

## **Joint Technical Visit to “Zero Carbon Building at Kowloon Bay”**

### **Details**

Date : 20 October 2012 (Saturday)  
Time : 10:00am to 12:00 noon

Venue: **Zero Carbon Building at Kowloon Bay**  
Assembly Point: **Zero Carbon Building at  
Kowloon Bay**

### **Visit Highlight:**

Green building has been a hot topic in Hong Kong and other countries of the world. The Zero Carbon Building completed on June, 2012 is the first ZCB in Hong Kong. It is a signature project to showcase eco-building design and technologies to the construction industry and to raise community awareness of sustainable living.

Total area of site is 14,700m<sup>2</sup> including the Zero Carbon Building with a footprint of 1,400 m<sup>2</sup> and a landscape area for public use. In the 3 storeys building, there are exhibition and education area, eco-office, eco-home and multipurpose hall. There are outdoor exhibition areas, eco-plaza, eco-cafe and Hong Kong's first urban native woodland, too.

There are some key features of the ZCB, namely:

- Generating on-site renewable energy more than operation needs, from photovoltaic panels and a biodiesel tri-generation system
- Beyond the common definition of a Zero Carbon Building - exporting surplus energy to offset embodied energy of its construction process and major structural materials
- Large-scale use of biodiesel made from waste cooking oil
- Achieving BEAM Plus Platinum rating,

During the design stage, integrated design based on Energy Hierarchy Approach and Eco-efficiency has been adopted. Some of the considerations are

- Energy conservation by passive design, achieving 20% of energy saving
- Energy efficiency by green active systems, achieving 25% of energy saving
  - o High-Volume-Low-Speed Ceiling (HVLS) fans
  - o Desiccant dehumidification
  - o Under-floor displacement cooling
  - o Radiant cooling by chilled beam
- Efficient production of renewable energy,

### **Registration & Enquiry:**

This Technical Visit is a joint activity among ASHRAE(HKC), HKIE(BSD) and CIBSE(HK Branch). For registration, please register ONLINE via the website of HKIE(BSD) – <http://bs.hkie.org.hk/Home.aspx?SubMenuID=fb3bb37c-9998-4e98-9447-cf17074d9859>. The maximum number of participants is 25. The Technical Visit is free of charge and application will be accepted on a first-come-first-served basis. Vacancy will be distributed evenly among the three institutions as far as possible. Names of successful members will be informed by confirmation email or on the website of HKIE(BSD) – <http://bs.hkie.org.hk/> no later than 17 October (Wednesday).

For enquiry, please contact Mr Cecil Man at 95033649 (ASHRAE – HKC), Ir KT Cheuk at 92092155 (HKIE-BSD) or Ir Stanley CHOW at 91339259 (CIBSE HK Branch).