

# CERTIFIED CARBON AUDITOR TRAINING COURSE

(Course Code: CA/03/10)

20 – 23 January 2010

## Organiser



## Implementation by

Energy Institute (Hong Kong Branch)<sup>1</sup>

## Supporting Organisations



## Background

This is the third intake of the certified carbon auditor training course. This course has been announced by the Environment Bureau of the HKSAR Government as related to energy-cum-carbon audit projects meeting the training requirements for a professional engineer to register as a qualified service provider to certify energy-cum-carbon audit projects under the Environment and Conservation Fund (ECF).

The emissions of carbon dioxide (CO<sub>2</sub>) and greenhouse gas due to power generation, transportation and other industrial/commercial activities have caused serious climate change and environmental impacts worldwide. Each corporation should immediately implement carbon-reducing measures to mitigation the problems. The first important step is to carry out carbon audit to identify the sources of carbon emission and quantify the carbon footprint of a corporation.

<sup>1</sup> Energy Institute (Hong Kong Branch) is incorporated in Hong Kong with limited liabilities.

The HKSAR Government is taking the lead to promote carbon audit. HK\$450 million has been reserved under the ECF to subsidize energy-cum-carbon audit projects and energy efficiency projects for building owners in Hong Kong. The scheme is very much well received by the professional societies and the general public at large. As an active professional institution and one of the green partners in Hong Kong, the Energy Institute is in full support of this initiative by providing timely and quality certified carbon auditor training course to train up more engineers and professionals to appreciate carbon audit and to acquire the necessary skills to conduct the professional carbon audits.

### **Course Objectives**

The Certified Carbon Auditor Training Course is designed for engineers and professionals in Hong Kong. After taking the course, the participants will be able to:

- appreciate the function of carbon audits as a means to help business sectors and corporations in estimating their carbon footprints thereby setting objectives to manage and reduce the footprints;
- understand the basic carbon audit processes and learn the skills to undertake such audit, with an appreciation of Hong Kong's requirements in carbon auditing; and
- establish network in the carbon business through certification as certified carbon auditor with the Energy Institute in UK, which has a membership of around 13,500 professionals all over the world.

### **Main Topics**

1. Climate Change and Potential Local Challenges
2. Energy Management
  - Policy and process
  - Data metering and monitoring
  - Data analytical methods
  - Management tools and assessment
3. Energy Auditing
  - Building energy consumption
  - Energy data assessment
  - Quantification of energy waste
  - Risk assessment of energy waste
  - Energy management opportunities
  - Finance and life cycle assessments
4. Carbon Management
  - Environmental management
  - Environmental impact reduction
  - Carbon auditing
  - Green house gas protocols
  - Internal and external verification
  - Trading schemes
  - Carbon audit guidelines in Hong Kong
5. Carbon Footprint Calculator
  - Emissions factors and calculations
  - Reductions versus offset approaches
  - Low carbon approaches and opportunities
  - Energy and carbon reducing solutions: HVAC, heating, lighting, motors, plant/building facilities, controls and maintenance

## Examination

- Participant should pass the examination in order to receive the certificate.
- Time period: 2 hours
- For those who failed the examination may re-sit the examination in the next course organised within one year. Participant can only re-take the examination for one time.

## Key Speakers

**Mr Trevor FLOYD**, CEng, MEI, CMarEng, MIMarEST, ACIBSE, MCMI, has been independent energy auditor and trainer for approaching 20 years. Mr FLOYD had 13 years working as a marine engineer for Shell, and has vast experience working on government contracts. He is an accredited Carbon Trust auditor and has audited many facilities in Hong Kong and Southern China including Hong Kong Airport and is an authority on energy related matters and has spoken at, and chaired conferences throughout the world, including Hong Kong and Sydney.

### Related Qualifications and Experience:

- Chartered Marine Engineer
- Accredited Carbon Trust Consultant
- Registered Low Carbon Consultant (CIBSE) – EPCs and DECc
- Accredited Carbon Trust Standard Assessor
- EU - Emissions Trading Scheme verifier
- MSc - Energy / Environmental Technology & Economics
- MBA – Business growth programme
- 1st and 2nd Class Marine Engineering registration (BEng Hons. Equivalent)
- Various Post Graduate Certificates and Diplomas related to Business Excellence, Quality Systems and People Coaching

**(TBC) Ir Roger LAI**, MSc(Eng), CEng, FEI, MIET, RPE, FHKIE, FHKAE, is currently the President of Hong Kong Association of Energy Engineers and a Distinguished Adjunct Professor at The University of Hong Kong. He was formerly the Director of Electrical & Mechanical Services Department, HKSAR Government (2001-2006). Ir Lai has been very active in promotion of energy efficiency and carbon emission reduction in Hong Kong.

**Ir Dr Michael KH LEUNG**, PhD, CEng, MEI, RPE, MHKIE, is currently the Chairman of Energy Institute (Hong Kong Branch). He is also an Assistant Professor in the Department of Mechanical Engineering at The University of Hong Kong. The main areas of his teaching and research are energy efficiency, renewable energy and building services engineering. He is also experienced in energy audit and carbon audit.

**Ir Raymond Fong**, MSc, LLB, CEng, MEI, RPE, MHKIE, is currently the Vice Chairman of Energy Institute (Hong Kong Branch). He is also the Principal Consultant of Environment Management Division, Hong Kong Productivity Council, with over 20 years experience in air pollution control and energy management field.

**General Information**

<b>Date &amp; Time:</b>	Lectures: 20 – 23 January 2010 (Wednesday to Friday); 09:30 am to 17:00 pm 23 January 2010 (Saturday); 09:30 am to 12:30 pm
	Examination 23 January 2010 (Saturday); 14:00 pm to 17:00 pm (1-hour preparation time and 2-hour examination time)
<b>Venue:</b>	1/F HKPC Building, 78 Tat Chee Ave, Kowloon Tong
<b>Teaching &amp; Learning Activities:</b>	Lectures, assignments and examination <i>Note: Lecture and examination will be postponed if typhoon signal No. 8 or above or a black rainstorm warning is hoisted in that morning or afternoon.</i>
<b>Medium of Instruction:</b>	English
<b>Target:</b>	Practicing Engineers, Energy Managers, Energy Auditors, Environmental Officers, Building Services Managers, Plant Managers, etc.
<b>Course Fee:</b>	<b>HK\$11,000</b> for Member of Organiser or Supporting Organisations <b>HK\$12,000</b> for Non-member <i>Notes:</i> <ol style="list-style-type: none"> <li><b>Complimentary refreshment and lunch</b> will be provided every day.</li> <li>A non-member participant is entitled to receive free affiliate membership of the Energy Institute up to 31st December 2010.</li> </ol>
<b>Registration:</b>	<ul style="list-style-type: none"> <li><b>Maximum 30 enrolments</b> on a first-come-first-served basis</li> <li>Please complete the registration form and submit it by fax to Ms April Li (fax no.: 8143 0048). We shall reply you immediately to acknowledge the receipt of your registration form and give you instruction to pay the course fee. Your enrolment is confirmed only after we receive your payment.</li> <li>Last day of registration on 23 December 2009.</li> </ul>
<b>Certificate:</b>	<ul style="list-style-type: none"> <li>Certificate will be issued by <b>Energy Institute</b> and <b>CIBSE</b>.</li> <li>The certificate is a proof of fulfilling the training requirement for a professional engineer to register as a qualified service provider to certify energy-cum-carbon audit projects under the ECF.</li> </ul>
<b>Leaflet &amp; Registration Form:</b>	Soft version of leaflet and registration form can be downloaded from <a href="http://www.energyinst.org.hk/09carbonaudit.asp">http://www.energyinst.org.hk/09carbonaudit.asp</a>
<b>Enquiry:</b>	Ms April Li Tel: 9058 7800, Fax: 8143 0048, Email: <a href="mailto:aprilmnli@yahoo.com.hk">aprilmnli@yahoo.com.hk</a>

**To: Ms Li**

[soft copy to [aprilmnli@yahoo.com.hk](mailto:aprilmnli@yahoo.com.hk) or hard copy by fax to 8143 0048]

## Registration Form

# CERTIFIED CARBON AUDITOR TRAINING COURSE

**20 – 23 January 2010**

Name

(Mr/Ms/Ir/Dr)

\_\_\_\_\_ (Please put the name you want it to be printed in your certificate issued.)

Position

\_\_\_\_\_

Organization

\_\_\_\_\_

Address

\_\_\_\_\_

\_\_\_\_\_

Tel

Fax

Email

\_\_\_\_\_

Academic and Professional  
 Qualifications

\_\_\_\_\_

\_\_\_\_\_

**Course fee (Please tick appropriate box(es) and input your membership number(s) if any.)**

EI Member (Membership No.: \_\_\_\_\_)

ASHRAE Member (Membership No.: \_\_\_\_\_)

BSOMES Member (Membership No.: \_\_\_\_\_)

HK\$11,000  CIBSE Member (Membership No.: \_\_\_\_\_)

HKAE E Member (Membership No.: \_\_\_\_\_)

IMechE Member (Membership No.: \_\_\_\_\_)

SOEHK Member (Membership No.: \_\_\_\_\_)

HK\$12,000 Non-member

### Important

The Organiser has adopted a Personal Data (Privacy) Policy. You may contact us for further details.