy of Sciences Malaysia Energy Committee and the MyNet Zero Task Force, and the Chair of Malaysia's Energy Efficiency and Conservation Act (Thermal Energy) Drafting Committee. He founded and spearheaded the UTM Sustainable Energy Management initiative that led UTM to achieve over USD 7 million energy savings between 2011 and 2023, to win the ASEAN Energy Awards in 2012, the National Energy Award 2022, the first AEMAS 3-Star ASEAN Certified Energy-Efficient organisation, and UTM to be ranked 1st globally by Times Higher Education on SDG7 –Affordable and Clean Energy.

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# SPEAKERS' PROFILE



**SPEAKER 3**

## **DR TAN YUE DIAN**

### **Chemical Processes and Energy Engineer – Sustainability and ESG**

Dr Tan Yue Dian is a chemical process and energy engineer at Optimal Systems Engineering Sdn Bhd, a UTM spin-off company with proven success in energy and resource conservation, consultancy and in providing professional training services. Her expertise includes sustainability management and awareness building, such as greenhouse gas (GHG) emissions and carbon footprint reporting, from corporate to community levels. Dr Tan completed her PhD in Chemical Engineering with specialisation in process optimisation and sustainable planning. Her study has addressed important research gaps in the sustainability impacts of effluent elimination and mill-refinery integration in palm oil mills. Dr Tan has been assisting companies in developing and reporting GHG inventory, as well as establishing product carbon footprints. She is also involved in community-level GHG accounting project, where she collaborates with various government agencies and local companies to support the National Low Carbon Cities Masterplan in Malaysia. As a young scientist, Dr Tan has been awarded the runner-up position in the prestigious YSN-ASM Chrysalis Award 2021, as well as the Gold Medal for Innovation award at Malaysi Technology Expo 2021.

# WHAT OUR TRAINEES *Said*



The GHG calculation training was clear and insightful, making complex concepts easy to understand. The practical examples and hands-on exercises greatly improved my grasp of the subject. I now feel confident applying these skills in my work. Highly recommended!

**Nur Aishah binti Kamarudin**

Facility Engineer

Omron Malaysia Sdn Bhd

2-Days Workshop on GHG Emissions Accounting and Management participants [20 - 21 August 2024]



This course has practical work sessions which allow participants to apply what they learn, and by doing so, reinforces their understanding and helps to retain knowledge. You don't know if you truly understand the concept until you've been asked to apply them.



**LAU ZHENG ZHOU**

MANAGER (ESG & SUSTAINABILITY)

HONG LEONG BANK

2-Days Workshop on GHG Emissions Accounting and Management participants [11 - 12 May 2023]



I think what is great about this training is that we get to practice almost immediately the details shared. This way the understanding of the subject is immediately applied and clarified if not understood especially since the training is done online.



**THARMASWARAN**

PROJECTMANAGER

FLUX POWER ENGINEERING SDN BHD

Introduction to GHG Accounting participants  
[8 February 2023]