

SUSTAINABILITY JOURNEY : HOW SMES PUT ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) INTO PRACTICE

可持續發展之路：如何實踐環境、社會和企業管治(ESG)

Your Quick Reference to “Greener”
您的綠色伙伴

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11 Nov 2022

AGENDA 議程

Sustainability Journey 可持續發展之路

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International and Local Plans
國際與本地政策

#

**Quantification, Analysis, Comparison and Governance
to ESG KPIs**
量化、分析、比較和治理 – 4 部曲

#

How can INTERTEK support in ESG Advisory
INTERTEK 與您在ESG 道路上同行



INTERNATIONAL AND LOCAL PLANS

國際與本地政策



NEWS IN 2015

COP21 / CMP 11 at Paris

The big deal unites all the world's nations in a single agreement on tackling climate change for the first time in history.

Coming to a consensus among nearly 200 countries on the need to cut greenhouse gas emissions is regarded by many observers as an achievement in itself and is being hailed as "historic".

巴黎COP21 協議後，近 200 個國家就需要減少溫室氣體排放達成共識



DECISIONS OF COP21



What are the key elements?

- To keep global temperatures **"well below" 2.0C** (3.6F) above pre-industrial times and **"endeavor to limit" them even to 1.5C** more,
- To limit the amount of greenhouse gases emitted by human activity to the same levels that **trees, soil and oceans can absorb naturally**, beginning at some point between 2050 and 2100
- To **review each country's contribution** to cutting emissions every five years so they scale up to the challenge
- For **rich countries to help poorer nations** by providing "climate finance" to adapt to climate change and switch to renewable energy.
- 把全球平均氣溫升幅控制在工業革命前水平以上低於2°C之內，並努力將氣溫升幅限制在工業化前水平以上1.5°C之內
- 減少氣候變遷的風險和影響。
- 由 2050 年到 2100 年之間，將人類活動排放的溫室氣體量限制在樹木、土壤和海洋可以自然吸收的水平,達至碳中和
- 富裕國家通過提供“氣候融資”來幫助貧窮國家以適應氣候變化並轉向可再生能源每五年審查每個國家在減排方面的貢獻

CHINA'S 14TH FIVE-YEAR PLAN (2021-2025)



“十四五”是碳达峰的攻坚期、窗口期——绿色能源发展“风光无限”

2021-03-31 08:22 来源：光明日报

【字体：大 中 小】 打印

“十四五”是碳达峰的攻坚期、窗口期—— 绿色能源发展“风光无限”

风电、光伏发电、水电等可再生能源既不排放污染物、也不排放温室气体，是天然的绿色能源。我国明确2030年前碳达峰、努力争取2060年前碳中和，对可再生能源发展提出了明确的要求，全国两会刚刚通过的“十四五”规划对2035年远景目标纲要，也对可再生能源发展提出了明确任务。

在国新办3月30日举行的新闻发布会上，国家能源局局长章建华表示，现在距离2030年碳达峰还有两个五年，共十年。“十四五”是第一个五年，也是能源低碳转型的关键期，要加快推动碳达峰工作能够成势见效。

可再生能源规模稳居世界第一

数据显示，2020年，我国可再生能源开发利用规模达6.8亿吨标准煤，相当于替代煤炭近10亿吨，减少二氧化碳、二氧化硫、氮氧化物排放量分别约17.9亿吨、86.4万吨、79.8万吨。

国际能源署发布的2020年可再生能源报告显示，中国是2020年全球可再生能源容量增长的主要推动力之一。截至2020年底，我国可再生能源累计装机容量达到9.34亿千瓦，占全球可再生能源总装机规模的三分之一。特别是我国风电、光伏去年新增装机约1.2亿千瓦，占全球风电、光伏新增装机容量的一半以上，成为全球可再生能源发展的中坚力量。

“规模稳居世界第一，为能源绿色低碳转型提供强大支撑。”章建华告诉记者，截至2020年底，我国可再生能源发电装机占总装机的比重达42.4%，较2012年增长14.6个百分点。其中，水电、风电、光伏发电、生物质发电分别连续16年、11年、6年和3年稳居全球首位。

Source: Guangming Daily

制定2030年前,碳排放達峰的行動方案. 以及力爭取2060年前實現碳中和的目標。

以抓铁有痕劲头推进碳达峰

实现碳达峰、碳中和是一场广泛而深刻的经济社会的系统性变革，“十四五”是碳达峰的攻坚期、窗口期，如何拿出抓铁有痕的劲头扎实推进？

“到2030年非化石能源的一次能源消费比重要达到25%左右，风电、太阳能总装机容量要达到12亿千瓦以上，这两个目标任务非常艰巨，我们必须完成。”章建华表示，国家能源局将制定更加积极的新能源发展目标，加快发展风电和太阳能发电。同时要因地制宜开发水电，在确保安全的前提下积极有序地发展核电，同时要加快推进抽水蓄能、新型储能等调节电源建设，增强电力系统灵活调节能力，大力提升新能源消纳水平。

实现碳达峰碳中和，要以经济社会发展全面绿色转型为引领，在重点领域乃至全社会推行绿色用能模式至关重要。“我们将采取更加严格的能耗标准，支持推动工业、建筑、交通等重点行业和领域非化石能源的替代和用能方式的改变。”章建华指出，要推动加快发展新能源汽车，建筑光伏一体化等绿色用能模式，也加快取暖、炊事用能等方面电能替代，提升全社会电气化水平，到2025年实现单位GDP能耗较2020年降低13.5%，单位GDP二氧化碳的排放较2020年降低18%的目标。

据介绍，国家能源局正在研究推动能源领域碳达峰、碳中和的实现路径和任务举措，同时抓好国家和省级“十四五”能源规划衔接工作，把可再生能源的电力消纳责任权重、节能减排和碳达峰等目标落实到规划中，充分发挥规划的引领作用，压实各级各地碳减排责任，支持有条件的地方率先实现碳达峰。（记者 张翼）



CHINA'S 14TH FIVE-YEAR PLAN (2021-2025)



這次會議謀劃了“十四五”碳達峰、碳中和工作“施工圖”

新華社記者高敬

2021年03月17日09:02 | 來源：新華社

T+ 大字号

原標題：這次會議謀劃了“十四五”碳達峰、碳中和工作“施工圖”

3月15日，習近平總書記主持召開中央財經委員會第九次會議，其中一項重要議題，就是研究實現碳達峰、碳中和的基本思路和主要舉措，會議指明了“十四五”期間要重點做好的7方面工作。

在業內專家看來，這次會議明確了碳達峰、碳中和工作的定位，尤其是為今后5年做好碳達峰工作謀劃了清晰的“施工圖”。

“這次會議的一大亮點就是，把碳達峰、碳中和工作在國家經濟社會中的定位說清楚了，明確把碳達峰、碳中和納入生態文明建設整體布局，這事關中華民族永續發展和構建人類命運共同體。”國務院發展研究中心資源與環境政策研究所副所長常紀文說。

我國力爭2030年前實現碳達峰，2060年前實現碳中和。專家表示，從現在開始，到2030年前實現二氧化碳排放達到峰值，時間不滿10年，但我國經濟發展的同時，能源消費總量仍然處於上升通道，因此“十四五”時期二氧化碳排放控制如何，就顯得格外重要，“十四五”是碳達峰的關鍵期、窗口期。

「十四五」規劃提到「建立統一的綠色產品標準、認證和標識體系，完善節能家電、高效照明產品、節水器具推廣機制，以及完善綠色農業標準體系，加強綠色食品、有機農產品和地理標誌農產品認證管理等」

今后5年，碳達峰重點工作在哪裡？此次會議從能源體系、重點行業、綠色低碳技術、綠色低碳政策和市場體系、綠色低碳生活、生態碳匯能力、國際合作等7個方面進行了部署。

在中國社科院學部委員、北京工業大學生態文明研究院院長潘家華看來，會議提出的舉措非常精準。“碳達峰、碳中和工作沒有捷徑可走，首當其沖就是要控制化石能源消費。”他說。

我國能源結構是以高碳的化石能源為主，化石能源佔比約85%。能源的清潔低碳化，是會議對“十四五”碳達峰部署的第一項重點工作。

會議提出完善能源“雙控”制度。潘家華說，這表示今后既要控制能源消費強度，也要控制能源消費總量，這是一大進步。他指出，我們要重點控制的是化石能源消費總量，可再生能源則是多多益善，要實施可再生能源替代行動，同時要構建以新能源為主體的新型電力系統。

工業、建築、交通是我國主要終端能耗部門。會議提出，工業領域要推進綠色制造，建築領域要提升節能標準，交通領域要加快形成綠色低碳運輸方式。

常紀文說，今后5年，工業領域的綠色供應鏈、建築領域的綠色建築等都大有文章可做。

根據《巴黎協定》的目標，為企業提供明確的減排途徑。

Science-based targets provide companies with a clearly-defined path to reduce emissions in line with the Paris Agreement goals. **More than 3,000 businesses** around the world are already working with the Science Based Targets initiative (SBTi)

Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to **meet the goals of the Paris Agreement** – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

ARÇELİK A.Ş. Türkiye, Asia	Consumer Durables, Household and Personal Products	WELL BELOW 2°C	2018 to 2030	Absolute
			2018 to 2030	Absolute
Beiersdorf AG Germany, Europe	Consumer Durables, Household and Personal Products	1.5°C	2018 to 2025	Absolute
CASIO COMPUTER CO., LTD. Japan, Asia	Consumer Durables, Household and Personal Products	WELL BELOW 2°C	2018 to 2030	Absolute
			2018 to 2030	Absolute
Colgate Palmolive Company USA, North America	Consumer Durables, Household and Personal Products	1.5°C	2018 to 2025	Absolute
			2018 to 2030	Absolute
			2016 to 2025	Absolute
			2018 to 2025	Absolute
Crystal Claire Cosmetics Inc. Canada, North America	Consumer Durables, Household and Personal Products	WELL BELOW 2°C	No comparable progress data of SBT(s) v	
ECOS	Consumer Durables, Household and Personal Products	WELL BELOW 2°C	No comparable progress data of SBT(s) v	

SET A TARGET

Join over 3,000 business leaders taking ambitious climate action. Follow this process to set science-based targets, cut your company's greenhouse gas emissions and future-proof your business today.



從承諾、發展進行、提交、溝通、披露

- ✓ Commit: submit a letter establishing your intent to set a science-based target
- ✓ Develop: work on an emissions reduction target in line with the SBTi's criteria
- ✓ Submit: present your target to the SBTi for official validation
- ✓ Communicate: announce your target and inform your stakeholders
- ✓ Disclose: report company-wide emissions and track target progress annually

TARGET TYPES IN SBTI (SBTI CRITERIA V5.0) FROM JUL 15, 22



範圍三包括
供應鏈

合格標準及
最少意願

			Scope 1 and 2			Scope 3			
Near-term science-based targets 近期目標 5-10年	Target boundary		95% coverage of scopes 1 + 2			If scope 3 >40% of total emissions: boundary to cover min. 67% of scope 3.			
	Target year		5 – 10 years from date of submission			5 – 10 years from date of submission			
	Method eligibility and minimum ambition	Method	Absolute reduction	Sector-specific intensity convergence	Renewable electricity (scope 2 only)	Cross-sector absolute reduction	Sector-specific intensity convergence	Supplier or customer engagement	Scope 3 physical and economic intensity reduction
Eligibility and min. ambition		• 4.2% linear annual reduction (LAR)	• Depends on sector and company inputs	• 80% RE by 2025 • 100% RE by 2030	• 2.5% LAR	• Depends on sector and company inputs (SDA)	• e.g. 80% of suppliers by emissions by 2025	• 7% year-on-year (both options)	
Long-term and net-zero science-based targets 長期目標到2050	Target boundary		95% coverage of scopes 1 + 2			90% coverage of scope 3			
	Target year		2050 or sooner (2040 for the power sector)			2050 or sooner			
	Method eligibility and minimum ambition	Method	Absolute reduction	Sector-specific intensity convergence	Renewable electricity (scope 2 only)	Cross-sector absolute reduction	Sector-specific intensity convergence	Supplier or customer engagement	Scope 3 physical and economic intensity reduction
Eligibility and min. ambition		• 90% reduction (cross-sector pathway) • 72% reduction for FLAG • Other sector pathways vary	• Sector / commodity pathways vary	• 100% RE	• 90% reduction (cross-sector pathway) • 72% reduction for FLAG • Other sector pathways vary	• Sector / commodity pathways vary	• Methods are not eligible for long-term SBTs	• 97% reduction (both options)	

Not eligible

1.5°C ambition

Well-below 2°C ambition

SUSTAINABLE DEVELOPMENT GOALS (UNSDGs) 可持續發展目標



SUSTAINABLE
DEVELOPMENT GOALS



17 Sustainable Development Goals (SDGs) and **169 targets** of the new agenda will be monitored and reviewed using a set of global indicators. 將使用一套全球指標監測和審查新議程的 **17 個可持續發展目標 (SDG)** 和 **169 個具體目標**。



Some of goals are related to environmental impacts in your industrial:

Goal 3: Good Health and Well-Being – COVID-19 issue

確保健康及促進各年齡層的福祉

Goal 6: Clean Water and Sanitation
確保所有人都能享有水及衛生及其永續管理

Goal 7: Affordable and Clean Energy
確保所有的人都可取得負擔得起、可靠的、永續的，以及現代的能源

Goal 12: Responsible Consumption and Production

確保永續的消費與生產模式

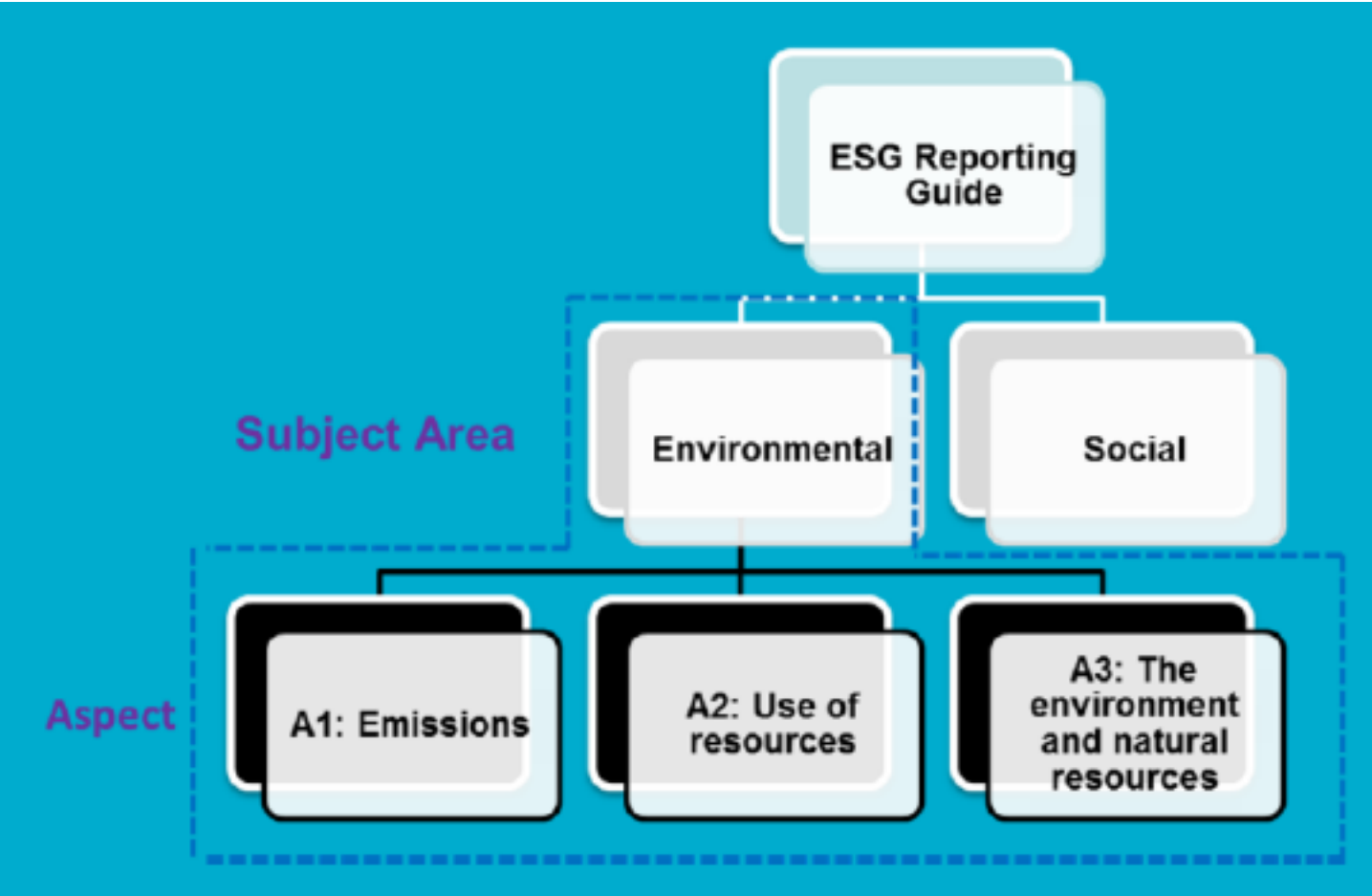
Goal 13: Climate Action, etc.

採取緊急措施以因應氣候變遷及其影響

HKEX ESG REPORTING 香港交易所環境、社會及管治報告



- ESG performance has become a proxy for a company's **resilience and risk management capabilities**.
- It also demonstrates and enhances the **long-term value** of a business.
- ESG 績效已成為衡量公司彈性和風險管理能力的指標。它還展示並提高了企業的長期價值。



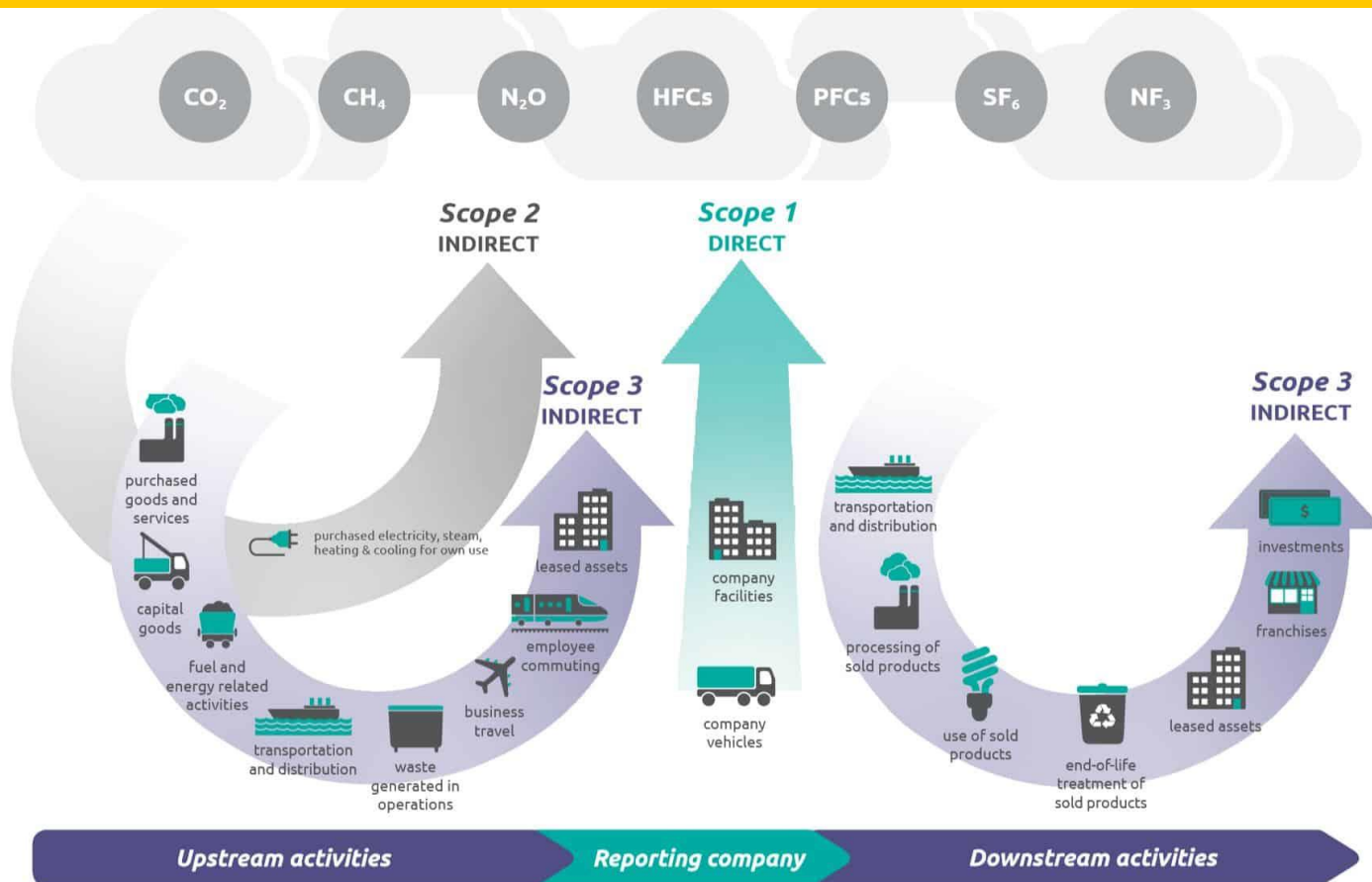
KPI A1.1 Air emissions: NOx, SOx and other pollutants	KPI A2.1 Direct and/or indirect energy consumption	KPI A3.1 Significant impacts on the environment / natural resources and actions
KPI A1.2 Greenhouse gas emissions: CO2, CH4, N2O, SF6, HFCs, PFCs	KPI A2.2 Water consumption in total and intensity	
KPI A1.3 Wastes: chemical, and clinical wastes, hazardous chemicals	KPI A2.3 Energy use efficiency initiatives and results	
KPI A1.4 Wastes: construction, commercial, domestic, grease / garden wastes	KPI A2.4 Water use efficiency initiatives and results	
KPI A1.5 Air or Greenhouse gas emissions (measures and results)	KPI A2.5 Total packaging material	
KPI A1.6 Waste (measures and results)		

GHG PROTOCOL (SCOPE 3 INDIRECT EMISSION)

溫室氣體協議書(範圍三非直接排放)



- GHG Protocol establishes comprehensive global standardized frameworks to **measure and manage greenhouse gas (GHG) emissions**. 建立了全面的全球標準化框架來衡量和管理溫室氣體 (GHG) 排放。
- The Corporate Value Chain (Scope 3) Accounting and Reporting Standard allows companies to **assess their entire value chain emissions impact** and identify where to focus reduction activities. 企業價值鏈 (範圍 3) 會計和報告標準允許公司評估其整個價值鏈排放影響並確定減排活動的重點。



When the global mandatory requested to report GHG emission in Scope 1 & 2, some stakeholders are looking forward for **Scope 3** in their consideration. 持份者已經考慮範圍三納入管治範圍中。

**QUANTIFICATION, ANALYSIS,
COMPARISON AND
GOVERNANCE TO ESG KPIs**

量化、分析、比較和治理





EXISTING PROJECT APPROACH

- Which reporting requirement should be follows? 應跟隨哪個報告方式要求 ?
e.g. SBTi, UNSDGs, HKEX, GRI
- Data available on existing status? Methodology? 現有數據由來及方法 ?
e.g. Carbon footprint data, Energy consumption data...etc
- Implemental and improvement Plan?? 實施和改進計劃 ? ?

Phase 1 - GAP Analysis 差距分析

1. Analysis the gap to achieve the requirement
2. Data collection from company and factories by requesting to complete the Questionnaire with template file
3. Desktop-review on data quality of information from factories
4. Site visit on factories situation

Phase 2 – ESG Continuous Monitoring ESG 持續監控

1. Select the factories with potential issues found in desktop review and carry out on-site audit and verification
2. Validated and quantified data is uploaded to monitoring dashboard 驗證和量化的數據
3. Analysis the data and energy saving opportunities 分析數據和節能
4. Continuous update of monitoring dashboard and yearly comparison on emission data 排放數據比較
5. Provide governance control and setup the emission target 治理控制和設定排放目標

Phase 3 – ESG Disclose and Reporting ESG 披露和報告

WORKFLOW OF ESG (ENVIRONMENTAL) MONITORING SOLUTION



Boundary define +
Gap analysis
定義邊界+
差距分析

Training 培訓

Data collection
數據採集
(Quantification
量化)

Desktop review
桌面審查
(Analysis
分析)

Assessment
評估

Platform
monitoring
平台監控
(Comparison
比較)

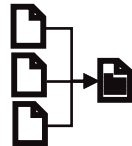
Target
Setting
目標設定
(Governance
治理)



- Identify policy and roles of responsibility
- Define reporting boundaries
- Gap analysis to find out the scopes of ESG reporting
- System Setup & documentation



- Provide guidelines to staff and factories
- Train the factories to understand the reporting requirements



- Issue Questionnaire to factories and responsible parties
- Receive the responses of energy consumption
- Convert to carbon emission



- Check for abnormalities in Questionnaire data which needs further verification



- Validation of carbon data with on-site/remote audit
- Adjust and follow up any incorrect data



- Upload data to dashboard for visualization
- On-going monitoring of factories and scopes
- Compare the reduction performances

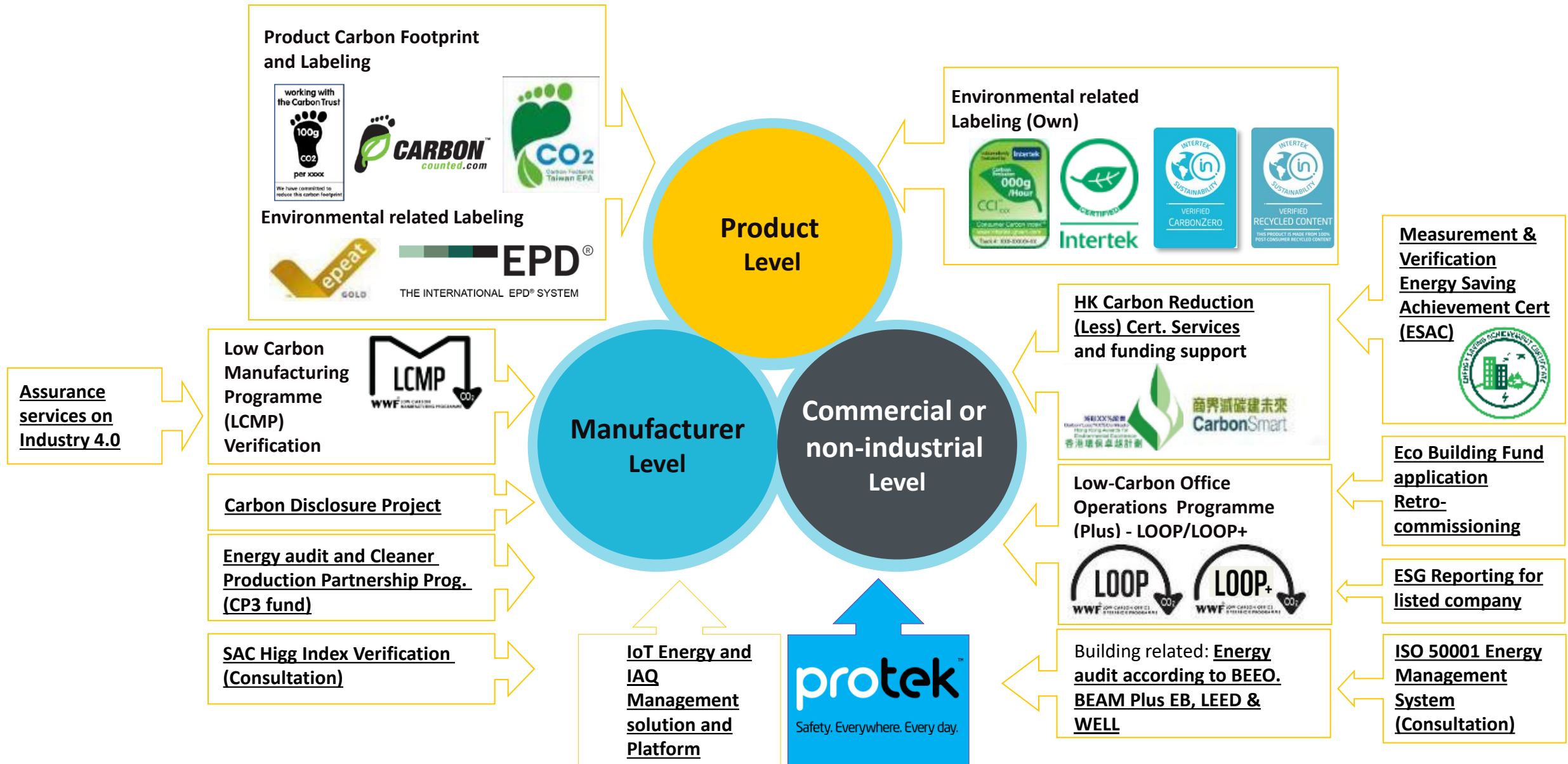


- Design reduction target according to Science Base Target initiatives (SBTi)
- Setup and control the KPIs according to target

**HOW CAN INTERTEK SUPPORT
IN ESG ADVISORY**
INTERTEK與您在ESG道路上同行



QUALIFIED PROVIDER IN GREEN SERVICES

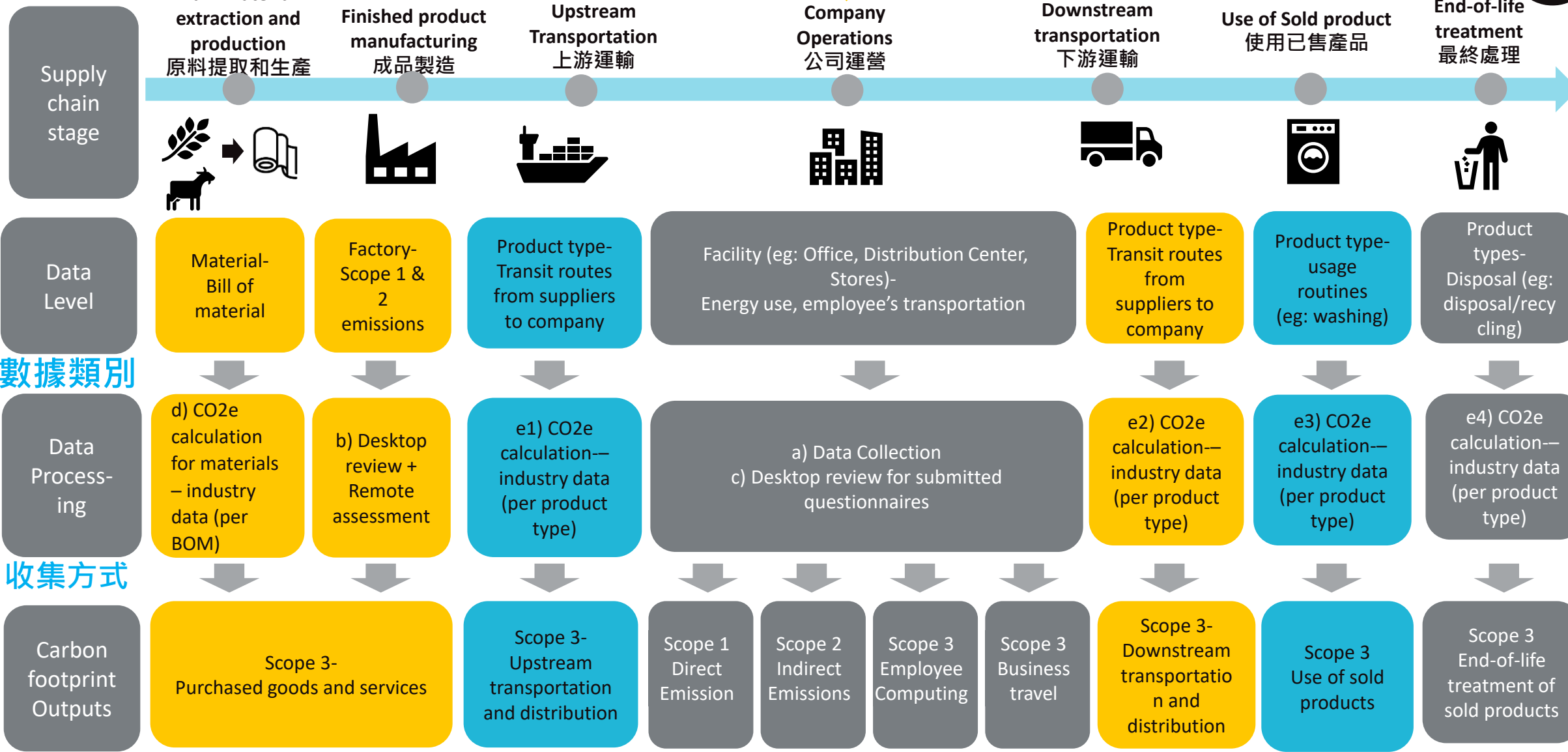


CARBON FOOTPRINT SOLUTIONS BY SUPPLY CHAIN STAGE

供應鏈階段的碳足跡解決方案



SME



數據類別

收集方式

碳數據分類

LCMP FOR SUPPLY CHAIN / MANUFACTURERS

低碳製造計劃對供應鏈/製造商



- This programme is organized by WWF HK

本項目由香港世界自然基金會主辦

Aims at reducing GHG emissions generated by factories related facilities

旨在減少工廠相關設施產生的溫室氣體排放

Provide corporate with measurement tools of their effectiveness in reducing GHG emissions

為企業提供工具,有效協助減少溫室氣體排放

Equip corporate with best practice in GHG management and consumption reduction

為企業提供溫室氣體管理和減少消耗的最佳實踐方案

Intertek provide 3rd Party Verification Services

- Intertek 提供第三方驗證服務

https://www.wwf.org.hk/en/whatwedo/climate_and_energy/what_can_businesses_do/lcmp/



INTERTEK CARBONZERO – CARBON NEUTRAL CERTIFICATION PROGRAM

零碳 - 碳中和認證計劃



Intertek CarbonZero offers a certification program for carbon neutrality of products, buildings, development projects, etc., providing companies with a means to demonstrate carbon neutrality/net zero, and give customers climate-friendly options & reduce regulatory pressure

Intertek CarbonZero 提供產品、建築、開發項目等的碳中和認證計劃，為公司提供證明碳中和/淨零的方法，並為客戶提供氣候友好型選擇並減輕監管壓力

Looking for 目的：提升企業形象

- Advertise self as carbon neutral 自我宣傳碳中和
- Upscale product 提昇為高檔產品
- Elevate corporate image 提升企業形象
- Support carbon neutral- and decarbonization-related policies 支持碳中和和脫碳相關政策
- Reduce carbon footprint 減少碳足跡
- Support carbon reducing projects 支持減碳項目

Standards 標準：

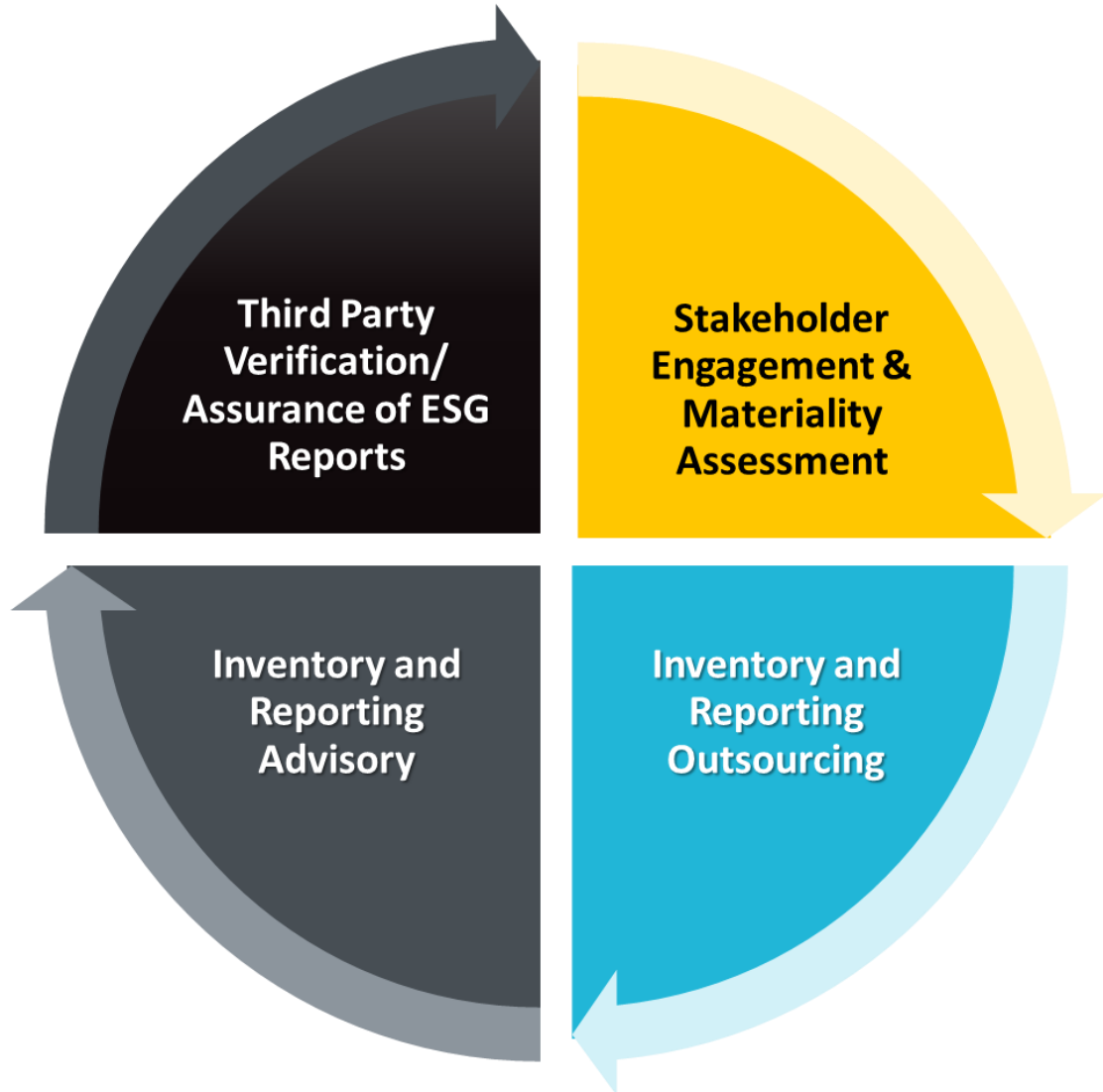
PAS 2060

ISO/WD 14068 (in development 開發中)



ESG REPORTING SERVICES

ESG 報告服務




GENERAL ESG REPORTING SERVICES

- **Second/Third Party Verification/Assurance of ESG Reports** 第三方驗證/保證
- **Stakeholder Engagement & Materiality Assessment** 利益相關者參與和重要性評估
 - Materiality Assessments
- **Inventory and Reporting Outsourcing**
 - Supplier chain engagement and collection of critical data 供應商鏈參與和數據收集
 - Support and calculations for science-based targets 基於科學的目標的支持和計算
- **Inventory and Reporting Advisory**
 - Assistance with strategy development surrounding creation of reporting data and annual report. 協助收集報告中數據和年度報告之制定戰略。

Tommy Cheung

BEAM Pro (NB, EB, BI), CAP, CMVP, CTP (Green and Safety), MIET, MSc (Green Tech.), LCMP & LOOP verifier, LEED Green Associate, WELL AP & PTA, SAC verifier for Higg Index

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Supporting Services includes:

ErP - Environmental Assessment, Life Cycle Assessment (LCA), Product Carbon Footprint (PCF) - PAS 2050, GHG Protocol, Carbon Disclosure Project (CDP), Green Leaf Mark, Consumer Carbon Index (CCI), CarbonTrust Reduction Label, Carboncounted Label, Verification on Taiwan Product Carbon Footprint label, EPEAT environmental requirement, Low Carbon Manufacturing Program (LCMP), Low-carbon Office Operation Program (LOOP/LOOP+), Cleaner Production (CP3), SAC Higg Index verification, Carbon Reduction /'Less' Certificate and CarbonSmart Pilot Fund, CarbonCare Label, Energy and Carbon audit, BEAM Plus Green Building Assessment, BEAM Plus Interiors, HKGBC Green Product Accreditation and Standards (HK G-PASS), LEED Green Building Rating System, WELL Building Standard, Retro-commissioning (RCx), Measurement & Verification (M&V) on Building Retrofit, Energy Saving Achievement Certificate (ESAC), CLP Eco-Building Fund (EBF), HK Electric Smart Power Building Fund (SPBF), Internet of Things (IoT) Environmental Management Solution (iEMS), Industry 4.0 advistoy, ISO 14001 Environmental Management System (EMS), ISO 50001 Energy Management System (EnMS), Energy Efficiency - Energy Star, Energy Saving Trust, EU Energy label, ErP and HKEELS, Water Efficiency - HKWELS...etc



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Total Quality. Assured.