

# Implementation Framework - Awareness Training

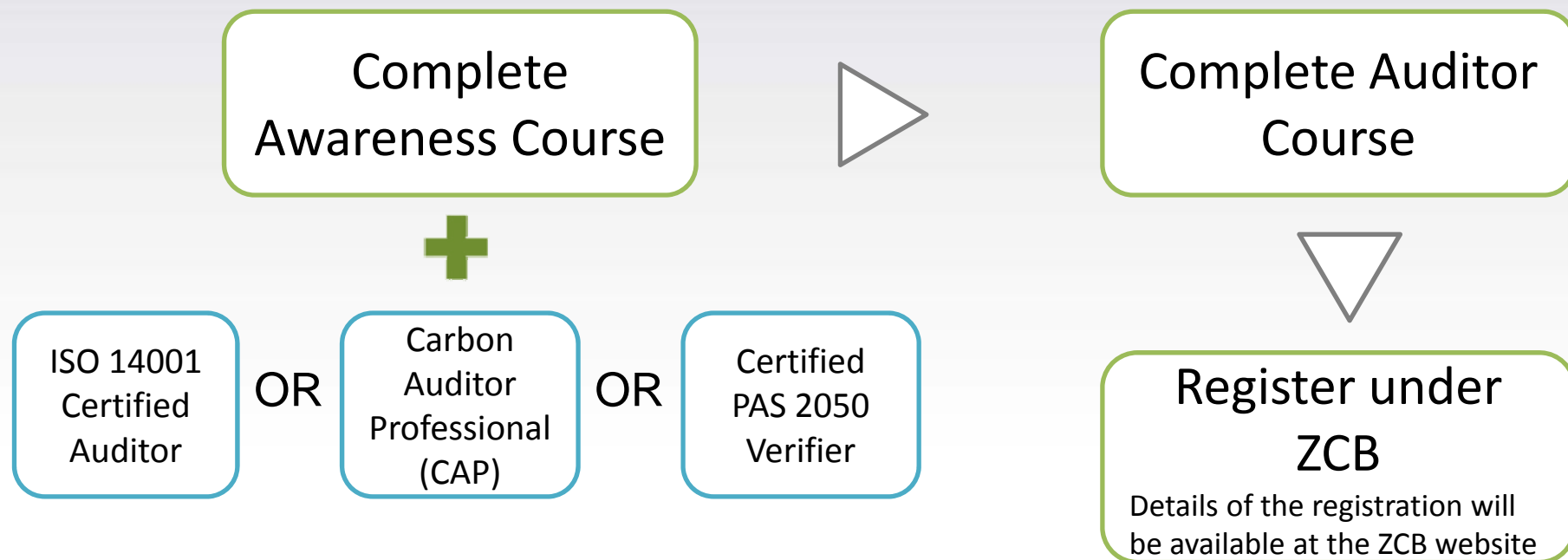
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|--------------------------|--|
| <b>Time &amp; Venue</b>  | 12 Nov 2013, 5 Dec 2013,<br>The hongkong federation of youth groups  |
| <b>Aim</b>               | Provide fundamental knowledge of the CFP and the labelling scheme  |
| <b>Who should attend</b> | Industry practitioners, Material suppliers, BEAM Pro,<br>Potential carbon auditors & verification bodies   |
| <b>Course structure</b>  | <ul style="list-style-type: none"><li>▪ Concept of CFP and life cycle assessment</li><li>▪ Overview of the Carbon Labelling Scheme</li><li>▪ General requirements and principles of CFP assessment</li></ul> |
| <b>Examination</b>       | None   |
| <b>Prerequisite</b>      | None   |
| <b>Remarks</b>           | <ul style="list-style-type: none"><li>▪ Open to all</li><li>▪ CPD Points - 3 hours</li></ul>   |

# Implementation Framework - Auditor Training Course

|                          |   |
|--------------------------|---|
| <b>Time &amp; Venue</b>  | Cement (16 Dec 2013), Steel & rebar (19 Dec 2013)<br>Wanchai, HKMA.   |
| <b>Aim</b>               | Offer professional training for accrediting trainees to be a certified carbon auditors (CCA) for CFP quantification and reporting   |
| <b>Who should attend</b> | Material suppliers, BEAM Pro, Potential carbon auditors, Potential GHG verification bodies  |
| <b>Course structure</b>  | <ul style="list-style-type: none"><li>▪ System boundary and sources of GHG emissions</li><li>▪ CFP quantification and reporting</li><li>▪ Use of carbon footprint audit protocols</li><li>▪ Carbon reduction strategies</li></ul> |
| <b>Examination</b>       | Yes   |
| <b>Remarks</b>           | <ul style="list-style-type: none"><li>▪ CPD Points - 6 hours</li><li>▪ Certified Carbon Auditor is qualified for carbon auditing and reporting for specific product categories.</li><li>▪ Valid for 3 years.</li></ul>            |

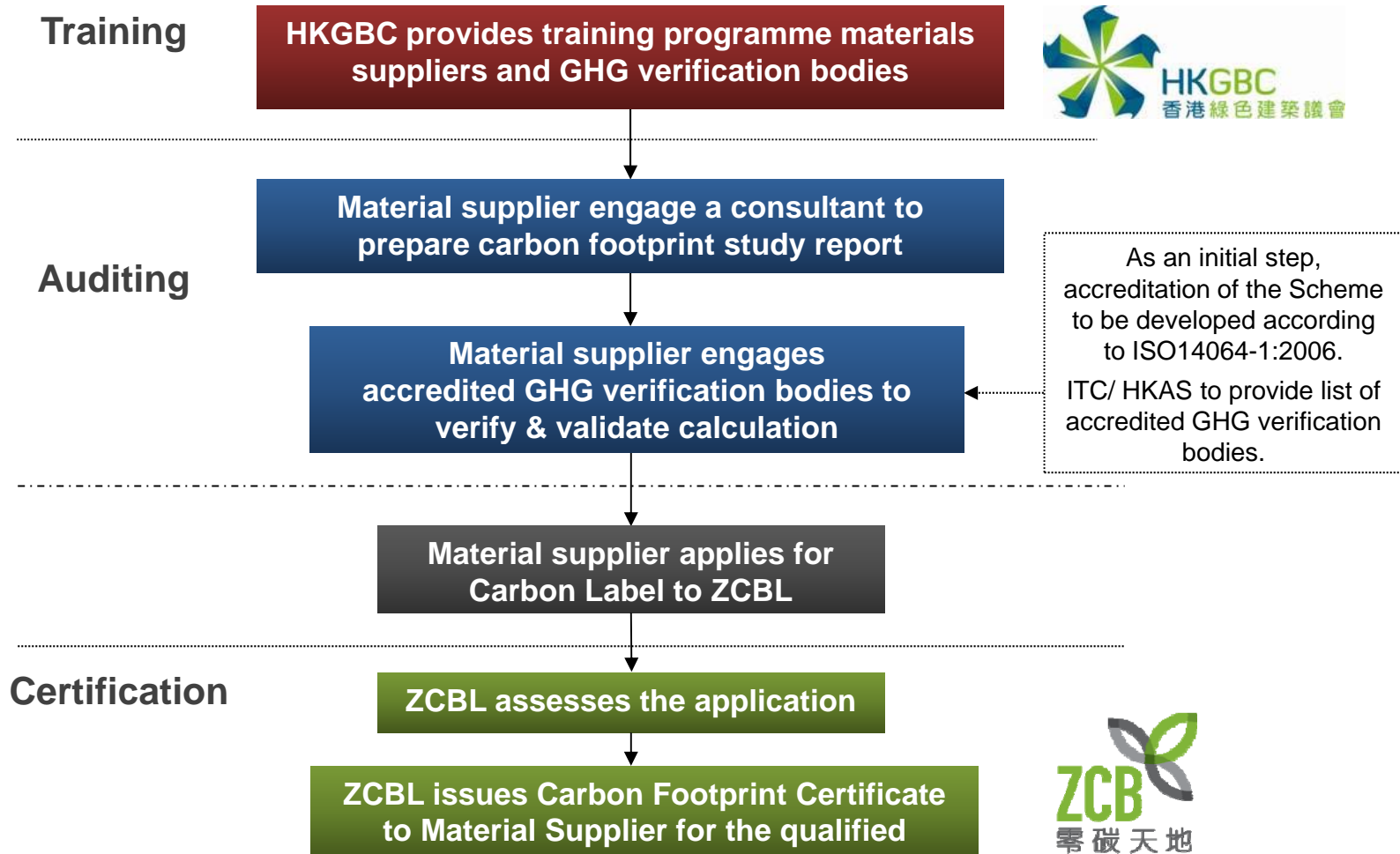
# Implementation Framework

## - How to become a Certified Carbon Auditor



Grace period for the CFP study reports issued by non-certified CCA with at least 2-year experience in CFP auditing: **12-months**

# Implementation Framework (cont.)



# Implementation Framework - Carbon Auditing

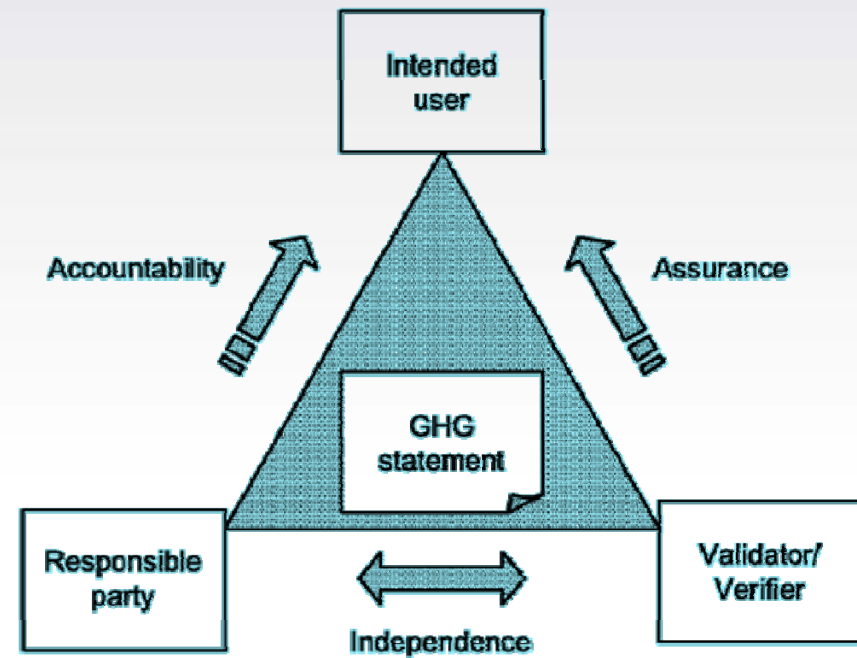
- Engage a certified carbon auditor (CCA), either internally or externally, to carry out the carbon auditing and reporting.
- CCA to conduct audit based on the Assessment Guide and the CFP quantification tool (accessible through ZCB's website in Nov 2013).

The image shows a composite of three elements related to carbon auditing for construction materials:

- Top Left:** Logo for Zero Carbon Building Ltd, a wholly-owned subsidiary of the Construction Industry Council, Hong Kong. It includes the Guide No. CLS 01-2013, Issued: September 2013, and Version: 1.0.
- Top Center:** Title "Carbon Labelling Scheme for Construction Materials Assessment Guide" and "PORTLAND CEMENT" with a footprint graphic.
- Bottom Right:** A screenshot of an Excel spreadsheet titled "CFP Quantification - Portland Cement". The spreadsheet contains sections for:
  - GENERAL INFORMATION:** Date of latest update (07 Oct 2013), Reporting Period.
  - A. General Plant Information:** Field, Company, Country, Main types.
  - B. System Boundary:** A list of processes with checkboxes for inclusion (Yes, No, or n/a), such as Raw material preparation, Kiln operation, On-site power generation, etc.
  - C. Cement and Clinker Production:** A table with columns for Type, Product 1, Product 2, Product 3, Product 4, Product 5, and Total.
  - D. Raw Materials Used to Produce Cement Products:** A table with columns for Material (Cyclotron, Silica, Clay, etc.), Product 1, Product 2, Product 3, Product 4, Product 5, and Total.

# Implementation Framework - Verification

- The CFP study report and relevant documentation should then be verified and validated by a GHG verification / validation body (VVB) accredited by HKAS, in accordance with ISO 14064-1:2006.
- Verification reports issued by non-accredited VVBs with at least 2-year experience in carbon auditing are acceptable within a 12-month grace period subsequent to the launch of the Scheme.



Source: ISO 14064-3:2006

# Implementation Framework - Certification

- Submit application form, application fee and relevant documents to ZCBL.
- Based on the product's carbon footprint, and the payment, ZCBL will issue the carbon label with corresponding class for a validity period of one year, subject to a licence fee.
- Application details will be available at ZCB's website in Nov 2013.



## Carbon Label

Carbon Rating:



Product Category:

Ordinary Portland Cement

Product: White Portland Cement (CEM I 52.5)

Assessment Boundary: Cradle to Site

Country of Origin: Shenzhen, China

Manufacturer: ABC Cement Co., Ltd.

CO<sub>2</sub> Equivalent

(t CO<sub>2</sub>e / t cement): 0.90

By life cycle stages (t CO<sub>2</sub>e / t)

Raw Material Acquisition 0.12

Production 0.74

Distribution to HK (by truck) 0.04

- Bulk Portland cements for civil engineering, building applications, ready-mixed concrete, and concrete products.

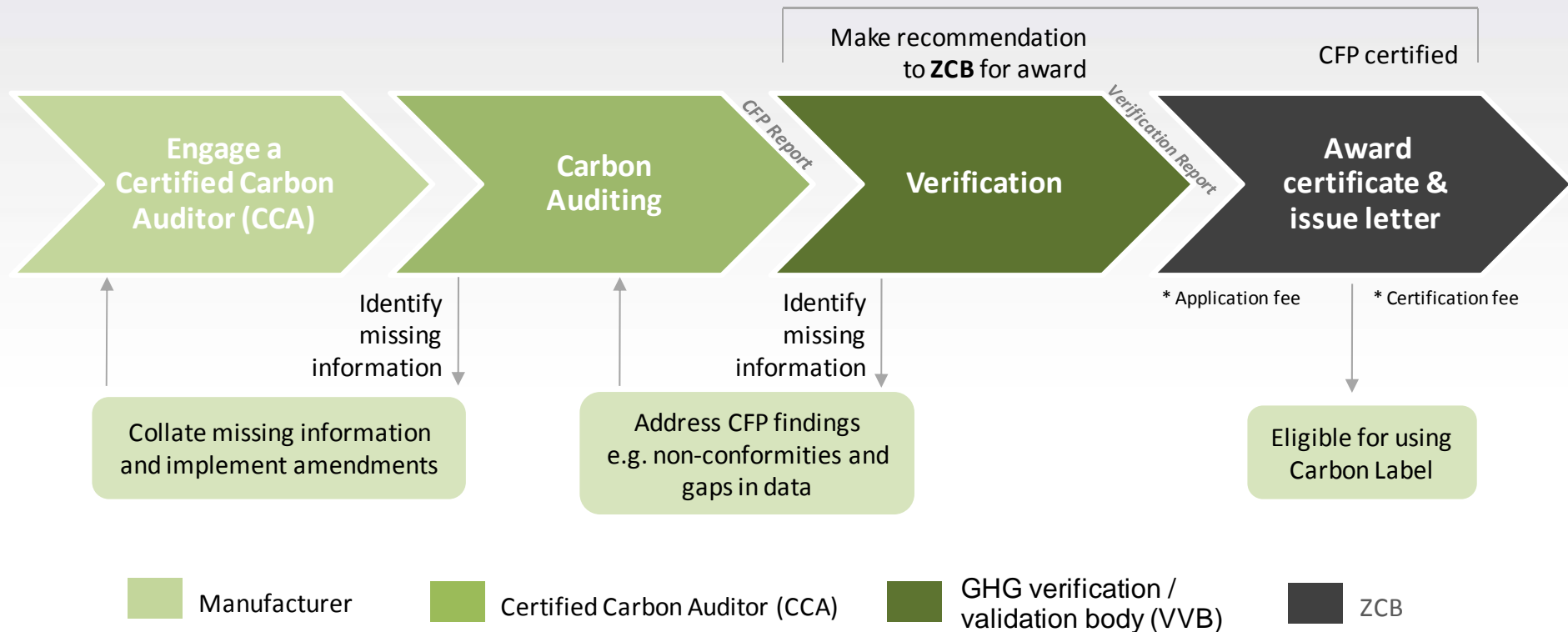
- Complies with BS EN 197-1 CEM I 52,5N.

- Carbon footprint assessment complies with ISO/TS 14067:2013

The data are provided according to the Carbon Labelling Scheme launched by the Construction Industry Council, Hong Kong. More information of the labelling scheme can be found at <http://zcb.hkcic.org/Eng/CarbonLabelling/>.



# How to Apply?





# CIC's Carbon Labelling Scheme for Construction Products - Implementation Plan

