

The Institution of Engineers, Malaysia

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Talk on "Conservation of Water – Apply Basic Engineering Principles"

(Organized by the Building Services Technical Division, IEM) BEM Approved CPD/PDP Hours: 2 Ref No: IEM16/HQ/204/T

Date : 8th June 2016 (Wednesday)

Venue: Tan Sri Prof. Chin Fung Kee Auditorium, 3rd Floor, Wisma IEM, Petaling Jaya

Time : **5.30pm-7.30 PM** Speaker: **Ir. Gary Lim Eng Hwa**

SYNOPSIS

Malaysia average water usage is 232 litres per capita per day and there is a plan to reduce the usage to 180 litres per capita per day by 2020. Water is a necessity and the high level of usage comes from many areas, some of which are beyond the control of the Engineering professionals. However Engineers should ensure that in their design works, the concept of water conservation should be given priority. Malaysians are used to cheap water rate and the water bill DOES NOT stands out among the many monthly bills. It would take a long while before their water wasteful habits can be changed. Non-Revenue Water (NRW) is an EXISTING occurrence is an issue to be handled by the authority and to a certain aspect it is beyond the control of Engineers. Engineers can play an important role in the conservation of TREATED water by apply effective measures in their design works from the source till consumed/used. Malaysia experience an annual rainfall between 2,300mm to 3,000mm and Rainwater Harvesting (RWH) has been promoted extensively and the Uniform Building By-Law 1984 was amended hence the implementation of Rainwater Harvesting and Utilization System (SPAH) at buildings. RWH system can be a very simplified system merely by applying basic Engineering principles and the rainwater collected should only be used for WC Flushing and Landscaping. Complicated studies need not be carried out, take a simple logic that if you could harvest 1,000 litres of rainwater and use it for WC Flushing and landscaping, you conserve 1,000 litres of treated water. The ability to duplicate it at multiple locations, say 1.000, then 1.000.000 litres of treated has been conserved. In this respect, Engineers have this role to play. Conservation of TREATED water has not been emphasis in design of water usage, example Singapore CP48 advocates WC flush of 4.5litres/flush, SPAN UTG stipulates 6litres/flush, wonder any major difference of the waste to be flushed out. Imagine a saving of 1.5 litres per flush per day per capita if Engineers are to adopt this design!

ABOUT THE SPEAKER:

Ir. GARY LIM ENG HWA

BE(Mech.) NZ, Mgt Dip. FIEM, P.Eng, Asean Eng, APEC Eng

Currently, a council member and committee member of the Building Services Technical Division and member of the Fire Advisory Board of the Institution of Engineers, Malaysia. He has a degree in Mechanical Engineering from the University of Canterbury, New Zealand and a Management Diploma from New Zealand. He is a Professional Engineer registered with the Board of Engineers, Malaysia and a Fellow of the Institution of Engineers, Malaysia (IEM).

Ir. Wong Chu Loong Chairman Building Services Technical Division, IEM

ANNOUNCEMENTS TO NOTE:

- Preferential admission to talk shall be accorded to IEM members (<u>pre-registration and online registration are NOT required</u>). <u>Telephone and/or fax reservation will NOT be entertained</u>.
- Non members may also attend the talk but will need to pay a registration fee of RM50 and an administrative fee of RM15. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
- IEM members who fail to produce their membership cards will be charged a fee of RM25.00. GST is inclusive.

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of <u>RM15</u> is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

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