

2-Days Workshop on GHG Emissions Accounting and Management

(Based on ISO 14064-1:2018)

28 - 29
Nov **2023**

Venue: MGTC, Bandar Baru Bangi
Time: 8:30 am - 5:00 pm
Meal is provided



8
CDP

Hours Approved
by Energy Commission

Fee: RM2,600/pax

Drive Energy-
Emissions
Management to
Net Zero

Identify, Quantify,
Analyse & Report
GHG Emissions

Monitor and
Reduce Energy
and Emissions

A 3-in-1
Training Package

- GHG emissions accounting and management
- Use **LCOS Software** to quantify, manage, mitigate & report GHG emissions
- Real-time energy monitoring, optimisation tools

Organized by:



Featuring:
GHG Software



Low Carbon Operating System



3RD CONVENTION ON
PROMOTION OF ENERGY
SUSTAINABILITY BEST
PRACTICES
ASEAN 2023

Prelude to **COPE-BEST 2023**
October 2 - 4, 2023

OVERVIEW

Are you ready to take your organization'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, software demonstration and use of real-time monitoring and optimisation tools.

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 tools for energy-emissions management, including real-time monitoring of energy systems and optimization of chiller efficiency to help reduce energy wastage and cut down 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.
- Monitor and mitigate
 - Apply smart systems for real-time monitoring and control of energy consumption.
 - Optimize the delta-T to improve energy efficiency of chiller systems.

TARGET AUDIENCE

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

TRAINING 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

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.

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

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 save over USD 7 million energy costs between 2011 and 2020, and to win the ASEAN Energy Awards.

SPEAKERS' PROFILE



SPEAKER 3

PROF IR TS DR SHARIFAH RAFIDAH WAN ALWI

P.B.S, PEng, CEng, MICHemE, MIEM, REEM, CEM

Prof Ir Ts Dr Sharifah Rafidah Wan Alwi is a Professor in the School of Chemical and Energy Engineering, Universiti Teknologi Malaysia. She previously helmed as the Director of Process Systems Engineering Centre for ten years (2011 to 2021). She is an expert resource minimisation consultant for multiple industries and is among the leading researchers in resource integration technique development. Prof Sharifah is also the co-founder and Director of Optimal Systems Engineering Sdn Bhd, a UTM Spin-off company. She has been extensively involved in 80 research projects, 17 industrial based projects for various companies and government agencies and has trained engineers from more than 300 companies in the field of sustainable engineering design and management. Together with her team, they have developed 7 resource minimisation software.

Sharifah has won various international and national awards such as Green Talents 2009 (Germany), IChemE Highly Commended Sir Frederick Warner Prize 2011 (UK), ASEAN Young Scientist and Technologist Award 2014, National Young Scientist Award 2015, ASEAN-US Science Prize for Women 2016 in Energy Sustainability, Malaysia Research Star Award 2016, 2018, 2019, Top Research Scientists Malaysia 2018 and Sarawak State - International Women Award 2021. She was listed as 'Asian Scientist 100' in 2017 and 'Asia's Rising Scientists' in 2020, and '8 Women Scientists from Asia You Should Know' in 2021 by AsianScientist.com. Sharifah is also the Associate Editor for Journal of Cleaner Production and UTM Sustainable Energy Management System advisor.

She has also served as the Chair for the Science Leadership Working Group under Young Scientist Network, Academy of Sciences Malaysia (YSN-ASM) and Chair for Malaysia IChemE Young Engineer Group (YEG). Sharifah is also a professional engineer, a professional technologist, a UK/EU chartered engineer, a certified energy manager, a registered electrical energy manager and a certified trainer for ASEAN energy managers.

SPEAKERS' PROFILE



SPEAKER 4

SAIFUL ADIB BIN ABDUL MUNAFF

Senior Director of Operations, Malaysian Green Technology and Climate Change Corporation (MGTC)

Saiful Adib bin Abdul Munaff is the Senior Director of Operations at the Malaysian Green Technology and Climate Change Corporation (MGTC). He works closely with stakeholders at all levels to help advance green growth and climate action. After spending more than a decade working in sustainable development across various industries, Saiful has developed an appreciation of the complexities of sustainable development and the challenges in implementing sustainability strategies. At the core of it, he believes that it is about how well we connect with the people we are trying to help and communicate our understanding back to them.

Saiful is a certified Green Building Facilitator, Energy Manager, BIM Professional and a HRDCorp Trainer.

Saiful holds a Masters Degree in Sustainable Development from the University of New South Wales and a BSc (Hons) in Electrical & Electronics Engineering from the University of Technology PETRONAS.

WHAT OUR TRAINEES *Said*



Comprehensive training which achieved its main objective in equipping trainees with the fundamentals to start GHG Accounting in respective organization

**ASHRAF TARIQ
ANWAR BIN ANUAR**

HEAD OF TECHNICAL
LHOIST MALAYSIA SDN BHD
2-Days Workshop on GHG Emissions Accounting and
Management participants [11 - 12 May 2023]



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]