



Hong Kong Institution of Certified Auditors

香港專業審核師學會

HKICA-CC801E

Personnel Certification Scheme of GHG Carbon Auditors

Certification Criteria

The Secretary, Room 108, 1/F Sun Ling Plaza, 30 On Kui Street,
Fanling, New Territories

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FOREWORD

1. The Hong Kong Institution of Certified Auditors (HKICA) was established in 2006. It is a learned society as well as an International Personnel Certification Body (PCB) providing certification services to the quality, environmental, occupational health & safety, food safety, laboratory and other management systems related professions in Hong Kong. In response to the increasing demand for professional and lack of recognition of professional status of Greenhouse Gas (GHG) personnel locally, HKICA expanded its activities to cover certification of GHG Carbon auditors.
2. The HKICA Certification Scheme for GHG Carbon Auditor is prepared by Hong Kong Institution of Certified Auditors in accordance with the requirements of ISO/IEC 17024: 2012. The “Criteria” is established by HKICA based on ISO/IEC 17024:2012 “Conformity assessment — General requirements for bodies operating certification of persons”, ISO 14065:2020 “General principles and requirements for bodies validating and verifying environmental information” and ISO 14066 “Competence requirements for GHG validation and verification teams”.
3. The objectives of the Scheme are to ensure the knowledge, competence, and personal attributes of GHG Carbon Auditors as:
 - (a) to promote the professional status of Hong Kong GHG Carbon auditors to the public;
 - (b) to provide professional recognition to the GHG Carbon auditors so as to attract and retain talented and skillful personnel to enter into the Greenhouse Gas industry
 - (c) to benchmarks competence of expertise and knowledge of the certified GHG personnel;
 - (d) to maintain a database of GHG Carbon audit personnel in the HKICA website for the benefit of the industry;
 - (e) to set up personnel certification schemes for GHG Carbon auditors in accordance with the requirements of ISO/IEC 14065:2020, ISO 14066:2011 and ISO/IEC 17024:2012; IPC_PL_11_006 and CNAS-CC03:2014;
4. The certifications of and HKICA-graded GFG Carbon Auditor only indicates the individual’s competence to perform audit. The scheme does not identify the area of technical competence that an individual may have. The responsibility for identifying that an GHG Carbon Auditor has the necessary knowledge and understanding of the technical environment to perform an Verify/Validate of a specific organization/commodity will still rest with those responsibility for managing the verify/validate process.

5. The mechanism of evaluation of competence of HKICA GHG Carbon auditors as stipulated in this "Criteria" is based on the principle and requirements of ISO/IEC 17024:2012 "Conformity assessment - General requirements for bodies operating certification of persons".

All public documents of HKICA are issued in both Chinese and English version. The latest issue will be uploaded to the Scheme website.

Applicant can contact the HKICA Secretariat for more information regarding the Certification Scheme for GHG Carbon Auditors by the following means:

Address: Room 108, 1/F Sun Ling Plaza, 30 On Kui Street, Fanling, New Territories

HomePage: <http://www.hkica.org>

Email: info@hkica.org

Phone: 27892389

1. SCOPE

- 1.1. This document prescribes procedures by which Greenhouse Gas personnel can be assessed and certified as GHG Carbon Auditors.

2. REFERENCES

- 2.1. ISO 14064-1:2018 “Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals”;
- 2.2. ISO 14064-2:2019 “Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements”;
- 2.3. ISO 14064-3:2019 “Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements”;
- 2.4. ISO 14065: 2020 “General principles and requirements for bodies validating and verifying environmental information”;
- 2.5. ISO 14066:2011 “Competence requirements for GHG validation teams and verification teams”;
- 2.6. ISO 14067:2018 “Carbon footprint of products — Requirements and guidelines for quantification”
- 2.7. ISO/TR 14069:2013 “Quantification and reporting of greenhouse gas emissions for organizations — Guidance for the application of ISO 14064-1”
- 2.8. BS EN ISO/IEC 17024:2012 “Conformity assessment — General requirements for bodies operating certification of persons”
- 2.9. ISO/IEC 17029:2019 “Conformity assessment — General principles and requirements for validation and verification bodies”
- 2.10. ISO 19011- Guidelines for Verification/validation management systems
- 2.11. ISO/IEC 17021 Conformity assessment — Requirements for bodies providing Verify/Validate and certification of Verification/validation - family of standards;
- 2.12. IPC_PL_11_006 “Certification Scheme for Management System Auditors”

3. TERMS AND DEFINITIONS

In view of any difference of the terms and definition giving below and other standards, the definitions as stipulated in this Criteria will be followed.

- 3.1. **Applicant:** person who has submitted an application to be admitted into the **certification process**.
- 3.2. **Carbon Footprint of Product (CFP):** sum of greenhouse gas emissions and removals in a product system, expressed as CO₂ equivalents and based on a life cycle assessment using the single impact category of climate change.
- 3.3. **Certification Body (CB)** - The body that administers procedures for certification of personnel in accordance with this specification and fulfils the requirements of ISO/IEC 17024.
- 3.4. **Certification process:** activities by which a certification body determines that a person fulfils **certification requirements** including application, assessment, decision on certification, recertification and use of certificates and logos/marks.
- 3.5. **Competence:** ability to apply knowledge and skills to achieve intended results.
- 3.6. **Continuing Professional Development Units (CPDU)** - The Continuing Professional Development Units (CPDUs) is the measuring unit used to quantify approved learning and professional service activities. Typically, one CPDU is earned for every one hour spent in a planned, structured learning experience or activity.
- 3.7. **Greenhouse gas (GHG)** - gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds.
NOTE GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆).
- 3.8. **GHG Carbon Auditor** - person with the demonstrated personal attributes and competence to conduct an audit and identify the GHG emission characteristics of different branches or products and services.
- 3.9. **GHG experience** - include research of national or regional greenhouse gas emission subject, establish of relevant standard greenhouse gas emission stand, methodology for verification of greenhouse gas emission, consultancy, audit and verification of the Clean development Mechanism (CDM) projects, consultancy, audit and verification of the National Certified Emission Reduction, Voluntary Emission reduction (VER), quantifying and verification for greenhouse emission gas projects for organizations, evaluation of carbon footprint for products, energy saving audit, audit for energy sources, monitoring of energy usage, and evaluation of energy performance, carbon emission certification of low carbon products, organizing carbon emission management, energy management consultancy and audit, diagnostic of energy

reduction, evaluation of green manufacturing system, environmental management system consultancy and certification audit, evaluation of environmental footprint, environmental impact assessment, clean production audit, and life cycle evaluation services.

3.10. **IPC** - International Personnel Certification Association

For any other terms not listed above, the relevant definitions in ISO/IEC 17000:2004 and the International Vocabulary of Basic and General Terms in Metrology apply.

4. GRADES OF GHG CARBON AUDITOR

4.1. Certified GHG Carbon Auditor

HKICA Certified GHG Carbon Auditors are certified to possess the knowledge, skill and competence in taking the role as GHG auditor and capable of detailing the carbon footprint of the studied product for a particular product category throughout the designated life cycle stages. As stated in ISO/TS 14067 (2013), the Carbon Footprint of Product (CFP) study shall include the four phases of life cycle assessment (LCA), i.e. goal and scope definition, life cycle inventory (LCI) analysis, life cycle impact assessment (LCIA), and life cycle interpretation. The Certified GHG auditor may be a member or lead an audit team in accordance with ISO 14066, ISO 19011 and ISO/IEC 17029. Certified GHG carbon auditor are able to initiate, plan, execute and report of first, second and third party GHG audit.

4.2. Registered GHG Carbon Auditor

HKICA Registered GHG Carbon Auditors are known to possess the training, knowledge in taking the role as auditor and skill of detailing the carbon footprint of the studied product for a particular product category throughout the designated life cycle stages. As stated in ISO/TS 14067 (2013), the Carbon Footprint of Product (CFP) study shall include the four phases of life cycle assessment (LCA), i.e. goal and scope definition, life cycle inventory (LCI) analysis, life cycle impact assessment (LCIA), and life cycle interpretation. The Registered GHG auditors are able to initiate, plan, execute and report a GHG audit.

5. CERTIFICATION CRITERIA

Applicants for certification shall fulfill the following certification criteria to ensure their competence.

5.1. Certified GHG Carbon Auditor

5.1.1. Academic and working experience

- a) Higher Diploma, Associate degree or equivalent and 6 years of working experience with a minimum 1 year of GHG experience; or
- b) Bachelor degree and 4 years of working experience with a minimum of 1 year of GHG experience; or
- c) Master degree or above and 2 years of working experience with a minimum of 1 year of GHG experience; or
- d) Certified Auditor of HKICA or equivalent certification body accredited for ISO/IEC 17024 with a minimum of 1 years of GHG experience.

Note1: Applicants for certification shall provide documentary evidence of work experience; this evidence may be presented in the form of employer references giving information on work carried out and positions held.

5.1.2. Professional experience

5.1.2.1 Applicant shall have at least one-year professional experience in GHG related carbon audit, validation/verification experience and participated 3 carbon audits within 3 years before application.

5.1.2.2 Carbon audit, validation/verification experience include audit and verification of Clean development Mechanism (CDM) projects, National certified Emission Reduction project, Voluntary Emission reduction (VER), establish of inventory and registry for greenhouse gas emission, verification for greenhouse emission gas projects for organizations, project or organization evaluation for carbon offset and carbon trading for verification, carbon emission certification of low carbon products, evaluation of carbon footprint, certification of carbon offset and major carbon offset evaluation.

5.1.3. Training

5.1.3.1 The applicant for Certified GHG Carbon auditors shall complete a minimum of 16-hours of

Carbon Auditor training course. The training course should be approved by HKICA or equivalent recognized by HKICA.

5.1.4. **Examination requirements**

5.1.4.1 Applicants for Certified GHG Carbon Auditor shall obtain satisfactory results in the "GHG Auditor" Examination. The written examination is a closed book assessment. All examination papers are prepared by HKICA.

5.1.4.2 Examination can be waived for applicants holding a valid GHG Carbon Auditor certification status granted by certification bodies accredited for ISO17024 or organization recognized by HKICA.

5.2. **Registered GHG Carbon Auditor**

5.2.1. **Academic and working experience**

- e) Higher Diploma, Associate degree or equivalent and 2 years of working experience; or
- f) Bachelor degree and 1 year of working experience or
- g) Master degree or above; or
- h) Certified Auditor of HKICA or equivalent certification body accredited for ISO/IEC 17024.

5.2.2. **Training**

5.1.3.2 The applicant for Registered GHG Carbon auditors shall complete a minimum of 16-hours of Carbon Auditor training course. The training course should be approved by HKICA or equivalent recognized by HKICA.

5.2.3. **Examination requirements**

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5.2.3.2 Examination can be waived for applicants holding a valid GHG Carbon Auditor certification status granted by certification bodies accredited for ISO17024 or organization recognized by HKICA.

6. CERTIFICATION PROCESS

6.1. Initial certification

- 6.1.1. Applicant fulfilled all criteria as stipulated in this document can submit application with supporter either by working organization or HKICA certified personnel.
- 6.1.2. Applications can be submitted by email or by post or on-line application with all necessary information including certificate of academic qualifications, certificate of achievement in training courses, audit/validation/verification log and any related documents together with the application fee. In the event of false statements being discovered, any certificate awarded will be revoked and declared null and void.
- 6.1.3. The requirements of personal attributes and ethics are fulfilled by a referee from a HKICA certified personnel or the Applicant's working organization. In case a HKICA certified personnel as the referee, he/she shall have at least at the auditor, engineer, validator/verifier grade or above. He/She shall be familiar with the applicant.
- 6.1.4. Applicants shall sign the declaration in the application form, for commit to abide by the Code of Conduct as stipulated by HKICA.
- 6.1.5. Applicant fulfilled the examination requirements also considered as fulfilling the knowledge and competence requirements.
- 6.1.6. The academic, working, professional working, GHG auditing, verifying or validating experience and training experience will be reviewed and assessed by the Qualification Board. Recommendation on certification of an applicant shall be made solely on the basis of the information gathered during the certification process by the examiners.
- 6.1.7. The Governing Council of HKICA will review the evaluation results of all the above certification criteria and make certification decision. Members of the Council shall not be involved in the examination and/or evaluation processes.

6.2. Certification notice and certificate

- 6.2.1. HKICA shall inform results of certification within 15 calendar days after certification decision made by Governing Council.

6.2.2. HKICA shall upload the certification notice and issue certification/re-certification certificate, where the certificate is valid for 3 years. HKICA will inform the nominated organizations or the applicants of unsuccessful certification.

6.2.3. The certificates are signed by the President of the Certification Body and shall contain, as a minimum, the following information:

- a) name of the certified person and certificate number (unique identification);
- b) name and logo of the Certification Body (HKICA);
- c) reference to the certification criteria HKICA-CC801 and year of issue on which the certification is based;
- d) the scope of certification, including level and limitations; and
- e) effective date of certification and date of expiry.

6.2.4. HKICA shall maintain sole ownership of the certificates. Certified persons shall stop use of the certificate during suspension or termination.

6.2.5. HKICA will upload the list of certified persons as public information to the website. The list includes:

- a) name of certified person;
- b) scope of certification;
- c) certificate number;
- d) certification date and expiry date.

6.3. **Monitoring and Re-certification**

6.3.1. Annual maintenance requirements: Certified GHG Carbon Auditors should complete at least 20 continuing professional development units (CPDUs) of which 5 shall be approved by HKICA. (1 contact hour is normally equivalent to 1 CPDU); Every year at the month of certification, the Secretariat will inform the certified auditors to pay for the annual fee and remind them to record and keep their annual verification (CPD) records. These records will be checked during the re-certification process.

6.3.2. Re-certification audit requirements:

- a) Certified GHG Carbon auditors shall complete at least 3 GHG audit, GHG verification/GHG validation within the recertification cycle. If they cannot fulfill the GHG carbon auditing requirements, they shall either completing a HKICA approved training

course and obtain certificate of achievement or obtaining a pass in re-examination as specified in section 4 to demonstrate their competence. The Operation Manager shall alert the applicant three months before expiration of the certification by e-mail.

6.3.3. Monitoring criteria

- a) HKICA monitors the performance and personal behavior and compliance of Code of Conduct of certified GHG carbon auditors through complaints against the person, feedback of the nominated organizations and organizations having GHG emissions audited by the certified person and annual verification evidence.
- b) All certified GHG personnel shall undergo at least one monitoring exercise within the 3-year re-certification cycle.
- c) Methods of monitoring:
 - i) review of on-site evaluation report by accreditation body.
 - ii) review of evaluation of performance and competence conducted by the organization conducting GHG audit (e.g. review of certification file, audit report and witness evaluation report, etc.)
 - iii) results of interview assessment conducted by HKICA.

6.3.4. Certified personnel should take appropriate corrective actions if the following problems are encountered:

- a) Complaints in relation to performance of their audit are not resolved;
- b) Unsatisfactory results in an on-site evaluation by the accreditation body; or
- c) Fail in an interview assessment.

6.3.5. HKICA can conduct interview assessment in monitoring the audit activities and performance of certified personnel, HKICA may suspend or terminate one's certification status in case there is no improvement of the above situations.

6.3.6. Re-certification follows the same procedures as initial certification.

7. APPEAL AND COMPLAINT

- 7.1. HKICA shall follow the procedures as stipulated in HKICA06E “Appeal and Complaint Procedure” to handle appeal and complaint.
- 7.2. Appellant shall submit their appeal in written form in HKICA-F04 “Appeal Form “ within 30 days from related decision.
- 7.3. Appellant or complainant can download the document HKICA06E “Appeal and Complaint Procedure” and the form from the website. HKICA can provide the document and form upon request.

8. ACTIONS AGAINST CERTIFICATION STATUS

- 8.1. All certified persons shall ensure the information provided is valid and complete. In view of any false or fraud statement, HKICA will suspend or terminate the certification status in accordance with Section 7 of HKICA01E “Regulations for Certification Scheme of Quality Management System Auditor”.
- 8.2. The same procedures as 6.1.1 will be carried out in case the certified person fails to abide to Regulations as set by HKICA or fails to comply with the certification criteria. Warning, suspension, downgrade will be imposed. The final penalty is termination of certification status.
- 8.3. A certified auditing person may, on any personal reason by serving a written notice signed by the applicant, voluntarily suspends or terminates his/her certification for any or all of his/her certified activities.