



CPD Seminar

Sustainability and Carbon Neutrality: Let Us Embrace Innovative Eco-Shorelines!

Eco-shorelines and underwater habitats play a crucial role in addressing the climate crisis, including but not limited to biodiversity, storm protection, carbon sequestration etc. By considering the ecological context of their projects, designers can contribute to combatting the climate crisis and also creating more resilient, sustainable, and harmonious built environments.

27.4.2026 (Mon)
7:00pm – 8:30pm



Zoom Registration



Physical Registration

Venue
HKIA Premises 19/F
One Hysan Avenue, Causeway Bay

Admission Fee
Free

Format
Hybrid

Language
English
complemented by
Chinese

Quota
Zoom: 500 persons
In person: 50 persons
(First-come-first-served)

CPD Hours
1.5 Hours

Synopsis

Eco-engineering of artificial shorelines can boost marine biodiversity and ecosystem functions

by Professor Kenneth LEUNG, BBS, JP

Artificial seawalls and breakwaters play a vital role in safeguarding our shorelines against waves, erosion, and flooding. However, their simplified and smooth surfaces often lack shading, refuge, and water retention capabilities, posing challenges for marine organisms to inhabit and thrive. To tackle this issue, Professor Kenneth Leung and his team from the State Key Laboratory of Marine Environmental Health at City University of Hong Kong has successfully integrated fundamental ecological principles and introduced innovative eco-friendly structures for enhancing habitat complexity and boosting marine biodiversity along the seawall. This innovative technology ultimately creates a vibrant and biodiverse living shoreline in urbanised coastal cities.

Eco-Shoreline in Hong Kong: Crafting a Home for biodiversity

By Ir. CHENG Nga-see Ellen

Traditional seawalls offer limited habitat potential, resulting in low environmental value along shorelines. To realize the vision of building a smart, green, and resilient Hong Kong, the Civil Engineering and Development Department introduced a 3.8km eco-shoreline in the Tung Chung New Town Extension reclamation, which is a pioneering example of nature-based solutions in coastal engineering and the first of its kind in public works project. By mimicking natural intertidal zones, it creates a unique and dynamic environment supporting a wide range of marine intertidal organisms as well as shore-birds. The results in enhancing biodiversity are highly encouraging, with over 250 marine species already discovered. This CPD talk highlights the objectives, initiatives and development for the eco-shoreline in Hong Kong. Looking ahead, with the promulgation of design and maintenance guidelines and Greater Bay Area Standard, there will be wider applications of eco-shorelines across future developments, crafting a Home for biodiversity.

Speakers



Prof. Kenneth LEUNG, BBS, JP

Chair Professor, Associate Dean of Science
Director, State Key Laboratory of Marine
Environmental Health, City University of Hong Kong
Deputy Chairman, Advisory Council on the
Environment, HKSAR



Ir. CHENG Nga-see Ellen

Deputy Project Manager, South Development
and Sustainable Lantau Office
Civil Engineering and Development Department

Host and Moderator



Ar. Prof. Ada FUNG, BBS

Past President, HKIA
Member, Advisory Council on the
Environment, HKSAR



Ar. Yvonne IEONG

Member, UDPSC, HKIA

