

Carbon Reporting & ESG - a Golden Opportunity for Auditors

Ir Dr Tommy Lo
President
Hong Kong Institution of Certified Auditors

Content 内容

- Market demand: Carbon &/ESG personnel
- Job description, responsibility
- 绿色低碳背景
- 双碳审计/审定/核查人员
- 香港可持續未來之路
- Carbon Audit
- Energy Audit
- ESG 披露
- Carbon Audit / Certification and Reporting
- Related Standard
- Validation and Verification Body
- HKICA Professional and Extension

Market Demand: Carbon and ESG Personnel

Carbon Reporting Manager - ESG Consultancy

CBRE

Birmingham

 As an experienced Carbon Reporting Manager, you will use your in-depth understo carbon reporting standards, protocols, and methodologies to lead the...

Carbon Manager (Part Time)

Skanska

London

 Support Building in the development, maintenance and updating of carbo reporting, against targets, including carbon dashboards.

Carbon Analyst

SmartestEnergy Hybrid work in London E14

o Provide good quality fundamental analysis on Carbon markets, both Compliance reporting to the Head of Carbon, the Net Zero leadership in London...

Senior Consultant- Net Zero

ERM Group

Hybrid work in London

 Knowledge of reporting frameworks (e.g. CDP and TCFD disclosures), and developments in the field, such as those around corporate sustainability...

Climate, Carbon & ESG Director

Logika Group London EC1N

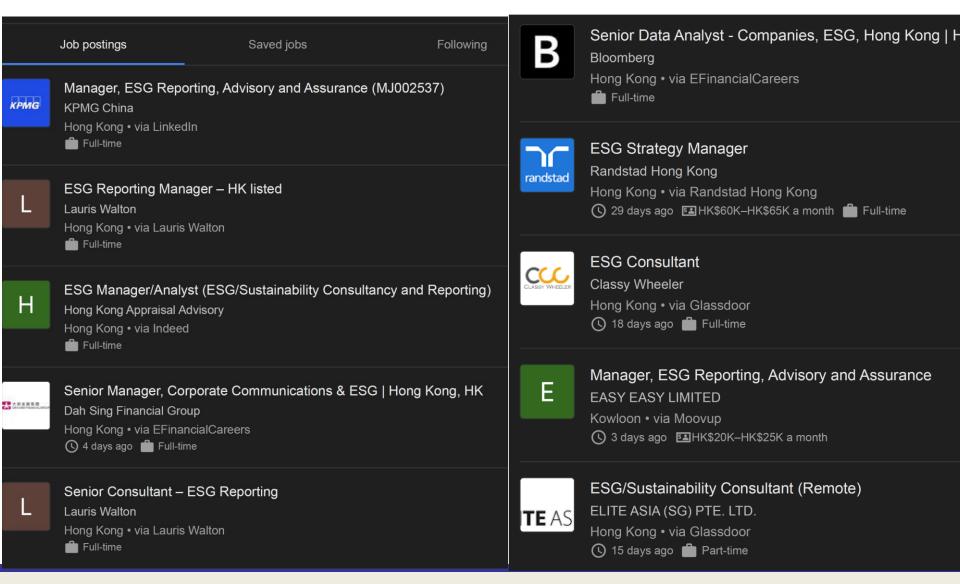
- Expertise in GHG emissions **reporting** and low **carbon** transition (from global to co
- O Working with clients on their TCFD actions and developing...

ESG Reporting & Communications Manager

Halfords Redditch

- Lead ESG **reporting** and ensuring adherence to regulatory requirements.
- Deliver the company's external ESG corporate reporting and benchmarking

Market Demand: Carbon and ESG Personnel



Assistant Manager / Manager | ESG Advisory

Job Description

Due to recent growth across our Valuation & Advisory Services business, we are sourcing for aspiring ESG professionals to grow with our business.

Key responsibilities include:

- Deliver ESG advisory service for asset owners, investors, landlord and/or occupiers
- Responsible for solution development and deliver consultancy project on a professional manner
- Evaluating the environmental impact a building has through research, such as determining their carbon footprint, energy use, water use, waste production and air quality
- Develop strategy and roadmap to minimize the negative impact a company or an asset has on the environment
- Utilizing ESG rating system to evaluate a corporate current ESG position and provide suggestion how to improve the rating



Environmental, Social and Governance (ESG) Manager – General Requirements

Environmental science and policy knowledge

Environmental, Social and Governance (ESG) Managers often have a well-developed understanding of the science behind environmental problems such as climate change and the effect of natural resources. They understand social issues related to environmental management. They have knowledge of environmental laws and regulations and business practices.

Systems thinking skills

Environmental, Social and Governance (ESG) Managers understand the interdependency between systems and subsystems that are relevant for sustainable development. They are able to think holistically. They understand relevant drivers, values, standards and regulations and have the ability to understand the underlying intrinsic drivers of corporate sustainability.

Management and entrepreneurship skills

Environmental, Social and Governance (ESG) Managers manage or lead sustainabilityfocused strategies and identify, prioritise and realise the plan and initiatives. They have the ability to develop a sustainability vision and to translate this into a sustainability program/plan, as well as manage it.

Environmental, Social and Governance (ESG) Manager – General Requirements

Academic qualification

A recognized bachelor's degree, preferably with a major in business administration, environmental science and sustainability-related disciplines.

Experience

4 to 5 years of experience in sustainability, preferably working in the financial sector



Carbon Personal (Managerial grade)

- Expertise in GHG emissions reporting and low carbon transition
- In-deph understanding of carbon reporting standards, protocols, and methodologies
- Lead ESG reporting and ensuring adherence to regulatory requirements
- Provide good quality fundamental analysis on carbon markets, both compliance reporting to the Head of Carbon, the net Zero leadership
- Knowledge of reporting frameworks (e.g. CDP and TCFD disclosures), and awareness of developments in the field, such as those around corporate sustainability
- Support Building in the development, maintenance and updating of carbon reporting, against targets, including carbon dashboards.

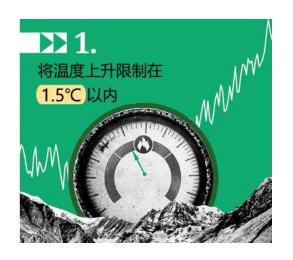
联合国 气候行动



《巴黎协定》



- ▶ 197个国家于2015年12月12日在巴黎召开的缔约方会议第二十一届会议上通过了《巴黎协定》
- > 旨在大幅减少全球温室气体排放
- ▶ 于2016年11月4日正式生效
- 以五年为一个周期,每个国家都要提交一份最新的国家气候行动计划







来源:联合国网页

第七十五届联合国大会 (2020年9月22日)

习近平在第七十五届联合国大会一般性辩论上的讲话(全文)

G 2020-09-23 11:25



9月22日,国家主席习近平在第七十五届联合国大会一般性辩论上发表重要讲话。新华社记者 鞠鹏 摄

全球绿色低碳转型的大方向.......

中国将提高国家自主 贡献力度,采取更加 有力的政策和措施, 二氧化碳排放力争于 2030年前达到峰值, 努力争取2060年前实 现碳中和...

绿色低碳背景





中华人民共和国中央人民政府

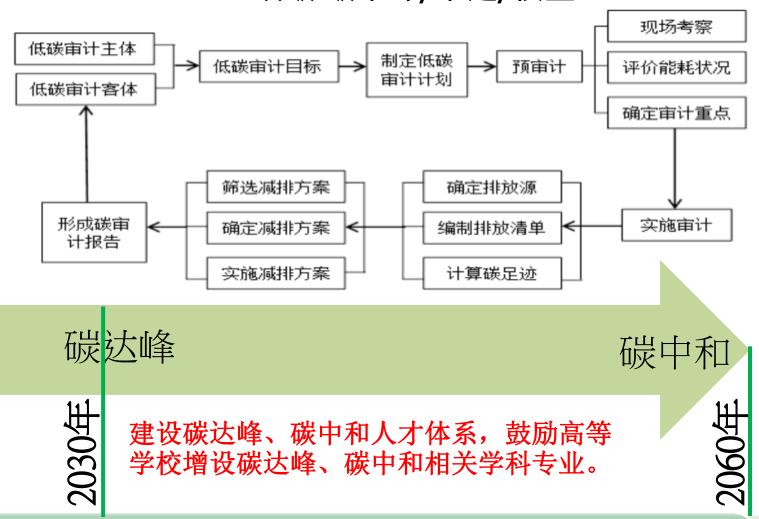
www.gov.cn

政策文件		政策要求
一、 第十四个五年规划 和五年远景目标的建议 (发布日期: 2020年10月2	35.加快推	绿色发展,促进人与自然和谐共生 注动绿色低碳发展。制定二〇三〇年 达峰行动方案。
二、中共中央国务院关于确全面贯彻新发展理念做峰碳中和工作的意见(发布日期: 2021年10月2	(好碳达 到 2025 年 形成到 2 4日) 得显著成 八、加强 (二十) 研发国家	,绿色低碳循环发展的经济体系初步 2030年,经济社会发展全面绿色转型取效 绿色低碳重大科技攻关和推广应用 培育一批节能降碳和新能源技术产品 重点实验室建设碳达峰、碳中和人才 励高等学校增设碳达峰、碳中和相关
三、 2030年前碳达峰行 - (发布日期:2021年10月2		保如期实现2030年前碳达峰目标。 最创新建设各人才培养 11

双碳 审计 审定/核查人员



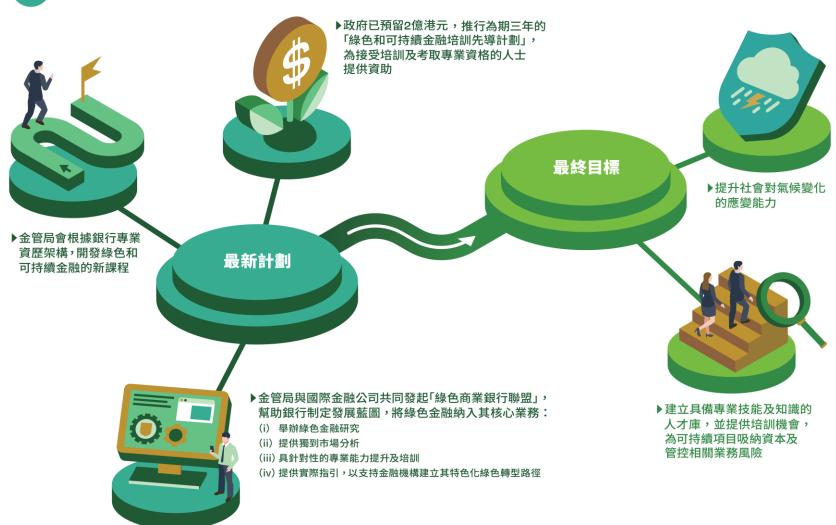
双碳 碳审计/审定/核查



双碳审计审定/核查人员



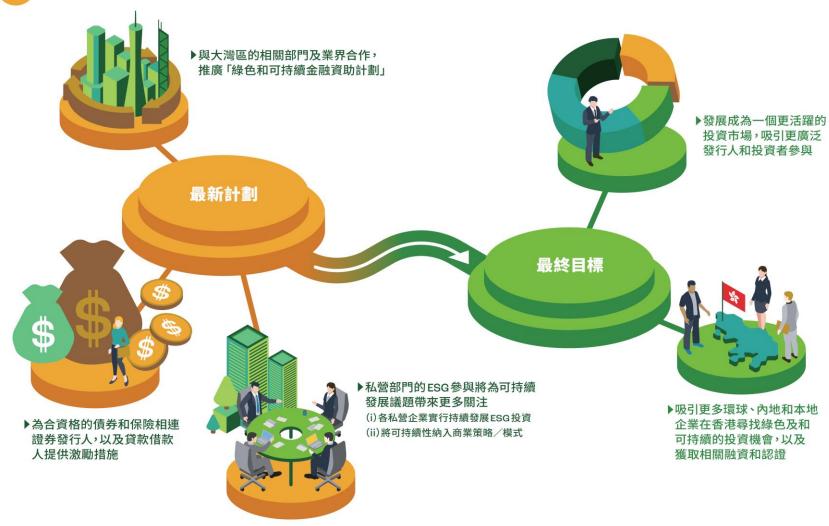
能力提升(人才與關注)

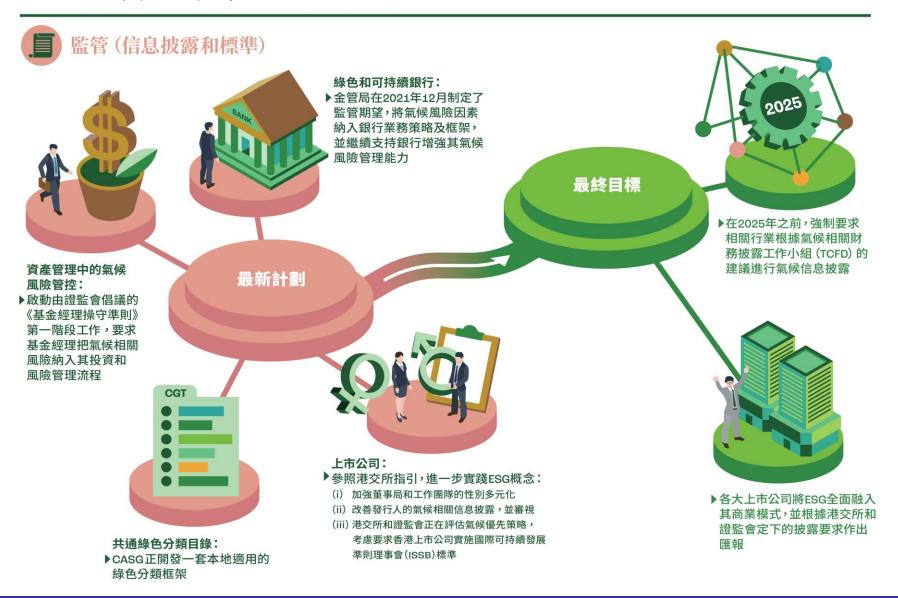






激勵措施

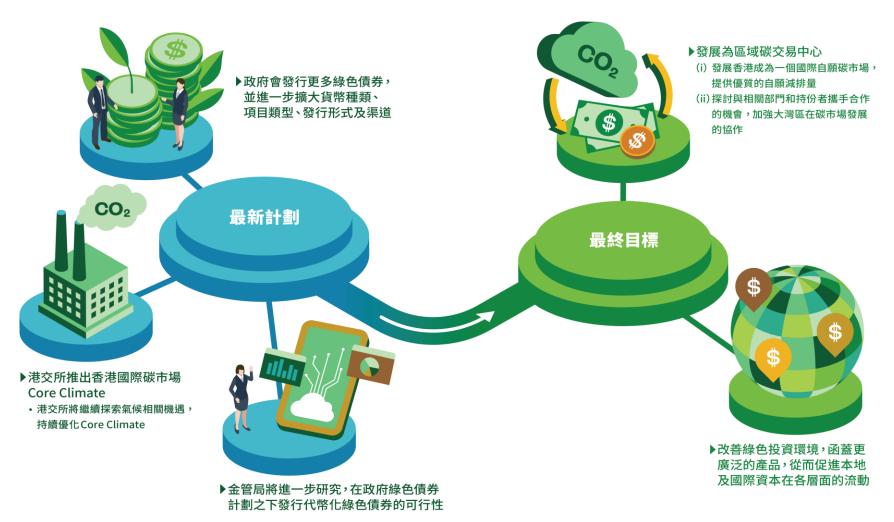








市場規模/產品



Carbon audit



A carbon audit, sometimes referred to as a 'carbon footprint', is a means of measuring and recording the GHG emissions of an organization or building within a defined system boundary.

Carbon audit in Hong Kong

Climate change is one of the most important challenges facing mankind. Government is embarking upon a series of measures to reduce greenhouse gas (GHG) emissions. These include promoting use of cleaner energy and renewable energy, improving energy efficiency and energy conservation, encouraging greening and raising public awareness.

Being a service economy without any major energy-intensive industries, electricity generation is the major source of GHG emissions in Hong Kong, accounting for over 60% of the total local emissions. The transport sector is the second largest GHG emission source (16%), followed by waste (12%). Among various end uses of electricity, buildings account for some 89% in Hong Kong.

Carbon audit

To reduce GHG emissions arising from electricity consumption in buildings, it is believed that an important step which could be taken by owners and managers of buildings is to find out the amount of GHG released to the atmosphere arising from the operation of their buildings and to take appropriate actions to reduce such emissions.

To facilitate carbon audit action, the Environmental Protection Department (EPD) and the Electrical and Mechanical Services Department (EMSD) have drawn up a set of "Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings in Hong Kong". The Guidelines provide a systematic and scientific approach for building owners and managers to account for and report on the GHG emissions arising from the operations of their buildings in Hong Kong, identify areas of improvement and conduct voluntary programmes to reduce and / or offset emissions arising from buildings according to the their own goals. For detail information of carbon audit, please visit https://cnsd.gov.hk/en/green-business-and-industry/carbon-audit/

Energy audit

What is Energy Audit?

Energy audit is a regular review of the usage of energy in a building to increase effectiveness of energy. The auditors examines the energy account of energy consuming equipment, checks the way energy is used in its various components and identifies savings opportunities. An energy audit process typically includes:

- •Analysis and assessment of your system/equipment's energy performance
- •Identification of "Energy Management Opportunities (EMOs)"
- Potential saving estimates

Recommendations for energy savings solutions

Benefits from Energy Audit

Energy Audit is an effective energy management tool. By identifying and implementing the means to achieve energy efficiency and conservation, not only can energy savings be achieved, but also equipment/system services life can be extended. All these mean savings in money. Based on the principle of "The less energy is consumed, the less fossil fuels will be burnt", the power supply companies will generate relatively less pollutants and by-products. Therefore, all parties concerned contribute to conserve the environment and to enhance sustainable development

Energy Audit =

Environmental Protection

Sustainable Development

Savings in Money

Energy audit

Typical Procedure to Conduct Energy Audit

- 1) Defining scope of energy audit, e.g. walk through audit is suitable for organization with limited resource and detailed audit is suitable for organization with more resources
- 2) Forming an energy audit team. The team shall include management representatives, maintenance professionals & staff representatives etc.
- 3) Estimate time frame & budget, e.g. auditor-hours, whether any disruption to the occupants, and the cost of measuring instruments etc.
- 4) Collecting building information, e.g. floor area, building orientation, equipment design condition, energy bills and system schematic diagrams etc.
- 5) Conducting site inspection & measurement to identify means for improvement
- 6) Analysing data collected
- 7) Recommending the improvement actions and measures

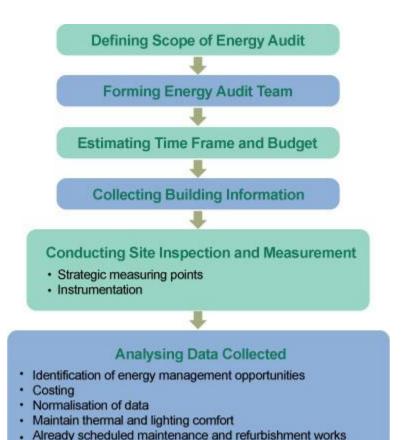
Energy audit



Energy audit report

The report should outline the objectives scope of audit, description and characteristics and operational conditions of equipment/systems audited, findings in the audit, EMOs identified, corresponding savings and implementing costs. recommendations FMO implementation and programme and any other follow-up actions.

Upon completion of all EMOs identified in an energy audit, a minimum energy saving of 5%-10% could be achieved for a typical commercial building.



ESG 披露

ESG 是企业关于环境、社会和治理,衡量企业可持续发展的的三个核心框架。 ESG报告中的信息披露,是捕捉企业日常活动中的所有非财务风险和机遇,促进经济价值和社会价值统一。

迄今为止,国际尚无一致商定的 ESG 披露指南。一些证券交易所、领先的国际非政府组织或贸易组织制定的ESG披露项目,大多包括企业社会责任、环境标准、合规义务、体系或产品责任和安全要求。

ESG 披露

内地,T/CERDS 2-2022:企业ESG披露指南提供了4个级别的企业ESG披露框架,包括披露原则;披露指标体系;披露要求和应用;责任和监督。一级指标代表环境、社会和企业管治3项基本准则,第二级指标(10个)和第三级指标(35个)针对ESG相关理论、相关法律法规和标准;第四级指标(118个)说明相应的测量和评估方法。

香港联合交易所(港交所)2020年7月1日《环境、社会及管治(ESG)报告指引》开始香港上市公司需要在其ESG报告中披露更多有关其ESG活动和结果的信息。涉及环境和社会主题领域,而管治部分继续在单独的《公司管治准则》中讨论。环境和社会主题领域均包含12个层面和36个关键绩效指标("KPI")。





(1)直接計量,或(2)估算方法量化溫室氣體排放

• (1) 直接計量:採用直接監測、質量平衡法或化學計量法量化溫室氣體排放

溫室氣體排放 = 排放數據 x 全球變暖潛力值(GWP)

• (2) 估算:通過將活動數據乘以排放系數,以量化溫室氣體排放

溫室氣體排放 = 活動數據 x 排放系數 x GWP值

第5章:指標及目標 **ESG**

溫室氣體排放	72
跨行業指標	100
內部碳定價	102
薪酬	108
行業指標	110
氣候相關目標	111

目的

本章的目的是討論發行人應如何衡量其氣候相關風險和機遇,以告知持份者其在管理氣候相關風險 和機遇方面取得的進展,以及與同一領域或行業內的同業公司相比其表現如何。

溫室氣體排放

ESG reporting works involved scopes of carbon emission calculation/assessment/validation

按照《溫室氣體核算體系》,溫室氣體排放可劃分為三個範圍48。

- 範圍1溫室氣體排放:由發行人擁有或控制的來源產生的直接排放;
- 範圍2溫室氣體排放:由發行人內部消防大耗(購買回來或獲得的)電力、熱能、製冷和蒸汽 的生成而導致的「能源間接」排放;及
- 範圍3溫室氣體排放:由公司活動產生的所有其他間接排放,但不包括由發行人擁有或控制來 源產生的排放。

為計量溫室氣體排放,發行人可參照下列工作流程:

設定邊界

選擇計算方法

數據收集

量化溫室氣體排放量

一家香港公司於2022年度已消耗2,500兆瓦時電力:

發行人就其營運所在地區識別排放系數。由於發行人在新界營運,其已識別由中華電力有限公司(「中電」) 在其2022年可持續發展報告中提供的排放系數,中電 為該服務地區唯一的能源供應商和電網營運商⁵⁷。

中電所銷售電力的二氧化碳當量排放量

0.39

(千克二氧化碳當量/千瓦時)58

然而,發行人應注意可能存在排放系數並未 換算為二氧化碳當量值的情況,例如:電力 排放系數按使用的每單位電力排放的二氧 化碳(CO_2)、甲烷(CH_4)和一氧化二氮 (N_2O)進行呈報。在此情況下,發行人需要 使用在報告日期可獲得的最新IPCC評估提供 的100年時間範圍的全球變暖潛力值,將該等 數值換算為二氧化碳當量值。

範圍2(地域為基準)溫室氣體排放:

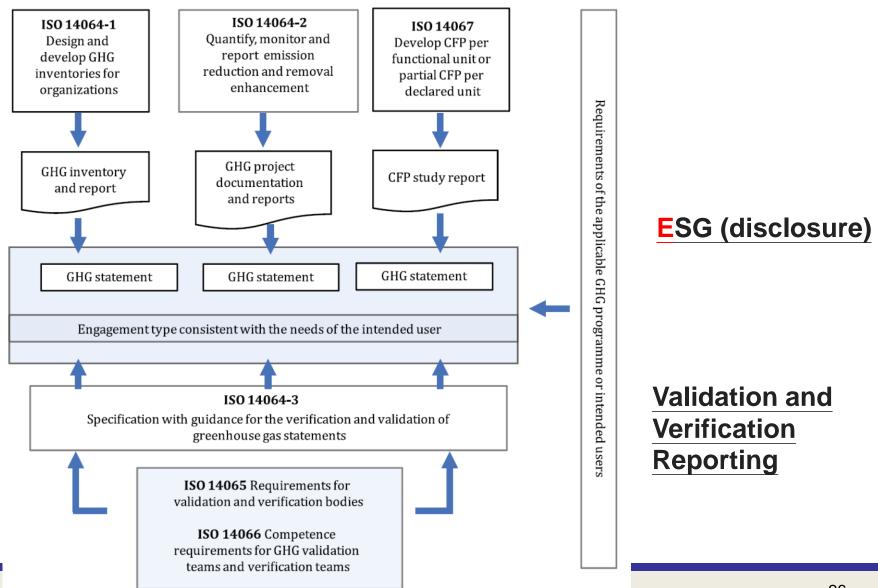
- = 2,500兆瓦時 × 1,000 千瓦時/ 兆瓦時 ×
- 0.39千克二氧化碳當量/ 千瓦時 × 0.001公噸/ 千克
- = 975,000千克二氧化碳當量 × 0.001公噸/ 千克
- = 975公噸二氧化碳當量

於該年度內,發行人亦從中電購買了可再生能源憑證, 用於其1,200兆瓦時的電力消耗。

HKEx with calculation example of Carbon equalivent



Carbon Audit / Certification and Reporting



Related Standard

ISO 14064-1:2018 Part 1:	Specification with guidance at the organization level for quantification & reporting of GHG emissions & removal 溫室氣體盤查標準 (ISO14064-1 requirements cover the design, development, management, reporting and verification of an organization's GHG inventory.)
ISO 14064-2:2019 Part 2:	Specification with guidance at the project level for quantification, monitoring & reporting of GHG emission reductions or removal enhancement 企業層級溫室氣體排放與清除
ISO 14064-3:2019 Part 3:	Specification with guidance for the verification & validation of GHG statements (包含有關於溫室氣體減量與移除之強化倡議/專案/目標等)
ISO 14066:2011	Greenhouse gases - Competence requirements for greenhouse gas validation teams and verification teams
ISO 14067:2018	Greenhouse gases - Carbon footprint of products — Requirements and guidelines for quantification產品碳足跡
ISO 14065:2020	General principles and requirements for bodies validating and verifying environmental information
ISO/IEC 17029:2019	Conformity assessment - General principles and requirements for validation and verification bodies



ISO 14067:2018 Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification

ISO 14067 specifies the principles, requirements and guidelines for the quantification and reporting of the carbon footprint of a product (CFP), and is consistent with life cycle assessment (LCA) Standards (ISO 14040 and ISO 14044). This Standard contributes to the UN Sustainable Development Goal 13 on Climate Change.

ISO 14067產品碳足跡(Product Carbon footprint)是指商品(或服務)在整個「生命週期」中因直接及間接活動所排放與移除的溫室氣體總量。溫室氣體排放(統稱碳排放),大多局限於製造所產出的量。但根據近些年的盤查經驗可發現,企業所產生的最大碳排放量,不一定是製程階段,許多時候可能是會在上下游運輸或使用階段的排放量最大。

Validation and Verification Body and Statement

1. HKCAS Supplementary Criteria No. 9 – Accreditation Programme for Greenhouse Gas Validation and Verification – Validation and/or Verification of Greenhouse Gas Statements at Organisation Level, and Validation and/or Verification of Greenhouse Gas Statements at Project Level (Issue No. 11)

PDF: https://www.itc.gov.hk/en/quality/hkas/doc/SupplementaryCriteria/HKCAS_SC-09.pdf

2. HKCAS Supplementary Criteria No. 16 – Accreditation Regulations Specific for HKCAS – Validation and Verification Body (Issue No. 3)

PDF: https://www.itc.gov.hk/en/quality/hkas/doc/SupplementaryCriteria/HKCAS_SC-16.pdf

HKCAS Supplementary Criteria No. 9

Accreditation Programme for Greenhouse Gas Validation and Verification – Validation and/or Verification of Greenhouse Gas Statements at Organisation Level, and Validation and/or Verification of Greenhouse Gas Statements at Project Level

1 Introduction

1.1 HKAS accreditation for Greenhouse Gas (GHG) Validation and Verification Bodies is provided under Hong Kong Certification Body Accreditation Scheme (HKCAS) and is open for voluntary application from any GHG V/VB^{Note} that undertakes a third-party validation and/or verification of GHG statements at organisation level to ISO 14064-1: 2018, or validation and/or verification of GHG statements at project level to ISO 14064-2: 2019 for areas described in Appendix A.

Note: In this document, V/VB refers to 'validation body', 'verification body' or 'validation and verification body'.

HKCAS Supplementary Criteria No. 9

Area No.: 3

Description: Validation of Greenhouse Gas Statements at Project Level

Standard: ISO 14064-2

Sub-area under this area:

No.	Description	Technical area covered by this sub-areas
3.1	Energy Industries	Thermal energy generation from fossil fuels and
	(renewable/non-renewable	biomass including thermal electricity from solar
	sources)	Energy generation from renewable energy sources
3.2	Energy Distribution	Electricity distribution
		Heat distribution
3.3	Energy Demand	Energy demand
3.4	Manufacturing Industries	Cement sector

		Aluminium
		Iron and steel
		Refinery
3.5	Chemical Industry	Chemical process industries
3.6	Construction	Construction
3.7	Transport	Transport
3.8	Mining/Mineral Production	Mining and mineral processes, exc
		industry, coal mine methane recove
		Oil and gas industry, coal mine me
		and use
3.9	Metal Production	Metal production
3.10	Fugitive Emissions from	Mining and mineral processes, exc
	Fuels (solid, oil and gas)	industry, coal mine methane recove
		Oil and gas industry, coal mine me
		and use
3.11	Fugitive Emissions from	Chemical process industries
	Production and Consumption	GHG capture and destruction
	of Halocarbons and Sulphur	
	Hexafluoride	
3.12	Solvents Use	Chemical process industries
3.13	Waste Handling and Disposal	Waste handling and disposal
		Animal waste management
3.14	Afforestation and	
	Reforestation	
3.15	Agriculture	Agriculture
3.16	Carbon Capture and Storage	Carbon capture and storage of CO2
	of CO ₂ in Geological	formations
	Formations	

HKCAS Supplementary Criteria No. 9

Description: Validation of Greenhouse Gas Statements at Organisation Level

Standard: ISO 14064-1

Sub-area under this area.

Sub-area under this area:		
No.	Description	Examples of included activities
1.1	Power Generation and Electric Power Transactions	 Transmission of electricity Generation of bulk electric power Transmissions from generating facilities to distribution centres and/or distribution to end users Renewable energy systems Purchased electricity, steam
1.2	General Manufacturing (physical or chemical transformation of materials or substances into new products)	Manufacturing – Electric and electronics equipment, industrial machinery Manufacturing – Food processing Note: Civil engineering e.g. construction will be covered under this sector
1.3	Oil and Gas Exploration, Extraction, Production and Refining, and pipeline distribution, including Petrochemicals	 Conventional exploration and production Oil sands and heavy oil upgrading Coal bed methane production Gas processing plants Gas well completions Transportation and distribution Natural gas storage and LNG operations Crude oil transportation Refining Petrochemical manufacturing Emissions from process vents in oil and gas treatment Process emissions (e.g. glycol dehydration, acid gas removal/sulphur recovery, hydrogen production, fluid catalytic cracker (FCC) catalyst regeneration) Venting emissions (e.g. vessel loading, tank storage and flashing, and venting of associated gas) Fugitive emissions (e.g. leaks from equipment and piping components) Non-routine events (e.g. gas releases during planned pipeline and equipment maintenance, releases from unplanned events)
1.4	Metals Production	 Production of processing of ferrous metals Production of secondary aluminium Processing of non-ferrous metals, including production of alloys Production of coke



Hong Kong Institution of Certified Auditors 香港專業審核師學會

1.5	Aluminium Production	Metal ore roasting or sintering, including pelletisation Production of pig iron or steel including continuous casting Primary aluminium
1.6	Mining and Mineral Production	Production of cement clinker and production of lime or calcinations of dolomite or magnetite Glass and ceramic, mineral wool
1.7	Pulp, Paper and Print	
1.8	Chemical Production Carbon Capture Storage	Production of carbon black Production of ammonia Production of bulk organic chemicals by cracking, reforming, partial or full oxidation or by similar processe Production of hydrogen and synthesised gas by reforming or partial oxidation Production of soda ash and sodium bicarbonate Production of nitric acid Production of adipic acid Production of glyoxal and glyoxylic acid Capture and transport of GHG by pipelines for geological storage
		 Geological storage of GHG in a storage site
1.10		AviationOther transportation
1.1	Waste handling and disposal	Water and waste water treatmentLandfill and Composting Facilities
1.13	Agriculture, Forestry and Other Land Use (AFOLU)	
1.13	3 General	 Building Services / facilities management Education Hospital Others

HKCAS Supplementary Criteria No. 16

Accreditation Regulations Specific for HKCAS – Validation and Verification Body

1 INTRODUCTION

1.1 This document provides specific regulations for accreditation of validation and verification bodies (V/VBs) under the Hong Kong Certification Body Accreditation Scheme (HKCAS). All accredited V/VBs shall conform to all the regulations stated in this document at all times. For an applicant V/VB, accreditation will only be granted after it has demonstrated to the satisfaction of HKAS Executive its competence and commitment to conforming to all the regulations stated in this document.

Notes:

1. In this document, validation and verification body (V/VB) refers to 'validation body', 'verification body' or 'validation and verification body'.

2. It is the responsibility of a V/VB to carry out its work in accordance with the applicable regulatory requirements of Hong Kong, or of the country where the validation/verification is carried out. It should be emphasised that assessment of the V/VB's compliance with the relevant regulatory requirements is outside the scope of HKAS accreditation schemes.

HKCAS Supplementary Criteria No. 16

3.2 If an accredited V/VB intends to subcontract any part of its validation/verification activities for which it is accredited, the V/VB shall ensure that the subcontractor is competent to perform the activities. A V/VB accredited for performing the activities by HKAS or an accreditation body which has concluded a multilateral recognition arrangement with HKAS is one of the means to demonstrate its competence. A list of such accreditation bodies is obtainable from HKAS Executive. The V/VB shall notify the client in writing of its intention to subcontract the activities, the extent of such subcontracting and the name of the subcontractor. The V/VB shall further ensure that its client agrees to such arrangement and shall keep all records of such subcontracted activities.

Note: HKAS will grant accreditation to a V/VB only those validation/verification activities which the V/VB itself is competent to carry out and which it normally perform such activities itself.

Hong Kong Institution of Certified Auditors 香港專業審核師學會

◆ 香港專業審核師學會成立於2006年,學會致力於推行認證 認可,檢验檢測人員專業發展,提升質量管理水平及文化。



◆ 2016 年 5 月,香港專業審核師學會人員認證系統獲取中國 合格評定國家認可委員會(CNAS)認證,成為符合國際標準 ISO17024 的人員認可機構,為專業人員提供人員認證服務。 推行自願性認證認可,檢验檢測業人員專業認可註冊服務。



◆ 2016年8月,與**中國認證認可協會(CCAA)達成互認協議**。 HKICA質量管理體系審核師,取得CCAA認證資格,成為 國家專業技術人員職業資格。



◆ 2018年10月,成為**國際人員認證協會 MLA多邊互認**簽署成 員



2016年5月,獲得中國合格評定國家認可委員會 (CNAS)依據ISO17024 的認可,成為人員認證 機構。 2016年8月,與中國認證認可協會(CCAA)達成互認協議。HKICA質量管理體系審核師,取得CCAA認證資格,成為國家專業技術人員職業資格。



2018年10月,成為國際人員認證協會 MLA多邊互認簽署成員





粤港澳大湾区工程技术人才 职业资格互认会商会



2019年 粤港澳大灣區資格互認會商



Membership (会员)

Fellow Member FHKICA 資深會員

Member MHKICA 會員

Student Member 學生會員

Company Member 公司會員

Register Schemes (注册方案)

ISO 9001 质量管理体系

ISO 14001 环境室管理体系

ISO 45001 安全管理体系

ISO 22000 食物管理体系

ISO/IEC17025 实验室管理体系

ISO 15189 医疗实验室管理体系

Registered (注册人员)

Lead Auditor 主任审核师

Auditor 审核师

Assistant Auditor 助理审核师

Internal Auditor 内审师

Quality Manager 审核师

Environmental Manager 环境经理

Laboratory Manager 实验室经理

Product Certification Tech Auditor产品认证审核师

GHG Carbon Auditor 温室气体碳审核员

Greater Bay Area Reciprocal recognition 粤港澳大灣區資格互認

Quality Management Engineers (QME) 質量管理師 Quality Testing Engineers (QTE) 建築材料質控檢測工程師



GBA Engineer MoU Background (粤港澳大灣區資格互認) 2020

工程技术人才专业资格互认啦!粤港澳 大湾区签订首批协议 2020年7月11

人民日报客户端广东频道 贺林平 2020-07-11 16:43 浏览量1.2万

广东省工程师学会成立大会暨粤港澳大湾区工程 技术人才专业资格互认协议签约仪式今天(7月 11日)在广东科学馆举行、粤港澳大湾区工程技 术人才专业资格互认协议同时签订。



中共广东省委常委、统战部部长黄宁生代表省 委、省政府对广东省工程师学会的成立表示祝 贺。黄宁生说,《粤港澳大湾区发展规划纲要》

广东省产品认证服务协会与香港专业审核师学会 质量管理工程技术人才资格互认协议

为加强内地和港澳质量管理工程技术人才 的交流与合作,促进粤港澳大湾区的共同发 展,广东省产品认证服务协会(以下简称:认 证协会)和香港专业审核师学会(以下简称:香 港学会)双方通过交流研究,一致认为广东省 产品认证服务协会质量管理工程技术人才(以 下简称:质量管理工程师)和香港专业审核师 学会HKICA质量管理师(以下简称:质量管理 师)在培训、评价标准等方面的实质内容上基 <u>本相同。经认证协会、香港学会协商,双方</u> 同意就广东省产品认证服务协会的质量管理 工程师和香港专业审核师学会的质量管理师 资格开展资格互认及合作开展粤港澳大湾区 质量管理工程技术人才资格评价(以下简称 "资格互认"),签署本协议。

一、资格互认的原则



大湾区检测及认证人员评价要求团標香港专业审核师学会 - 主要起草單位

大湾区检测与认证技术人员资格评价要求

前 言

本标准按照GB/T 1.1-2009给出的规则起草。

本标准由广东省产品认证服务协会及香港专业审核师学会提出。

本标准由广东省产品认证服务协会归口。

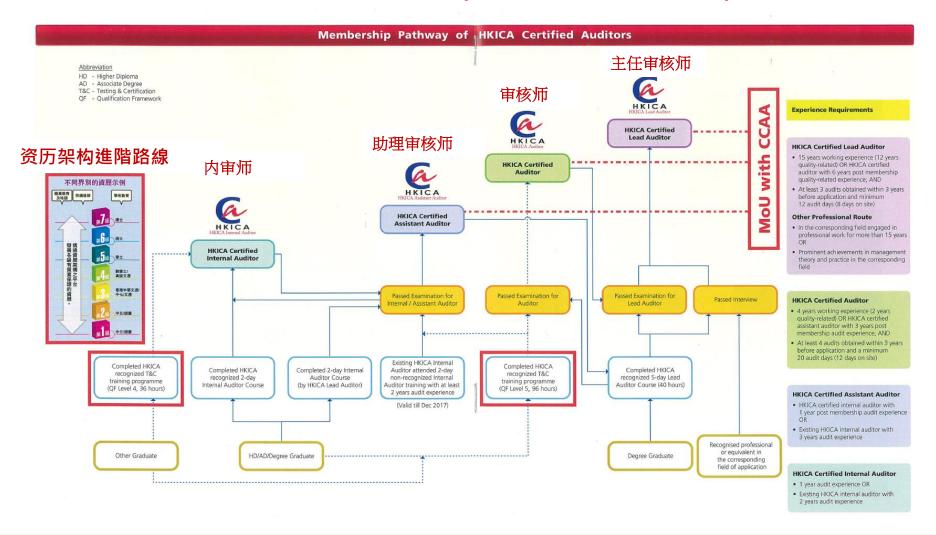
本标准主要起草单位:中国检验认证集团广东有限公司、中国质量认证中心广州分中心、香港专业审核师学会、广东省认证认可协会、 必维认证(北京)有限公司、广东省产品认证服务协会、香港通用检测认证有限公司、广东省食品工业研究所有限公司、香港科正认证服务有限公司、华南理工大学材料科学与工程学院、广东中能检测技术有限公司、广州通标检测技术服务有限公司。

本标准主要起草人:陈耀津、<mark>卢耀、</mark>许银叶、陈翔、林棠华、何晓晖、罗剑花、吴健邦、吴凯、史東甫、谢兆良、吴家恒、张炯、易健阳。

广东省产品认证服务协会

发布

审核师专业阶梯(资历架构進階路線)

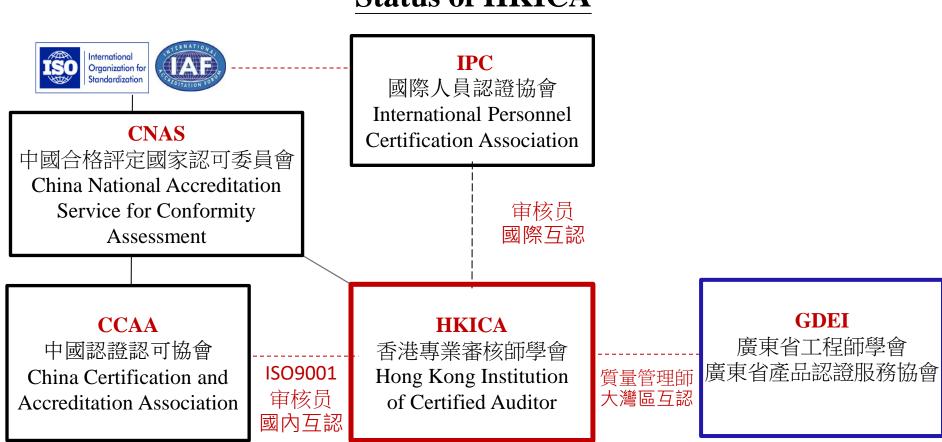


HKICA Professional tie with society need/academic

List of Programmes leading to membership and registration grade 认可教育课程

Academic Institution	Programme Title	Grade/ Membership	Accreditation Period	
(Department)	riogramme mue	diade, Membership	Accieuitation renot	
Hong Kong Polytechnic University	MSc in Sustainable Technology	Registered GHG		
Department of Applied	for Carbon Neutrality 香港理工大学	Carbon Auditor	2023 - 2028	
Biology and Chemical Technology	碳中和可持续技术理学硕士		注册碳审核员	
Hong Kong Metropolitan		Assistant Auditor		
University School of Science and	Bachelor of Engineering Programme in Testing and Certification	(Certified Quality Management System	2019 - 2024	
Technology	香港都会大学 检测和认证工程学士课程	Auditors - CNAS accredited to ISO	质量管理体系 助理审核师	
		17024)		
Chinese University of Hong		Assistant Auditor		
Kong	MSc in Accreditation Chemistry	(Laboratory	2023 - 2028	
Department of Chemistry	香港中文大学化学认证学硕士	Management System) 实验室管理体系 助理审核师	
Chinese University of Hong Kong	MSc in Accreditation Chemistry	Registered Quality Testing Engineers	2023 - 2028	
Department of Chemistry	香港中文大学化学认证学硕士	(QTE)	建築材料質控檢測 工程師	

Status of HKICA







中国认证认可协会



温室气体核查员 注册准则

(8/2021)

(第1版)

中国认证认可协会



温室气体自愿减排项目核查员 注册准则

(第1版试行)

温室气体自愿减排项目核查 (3/7/2024)

发布日期: 2024年7月3日 实施日期: 2024年7月3日

文件编号: CCAA-R402-10



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

Document code: HKICA CC801E Issue date: 1 Sept 2022 Effective date: 1 Sept 2022

© Copyright 2022 Hong Kong Institution of Certified Auditors

INTERNATIONAL PERSONNEL CERTIFICATION ASSOCIATION



CERTIFICATION SCHEME

"IPC WB Verifier/validator"

ISSUE 2 IPC-PL-22-04

国际人员认证协会

香港专业审核师学会 温室气体碳审核员 (9/2022)

碳审定/核查员(7/2023)

双碳人员的专业资历

HKICA participate in 粤港澳大灣區 (Association Standard) 双碳目标的永续发展(ESG) 10.7.2024

粤港澳大湾区标准化研究中心

关于拟纳人"湾区标准"清单标准项目的公示

为贯彻落实《粤港澳大湾区发展规划纲要》,以先进标准助推大湾区高质量发展,根据《促进粤港澳大湾区标准发展指南(试行)》(广东省市场监督管理局通告 2023 年第 66 号)规定,现将拟纳入粤港澳大湾区共通执行标准("湾区标准")清单的 32 项标准予以公示。公示期内,有关单位或个人如有异议,可以通过实名信件、电子邮件等形式反映。

公示时间: 2024年7月10日-7月24日, 共15日

联系人: 王娟、谢燕文

联系申话: 020-84253809、84236863

电子邮箱: gbsrc@gdis.org.cn

通讯地址:广东省广州市海珠区南田路 563 号广东省标准化研究院,邮编 510220。

附件: 1. 拟纳入"湾区标准"清单标准项目情况表

- 2. 拟纳入"湾区标准"清单标准项目文本
- 3. 拟纳入"湾区标准"清单标准项目编制说明







环境、社会和治理(ESG)气候变化财务信息披露指南

"湾区标准"清单标准项目情况表

序号	"湾区标 准"识别号	标准编号	标准名称	起草单位	发布单位	声明使用单位
26	WQ 1-209	T/CAGDE 226-2024	环境、社会和治理(ESG) 气候变化财务信息披露指南	广东贸促国际商事认证中心、中国贸促会贸易推广交流中心、中科天网(广东)标准技术研究有限公司、北京大成律师事务所、莱茵技术监督服务(广东)有限公司、海信家电股份集团有限公司、海省联及服务有限公司广州分公司、河南省限公司、海省联系中心有限公司、深圳华大基因股份有限公司、广东省清洁生产协会、广东省市和股公司、质任云研究院、广东省标准化研究院、广东外语外贸大学南国商学院空港经济协同创新研究中心、绿技金创(上海)低碳科技有限公司、香港品质保证局、澳门质量品牌国际认证联盟、广东省应对技术贸易壁垒协会、广东传利标准研究院(有限合伙)、佛山市对外数字贸易产业促进会、广东绿美认证有限公司、广东	广东省应对 技术贸易壁 全协会	香港品质保证局、注册合规师公会有限公司、澳门质量品牌国际认证联盟、香港专业审核师学会有限公司、公新博有限公司、澳门融贯投资科技有限公司、广东省应对技术贸易壁垒协会、广东传利标准研究院(有限合伙)、广东胜宇电缆实业有限公司、广州集泰化工股份有限公司、北京大成律师事务所、南网碳资产管理(广州)有限公司、广州电缆厂有限公司、佛山市对外数字贸易产业促进会、广东省电力线路器材厂有限公司、广东省国际工程咨询有限公司、佛山市三水区铝加工行业协会、广东新悦环保科技有限公司、广东省清洁生产协会、广东绿美认证有限公司、莱茵技术监督服务(广东)有限公司
				东新悦环保科技有限公司、香港专业审核师学会有限公司、公新博有限公司、澳门青创国际集团有限公司、澳门融贯投资科技有限公司、广州澳青科技产业服务有限公司。		

粤港澳大灣區(Association Standard) 双碳目标的永续发展(ESG) 10.7.2024



环境、社会和治理(ESG)社会责任投资评估指南

"湾区标准"清单标准项目情况表

序号	"湾区标 准"识别号	标准编号	标准名称	起草单位	发布单位	声明使用单位
27	WQ 1-210	T/CAGDE 227-2024	环境、社会和治理(ESG) 社会责任投资评估指南	广东贸促国际商事认证中心、中国贸促会贸易推广交流中心、广东胜宇电缆实业有限公司、北限公司、淮师事务所、莱茵技术监督服务(广东)有限公司、莱茵技术监督服务有限公司、莱茵技术监督服务有限公司、深圳华大基因股份有限公司、深圳华大基因股份有限公司、深圳华大基因股份东省国际工程。为有限公司、深圳华大基因股份东省国际工程。为有限公司、东省国际、广东省国际、广东省、省标贸、广东省、省标贸、大学南国商学院交港经济协同创新、香港的对方,在一个大学商工程。从证(中科大公司、大大学商工、大学商工、大学商工、大学商工、大学商工、大学商工、大学商工、大学商	广东省应对 技术贸易壁 垒协会	香港品质保证局、注册合规师公会有限公司、澳门质量品牌国际认证联盟、香港专业审核师学会有限公司、公新博有限公司、澳门融贯投资科技有限公司、广东省应对技术贸易壁垒协会、广东传利标准研究院(有限合伙)、广东胜字电缆实业有限公司、广州集泰化工股份有限公司、北京大成律师事务所、南网碳资产管理(广州)有限公司、广州电缆厂有限公司、佛山市对外数字贸易产业促进会、广东省电力线路器材厂有限公司、广东省国际工程咨询有限公司、佛山市三水区铝加工行业协会、广东新悦环保科技有限公司、广东省清洁生产协会、广东绿美认证有限公司、莱茵技术监督服务(广东)有限公司

粤港澳大灣區(Association Standard) 双碳目标的永续发展(ESG) 10.7.2024

环境、社会和治理(ESG)企业合规治理指南

"湾区标准"清单标准项目情况表

序号	"湾区标 准"识别号	标准编号	标准名称	起草单位	发布单位	声明使用单位
28	WQ 1-211	T/CAGDE 228-2024	环境、社会和治理(ESG) 企业合规治理指南	广东贸促国际商事认证中心、中国贸促会贸易推广交流中心、广东胜宇电缆实业务(广东)有限公司、广东胜宇电缆实业务(广东)有限公司、产东胜宇电缆实业务(广东)有限公司、产东省市生产协会、南省市大学市村市省省市区公司、海、省联、公司、海、省联、公司、海、省联、公司、海、省联、公司、海、省联、公司、海、省、省、省、省、省、省、省、省、省、省、省、省、省、省、省、省、省、省、	广大学的大学的大学的大学的大学的大学的大学的大学的大学的大学的大学的大学的大学的大	香港品质保证局、注册合规师公会有限公司、澳门质量品牌国际认证联盟、香港专业审核师学会有限公司、公新博有限公司、澳门融贯投资科技有限公司、广东省应对技术贸易壁垒协会、广东传利标准研究院(有限合伙)、广东胜宇电缆实业有限公司、广州集泰化工股份有限公司、北京大成律师事缘厂有限公司、佛山市对外数字贸易产业促进会、广东省电力线路器材厂有限公司、广东省国际工程咨询有限公司、佛山市三水区铝加工行业协会、广东新悦环保科技有限公司、广东省清洁生产协会、广东绿美认证有限公司、莱茵技术监督服务(广东)有限公司

粤港澳大灣區(Association Standard) 双碳目标的永续发展(ESG) 10.7.2024



可持续金融 信息披露指南

"湾区标准"清单标准项目情况表

序号	"湾区标 准"识别号	标准编号	标准名称	起草单位	发布单位	声明使用单位
29	WQ 1-212	T/CAGDE 230-2024	可持续金融信息 披露指南	广东贸促国际商事认证中心、中国贸促会贸易推广交流中心、广东中誉认证有限公司、北京大成律师事务所、莱茵技术监督服务(广东)有限公司、广东省清洁生产协会、深圳天祥质量技术服务有限公司、河南省碳排放权服务中心有限公司、河东省广业检验检测集团有限公司、广东省国际工程咨询有限公司、广东省域联制的工程咨询,是国际工程咨询有限公司、责任云明究院、广东外语外贸大学南国商学院空港经济协同创新、广东外语外贸大学南国商学院空港经济协同创新、广东外语外贸大学南国商学院空港经济协同创新、不管中心、绿技金创(上海)低碳科技有限公司、广东外语人员是品牌国际认证联盟、广东外语人员是品牌国际认证联盟、广东传利标准研究院(有限公司、广东传利标准研究有限公司、广东传利标准研究有限公司、佛山市对外数字贸易产业促进会、广东绿美认证有限公司、广东新悦环保科技有限公司、大广东新悦环保科技有限公司、大广东新悦环保科技有限公司、澳门青创国际	广东省应对 技术贸易壁 垒协会	香港品质保证局、注册合规师公会有限公司、澳门质量品牌国际认证联盟、香港专业审核师学会有限公司、公新博有限公司、澳门融贯投资科技有限公司、广东省应对技术贸易壁垒协会、广东传利标准研究院(有限合伙)、广东胜宇电缆实业有限公司、广州集泰化工股份有限公司、北京大成律师事务所、南网碳资产管理(广州)有限公司、广州电缆厂有限公司、佛山市对外数字贸易产业促进会、广东省电力线路器材厂有限公司、广东省国际工程咨询有限公司、佛山市三水区铝加工行业协会、广东新悦环保科技有限公司、广东省清洁生产协会、广东绿美认证有限公司、莱茵技术监督服务(广东)有限公司

本文件主要起草人: 邱招贤、李敬、付国印、闫芸、温智尧、向艳、方涌东、蔡开明、王欣欣、黄 妍、黄强、陈佩婷、徐茜、罗洪广、江婷、沈毅、罗红姣、廖勇强、孙伟、张淑彬、王勋、阮锦华、陈 丽卿、余双辉、曹海磊、陈舜权、钟宏武、杨文、谢韵妍、吕奋进、苏培、张瑛瑛、陈超青、刘悦敏、 刘敬雯、殷琼琼、李昕源、郭小壮、邢静、黄雪冬、周晓斌、温峻峰、狄肖伟、吴新铃、况莫、苏明、 王冰冰、源昭文、刘春阳、张远标、朱立学<u>、卢耀、</u>卢柏龙、陈祥、金维刚、胡永仪、刘悦敏、周伟涛。

本文件及其所代替文件的历次版本发布情况为:

-2023年首次发布为T/CAGDE 228—2023:

Carbon Reporting & ESG - a Golden Opportunity for Auditors

Thanks

Ir Dr Tommy Lo
President
Hong Kong Institution of Certified Auditors