



THE FUTURE OF INDUSTRIAL ENERGY: ENERGY STORAGE, RENEWABLES, AND DECARBONIZATION TRENDS



19 NOVEMBER 2026
(THURSDAY)



9:00 AM – 5:00 PM



FMM MELAKA BRANCH



SBL-KHAS Approval No: 10001759626

SYNOPSIS

This workshop breaks down the practical application of industrial energy efficiency, on-site renewable energy integration (solar, biomass, etc), and advanced storage technologies (BESS and thermal energy storage). Participants will gain actionable frameworks to optimize power usage, reduce peak demand charges, capture thermal waste, and evaluate low-carbon investments for high financial and operational return.

LEARNING OUTCOMES

Upon the completion of the programme, participants should be able to:

- Evaluate Global & Local Decarbonization Trends: Identify regulatory, market, and supply-chain pressures impacting manufacturing operations and benchmark their facility's current carbon footprint.
- Assess Renewable Energy & Storage Systems (BESS): Analyze the feasibility, sizing, and grid integration of on-site renewables combined with battery and thermal energy storage for peak shaving and load shifting.
- The core principles of energy management systems (such as ISO 50001) and structure a targeted energy action plan to systematically identify, prioritize, and execute efficiency improvements across plant operations.



WHO SHOULD ATTEND ??



- Corporate Executives & Board Members
- CEO, CTO, CFO, COO
- Investors & Financial Analysts evaluating RE risks and opportunities
- Compliance & Risk Managers navigating RE regulations
- Engineers
- Government & NGO Representatives promoting sustainable development

PROGRAMME OUTLINE

0830 *Registration*

0900 **The Global Energy Transition Landscape**

- Overview of global decarbonization and net zero trends.
- Global investment flows in renewable energy.
- Key market drivers: ESG finance, regulatory shifts, and carbon pricing.

1000 *Morning Teabreak*

1015 **Malaysia's Renewable Energy Landscape**

- Malaysia's RE policies, incentives, and national targets.
- Institutional players: SEDA, Suruhanjaya Tenaga, and others.
- Renewable energy mix and project pipeline.
- Case studies: Successful renewable energy investment projects in Malaysia.

1300 *Lunch*

1400 **Energy Management Frameworks & Action Plan Development**

- Foundations of ISO 50001: The Plan-Do-Check-Act (PDCA) continuous improvement cycle for industrial plants.
- Identifying Significant Energy Uses (SEUs): Mapping high-consumption equipment (compressed air, boilers, industrial chillers, motor systems).
- Structuring an Energy Action Plan: Setting baseline metrics (EnPIs), defining target KPIs, and assigning cross-functional accountability.

1530 *Afternoon Teabreak*

1545 **Carbon Accounting and Its Financial Relevance**

- What is carbon accounting and why it matters.
- Understanding Scope 1, 2, and 3 emissions.
- How carbon costs and credits influence project ROI as well as other financial implications
- Implementation.

1700 *End of Programme*



PARTICIPATION FEE :

MEMBERS: RM 648.00 (per pax)

NON-MEMBERS: RM 756.00 (per pax)

(Fee includes 8% SST, Course Materials
and Certificate of Attendance)

SPEAKER PROFILE

Ir. Prof. Dr. Chua Kein Huat is an accomplished energy expert and Associate Professor at the Lee Kong Chian Faculty of Engineering, Universiti Tunku Abdul Rahman (UTAR), with over 14 years of experience and more than 270 training sessions conducted across Malaysia and the Asia-Pacific region. He is an HRDC-accredited trainer and holds professional certifications including Certified Energy Manager (CEM), Registered Electrical Energy Manager (REEM), and Registered Energy Auditor (REA) conferred by the Energy Commission (Suruhanjaya Tenaga).

His expertise covers energy management, energy auditing, carbon accounting, and green technology, and he actively provides consultancy to help organisations improve energy efficiency and reduce carbon emissions. He is also a certified ISO 50001:2018 Internal Lead Verifier by Integrated Assessment Services (IAS) and a recipient of the AEE 2024 Asia Pacific Rim Energy Professional Development Award.

FOR SBL-KHAS SCHEME

Attendance of 100% is a MUST. In any case, Employers will be billed in full. SBL-KHAS Grant Approval MUST be forwarded to FMM Malacca Branch at least **3 DAYS BEFORE** the seminar.

REGISTRATION AND REFUND POLICY

Attendance is by prior registration only. Completed Registration Forms must be returned to FMM Malacca Branch by **9 November 2026**.

PAYMENT

Can be made via e-Payment (EFT) or Cheque in favour of 'FEDERATION OF MALAYSIAN MANUFACTURING' & crossed 'Account Payee Only' should be forwarded to FMM Malacca Branch.

CANCELLATION

Must be in writing with reasons. For cancellation 7 working days - no charges. 3 - 6 working days - 50% payment. Less than 3 working days - Full payment and for 'No Show' - Participants will be billed accordingly. **Replacements** are accepted at no additional cost.

FMM Malacca Branch reserves the right to **change the facilitators, topics, cancel or reschedule the programme** and all efforts will be taken to inform participants of any changes.

For REGISTRATION or ANY ENQUIRIES, please contact:

Chloe Leong (email: bing_yee@fmm.org.my)

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REGISTRATION FORM

THE FUTURE OF INDUSTRIAL ENERGY: ENERGY STORAGE, RENEWABLES, AND DECARBONIZATION TRENDS



NOVEMBER 19, 2026 (THURSDAY)



9.00AM - 5.00PM



FMM MELAKA BRANCH

Attn: **FMM Malacca Branch**

Please register the following participant(s) for the above programme.

No	Name	Designation	NRIC Number	Email	H/P No.
1.					
2.					
3.					

PLEASE TICK :

(Please attach a separate list if space is insufficient)

☐

I require Vegetarian Meals.

☐

We **will be claiming under the SBL-Khas Scheme (MyCOID: 007907X_MELAKA)** but Full Payment would be made to Federation of Malaysian Manufacturing in the event that there are no disbursement from HRD CORP under any circumstances.

☐

We **WILL NOT BE CLAIMING** under the SBL-KHAS Scheme. We **Will be PAYING the Full Course Fees as Invoiced**.

SUBMITTED BY:

Name : _____ Designation : _____

Company : _____ FMM Membership No. : _____

Address : _____

Email : _____ Tel : _____