

## **About CDP**





CDP is a global environmental impact non-profit working to secure a thriving economy that works for people and planet.



We help investors, companies and cities to measure, understand and address their environmental impact.



CDP is the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action.



We aim to make environmental reporting mainstream and provide insights to drive urgent action needed for a climate-safe, water-secure, deforestation-free world.

## Global, independent, environmental disclosure system

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## 18,700+

Companies in over 90 countries reporting

Representing over half of the world's market cap

**1,200+** Cities, states, and regions sharing best practice and progress **280+** Global purchasing companies asking

their supply chains to disclose

US\$6.5 trillion in buying power

## 740+

Institutional investors requesting information from their portfolios

US \$130 trillion in assets

Footnote: statistics from 2022 disclosure season







# CDP Questions in the SME Questionnaire

# Structure of the SME Questionnaire

The SME Questionnaire consists of 9 Modules



Modules in the SME Questionnaire	Number of CDP Questions	
0. Introduction	<mark>6</mark> / 7	<b>65</b> questions in total, and
1. Governance*	3 / 5	<b>44</b> are originated from
2. Climate-related Risks*	4 / 7	resources:
3. Business Strategy*	<mark>8</mark> / 11	CDP Private Markets
4. Reported Emissions, Targets & Performance*	<mark>14</mark> / 14	Questionnaire 2022
5. Energy	2/3	Framework for SME, CDP
6. Carbon Pricing	<mark>2</mark> /3	CDP Climate Change 2022 Questionnaire
7. Other Environmental Risks	<mark>2</mark> /3	CDP Water Security
SC. Supply Chain	<mark>1</mark> / 12	Questionnaire 2022

\* Refers to TCFD-aligned modules

## **Overview of Module Questions**

1. Governance



1.1	Is there any member(s) of your organization responsible for overseeing climate change matters?
1.2	Do you provide incentives for the management of climate-related issues, including the attainment of targets?
1.2a	Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).
1.3	Are you familiar with any local government or related incentives to manage your climate-related issues, risks or disclosure?
1.3a	Do you take advantage of such incentives? Please provide further details on the incentives used by your firm.



# 1.1 Is there any member(s) of your organization responsible for overseeing climate change matters?

### **Requested content**

- Companies shall disclose if there is an individual(s) responsible for overseeing climate change action and their seniority within the organization
- If the company has a board, they should disclose whether there is board-level oversight of climate change matters

### Note

- State "Yes" if the member(s) take account of climate-related issues when, for example:
  - reviewing and guiding business strategy, the risk management approach and annual budgets
  - overseeing the organization's employee incentives, major capital expenditures, acquisitions, and divestitures
  - monitoring progress towards targets
  - creating and reviewing environmental policies, strategy or information



# 1.1 Is there any member(s) of your organization responsible for overseeing climate change matters?

Position of individual(s)	Please explain
Board Chair	The Chairman is ultimately accountable for the sustainable development strategy. Akey component of this strategy is to encourage our employees to make better decisions with the intention of minimizing the social and environmental impacts of their daily routines. This enables us to make our business more sustainable and help deliver economic value – i.e. profits for shareholders. Being on the Board of Directors and the Management Committee, which oversees the day-to-day operations of all businesses and functions, the leadership and responsibilities of the Chairman can ensure that climate-related issues are being incorporated into corporate strategy formulation and decision-making process, as well as facilitating the implementation of climate-related initiatives across all divisions. The Board is advised by the Group Risk Management Committee (GRMC) who meets on a quarterly basis. The GRMC provides oversight on all the risks to which the Group is exposed, including climate change related matters, except for those expressly covered by the Finance Committee, including setting risk management policies and strategies. [] In 2021, the Chairman approved the revision of the Group Climate Change policy, as well as the Groups 2030 decarbonization target and net zero by 2050 commitment, and Swire Pacific joining Cathay Pacific's Corporate Sustainable Aviation Fuel Partnership programme.



1.2a Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

### **Entitled to incentive**

Board Chair

- Management group
- Board/executive board Procurement manager
- Director on board
- Public affairs manager

C-suite level

Risk manager

• • • •

Other, please specify

### Type of incentive

- Monetary reward (e.g. bonus)
- Non-monetary award (e.g. employee awards)

### Activityincentivized

- Emissions reduction project
- Emissions reduction target
- Energy reduction project
- Energy reduction target
- Efficiency project
- Efficiency target
- Behavior change related indicator
- Environmental criteria included in purchases
- Supply chain engagement
- Other, please specify



**1.2a Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).** 

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Environment/ Sustainability manager	Monetary reward	<ul> <li>Emissions reduction project</li> <li>Emissions reduction target</li> <li>Energy reduction target</li> </ul>	<ul> <li>Progress against Sustainability targets such as Emissions and Energy reduction are built into the appraisal process of all sustainability managers in all of our operating companies.</li> <li>At Cathay Pacific, progress on climate change strategy and related targets of the company such as fuel efficiency, carbon emissions, engagement of business units and reporting on climate change issues form part of the regular performance review of the head and managers of Sustainable Development, Corporate Affairs Department.</li> <li>Such achievements and recognition will be reflected in annual appraisals accordingly.</li> </ul>

## **Overview of Module Questions**

2. Climate-related Risks



2.1	How does your organization define short-, medium- and long-term time horizons?
2.2	Do you assess your climate risks?
2.2a	(If yes) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.
2.3	Can you provide a financial impact figure for any of the risks listed in the previous question?
2.4	What is the proportion of revenue in your organization that is reliant upon high-carbon products (e.g., oil, gas, coal)?
2.5	Please provide key asset locations of the organization, including both operating assets and collateral assets.
2.6	Does your organization have sufficient insurance policy coverage to mitigate against financial losses due to residual physical risks after the implementation of your organization's climate risk policy and strategy?



### 2.1 How does your organization define short-, medium- and long-term time horizons?

### Note

- If your long-term time horizon is open-ended, you may leave the column "To (years)" blank
- In "Comment" column, you may specify if this time horizon for assessing climate-related risks and opportunities is aligned with other business practices time horizons and provide any other relevant information





## 2.1 How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	In line with standard financial budget planning, Swire Pacific at a Group level requires its businesses to set a sustainability budget, which includes detailed projections for their carbon emissions, energy and water usage and waste production for the next three years, as well as detailed 3-year Capex plan for the projects and investments needed to hit these targets (in addition they are also asked to produce less detailed projections and costings up to ten years).
Medium-term	3	10	The standard Swire Pacific <mark>risk assessment and business plans go out to 5 years</mark> . However, the Board also <mark>projects out the business strategy to ten years</mark> .
Long-term	10	30	The Group risk assessment assesses risk likelihood criteria, which includes once in a lifetime risks, and risks that occur every 10-40 years. [] Under the banner of SwireTHRIVE, Swire Pacific has committed to Net Zero Carbon Emissions, Water Neutrality and Zero Waste to Landfill by 2050.



- Does your organization have a process for identifying, assessing and managing climaterelated risks?
  - Yes
  - No
- Describe your process(es) for identifying, assessing and managing climate-related risks
  - How frequently you carry out climate risk assessments
  - Value chain stages covered (e.g., direct operations, downstream, upstream)
  - Time horizon(s) covered
  - Risk types considered

- When do you expect the risk impacts to materialise?
  - <3years</li>
  - 3-10 years
  - >10 years
  - N/A
- How often do you review your climate risk assessment?
- When was the last time you assessed your climate risks?



Figure 1

### Physical risks

 Risks related to the physical impacts of climate change

### Transition risks

 Risks related to the transition to a lower-carbon economy





#### Value chain stage(s) covered Direct operations

**Risk management process** 

Integrated into multi-disciplinary

company-wide risk management

**Description of process** 

- [...] The risk management process is multi-disciplinary and company-wide:
- 1) Establishing scope, context, risk criteria.
- 2) Identifying risks based on relevant, appropriate and up-to-date information.
- 3) Analysing risks with detailed consideration of risk sources, consequences, likelihood, events, scenarios, existing controls and their effectiveness. Each of the identified risks would be analysed and profiled using a Risk Assessment Tool (5x5 Risk Assessment Matrix) which helps assess and prioritise the risks into four risk levels (Extreme, High, Medium and Low) according to their consequence (5-point scale: Critical, Major, Moderate, Minor and Insignificant) and likelihood (5-point scale: Almost certain, Likely, Possible, Unlikely, Rare). In assessing the consequence of a risk, CLP considers both financial and non-financial types of consequences including: (a) People, Safety and Health (b) Environment (c) Legal and Compliance (d) Reputation (e) Financial, and (f) Operations and Systems.

4) Evaluating the risks against the established risk criteria to rank them and prioritise management efforts.
Whether to mitigate, transfer, accept or control a risk depends on the Company's risk appetite. CLP's risk appetite represents the nature and extent of the risks the Group is willing to undertake in pursuit of strategic and business objectives. CLP has established its risk profiling criteria in line with its risk appetite to assess and prioritise each identified risk according to its consequence and its likelihood. Therefore, when assessing a risk, CLP considers non-financial consequences, as detailed in its risk appetite, in addition to financial ones.
5) Developing control and mitigation plans.

### **Frequency of assessment** More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Upstream

process

Downstream



• The guidance discusses the steps in identifying climate-related risks, as well as the common approaches to risk prioritisation



Source: HKEX - Reporting on TCFD recommendations Guidance on Climate Disclosures





2.2a (If yes) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

- Where in the value chain does this risk driver occur?
  - Direct Operation / Upstream / Downstream
- Primary climate-related risk driver
  - Current regulation

- Market
- emerging regulation
- reputation

Legal

acute physical/ chronic physical

technology

### Primary potential financial impact

- Increased direct costs
- Increased indirect (operating) costs
- Increased capital expenditures
- Increased credit risk
- Other, please specify

### Company-specific description

 Provide further contextual information on the risk driver, including more detail on the exact nature, location and/or regulation of the effect concerned, as well as any notable geographic/regional examples

### Time horizon

- Short- / Medium- / Long- term/ Unknown
- Likelihood
  - Virtually certain (99–100%)
  - Very likely (90–100%)
  - Likely (66-100%)
  - More likely than not (50-100%)
- Magnitude of Impact

- About as likely as not (33–66%)
- Unlikely (0–33%)
- Very unlikely (0-10%)
- Exceptionally unlikely (0–1%)
- High/ Medium-high/ medium/ medium-low/ low/unknown



2.2a (If yes) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Where in the value chain does the risk driver occur? Direct operations

#### (Risk type)Primary climate-related risk driver (Market) Changing customer behavior

#### **Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

### Time horizon

Medium-term

Likelihood About as likely as not

Magnitude of impact Medium-low

#### **Company-specific description**

According to the Intergovernmental Panel on Climate Change (IPCC), the aviation industry accounts for around 2% of global GHG emissions and by 2050, this is projected to rise to 3%. Despite the relatively low industry carbon footprint, there is an increasing expectations on the aviation industry, in particular the airlines, to reduce and manage its GHG emissions. Meanwhile, vilification of aviation and a perceived lack of action to counteract the industry's significant environmental impact on climate change could adversely hamper demands for air travel. Hence, there is a climate market risk for Cathay Pacific relating to customer retention and a attraction as preferences may shift to greener forms of passenger and cargo services in the future. The risk is still low given that there is lack of alternatives available on the market, however Cathay Pacific has been preparing for alternative fuel and new technology adoption once the customer and market are ready for the shift.



# 2.3 Can you provide a financial impact figure for any of the risks listed in the previous question?

# Are you able to provide a potential financial impact figure?

- Yes, a single figure estimate
- Yes, an estimated range
- No, we do not have this figure

### Potential financial impact figure (\$USD)

- Provide a single figure for the inherent financial impact of the risks (before taking into consideration any controls you may have in place to mitigate the impacts)
- This figure should be in USD

### Explanation of financial impact figure

- What approach was employed to calculate the figure
- The figures used in your calculation
- Any assumption the figure is dependent on

### Cost of response to risk (\$USD)

- Provide a quantitative figure for the cost of your risk response actions. If there are no costs to responding to the risk, enter 0.
- If you cannot provide absolute values, you may provide a percentage value in the "Comment" column

# Description of response and explanation of cost calculation

- Provide details of your organization's response to mitigate, control, transfer or accept the risk
- Include an example of company-specific risk responses actions (activities, projects, products and/or services)
- Provide an explanation of how the figure for the cost of managing the risk (in column 5) was calculated, including the figures used in your calculation



# 2.3 Can you provide a financial impact figure for any of the risks listed in the previous question?

### Are you able to provide a potential financial impact figure? Yes, an estimated range

#### Potential financial impact figure (in HKD) 721680000-7216800000

### **Explanation of financial impact figure**

[...] The impact on demand reduction is relatively small (less than 5%), limited to specific regions (mainly in Europe), and mainly for domestic travel. This is not a market Cathay Pacific operates in as we carry long-haul, international passengers from Europe to Asia and the Southwest Pacific. In the medium term, if the reduction in demand remains at the 5% level and affecting only our European market, the impact to Cathay Pacific is expected to be 1% of our annual passenger revenue (according to 2019 ASK share). In the long term, if the trend becomes global and the impact on passenger demand doubles, it could have an impact of up to 10% of our operating revenue. In 2019, passenger revenue was HK\$72,168 million - a 1% and 10% reduction will cost Cathay Pacific from HK\$721,680,000 to HK\$7,216,800,000.

## Cost of response to risk (in HKD) 1026000

#### Description of response and explanation of cost calculation

[...] In particular, we raise awareness on sustainability and carbon impacts amongst our customers through our FLY Greener offset programme, which offers passengers the option to offset the carbon emissions associated with their flights. It also gives them the chance to support the development of emissions reduction projects. This programme was the first of its kind by an Asian airline when we started it in 2007. The cost of communication and awareness raising programmes forms part of the remit of our staff, and is incorporated into our operating costs, estimated direct cost involved is around HK\$500,000. In 2021, offsets for our employees duty travel, corporate clients, and by individual customers had an associated approximate cost of HK\$526,000.

# **Overview of Module Questions**

3. Business Strategy



3.1	Does your organization use climate-related scenario analysis to inform its strategy?
3.2	Provide details of your organization's use of climate-related scenario analysis.
3.3	Describe where and how climate-related risks and opportunities have influenced your strategy.
3.4	Describe where and how climate-related risks and opportunities have influenced your financial planning.
3.5	Does your organization's strategy include a transition plan that aligns with a 1.5°C world?
3.6	Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.
3.7	Do you classify any of your existing goods and/or services as low-carbon products?
3.7a	(If yes) Provide details of your products and/or services that you classify as low-carbon products.
3.8	Provide details of the organization's capital investment in low-carbon or other green technologies.
3.8	Provide details of the organization's capital investment in low-carbon or other green technologies. Provide the R&D investments that have been made in low-carbon or other green technologies, no and in the future.
3.8 3.9 3.10	<ul> <li>Provide details of the organization's capital investment in low-carbon or other green technologies.</li> <li>Provide the R&amp;D investments that have been made in low-carbon or other green technologies, no and in the future.</li> <li>Provide details of your organization's plans to cater for any emerging demand of competitive energy efficient products.</li> </ul>



## 3.1 Does your organization use climate-related scenario analysis to inform its strategy?

### **Scenario Analysis**

A strategic planning tool to

- Enhance critical strategic thinking by challenging "business-asusual" assumptions
- Help organizations understand how they could perform in different future scenarios
- Improve companies understanding of future risks and develop suitable resilience strategies aligned with a 1.5°C world
- Offer insight into opportunities including energy efficiency, changes in energy sources and/or technologies, new products and services, new markets or assets, and increased resilience

### Key Characteristic of Scenario Analysis

Plausible, distinctive, consistent, relevant, challenging

### Just starting?

Conduct a qualitative scenario analysis

- Relies on descriptive, written narratives
- Explores relationships and trends for which little or no numerical data is available
- Helps management explore the potential range of climate change implications

### More experienced?

#### Conduct a quantitative scenario analysis

- Relies on numerical data and models
- Assesses measurable trends and relationships using models and other analytical techniques
- Illustrates potential pathways and outcomes



### 3.1 Does your organization use climate-related scenario analysis to inform its strategy?

TCFD's process for exploring and applying climate-related scenario analysis

**Ensure governance is in place:** Integrate scenario analysis into strategic planning and/or enterprise risk management processes. Assign oversight to relevant board committees/sub-committees. Identify which internal (and external) stakeholders to involve and how.



**Document and disclose:** Document the process; communicate to relevant parties; be prepared to disclose key inputs, assumptions, analytical methods, outputs, and potential management responses.

Source: Technical Supplement - The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities, TCFD, 2017

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## 3.2 Provide details of your organization's use of climate-related scenario analysis.

#### **Climate-related scenario Physical scenarios Transition scenarios** Focus on plausible assumptions Address patterns of physical about the development of climate impacts attributed to climate policies and climate-friendly change technologies to limit GHG Typically present the results of global climate models that show emissions Examples: IEA NZE 2050, IEA the response of Earth's climate to B2DS, IEA 2DS, IEA 450, IEA changes in atmospheric GHG SDS, IEA APS, IEA STEPS concentrations. Examples: RCP 1.9, RCP 2.6, (previously IEA NPS) ٠ RCP 3.4, RCP 4.5, RCP 6.0, RCP 7.0. RCP 8.5

### Scenario analysis coverage

 The TCFD Guidance on Scenario Analysis recommends that scenario analysis should encompass the whole company

### Options

- Company-wide
- Business division
- Business activity
- Facility
- Country/area
- Product-level
- Portfolio [FS only]
- Other, please specify



## 3.2 Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices	
Physical climate scenarios	RCP 8.5	Company-wide	<ul> <li>Parameters/ Assumptions:</li> <li>The modelling assumed that our business activities are the same as they are today. While we understand that policy risk and physical impact can happen simultaneously, we made the following simplifying assumptions:</li> <li>In the 4°C scenario, we assumed climate policy is less ambitious and emissions remain high so the physical manifestations of climate change are increasingly apparent by 2030. Given this we have not included impacts from regulatory restrictions but focus on those resulting from the physical impacts.</li> <li>Analytical Choices:</li> <li>Our aim was to build a scenario model which was bespoke to Unilever. We drew on various physical scenarios (e.g. IPCC RCP 8.5 Scenario) &amp; transition scenarios (e.g. Greenpeace Energy Revolution, IEA WEO 450ppm scenario, IEA 2DS) and various 3rd party scenarios as well as TCFD guidance. We also used internal data sources such as historical financial results, scopes 1, 2 and 3 (value chain) emissions, and commodity spend. The analysis covered Unilever's full value chain: raw materials, manufacturing, logistics and sales &amp; covered a time horizon of 2030, which is relevant and in line with some of our current GHG emission targets. []</li> </ul>	



# 3.3 Describe where and how climate-related risks and opportunities have influenced your strategy

### Business Area

- Products and services
- Supply chain and/or value chain
- Investment in R&D
- Operations
- Have climate-related risks and opportunities influenced your strategy in this area?
  - Yes
  - No
  - Evaluation in progress
  - Not evaluated

### Description of influence

- Describe how your strategy in this area has been influenced by climate-related risks and opportunities and the time horizon(s) it covers
- Specify if this includes any climate change adaptation and mitigation activities
- Include the most substantial strategic decision(s) in this area to date that have been influenced by the climate-related risks and opportunities
- If a certain strategic decision was informed by the climate-related scenario analysis, please specify that
- If your strategy in this area has not been influenced by climate-related risks and opportunities, explain why not
- If the evaluation of influence is still in progress, include a companyspecific description of the evaluation process used, and when it is expected to be completed



# **3.3 Describe where and how climate-related risks and opportunities have influenced your strategy**

Business area F c s	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and Y services	<i>r</i> íes	Influence on strategy (medium-term horizon): Our growth and profitability depend on our ability to anticipate or respond to changing consumer preferences. Public concern about climate change is higher than ever and consumers are increasingly choosing more sustainable brands. Consumers in a number of our markets are increasingly adopting plant-based diets which have a lower GHG footprint than meat-based diets. The global plant-based meat market is growing significantly and expect the global market for plant-based products to rise to USD 1.6 trillion dollars. To support our growth ambitions, it is imperative that we understand the market opportunities from plant-based foods and invest in innovation capability accordingly. Case study of strategic decision: We have identified plant based as one of our Unilever Compass 'strategic choices', to develop our portfolio into high growth spaces. In 2020, Unilever announced an annual global sales target of €1 billion from plant-based meat and dairy alternatives, by 2025-2027. The growth will be driven by the roll-out of The Vegetarian Butcher which is growing in all 55 markets. The latest addition to its meat alternatives is Patty on the back burger. Our plant-based ice cream range continued to grow with Ben and Jerry's, Magnums, Breyers, Cornetto, Carte D'or, and Swedish Glace. We have also launched Rinde Mas, a blend of herbs spices,



# 3.4 Describe where and how climate-related risks and opportunities have influenced your financial planning.

### Financial planning elements that have been influenced:

- Revenues
- Direct costs
- Indirect costs
- Capital expenditures
- Capital allocation
- Acquisitions and divestments
- Access to capital
- Assets
- Liabilities
- None of the above

### Description of influence

- Provide details on how climate-related risks and opportunities have influenced the selected elements of your financial planning. Including a case study for at least one of the elements selected
- Specify the time horizons this planning covers
- If you selected "None of the above", explain if there is another element of financial planning that has been influenced; or why climate-related risks and opportunities have not yet influenced your financial planning



# 3.4 Describe where and how climate-related risks and opportunities have influenced your financial planning.

Business area	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Revenues	Yes	As part of our TCFD aligned Climate Scenario Analysis, Telstra identified a number of climate-related risks that pose a
Direct costs		risk to CAPEX, OPEX, revenues and costs which has influenced our financial planning. For example, higher mean
Indirect costs		(average) temperatures associated with climate change in Australia will likely increase the energy consumption and
Capital expenditures		direct/indirect costs required to operate our telecommunications network infrastructure and assets, such as data centres
Capital allocation		and exchange buildings, fibre network, international subsea cables, poles, ducts and pipes. To mitigate this, Telstra
Acquisitions and		specifically includes climate change risks and opportunities identified through regular risk assessments as parameters in
divestments		the financial decisions about capital expenditures. For example, since 2011, we have invested \$73.5 million in improving
Access to capital		the energy efficiency of our facilities. This year alone, we invested \$8.6 million in energy reduction projects that delivered
Assets		collective savings of 18,537 tCO2e and more than 19,335 MWh of electricity. Having a dedicated budget for energy
		efficiency has helped Telstra reduce the potential for increased energy costs due to climate-related impacts and is
		covered as part of our financial planning in the short- and medium-term time horizons. []

## **Overview of Module Questions**

4. Reported Emissions, Targets & Performance



4.1	Do you evaluate your organization's GHG emissions?
4.1a	(If yes) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
4.2	What were your organization's gross global Scope 1 and 2 emissions in metric tons CO2e?
4.3	Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
4.3a	(If yes) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.
4.4	How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?
4.4a	("Increased", "Decreased", "Remained the same overall") Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.
4.5	Describe your emissions in the context of an appropriate business metric (Emissions intensity).



### 4.1 Do you evaluate your organization's GHG emissions?

# Sources of greenhouse gas (GHG) emissions:

- Scope 1 direct GHG emissions that occur from sources that are controlled or owned by an organization
- Scope 2 indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling
- Scope 3 all indirect GHG emissions (not included in scope 2) that occur in the value chain of an organization





4.1a (If yes) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

### Common standards, protocols or methodologies used by Hong Kong companies including but not limited to

- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- The Intergovernmental Panel on Climate Change (IPCC) Synthesis Report (AR5) (2014)
- Hong Kong Environmental Protection Department, Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings, 2010





## 4.2 What were your organization's gross global Scope 1 and 2 emissions in metric tons CO2e?

### Sources of Scope 1 emissions

- GHG emissions from stationary combustion sources
- GHG emissions from mobile combustion sources
- HFC and PFC emissions

### Examples of activities resulting in Scope 1 emissions

- Combustion of fuels in stationary sources to generate electricity, heat or steam (e.g. electricity generators, boilers, gas cooking stoves, etc.)
- Combustion of fuels in mobile sources (e.g. motor vehicles and ships) controlled by the reporting entity
- Hydrofluorocarbons and perfluorocarbon emission during the use of refrigeration and air conditioning equipment and other fugitive emissions



## 4.2 What were your organization's gross global Scope 1 and 2 emissions in metric tons CO2e?

Calculating Scope 2 emissions					
Emissions [tCO2e] = Activity Data [MWh] * Emission Factor [tCO2e/MWh]					
<ul><li>Activity Data</li><li>Electricity consumed [MWh]</li><li>Gas consumed [MWh]</li></ul>	<b>Location-based</b> method: use grid-average emission factors		Market-based method: use emission factors derived from qualifying contractual instruments. e.g. RECs, PPAs		

### Emission Factors for Hong Kong/Mainland China-based operations:

Electricity / fuel type	Emission Factor	Source
Electricity supplied by Hong Kong Electric	0.68 kg CO2e / kWh	Hong Kong Electric Sustainability Report 2022
Electricity supplied by CLP	0.39 kg CO2e/kWh	CLP 2022 Sustainability Report
Gas supplied by Towngas	0.576 kg CO2e / Unit	Towngas ESG Report 2022
National Emission Factors for Mainland China	0.5703 kg CO2/kWh	The Ministry of Ecology and Environment of People's Republic of China (2022))



## 4.2 What were your organization's gross global Scope 1 and 2 emissions in metric tons CO2e?

### Location-based method

Reflects the average emissions intensity of grids on which energy consumption occurs

Examples: regional or sub-national emission factors, national production emission factors



### Market-based method

Reflects emissions from electricity that companies have purposefully chosen (or their lack of choice)

Examples: electricity attribute certificate or equivalent instruments, contracts for electricity such as PPAs, supplier/utility emission rates





4.3 Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

4.3a (Yes) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Relevance of Scope 1 emissions/ Scope 2 (location-based or market-based) from this source

- No emissions excluded
- No emissions from this source
- Emissions are not relevant
- Emissions are relevant but not yet calculated
- Emissions from this source are relevant and have been calculated, but are not disclosed
- Emissions excluded due to a recent acquisition or merger
- Emissions are not evaluated

#### Explain why this source is excluded

Describe why the sources is excluded and its significance

# Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 1+2 emissions the excluded source represents = 100% x (Estimated Scope 1+2 emissions the excluded source represents) / (Total gross Scope 1+2 emissions reported in C4.2)

# Explain how you estimated the percentage of emissions this excluded source represents

 Methodologies: Direct comparison/ pro-rata extrapolation/ benchmarking



# 4.3a (Yes) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

#### Source

HFC (hydrofluorocarbon gases)

#### Relevance of Scope 1 emissions from this source

Emissions are not relevant

# Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

#### Explain why this source is excluded

The emissions from air conditioning units are considered not to be relevant as they refer to a very small amount of HFC gases refilled during the reporting year.

# Estimated percentage of total Scope 1+2 emissions this excluded source represents

0.0%

# Explain how you estimated the percentage of emissions this excluded source represents

Even considering a refill of 10 kg of HFC-23, which has the highest GWP value for 100-year time horizon (12,400 from Fifth Assessment Report - AR5), the GHG emission could be at most equivalent to 124 tCO2eq (0.08% of overall S1+S2 emissions)



4.4 How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

### **Response Options for 4.4**

- Increased
- Decreased
- Remained the same overall
- This is our first year of reporting, so we cannot compare to last year
- We don't have any emissions data

### How to calculate the change in emissions

Total change in emission = Total gross Scope 1+2 emissions for the current reporting year – previous year's total gross Scope 1+2 emissions

If the resulting figure is **negative**, then your company's overall emissions **decreased** compared to the previous year.

If the resulting figure is **positive**, overall emissions have **increased** compared to the previous year.

If the resulting figure is equal to **zero**, overall emissions have **not changed** compared to the previous year.



4.4a ("Increased", "Decreased", "Remained the same overall") Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Reason	Change in emissions (metric tons CO <sub>2</sub> e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	519.0	Decreased	1.29	The amount of renewable energy produced and consumed on our factory and office sites increased this year. This was led by increasing the amount of installed photovoltaics in our factories and offices around the world. This change accounts for -519 tCO2e emissions globally519/40157=-1.29%
Change in output	3453.0	Increased	8.6	The consumer business net sales increased by 7.53% as a result of post Covid growth, at the same time our production Centers ramped up volumes by 8.23%. Therefore the impact of change in output is calculated by considering 7.53% emission increase in office emissions and 8.23% increase in production centers emissions. 7.53%*13637 +8.23% *29484= 3453.4 ton.



# 4.5 Describe your emissions in the context of an appropriate business metric (Emissions intensity)

### **Emissions intensity**

Intensity measures describe an organization's CO2e emissions in the context of another business metric. In this way, the emissions are normalized to account for growth.

- Emissions intensity is calculated by dividing the CO2e emissions figure by an alternative business metric such as the number of full-time equivalent employees, the revenue or tons of aggregate produced
- Common emission intensity "per unit total revenue"
- Make sure that the revenue figure refers to the same organisational boundary of your emissions data

#### Worked examples

A reporting organization has gross total combined Scope 1 and 2 emissions of 300,000 metric tons CO2e, revenue of 5 million US\$ and 3,000 FTE employees.

**1)** Emissions intensity in metric tons CO2e per unit currency total revenue

- = 300,000 (metric tons CO2e) / 5,000,000 (US\$) = 0.06
- **2)** Emissions intensity in metric tons CO2e per FTE employee
- = 300,000 (metric tons CO2e) / 3,000 (FTE employee) = 100

## **Overview of Module Questions**

4. Reported Emissions, Targets & Performance



4.6	Did you have an emissions target that was active in the reporting year?
4.6a	(Absolute target) Provide details of your absolute emissions target(s) and progress made against those target(s).
4.6b	(Intensity target) Provide details of your emissions intensity target(s) and progress made against those target(s).
4.6c	(No target) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.
4.7	Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
4.7a	(If yes) Provide details on the initiatives implemented in the reporting year.



## 4.6 Did you have an emissions target that was active in the reporting year? & 4.6a & 4.6b

### Types of Targets:

- Absolute target: tons CO2e reduced
- Intensity target: kg CO2e / (product/revenue) reduced
- Specify if it is a Science-Based Target

Examples of absolute emission	<ul> <li>Metric tons CO2e or % reduction from base year</li> </ul>	
reduction targets	<ul> <li>Metric tons CO2e or % reduction per year</li> </ul>	
Examples of intensity emission reduction targets	<ul> <li>Metric tons CO2e or % reduction per unit of product (e.g. metric ton of paper; metric ton of aluminum) relative to base year</li> </ul>	
	<ul> <li>Metric tons CO2e or % reduction in emissions from business flights per employee</li> </ul>	

4.6a Provide details on your absolute emissions target(s) and progress made against those target(s):

- Year target was set
- Base year
- Covered emissions in base year (metric tons CO2e)
- Target year
- Targeted reduction from base year (%)
- Covered emissions in target year (metric tons CO2e)
- Covered emissions in reporting year (metric tons CO2e)
- % of target achieved
- Is this a science-based target



4.6a (Absolute target) Provide details of your absolute emissions target(s) and progress made against those target(s).

		Adobe
Year target was set	2019	2019
Scope	Scope 1 and Scope 2	Scope 3
Base year	2018	2018
Covered emissions in base year (metric tons CO2e)	59,990	84,401.0
Target year	2025	2025
Target reduction from base year (%)	35	30
Covered emissions in target year (metric tons CO2e)	20,996.5	25,320.3
Covered emissions in reporting year (metric tons CO2e)	35,383.0	1,187.0
% of target achieved	117.2	328.6
Is this a science based target	Yes, and this target has been approved by the Science Based Targets initiative	Yes, and this target has been approved by the Science Based Targets initiative



# 4.6b (Intensity target) Provide details of your emissions intensity target(s) and progress made against those target(s).

	F	IP
Year target was set	2018	2016
Scope	Scope 3	Scope 3
Scope 3 category (ies)	Category 11: Use of sold products	Category 1: Purchased goods and services
Intensity Metric	Metric tons CO2e per unit of production	Metric tons CO2e per unit revenue
Base year	2015	2015
Intensity figure in base year (metric tons CO2e)	100	7.88e-05
Target year	2025	2025
Target reduction from base year (%)	30	10
Intensity figure in target year (metric tons CO2e)	70.0	7.092e-05
Intensity figure in reporting year (metric tons CO2e)	67.0	7.37e-05
% of target achieved	110.0	64.7
Is this a science based target	Yes, and this target has been approved by the Science Based Targets initiative	Yes, and this target has been approved by the Science Based Targets initiative



# 4.6c (No target) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

### **Response options**

- We are planning to introduce a target in the next two years
- Important but not an immediate business priority
- Judged to be unimportant, explanation provided
- Lack of internal resources
- Insufficient data on operations
- No instruction from management
- Other, please specify

### **Five-year forecast**

- forecast the expected direction of change
- provide a quantitative description of the forecasted change in emissions
- provide a brief description of the reasons you forecast this change, or in the unlikely event no change, in emissions over the next five years

### **Please explain**

provide an explanation of why you do not have a target and the timeline to implement one, if applicable



## 4.7 Did you have emissions reduction initiatives that were active within the reporting year?

### Rationale

Reporting emission reduction initiatives helps data users to understand your organization's commitment to reducing emissions beyond business-as-usual scenario.

Provide details on the initiatives implemented in the reporting year:

- Category and type of initiative
- Estimated annual CO2e savings
- Scope(s)
- Annual monetary savings
- Payback period

### Initiative category examples:

- Energy efficiency in buildings
- Energy efficiency in production processes
- Waste reduction and material circularity
- Fugitive emission reductions
- Low-carbon energy consumption
- Company policy or behavioral change
- Transportation



### 4.7a (Yes) Provide details on the initiatives implemented in the reporting year

### Provide details on the initiatives implemented

Initiative category	Building Energy Management Systems (BEMS)
Initiative type	Energy efficiency in buildings
Estimated annual CO2e savings (metric tons CO2e)	236.0
Scope(s)	Scope 2 (location-based); Scope 2 (market-based)
Voluntary/mandatory	Voluntary
Annual monetary savings	USD 155,000.0
Investment required	USD 2,160,000.0
Payback period	11-15 years
Estimated lifetime of the initiative	16-20 years



# THANK YOU!

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