

Participation in Accreditation Scheme as a Good Platform to Align Greenhouse Gas Quantification and Reporting Methods

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**THE WORLD'S LEADING
INSPECTION, VERIFICATION, TESTING &
CERTIFICATION COMPANY**

WHEN YOU NEED TO BE SURE



- Disaster
- Food Security
- Sea level rise
- Hurricane
- Heat waves

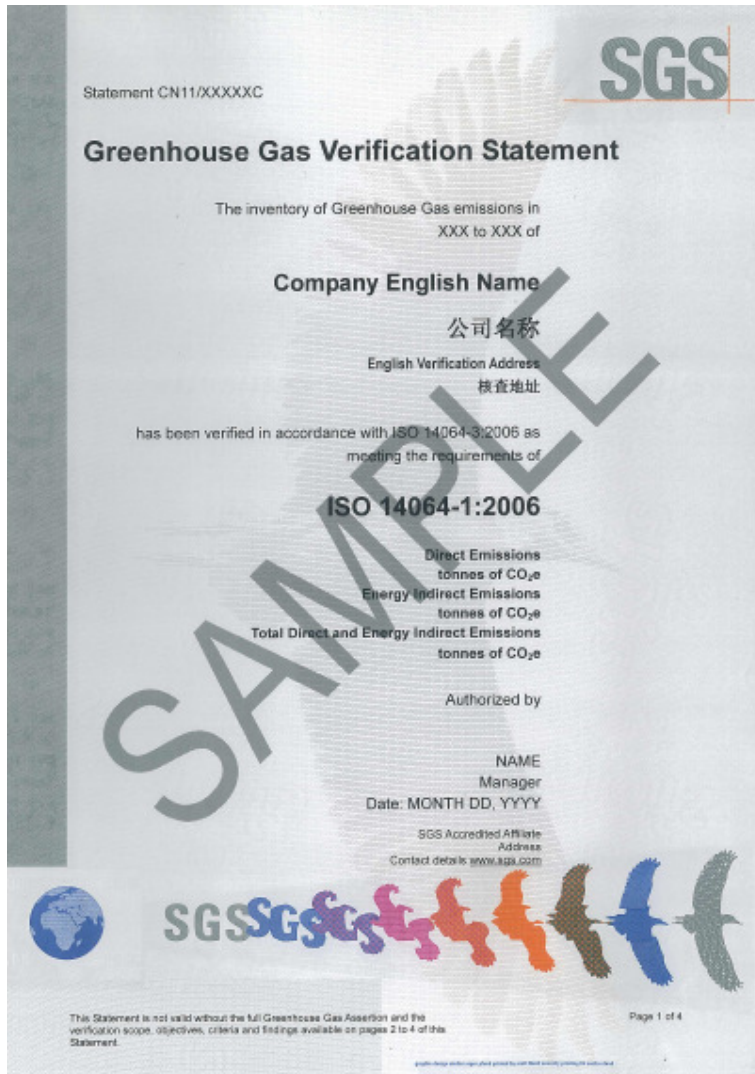


Source: IPCC

SUSTAINABLE

CORPORATE
SUSTAINABILITY
REPORT

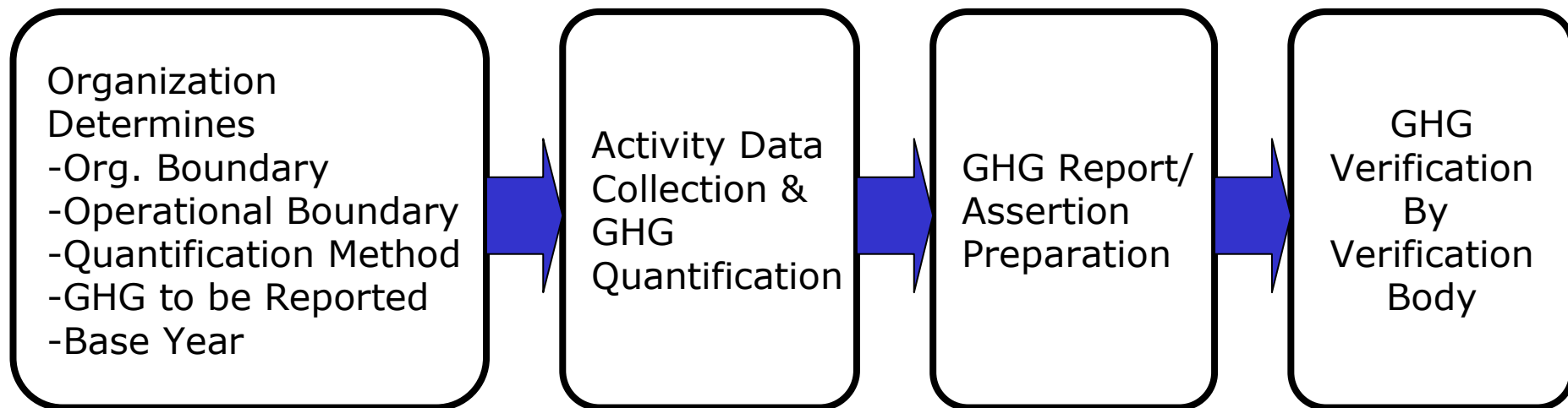
- Climate change as a key environment performance to be reported in most of the corporate sustainability report.
- CDP Global 500 Climate Change Report 2012: 99% disclose carbon emission/ 96% of companies have board or executive level oversight of the issue.
- Corporate vision & objective in greenhouse gas reduction.
- Public expectation and support from government.



Examples of SGS China HK Experience in GHG Verification:

- Building & Office Operation
- Hotel Management
- Catering
- Airport Management
- Construction Project
- Logistics Service Management
- Event Management
- Manufacturing Plant
- Supply Chain

Typical Process Flow





- Boundary of GHG quantification?
- Scope 3 included?
- GHG Quantification Methodology?
- Report content?
- Benchmarking?

What standard, guideline, scheme shall be adopted?

- **HK Guideline** - Published by EPD & EMSD
 - Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong
 - First version: 2008; Revised version: 2010
- **Energy cum Carbon** – Building Energy Efficiency Funding Scheme (BEEF)
- **Carbon 'Less' Certificates Scheme**
 - Launched by HK Government with Environment Campaign Committee in 2009
- **Environmental, Social and Governance (ESG) reporting** by HKEx
 - HKEx encourages listed company to conduct carbon audit and publish the results
- **CarbonSmart Programme**
 - Launched by HK Government in Aug 2012 with a funding scheme to subsidize carbon audit

- Hong Kong Accreditation Service (HKAS) ISO 14064 accreditation
- 2012年 12月深圳市市場監督管理局發佈：
 - 組織的溫室氣體排放核查規範及指南 (Ref ISO14064-1, ISO 14064-3),
 - 組織的溫室氣體排放量化和報告規範及指南 (Ref ISO 14064-1)

It is time to discuss the necessity of standardizing quantification & reporting requirements adopted.

INTERNATIONAL
STANDARD

ISO
14064-1

First edition
2006-03-01

Greenhouse gases —

Part 1:

Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

Gaz à effet de serre —

Partie 1: Spécifications et lignes directrices, au niveau des organismes, pour la quantification et la déclaration des émissions et des suppression des gaz à effet de serre

- Organization adopts ISO 14064-1 as a guideline for **quantification and reporting**.

- GHG inventory report content is clearly stated.

- Organization shall select and use **quantification methodologies** that will reasonably minimize uncertainty and yield accurate, consistent and reproducible results.

What quantification methodology shall be applied for GHG report preparation & verification?

Organizations and Verification Bodies may have different practices.

- Emission Factor (EF)
- Energy indirect & Electricity indirect emissions
- Scope 3 emissions, Life cycle assessment approach?
- Fugitive emissions



ACCURATE



TRUSTFUL



RECOGNIZED

verification

systematic, independent and documented process for the evaluation of a **greenhouse gas assertion** (2.12) against agreed **verification criteria** (2.32)

verification criteria

policy, procedure or requirement used as a reference against which evidence is compared

NOTE Validation or verification criteria may be established by governments, GHG programmes, voluntary reporting initiatives, standards or good practice guidance.

greenhouse gas assertion

declaration or factual and objective statement made by the responsible party (2.23)

verification body

body that performs validations or verifications of GHG assertions in accordance with this International Standard (i.e. ISO 14065:2007)

ISO 14064-3: 2006

Specification with guidance for the validation and verification of greenhouse gas assertions

ISO 14065: 2007

Greenhouse gases — Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition

ISO 14066: 2011

Greenhouse gases — Competence requirements for greenhouse gas validation teams and verification teams

Verification Bodies may have different practices.

- Sampling plan
- Multi-Site handling
- Level of assurance
- Information on verification statement

As a platform to facilitate

- minimizing the deviation in adopting specific GHG program or quantification methodology, so the reported GHG emissions will be more meaningful.
- communication among verification bodies and industrial representatives about the quantification methodology.
- standardizing verification practices among verification bodies according to relevant ISO requirements.

Thank you

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WHEN YOU NEED TO BE SURE

