

AFEO Energy Tour 2016, Malaysia

ELECTRICAL ENGINEERING TECHNICAL DIVISION



reported by
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Group photo at IEM building.

EM's Electrical Engineering Technical Division (EETD), in collaboration with ASEAN Federation of Engineering Organisations (AFEEO), organised the AFEO Energy Tour 2016 in Malaysia on 21- 23 September, 2016.

There were 15 representatives from Brunei, Cambodia, Indonesia, Myanmar, The Philippines, Thailand, Timor Leste and Vietnam. The event was sponsored by International Copper Association Southeast Asia (ICA) and Dexon Electrical Engineering Sdn. Bhd.

Delegates were welcomed in the morning of the first day at IEM Building with an address presented by Ir. Ellias Saidin, ASEAN Engineer Register (AER) Head Commissioner. It was followed by a briefing on the tour itinerary by EETD Chairman Ir. Yau Chau Fong.

Then Ir. Francis Xavier Jacob, AFEO Energy Chairman, presented "Overview of Malaysia's Energy Efficiency (EE) Initiatives" and Dato' Ir. Dr Ali Askar Sher Mohamad, IEM, presented "Overview of Malaysia's Renewable Energy (RE) Initiatives".

There was also the launch of the ASEAN Engineering Inspectorate (AEI) guidebook, titled A Guide to Inspection and Testing of Low Voltage Electrical Installations of Buildings, officiated by Ir. Ellias Saidin, Ir. Yau Chau Fong and Mr. Bek Chee Jin from ICA. The guidebook, funded by ICA, is aimed at promoting harmonisation of electrical inspection standards and practices in ASEAN. Subsequently, the ASEAN Service Providers' Confederation (ASPC) was launched by Ir. Choo Kok Beng, ASPC President.

Delegates from Cambodia, Indonesia and Thailand also presented their topics on "Renewable Energy Development in

Cambodia", "35 GW Projects & Indonesia Integrated LNG/Gas Infrastructure Projects" and "Energy Technology for Environment" respectively.

In the afternoon, there was a visit to The Energy Commission Diamond Building, winner of the multiple energy building award, in Putrajaya. The overview of Energy Commission was presented by Ir. Abdul Rahim Bin Ibrahim, Director of Energy Management Development and Service Quality Department.

After that, Encik Zulkiflee Umar, Head of Demand Side Management Unit, gave a presentation titled "Energy Commission Diamond Building - A Showcase of Energy Efficient & Sustainable Building". The Diamond Building is designed to reduce energy consumption through the installation of photovoltaic panels, a tilting facade, use of radiant cooling slabs, rainwater harvesting and optimise daylight utilisation with reflective panels. Most of these features were highlighted during the building tour.

In the evening, there was a free and easy tour of Putrajaya, arranged by the Federal Administrative Centre of Malaysia, followed by an evening cruise of the scenic Putrajaya Lake, which included a delicious dinner aboard the boat.

On Day Two, delegates visited Bus Rapid Transit (BRT) – Sunway Line in the morning. The elevated BRT system is a project by Prasarana Malaysia Berhad and Sunway Berhad under the Public-Private Partnership initiative, with the aim to solve traffic congestion in Bandar Sunway and Subang Jaya.

The system has 5.4km dedicated bus lanes with 7 stations between Setia Jaya and USJ7. The stations are serviced by 12 eco-friendly,

battery-run electric buses which can accommodate 60 passengers each.

After the presentation on BRT operations by Encik Shamsul Rizal Mohd Yusof, Chief Operating Officer of BRT Sunway Line, a tour of the BRT control room and BRT depot was arranged. To end the visit, the delegates took a round-trip BRT ride from SunU-Monash Station.

The delegates then stopped for lunch at Sunway Pyramid Shopping Mall before going to Malaysia Transformer Manufacturing Sdn. Bhd. (MTM) Factory in Ulu Klang. MTM, a wholly owned subsidiary of Tenaga Nasional Berhad (TNB), has positioned itself as a One Stop Solution Provider for the local electrical transformer market. Its General Manager (Sales & Marketing), Encik Azhar bin Alias, presented the MTM Business Overview, whereas the technical content of power transformers was presented by Encik Zahrullai Abu Bakar, the General Manager (Engineering). Then there was a guided factory tour to see the transformer manufacturing process, which included paper lapping of copper wire, winding, coil drying and pressing, core cutting and building.

In the evening, the ASEAN delegates went on a sightseeing tour of Kuala Lumpur City Centre before dinner at Songket Restaurant. The dinner was also attended by IEM members and representatives from Energy Institute of Malaysia, The Electrical and Electronics Association of Malaysia (TEEM), Terasaki Electric Malaysia Sdn. Bhd. (sponsor of the dinner) and other industrial participants.

On the morning of the third day, the delegates visited Seri Ulu Langat Palm Oil Mill Sdn. Bhd. (SULPOM) 7 MW Biomass Cogeneration Power Plant in Dengkil, Selangor. After the introduction and safety briefing session, the Biomass Power Plant Conceptual presentation was delivered by Mr. Yap Hai San, Director of SULPOM Group. The biomass and biogas power plants utilise wastes from palm oil mill to generate electricity for export to the power grid. Plant Manager Encik Yahaya and Assistant Plant Manager Mr. Yap Leong Chee took the delegates on a tour of the biomass power plant before lunch, which was hosted by Tenaga SULPOM Sdn. Bhd.

In the afternoon, delegates visited Malaysia's first floating solar system at the Sungai Labu Water Treatment Plant (WTP) in Sepang, Selangor. The safety briefing was given through a short video presentation, after which Plant Manager Encik Khairul Nidzham Zainal Abidin presented an overview of Sungai Labu Water Supply Scheme and WTP operations.

Sungai Labu WTP is a dedicated WTP for Kuala Lumpur International Airport (KLIA). Later, a presentation titled "Pilot Grid-Connected Floating Photovoltaic System" was delivered by Encik Mohd Razwan Rusli from TNB Research Sdn. Bhd. This project has a total solar capacity of 108 kWp. After the presentation, a visit was made to the project site at Sungai Labu Off River Storage.

On the behalf of the organisers, Mr. Low Pek Jun, Committee Member of AFEO Energy Tour 2016, closed the event, followed by EETD committee members singing the Malay folk song, Rasa Sayang. The delegates were also given the opportunity to provide feedback on the event. ■