

Organiser



Implemented by



WEBINAR

CERTIFIED CARBON AUDITOR TRAINING COURSE

(21st Intake)

10 – 13 April 2024

Supporting Organisations



(TBC)



(TBC)



Background

The emissions of carbon dioxide (CO₂) 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 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 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 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 course case study exercise and also a laptop for the assessment.

Examination

- Participants must pass the examination and attend the introduction webinar session as well as all lectures (in webinar) in order to receive the certificate.
- The examination will be undertaken using the Energy Institute online portal.
- Examination will be 2.5 hours and comprises a mix of multi-choice, short text based and calculation questions. If a participant fails the examination, they will normally have one opportunity to re-sit the online examination. There will be no charge for the re-sit. Please note there will be no opportunity for a second re-sit. Details will be announced during the course.

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

Date & Time: **Introduction webinar session** 3 April 2024 at 19:00 HK time (up to 2 hours)
Lectures (webinar only) 10 – 12 April 2024 (Wed – Fri): 14:30 – 20:30
13 April 2024 (Sat): 12:00 – 20:30

Teaching & Learning Activities: Lectures, case study assignments and a formal examination

Medium of Instruction: English

Target Participants: 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.

- Online Examination:** The online examination will be held on **27 April 2024 (Sat)**.
(The participants are responsible for arranging a venue with a stable internet connection by themselves during the designated time for the online assessment via the EI Learning Centre.)
- Results Releasing Date:** By 4 July 2024
- Course Fee:** HK\$10,000 for Members of Organiser, Supporting Organisations and Hong Kong Green Organisation Certification (HKGOC)
HK\$11,000 for Non-members
- Registration:**
- Please register through online system: <https://bit.ly/ccatc21>. 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: **13 March 2024**
 - 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 2 April 2024**.
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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 (if required)** 27 July 2024 (results will be released by 21 August 2024)
- Remarks:**
- Obtain one of the recognised professional qualifications of Certified Carbon Auditor (CCA) under the CIC Green Product Certification (CIC GPC) scheme. Please visit the official website of CIC GPC for detailed information at <https://cicgpc.hkgbc.org.hk/subpagex.php?serial=129>
 - Professional qualification recognised by Carbon Reduction Certificate under the Hong Kong Green Organisation Certification (HKGOC) Scheme
- Enquiries:** Course Secretariat Tel: 2967 8855 Email: events@agchk.com



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
Chris Burgess
Course Lecturer
Energy Institute

Nick Wayth

Nick Wayth
Chief Executive
Energy Institute