

IEM Forums at ASEAN's Mechanical and Electrical Engineering Expo

BY MECHANICAL ENGINEERING TECHNICAL DIVISION

IEM is collaborating with United Business Media Sdn. Bhd. (UBM) to organise forums during the three-day ASEAN Mechanical & Electrical (M&E) Expo. Regarded as a key highlight of the event, the daily forums will cover current topics of interest to engineers. According to Ir. Dr Cheong Thiam Fook, from IEM's Mechanical Engineering Technical Division, the forum offers excellent opportunities for engineers and other professionals to start talking about technological developments and innovations in the industry.

"They may not see these developments yet but through the forum, we are creating a platform for them to challenge their thought process. We also want to challenge and expose the engineers to the various opportunities that will be here in a short time due to the rapid development in technology," he says.

More than 20 local and international experts will present and discuss the best practices in the power and electrical sector, green technology, renewable energy and HVACR, particularly the continuation of the ASHRAE Conference and IEM's Forum.

Ir. Loo Chee Kin, the Organising Chairman, says the forum will have two streams that align three titles under each stream. Stream 1 will cover: (1) Green Energy and Sustainability (2) Power and (3) REVAC. Topics under Green Energy and Sustainability include 'Why Green Energy and Sustainability' and 'Hydrocarbon as Greener and More Efficient Refrigerants'.

He says that traditional refrigerants have had adverse effects on the environment with rather high global warming potential, even though the use of refrigerants with ozone



From left: UBM Project Manager Chean Fei Ong, Ir. Dr Cheong, Ghandi and Ir. Loo



Part of the exhibition floor at ASEAN M&E 2014

depletion potential, is restricted. He adds that a group of industry players in Malaysia is promoting gases that are not man-made but rather, are natural occurring gases, such as methane and propane. Malaysia is now working on developing a Malaysian Standard (MS) to address the safe

use of these gases, which will be highlighted at one of the sessions.

The forum on Power will discuss, among others, 'Renewable Energy (RE) Policy and the Latest Development of RE in Malaysia' and the 'Latest Electrical Installations Requirements'. REVAC forum will include topics such as 'Commissioning Process for Smoke' and 'Healthcare Ventilation System Requirements and Challenges'.

Elaborating on Stream 2, Ir. Loo says the three topics are 'Development in Codes and Standards', 'M&E Infrastructure' and the most important area is 'Safety and Risk Control'. He says: "At times, engineers are at fault because they may not fully understand safety requirements. For example, there may be lifts and escalators in shopping complexes that are not fully compliant to current safety standards. That's why one of the topics to be covered under Safety and Risk Control is Lift and Escalator Code in Malaysia."

Ir. Dr Cheong says engineers attending the forum can earn points under the Continuing Professional Development (CPD) Accreditation. He says the IEM forum at ASEAN M&E 2016 is designed to foster closer working relationships among engineers and to raise awareness among its members of the latest developments in technology, issues and legislation related to engineering including mechanical and electrical.

He adds that partnerships between engineers and the M&E industry can materialise at the IEM Forum and the exhibition halls. IEM's participation in the event also helps to pave the way for all engineers to engage with ASEAN engineering associations which will allow the engineers to excel both locally and internationally.

THE ASEAN M&E EXPO

The M&E Expo 2016, Southeast Asia's biggest international building services and electrical engineering exhibition, in Kuala Lumpur will have three power-packed shows under one roof. These are the TENAGA Expo & Forum (Southeast Asia's Premier Power & Electrical Industry Show), REVAC Expo & Forum (Southeast Asia's International Refrigeration, Ventilation & Air-conditioning Event), and Green Energy Asia (Southeast Asia's International Green Energy & Conference).

To be held at Kuala Lumpur Convention Centre (KLCC) on 23-25 May, the Expo will attract 10,500 trade professionals from around the region. Over 350 exhibitors have confirmed participation, with displays to be spread over 10,000 square metres of the entire ground exhibition halls of KLCC.

The event, which is the sixth edition of the ASEAN M&E Expo, is an excellent platform for engineers and other trade professionals to keep abreast with industry developments and innovations as well as to network, conduct business and forge alliances. Held biennially in Kuala Lumpur with complementary M&E shows in Indonesia and Vietnam, the expo is organised by United Business Media (M) Sdn. Bhd. (UBM). This year's edition is endorsed by the Malaysia External Trade Development Corporation (MATRADE) and supported by the Ministry of Energy, Green Technology and Water (Kementerian Tenaga, Teknologi Hijau dan Air or KeTTHA), Construction Industry Development Board

(CIDB), the Institution of Engineers, Malaysia (IEM), Malaysian Air-Conditioning & Refrigeration Association (MACRA) and The Electrical and Electronic Association of Malaysia (TEEAM). The host utility is Tenaga Nasional Berhad while the 'Co-located Conference' is the Malaysian Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE).

NEW CHALLENGES FOR M&E ENGINEERING

UBM Managing Director (ASEAN Business) M. Ghandi says the ASEAN M&E Expo is where engineers in the ASEAN region can network and share ideas that relate to M&E products and services.

"The main objective of this year's show is for engineers to challenge the status quo in the practice of M&E engineering. One of the current challenges faced by engineers relates to the changing dimensions of energy itself," he says, adding that there is also a major change in the dimensions globally. He explains that building designs are no longer done based on the way energy and electricity are transmitted and distributed. These designs as well as the way business in the world is conducted are also affected by the ability of consumers to produce energy themselves using different sources, such as solar energy and geothermal.

"An important dimension already taking shape is power storage. Last year, US-based company Tesla Motors ran pilot demonstrations of Power wall, a rechargeable lithium-ion battery for home use. It stores electricity for domestic use, and provides backup electricity supply. It is energy storage for a sustainable home and offers independence from the conventional utility grid," says Ghandi.

Tesla's creation of low-cost home battery pack, expected to hit the market next year, has helped raise public awareness of a field that is booming with innovation and the potential of billion-dollar global investment.

Such development, continues Ghandi, will challenge the way that Malaysia and all other ASEAN member countries manage the future of M&E, particularly where renewable energy and energy savings are concerned.

"Some utility companies may even close business. For example, RWE AG, the largest utility company in Germany has seen their business dropping to nearly 80% in the last five years when consumers started to produce energy themselves. Another German utility company, E.ON SE, is shrinking its core conventional and unprofitable power generation business and will instead focus on renewable energy, and building its distribution network and providing customer solutions," he says.

The Deputy Chairman of IEM Mechanical Engineering Technical Division (METD), Ir. Loo Chee Kin, says Malaysia aims to increase the use of renewable energy to 30% by 2020 under the ASEAN Ministers of Energy Meeting agenda in 2014. The share of renewable energy (RE) in Malaysia is currently less than 15%. He says one of the measures being looked into by the government is the use of net energy meters as an alternative incentive to meet the increase capacity for RE capacity in Malaysia. Net metering allows anyone with

WHO WILL BE ATTENDING?

Alongside, 10,500 trade professionals attending ASEAN M&E 2016, grab the opportunity to meet key decision-makers including:

Percentage of Senior Purchasers:



Top 10 Organisations Attended



a connection to the electricity grid to sell self-generated electricity to the grid and to claim back credits on their electricity bill. This holds well for small-scale solar generators on roof tops, as the generation will be near the load.

Another development in power generation is the proposed plan to have a single ASEAN power grid to connect all the power supplies of ASEAN countries. Ghandi

says while having this grid is possible, it will involve huge investment. Ir. Loo adds that currently Malaysia has a limited grid connection with Thailand and Singapore. "It is not so much a grid that runs 24/7 but, rather it's for Malaysia and Thailand to share power with each other during the different power peak periods," he says. ■