

**Agricultural and Food Engineering Technical Division**

The Institution of Engineers, Malaysia

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Organised by:  
Agricultural and Food Engineering Technical Division,  
The Institution of Engineers, Malaysia

**REGISTRATION FOR RENEWABLE ENERGY FROM THE PALM OIL MANUFACTURING  
INDUSTRY: THE DIRECTION AND CHALLENGES**

Name(s)	IEM M'ship No. /Grade	Fees (RM)
SUB TOTAL		
ADD GST @ 6%		
<b>TOTAL PAYABLE</b>		

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Mobile: \_\_\_\_\_ Tel(O): \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

(Please write clearly as the "Confirmation Notification" will be sent via email)

Contact Person: \_\_\_\_\_ Designation: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**PAYMENT DETAILS**
 Cash RM \_\_\_\_\_

 Cheque no. \_\_\_\_\_ for the amount of RM \_\_\_\_\_  
(non-refundable) and made payable to **"THE INSTITUTION OF ENGINEERS, MALAYSIA"**  
and crossed **'A/C Payee Only'**.

**Terms & Conditions:**

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via Credit Card]
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- For online registrations, please note that **payment MUST be made on registration.**
- **FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. Registration fee includes lecture notes, refreshment and lunches.
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

**One-Day Course on  
"Renewable Energy From The Palm Oil  
Manufacturing Industry: The Direction and  
Challenges."**
**Speaker**
**Ir. Hor Kok Luen**
**Date**
**26 August 2017 (Saturday)  
9.00am - 5.30pm**
**Venue**
**Auditorium Tan Sri Prof. Chin Fung Kee, 3<sup>rd</sup> Floor,  
Wisma IEM, Petaling Jaya, Selangor Darul Ehsan**
**REGISTRATION FEES (SUBJECT TO 6% GST)**

Grade	Online Fee	Normal Fee
IEM Student Member	RM 150.00	RM 180.00
IEM Graduate Member	RM 250.00	RM 300.00
Corporate Member	RM 450.00	RM 500.00
Non IEM Member	RM 600.00	RM 650.00

**Closing Date: 22<sup>nd</sup> August 2017**
**BEM Approved CPD/PDP Hours: 7  
Ref. No: IEM17/HQ/231/C**
**GST is implemented  
effective 1 April 2015**
**PERSONAL DATA PROTECTION ACT**

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

## TENTATIVE PROGRAMME

TIME	PROGRAMME
08:30am – 09:00am	<b>Registration</b>
09:00am – 10:30am	<ul style="list-style-type: none"> <li>➤ Green energy review and industry introduction</li> <li>➤ The governing authorities and enforcement (DOE, MPOB, DOSH)</li> <li>➤ Green energy concern: Bio-methane gas and biomass. Source/feed stock?</li> <li>➤ The availability of the source from the industry. How to optimize?</li> </ul>
10:30am – 10:45am	<b>Morning Tea Break</b>
10:45am – 13:00pm	<ul style="list-style-type: none"> <li>➤ Bio-methane gas and its characteristics, composition and value</li> <li>➤ The technical and commercial value of biogas</li> <li>➤ Technique of forming and harnessing of bio-methane gas</li> <li>➤ Treatment before utilization: Technology that available</li> <li>➤ Biomass: Source and availability: Mass of balance study Biomass composition and its potential caloric value</li> </ul>
13:00pm – 14:00pm	<b>Lunch</b>
14:00pm – 15:30pm	<ul style="list-style-type: none"> <li>➤ Green Power Plant basic set up (independent &amp; integrated)-viability?</li> <li>➤ Various power consumption and utilization. Pros and cons??</li> <li>➤ Case study on the respective green power plants</li> </ul>
15:30pm – 15:45pm	<b>Afternoon Tea Break</b>
15:45pm – 17:15pm	<ul style="list-style-type: none"> <li>➤ What is <b>SEDA</b>: Sustainable Energy Development Authority. Its Role?</li> <li>➤ Challenges (technical and commercial) for these green plant</li> <li>➤ Sustainability: Are we working enough? Shortcoming?</li> <li>➤ Sustainability: overall scope concern: common role(s) and respective role(s) of policy maker, industrial investor and player, technology provider</li> </ul>
17:15 pm – 17:30 pm	Q & A session

## SYNOPSIS

The technology of harnessing green energy has been inspired and developed decades ago. This has been becoming a hot topic since years ago until today in global level generally and in Malaysia particularly.

The conventional main energy source from fossil fuels such as oil, natural gas and coal are still in place and in use so far but it is believed going to be less dependent on them gradually and significantly in the next decades. This is due to severe alarming on global warming that related to the releasing of Green House gas from the industrial plants in majority.

The efforts on sourcing the alternative power source(s) has driven the world towards tapping renewable energy sources which are abundant, untapped & environmental friendly and available everywhere. Malaysia in this context has abundant biomass resources generated from the agricultural industry particularly the large commodity, palm oil. To enhance the degree of implementation on tapping the green energy from this biomass and biogas in the industry, team work and collaborative efforts from various parties are crucial. What are the matured engineering approach/method that can be adopted in this context?

Next to focus... What would be the expected roles to be played respectively by the policy maker, industrial investors & players and of course the technologies providers? Any challenges when working together towards the same direction...making the world greener and greener.

To be able to transform and diversify to reach sustainability stage, the industry players must realign their direction, both technically and commercially to move forward. The initiative and proactive behaviour from the industry players are crucial that to turn positive transformation into reality. The potential but expected challenges which are going to be discussed here may become less drastic and significant after the post-mortem stage in the course.

## CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

## BIODATA OF SPEAKER



**Ir. Hor Kok Luen** (P.Eng, MIEM, First Grade Competent Steam Engineer, ASEAN ENGINEER) graduated from University of Science Malaysia (USM) in 2001. He is holding Bachelor of Degree (Hons.) in Mechanical Engineering.

He has more than 17 years of working experience in the palm oil mill & related downstream industries, inclusive of biogas power plant. He has vast experience in palm oil mill design, mill upgrading and mill troubleshooting as well as waste handling & management.

As holding the qualification as Competent First Grade Steam Engineer (JKKP, Malaysia), currently he is taking the responsibility and challenge as the Chief Engineer for a well-established palm oil group of company which owns five (5) palm oil mills and subsidiary plants, which aggressively embark involving in palm oil mill processing, long fiber plant, short fiber plant, solvent extraction plant, biomass power plant, biogas capturing plant, CHP plant and of course green energy generation for grid connection (Feed in tariff) besides islanded unit for in-house consumption.

The speaker is a corporate member of The Institutions of Engineers Malaysia (IEM) in Mechanical Discipline. He is also a Registered Professional Engineer with Practising Certificate (PEPC) with the Board of Engineers Malaysia (BEM) as well as ASEAN Engineer (AE). Currently he is a Hon Secretary of Food & Agricultural Engineering Technical Division (AFETD), IEM HQ.