

Organiser



Implemented by



WEBINAR

# CERTIFIED CARBON AUDITOR TRAINING COURSE

(20<sup>th</sup> Intake)

1 - 4 November 2023

## Supporting Organisations (TBC)



(TBC)



(TBC)



## Background

The emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHG) due to power generation, transportation and other industrial / commercial activities are contributing to climate change and environmental impacts worldwide. Each corporation should immediately implement carbon-reducing measures to mitigate the problems. The first important step is to carry out a carbon audit to identify the sources of carbon emissions and quantify the carbon footprint of a corporation. As energy consumption is one of the major sources of carbon emissions, it is always effective to reduce carbon footprint through implementing energy saving measures.

As an active professional institution and one of the green partners in Hong Kong, the Energy Institute is active in providing timely and quality certified carbon auditor courses to train engineers and other professionals to understand the audit process and to acquire the necessary skills to conduct professional carbon audits.

## Course Objectives

The Certified Carbon Auditor Training Course is designed for engineers and other professionals who have an interest or involvement with greenhouse gas accounting, reporting and management 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 (greenhouse gas) 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 over 14,000 individuals and 300 companies all over the world.

The course will suit those with no or limited GHG accounting experience or those wishing to gain a basic understanding of the concept of net zero emissions using science-based targets and the requirements of the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

## Main Topics

### **1. Climate Change and Potential Local Challenges**

- Energy and climate change
- Kyoto greenhouse gases

### **2. Greenhouse Gas Accounting and Reporting**

- International GHG Corporate Accounting and Reporting Standard (produced by WRI/WBCSD)
- Setting Organisational and Operational boundaries
- Hong Kong Accounting and Reporting Guide

### **3. Carbon auditing**

- Carbon Auditing in Practice
- Scope 2 emissions guidance
- Organisational boundary guidance for leased assets

- Hong Kong's GHG inventory and major emission sources

- Emissions factors and calculations
- Workshop Activities – Collating and Sense checking accurate emissions data

- Workshop Activity – Carbon auditing case study exercise (*Applying the Hong Kong GHG reporting guide to a case study HK office building*)
- Preparing a greenhouse gas report

#### 4. International carbon policies

- Hong Kong policy & actions
- EU & UK policy & actions
- IPCC reports

#### 5. Energy and Carbon Management

- Energy Auditing – process & reporting
- Energy and carbon reduction solutions  
*(air conditioning, lighting, motors, building facilities)*
- Low & Zero Carbon technologies
- Emission reduction versus offsetting

#### 6. Developing carbon accounting practice beyond the Hong Kong GHG Guide

- Paris Agreement and COP26 commitments
- IPCC guidance on fugitive emissions
- Relevance of Scope 3 value chain emission sources
- Review of ISO 14064-1:2018 GHG organisational accounting & reporting requirements
- Concept of Science Based Targets
- Science Based Targets initiative (SBTi) Corporate Standard
- Concept of Net-zero emissions
- Basic principles of Net Zero strategies and pathways

*Note: Contents are subject to minor change without prior notice.*

### Course Delivery

The course will include a mixture of tutor led training, group discussion and delegate activities and will be assessed through a 2.5 hour written/online examination. Training will focus on the application of the greenhouse gas accounting and reporting guide developed by the Hong Kong SAR Government and will also cover practical energy and carbon auditing skills.

Delegates will gain practical experience of GHG emission accounting and reporting calculations by completing a range of exercises and a case study Hong Kong office building. Participants will require MS Excel for the case study exercise and also a laptop for the assessment.

### Examination

- Participants must pass the examination and attend all webinar sessions in order to receive the certificate.
- The examination will be undertaken at a formal assessment centre using the Energy Institute online portal (participants will use their own laptops for the assessment).
- Examination time period is 2.5 hours.
  - If a participant fails the examination, they have one opportunity to re-sit the examination at a second assessment centre. There will be no charge for the re-sit. Please note there will be no opportunity for a second re-sit.

## Key Speakers

**Mr Chris BURGESS**, BSc, CEng, MEI, has a degree in Mechanical Engineering and over 35 years' experience within the energy industry and fifteen years as an independent energy consultant. Chris had a number of technical and marketing roles within British Gas and Midlands Electricity over 18 years before establishing Alpha Energy Consultancy in 1998 and is now Head Energy Management Trainer for the Energy Institute - London.

Chris specialized in implementing energy management and technical solutions to reduce operational cost and carbon emissions. He has carried out energy and carbon audits for a wide range of public and private sector organizations and is experienced in identifying, and implementing efficiency measures based on both capital investment and staff engagement solutions.

He delivers bespoke energy management and carbon audit training courses on behalf of the Energy Institute and is author of CPD training modules for Energy in Buildings and Industry magazine.

Chris has been an accredited Assessor for the Carbon Trust Standard (UK carbon management certification scheme) and as Lead Verifier (ISO 14064), under the Climate Registry Scheme, for Green House Gas verification in the US following the verification of GHG emissions at Stanford University, California and Utah Transit Authority, Utah. Chris also trained as Lead Verifier for BS 16001 (Energy Management Standard).


**Ir Prof. Michael KH LEUNG**, PhD, CEng, MEI, RPE, FHKIE, is the Past Chairman of Energy Institute Hong Kong. He is also the Associate Provost( Academic Affairs), Shun Hing Education and Charity Fund Professor of Energy and Environment, Chair Professor of Renewable Energy in School of Energy and Environment, and Director of the Ability R&D Energy Research Centre of City University of Hong Kong . His 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 Gary CHIANG**, BEng, MEng, CEng, MHKIE, MCIBSE, MEI, REA, BEAM Pro, Past Chairman, Energy Institute Hong Kong Branch / Principal Manager – Business Development & Support Customer Success & Experience / Customer Success & Sales, CLP Power Hong Kong Limited.

## General Information

<b>Date &amp; Time:</b>	<b>Introduction webinar session</b>	26 October 2023 at 19:00 HK time (up to 2 hours)
	<b>Lectures (<u>webinar only</u>)</b>	1 – 3 November 2023 (Wed - Fri): 14:30 – 20:30 4 November 2023 (Sat): 12:00 – 20:30
<b>Teaching &amp; Learning Activities:</b>	Lectures, case study assignments and a formal examination	
<b>Medium of Instruction:</b>	English	
<b>Target Participants:</b>	Practicing Engineers, Energy Managers, Energy Auditors, Environmental Officers, Building Services Managers, Plant Managers, etc. who have no or limited GHG accounting experience and wish to understand the requirements of the Hong Kong GHG accounting and reporting guide.	
<b>Online Examination:</b>	Examination assessment centre to be held on <b>18 November 2023 (Sat)</b> (at a venue to be arranged and hosted using the online assessment via EI Learning Centre)	



- Results Releasing Date:** By 20 January 2024
- Course Fee:** HK\$10,000 for Members of Organiser or Supporting Organisations  
HK\$11,000 for Non-members
- Registration:**
- Please register through online system: <https://bit.ly/ccatc20>. We shall reply to you immediately to acknowledge the receipt of your registration and provide you with instructions on how to pay the course fee. Your enrolment is confirmed only after we receive your payment.
  - Last day of registration: **4 October 2023**
  - The Organiser reserves the right to cancel the course in the case of low registration rate. All registrants will be informed of the cancellation and refund arrangement on or before **25 October 2023**.
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- Certificate:** Certificate will be issued by Energy Institute and carry CIBSE CPD accreditation approval. (Certificate sample is attached on the next page)
- Qualification:** Completed CCATC, EIUK
- Registry:** List of persons obtaining Certified Carbon Auditor Training Certificate will be posted on EIHK and EIUK website with consent from the participants who have passed the exam
- Resit Assessment Centre (if required)** 17 February 2024 (results will be released by 18 March 2024)
- Remarks:** To qualify as a Certified Carbon Auditor (CCA) for conducting the Carbon Footprint of Products (CFP) quantification and reporting for a particular product category under the CIC Green Product Certification (CIC GPC) scheme owned by the Construction Industry Council (CIC), please refer to the official website of CIC GPC for detailed information about the qualification requirement of CCA. You can visit at <https://cicgpc.hkgbc.org.hk/subpagex.php?serial=129>
- Enquiries:** Ms Melody Yau    Tel: 2967 8855    Email: [events@agchk.com](mailto:events@agchk.com)


**CPD**

This is to certify that

**CHAN Tai Man**has successfully completed  
the Energy Institute's**Certified Carbon Auditor  
Training Course**

on 8 - 11 June 2022

delivered virtually in partnership with

**The Energy Institute Hong Kong Branch**  
**Chris Burgess**  
Course Lecturer  
Energy Institute**Nick Wayth**  
Chief Executive  
Energy Institute