WEBINAR

Technical Talk on

Sustainable Urban Underground Storm Water Management Using Eco Module Modular Tank A Green, Eco Friendly Underground Space Structure

The Institution of Engineers, Malaysia

Organised by
TUNNELLING AND UNDERGROUND SPACE TECHNICAL DIVISION (TUSTD)

New Date : **29 October 2026 (Thursday)**
~~**27 October 2026 (Tuesday)**~~

Time : **03.00 pm - 05.00 pm**

Platform : **ZOOM Online**

Registration Fees

*Student Member : **FOC**
*IEM Member : **RM 15.00**
*Non-Member : **RM 70.00**

BEM APPROVED CPD: 2 **REF NO: IEM26/HQ/454/T(w)**

Speaker: Ir. Neo Boon Kheng

SYNOPSIS

Application of Eco-Module Underground Stormwater Tank

The Eco-Module Underground Stormwater Tank is a water storage system constructed using precast modular concrete units. It is used to temporarily or permanently store stormwater from buildings, roads, car parks, commercial areas and other developed areas.

During heavy rain, stormwater is collected and directed into the underground tank. The stored water can be released at a controlled rate to the existing drainage system to reduce peak flow and minimise the risk of flooding. Where required, the stored water can also be used for non-potable purposes, such as landscape irrigation and general washing.

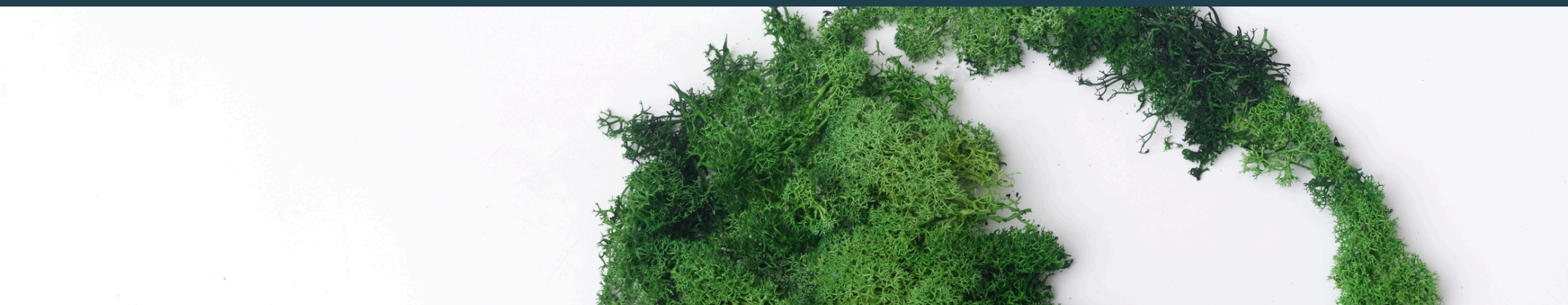
The system can be installed beneath car parks, roads, landscaped areas and other available spaces, making it suitable where land is limited. Its modular design allows the tank size and configuration to be adjusted according to site requirements.

The Eco-Module system can be applied to residential, commercial, industrial and infrastructure developments as a practical and space-efficient stormwater management solution.

Presentation Scope

This presentation will cover the feasibility, design, precast casting and installation of the Eco-Module system.

Selected completed projects and case studies will also be presented to demonstrate its applications and benefits, including a comparison of the Eco-Module system with conventional stormwater storage system.



SPEAKER'S PROFILE

Neo Boon Kheng is a Registered Professional Civil Engineer with more than 30 years of professional experience in civil, geotechnical, underground utility, and infrastructure engineering. He is a Registered Professional Engineer (P.Eng.) with the Board of Engineers, Malaysia and holds a valid Practising Certificate. His professional memberships and qualifications include:

- Fellow Member, Institution of Engineers, Malaysia (F.I.E.M.)
- Fellow Member, Academy of Engineering and Technology of the Developing World
- ASEAN Chartered Professional Engineer
- American Society of Civil Engineers (ASCE)
- ASEAN Engineer
- Malaysia Board of Technologists (MBOT)
- Qualified Person (QP) under SPAN AWAM – W1, W2, W5, W7, S1, S2, S5 and S7

He has extensive experience in design and project management cover area in Trenchless technology, Underground utility installation, Deep foundation ,Drainage and sewerage works and Soft-ground improvement works.

Throughout his career, he has been involved in projects across Malaysia, Indonesia, and Timor-Leste, working with both Consultants and Specialist Contractors. His experience covers the planning, design, projects management, and coordination of complex underground and civil engineering projects.

He also has experience in the application of bamboo-geotextile mattress systems [BGCS] for soft-ground improvement, including the use of BGCS to enhance the performance of foundations and embankments constructed over soft clay.