

TECHNICAL VISIT TO BIOGAS POWER PLANT KKSL SDN BHD AND EMPTY FRUIT BUNCH (EFB) LONG FIBER PLANT AT KKSL NATURAL FIBER SDN BHD

(Organized by Agricultural and Food Engineering Technical Division, IEM)

BEM Approved CPD/PDP Hours: 6

Ref. No.: IEM/HQ/163/V

Date : 22 July 2017 (Saturday)
Time : 9.00 am – 4.30 pm
Venue : Batu 11, Lekir, 32020 Setiawan, Perak
Transport : Coach will be provided. (The coach will depart from IEM at 7.00 am sharp)

Commitment fees (inclusive GST)
(Non refundable & non transferable)
IEM Member: RM 50.00
Non IEM Member: RM 80.00

SYNOPSIS

Under the **National Key Economic Areas (NKEA)** plan by the Government in the **10th Malaysia Plan (2010-2015)**, the importance of biogas trapping is evident from its inclusion as one of the Eight Entry Point Projects (EPPs) of the palm oil sector. The Biogas capturing project from the **Palm Oil Mill Effluent (POME)** is a good source of renewable energy for various utilization and application. The biogas power Plant In KKSL Sdn Bhd is a green energy power plant integrated with a palm oil mill having processing capacity of 100 ton per hour. The palm oil mill basically process 560,000 ton to 620,000 ton Fresh Fruit Bunch (FFB) per annum. The biogas plant is able to provide gaseous that can generate more than 2MW continuously in general condition. The power that generated mainly for FIT purpose besides in-house consumption (islanded unit). The waste heat from the micro-turbine exhaust is captured and channeled to the Empty fruit bunch (EFB) long fiber plant as heating source (CHP program).

The **Empty Fruit Bunch (EFB)** treated as the by-product from the Palm Oil extraction processing (Threshing stage). Conventionally the EFB applied as mulching material in the plantation. With mature and good engineering approach, the pressed EFB can be further processed to produce dried long fiber, which is an alternative source for cushion-based raw material besides the coconut fiber (conventionally). The waste heat from the biogas power generator is captured and channeled to the Empty fruit bunch (EFB) long fiber plant as the heating source (CHP program) to dry up the long fiber to meet the market specification (10-13% moisture content). No additional heat energy source (steam or electrical heater) is required. Hence the commercial value of the EFB/pressed EFB has been increasing besides conventional environmental issue resolved and overcome. That is so called: Practical and commercially viable waste management.

ITINERARY

TIME	ITINERARY
6.45 am – 7.00 am	Registration at IEM Bangunan Ingenieur
7.00 am – 9.45 am	Depart from Bangunan Ingenieur / Arrival at KKSL
10.00 am – 10.30 am	Introduction of KKSL group and its biogas power plant
10.30 am – 11.30 am	Biogas plant design, operation and maintenance
11.30 am – 12.30noon	Biogas power plant visit
12.30noon – 1.15 pm	Q & A / Refreshments
1.15 pm – 2.00 pm	Continue journey to KKSL Natural Fiber Sdn Bhd
2.00 pm – 2.30 pm	Registration at KKSL Natural Fiber Sdn Bhd
2.30 pm – 2.45 pm	Introduction to the company profile
2.45 pm – 3.30 pm	The Natural fiber plant process & operation
3.30 pm – 4.15 pm	Natural Fiber plant visit
4.15 pm – 4.30 pm	Q & A / Refreshments
4.30 pm	Dismiss/The End- Back to IEM HQ

- ✓ The visit is strictly limited to **20 participants** registered on a first-come, first-served basis.
- ✓ Interested participants are to register and pay online at www.myiem.org.my or register by returning the appended registration form **before 18 July 2017** together with the payment.
- ✓ Cheques are to be made payable to **The Institution of Engineers, Malaysia**.
- ✓ Please note that the commitment fee must be settled prior to the visit. Payment on the day of the visit is not acceptable.
- ✓ After this closing date, IEM reserves the right to allocate seats on first come first pay basis.
- ✓ Members are also reminded that if a place is reserved, IEM *may* cancel the reservation if payment is not received.

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.

Ir. Yong Hong Liang

Chairman Session 2016/2017

Agricultural and Food Engineering Technical Division, IEM

REPLY SLIP (Fax to : 03-7957 7678) (Email: ezzaty@iem.org.my)

Chairman, Agricultural and Food Engineering Technical Division, IEM

The Institution of Engineers, Malaysia

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I wish to participate in the above visit on **22th July 2017**. I enclosed herewith a cheque No for the amount of as my commitment fee for the visit.

Name of Member :
Company's Name :
Position :
Address :

M'Ship No :
NRIC :
Email :
Tel :
Mobile :
Fax :

I will be participating in the visit at my own risk and hereby indemnify fully the IEM from all claims arising from any injury, damage or loss that may be sustained by me.

(Date)

(Signature)

Please bring along this flyer for confirmation of attendance
(Photostat copies are acceptable)