



TCFD 102 Training Workshop

Building experience in climate-related financial
reporting



Today's Hosts

Main Facilitators



Evan Guy
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Additional Support



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Agenda for today's session

Time	Content
15:00-15:15	Session overview & introductions
15:15-15:55	1. Deep dive into the TCFD recommended disclosures Including good practice case studies
15:55-16:00	Break
16:00-16:15	2. Developing internal processes & overcoming challenges
16:15-16:35	3. Disclosure review discussion exercise
16:35-16:45	4. Supporting your TCFD journey: Further resources & TCFD 102E
16:45-17:00	Questions & session closeout

Housekeeping & workshop interaction

We encourage you to share your questions, views & experiences

- Please feel free to introduce yourself in the chat box.
- There will be time for Q&A towards the end of the training, but we encourage you to share your questions in the Q&A box throughout the session.
- During the Q&A, please use the raise hand function if you would like to ask your question in person. Your mic will be unmuted when you are called upon to speak
- We will take a short break halfway through the session.
- All presentation materials will be sent to participants after the event.

The TCFD Training Programme



TCFD 101

Live workshop: Getting started with climate-related financial reporting



TCFD 102

Live workshop: Building experience in climate-related financial reporting



TCFD 102E

Self-guided online learning: Supporting your ongoing TCFD journey

Learning objectives for TCFD 102



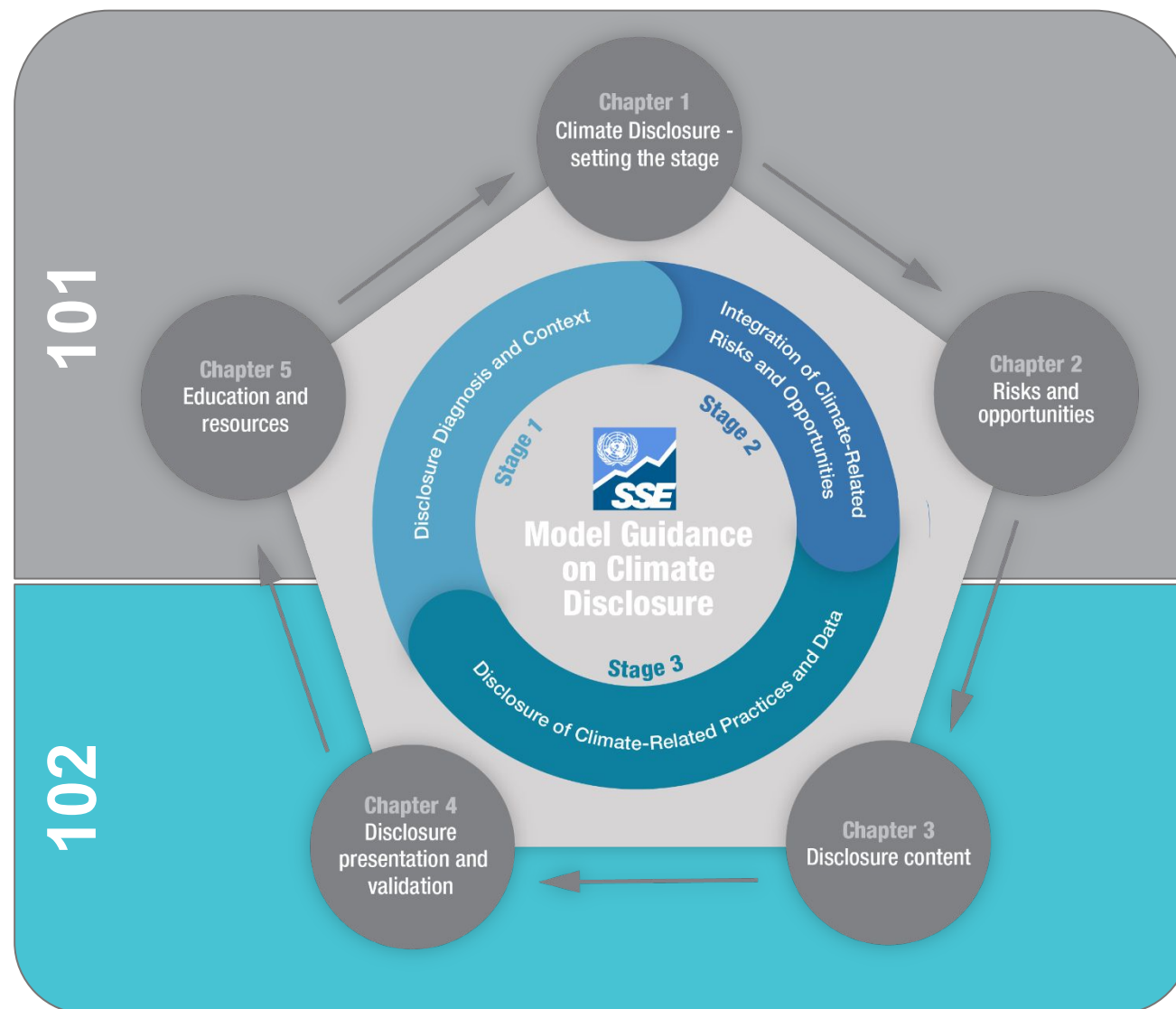
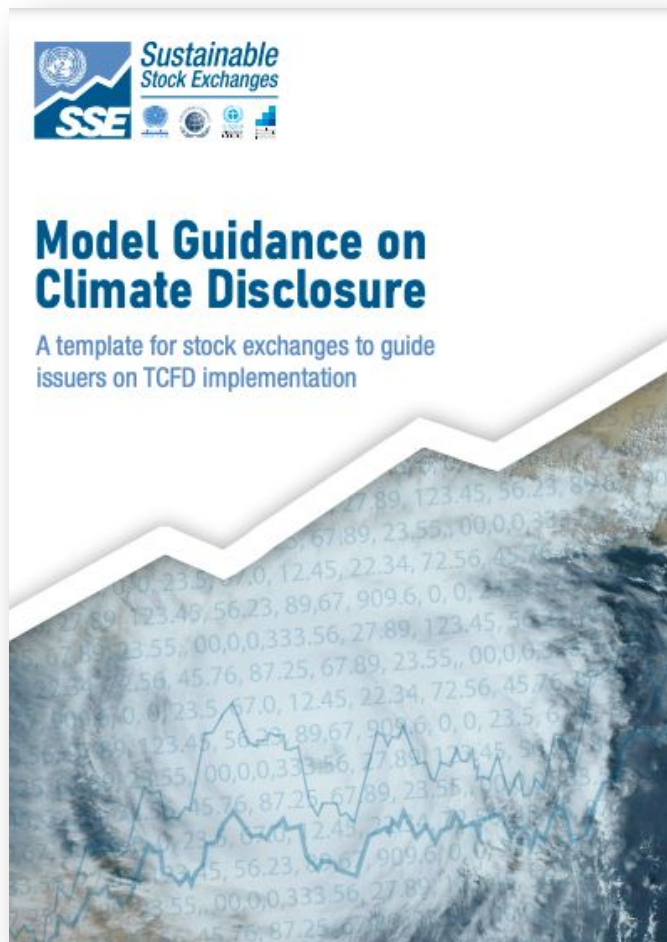
TCFD 102

Live workshop: Building experience in climate-related financial reporting

By the end of today's workshop, participants should:

1. Build a **detailed understanding** of the TCFD recommended disclosures and how to achieve **practical implementation**.
2. Understand what **good practice** looks like, through **case studies**.
3. Identify the **internal processes** necessary to support climate risk & opportunity reporting, and how to overcome **common implementation challenges**.

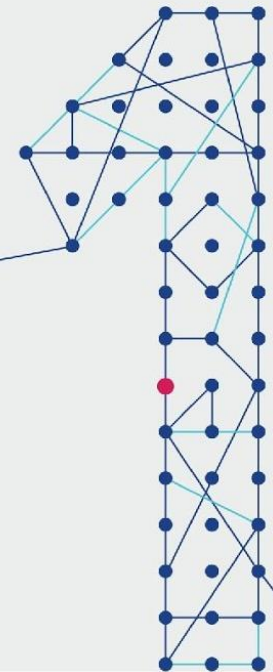
SSE Model Guidance - A reference tool



Q1: Which of the TCFD core elements do you think is the most challenging to implement?

- ❑ Governance
- ❑ Strategy
- ❑ Risk Management
- ❑ Metrics & Targets

Deep dive into the TCFD recommended disclosures



An overview...

STRATEGY (Risks & Opportunities)

Risks & Opportunities identified

Impacts on strategy & financial planning

Resiliency (Scenario Planning)

- Physical risks
- Transition risks
- Opportunities

Metrics & Targets

Metrics

Emissions (Scope 1, 2, 3)

Targets

- Comparable
- Consistent

GOVERNANCE

Board oversight

Management oversight

- Committees
- Processes/Mechanisms
- Time lines

Governance

Strategy

Risk Management

Metrics and Targets

RISK MANAGEMENT

Identification & assessment

Management processes

Integration







RISK MANAGEMENT PROCESS



Case study: Lendlease

Our disclosure progress and next steps

The below table provides a summary of our TCFD disclosure. For further detail related to this and previous disclosure, please visit the Lendlease website (www.lendlease.com).

		Actions	FY19-20	FY21	FY22
Governance	Disclose the organisation's governance around climate related risks and opportunities	Strengthen Board and Management oversight of climate related risks through Board Sustainability Committee		→	
		Establish cross functional TCFD Steering Committee chaired by Chief Commercial Risk Officer		→	
Strategy	Disclose the actual and potential impacts of climate related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material	Identified climate related risks and opportunities for each scenario			
		Impact of climate related risks and opportunities on the entity			→
		Assess the effect of climate related risks and opportunities on decisions and plans of the entity			→
		Resilience of climate related risks and opportunities (see page 53)			→

 Completed  Commenced → Ongoing action

For each TCFD core element, Lendlease report transparently on their progress. This includes both the actions they have taken in the reporting year, and those which are planned for future.

Communicating your **roadmap for TCFD adoption** over time demonstrates to your investors that you have a clear plan in place to align to the recommendations over time, whilst providing transparency over areas for future improvement.

Governance

Disclose the organisation's governance around climate-related risks and opportunities.

What do investors want to know?

- Insight into the governance and risk management context in which financial and operating results are achieved.
- To understand if climate-related issues receive appropriate board and management attention, and are taken into account in decision-making.

Governance



Disclose the role of the board of the organisation in overseeing climate-related issues.

Consider including a discussion of:

- Processes and frequency by which the board and/or board committees (e.g. audit, risk, or other committees) are informed about climate-related issues,
- Whether the board considers climate-related issues when reviewing strategy, risk management policies, expenditure, etc; and
- How the board monitors and oversees progress against targets for addressing climate-related issues.

Governance

G
b) Disclose the role of management in assessing and managing climate-related issues.

Consider including a discussion of:

- Whether your organisation has assigned climate-related **responsibilities** to management-level positions or committees;
- Description of the associated **organisational structure(s)**;
- Processes by which **management is informed** about climate-related issues; and
- How management **monitors** climate-related issues.

Case study: BOC Hong Kong Holdings Limited

Governance structure outlined visually, with **identification of committees with specific accountability** in relation to climate change.

Three-tier Governance Structure



The composition and major duties of the Committee as of 31 December 2021 are as follows:

Composition ¹	Major Duties
Mdm CHENG Eva (Chairman) ²	Reviewing the Group's sustainability strategies, goals and priorities, as well as material sustainability-related policies
Mr SUN Yu ³	Reviewing environmental, social and governance issues which are material to the Group, and related measures
Dr CHOI Koon Shum ²	Overseeing the Group's sustainability performance
Mr KOH Beng Seng ²	Overseeing the Group's corporate culture and reviewing related policies
Mr LAW Yee Kwan Quinn ²	Determining appropriate reporting principles and boundaries, and reviewing the Sustainability Report
Mr TUNG Savio Wai-Hok ²	

The **roles and responsibilities** for of the relevant committees are broken out in narrative descriptions.

Later on key discussions and activities of the Sustainability Committees are described, which helpfully identifies some of its key areas of focus in the reporting year.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning **where such information is material.**

What do investors want to know?

- Alignment of a company's underlying future vision with its business model;
- Risks and opportunities recognised through scenario analysis and processes to incorporate them into the company's strategy and financial plans.

Strategy

- S** Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.
- a)**

Consider including a discussion of:

- What do you mean by short-, medium- and long-term?
- What **material** opportunities and risks have you identified for each?
- What process(es) have you used to determine whether they will have a financial impact on your organisation?

Strategy

S Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.









b)

Consider including a discussion of the impacts on:




- Products and services
- Supply chain and/or value chain
- Adaptation and mitigation activities
- Investment in research and development
- Operations (including types of operations and location of facilities)

Qualitative Climate-Related Risk Assessment

Sources of risk arising from transition and physical risks, and examples of potential transmission channels are laid out below, while the resulting financial risks to CIMB are contained on the following page.

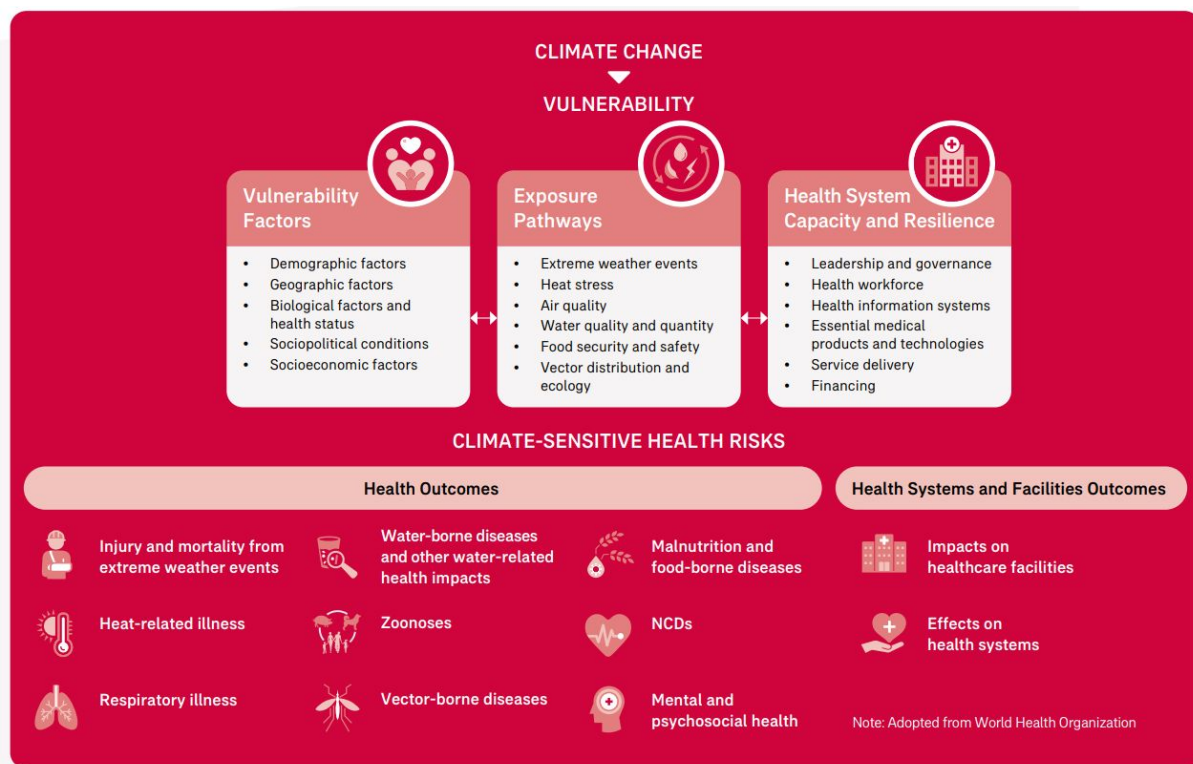
Sources of Risk			Examples of Potential Transmission Channels
Risk Category	Risk Type	Examples of Risk	
 Transition Risk	 Policy and Legal Risk	<ul style="list-style-type: none"> Policy and regulatory changes, e.g. GHG emission reduction policies including carbon taxation, outright bans on carbon-intensive activities Legal liabilities (e.g. class action on companies that cause haze pollution) 	Lower corporate profitability (e.g. due to increase in energy prices) and increased litigation
	 Technology Risk	<ul style="list-style-type: none"> Accelerated obsolescence of higher emission technologies, replaced with new low-carbon technologies Sudden rush of capital expenditures on unproven low-carbon technologies 	Corporate devaluation or premature asset write-downs (e.g. closure of coal-fired power plants due to lower cost of renewable energy)
	 Market Risk	<ul style="list-style-type: none"> Shifts in customer preferences Increased cost of raw materials or inputs, leading to higher production cost Reduced valuation of assets such as fossil fuel reserves 	Lower household wealth and higher inflation (e.g. rising living costs due to carbon cost pass-through and lower corporate profitability)
	 Reputational Risk	<ul style="list-style-type: none"> Negative stakeholder perception, concern or feedback on carbon intensive sectors Customers shunning brands that are perceived to be associated with contributing to the climate crisis 	Rising public scrutiny on corporates' unsustainable behaviours and potential drastic loss of customers, impacting profitability
 Physical Risk	 Acute	<ul style="list-style-type: none"> Increased frequency and severity of extreme weather events such as floods and droughts 	Reduced, or complete loss of, residential and commercial property values in affected areas, and increase in prices of property in higher elevations
	 Chronic	<ul style="list-style-type: none"> Long term shifts in weather patterns including mean temperature, precipitation, and sea level 	Operational disruptions resulting in income loss (e.g. due to water shortages)

Case study: CIMB

Climate-Related Financial Risks		
Risk Type	Examples of Risk	Potential Time Horizon of Risk
 Credit Risk	<ul style="list-style-type: none"> Impact on repayment capacity of the customers, leading to a possible increase in the default rates Impact on the collateral value due to stranding of climate misaligned assets 	<ul style="list-style-type: none"> Medium- (1 – 5 years) to long-term (>5 years)
 Market Risk	<ul style="list-style-type: none"> High volatility and potential abrupt decline in the value of climate-incompatible securities underwritten or held by CIMB 	<ul style="list-style-type: none"> Medium- (1 – 5 years) to long-term (>5 years)
 Liquidity and Funding Risk	<ul style="list-style-type: none"> Inability of CIMB's customers to repay their facilities as contracted, which in turn affects the Group's cashflow requirements Significant withdrawals of deposits from customers to fund capital expenditures in low-carbon technology or to recover from damages caused by extreme events 	<ul style="list-style-type: none"> Medium- (1 – 5 years) to long-term (>5 years)

Disclosure of identified risks is provided in line with the TCFD risk types. Examples are given for each risk, and the 'transmission channel' by which it could **influence the bank specifically** is described. On the next page, financial risks connected to these issues are identified, with the time horizons directly mapped to each risk.

Case study: AIA Group



Climate-related risks		Common Manifestations of Risk	Primary Exposure to Insurers
Physical	Acute	<ul style="list-style-type: none"> Increased severity of extreme weather events such as cyclones and floods 	Operational Risk
	Chronic	<ul style="list-style-type: none"> Changes in precipitation patterns and extreme variability in weather patterns Rising mean temperatures Rising sea levels 	Insurance Risk
Transition	Policy and legal	<ul style="list-style-type: none"> Increased carbon pricing Enhanced emissions reporting obligations 	Investment Risk Structural Risk Business Risk Operational Risk
	Market and Technology	<ul style="list-style-type: none"> Substitution of existing products and services with lower emissions options Unsuccessful investment in new technologies Costs of transition to lower emissions technology Changing customer behaviour Uncertain market signals 	
	Reputation	<ul style="list-style-type: none"> Shifts in consumer preferences Stigmatisation of industry sector Increased stakeholders concern or negative stakeholder feedback 	
Liability	Litigation	<ul style="list-style-type: none"> Exposure to litigation 	Operational Risk
	Regulatory enforcement	<ul style="list-style-type: none"> Mandatory regulation of existing products and services Mandatory disclosure of climate-related information 	

AIA Group identifies climate-related risks (including physical and transition risks), and describes the possible transmission channels for those risks. To improve on this, AIA Group could illustrate the **potential financial implications of each of those risks listed.**

Strategy

S
c) Disclose the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Consider including a discussion of:

- Have you used climate-related scenarios to inform the business strategy and financial planning?
- What are the climate-related scenarios and associated time horizon(s) considered?
- What are the implications of different policy assumptions, macro-economic trends, energy pathways, and technology assumptions used in climate-related scenarios to assess the resilience of the organisation's strategies?

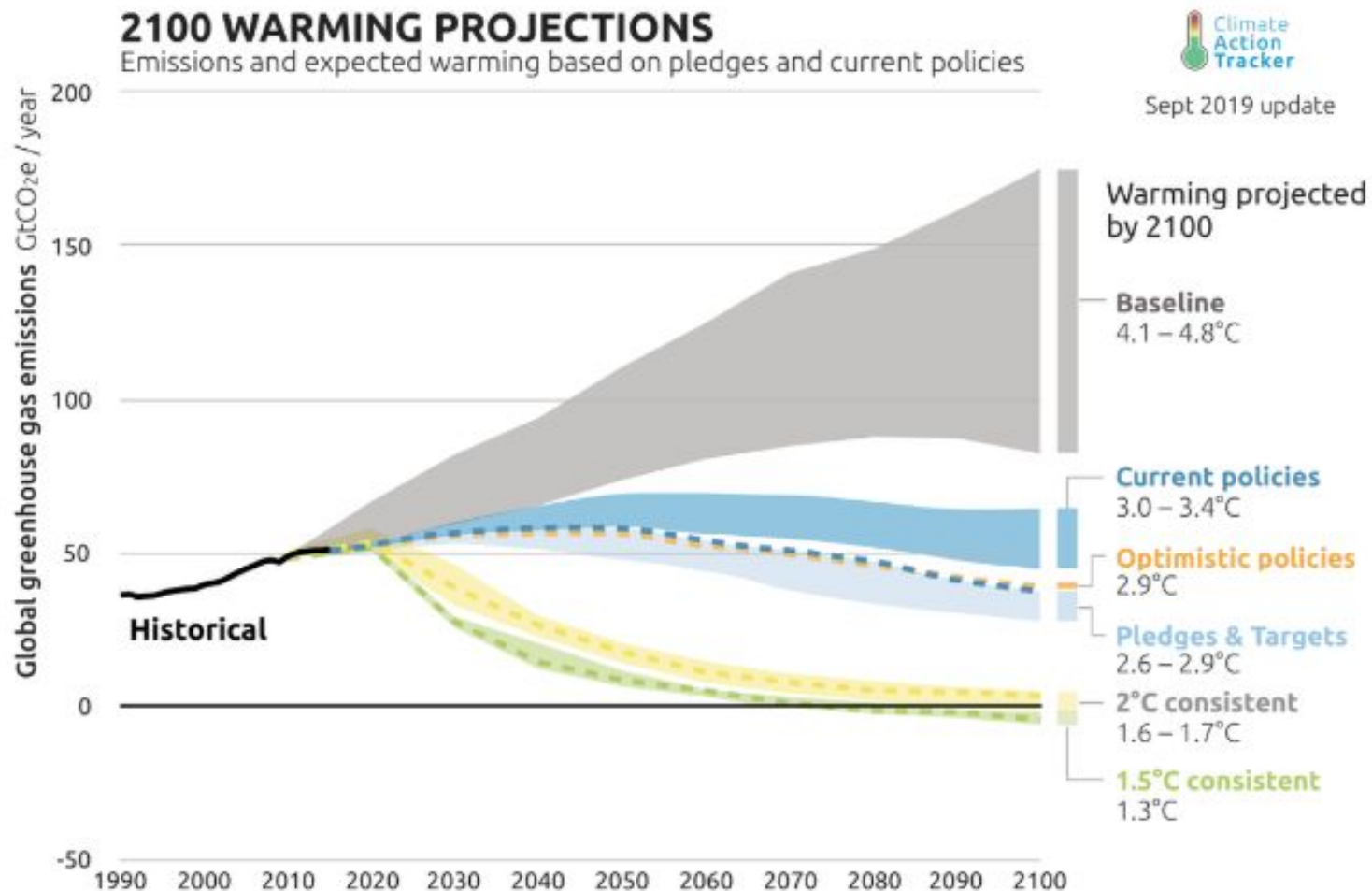
In focus: what is scenario analysis?

A method for developing strategic plans that are more flexible or robust to a range of plausible future states.

- Explore alternatives that may significantly alter the basis for “business-as-usual” assumptions.
- A scenario describes a **pathway** of development leading to a particular **plausible** (but not necessarily ‘desirable’) outcome.
- Scenario analysis is a **tool to enhance critical strategic thinking** and should be understood as narratives based on multiple scenarios.
- What is important is not credibility of the results of analysis, but the responses to the expected futures.

Scenario analysis is not a prediction of future performance.

What are climate scenarios?

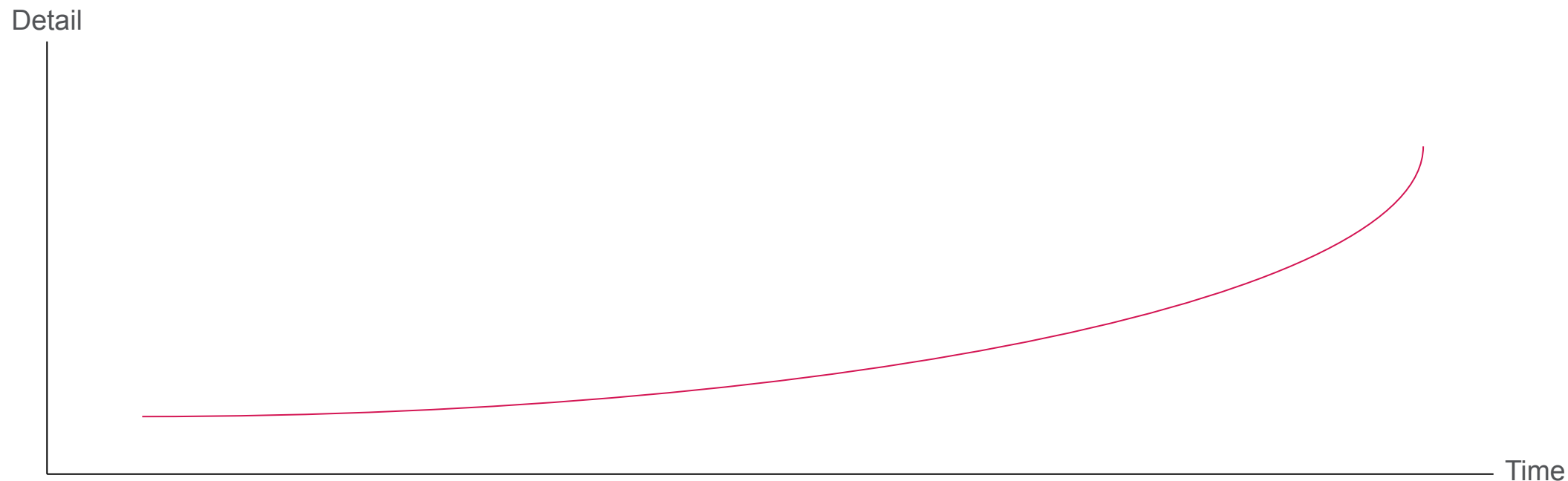


Source: *Climate Action Tracker*

A variety of potential societal pathways

- International and national climate policy responses.
- Reductions targets in GHG emissions.
- Changes required to the energy mix and infrastructure.
- Increased investment in new technologies.
- Shifts in consumer behaviours and demands.
- Potential for sudden, abrupt changes under high warming scenarios.

Completing a scenario analysis



Organisations may choose to start with **qualitative scenario narratives** or storylines to help explore the potential range of climate change implications.

The scenarios and associated analysis of development paths can use quantitative information to illustrate potential pathways and outcomes.

Greater rigor and sophistication in the use of data sets and quantitative models and analysis may be warranted.

Case study: Allianz

Assets and business impact under transition scenarios (source: Allianz, excerpt)

Global		2°C					1.5°C				
		2020	2025	2030	2035	2040	2020	2025	2030	2035	2040
Energy	Integrated oil and gas	(M)	(M)				(M)				T
Energy	Oil and gas storage and transportation										
Energy	Coal and consumable fuels				T, P	T, P				T, P	T, P
Materials	Fertilizers and agricultural chemicals	(T)	(T)	(T)	(T)	(T)	(T)	(T)	(T)	P	
Materials	Aluminium										
Materials	Steel										
Industrials	Industrial conglomerates										
Industrials	Airlines	(T)	P				(T)	P			
Consumer discretionary	Auto components										
Consumer discretionary	Automobiles			P	P, T	T		P	P	P, T	P, T
Utilities	Electric utilities	P	(M)		P	P	P	(M)		P	P
Utilities	Renewable electricity				T	T				T	T

Risk enhancer:

P = policy

T = substitution technology

M = related market forces

Risk mitigator:

(P) = policy

(T) = little substitution technology

(M) = countering market forces

Risk:

Low

Medium

High

Very high

Allianz heatmap shows various time horizons, asset types, risk levels, and factors that may enhance or mitigate potential risk exposures in order to increase resilience (e.g., policy, technology substitutions, and other market forces).

It also includes **two scenario** test 2°C and 1.5 °C.

Case study: HSBC Holdings

HSBC provides a comprehensive description of the scenario analysis it conducted. Here it includes the consideration of transition scenarios that are **orderly, disorderly, and hot house**. It considers what these different scenarios will imply for the various sectors and sub-sectors for which it offers financial services.. Crucially, the company provides a narrative description of the main **impacts of these climate transition risks on the business**.

A particular strength of the disclosure is the concluding statement that demonstrates how it plans to bolster its **resilience to climate-related risks**. The disclosure explains that it will expand its scenario analysis methodology beyond credit risk, forecasting key climate metrics, integrating climate scenario analysis into risk management, business decisions and strategic planning.

Sector	Sub-sectors	Projected impact			Impact analysis
		Orderly	Disorderly	Hot house	
Building and construction	Construction	d	d	d	Companies with carbon-intensive production activities, such as steel and cement companies, are significantly impacted under the Orderly and Disorderly scenarios due to their expected vulnerability to carbon price increases and limited options currently available to transition.
	Steel	e	e	d	
	Cement	e	e	b	
Oil and gas	Integrated	c	c	c	A number of our oil and gas counterparties are operating in regions with low extraction costs, and are expected to be more resilient in transition scenarios.
	Services	c	c	b	
	Downstream	d	d	c	Profiting from greater diversification and size, integrated companies perform relatively better compared with counterparties specialised on one part of the value chain.
	Upstream	d	d	c	
	Midstream	d	d	c	
Automotive	Original equipment manufacturers	c	c	b	Impacts are broadly similar in the automotive sector under the transition risk scenarios due to a similar cumulative effect of electrical vehicle sales and carbon pricing over the 30 years. As expected, companies with existing investments in electrical vehicle manufacturing tend to be less impacted, particularly as they scale up over time. Dealers experience a more severe downgrade due to carbon pricing impacting current financial positions.
	Dealers	d	d	c	
	Suppliers	c	c	b	
Power and utilities	Gas and water utilities	c	c	b	Coal-focused companies are materially impacted in the transition scenarios. In contrast, renewables-focused counterparties benefit in the transition risk scenarios from the increase in demand for their products, lower carbon tax impacts and lower investment requirements. Overall, the ability of power and utilities companies to transfer costs to customers and the exposure to renewable-based power generators offsets negative impacts from fossil fuel-based counterparties.
	Power generation companies	c	b	b	
	Transmission, distribution and other electricity companies	c	c	a	
Chemicals	Chemical companies	e	d	c	Carbon-intensive processes significantly impact part of the chemicals sub-sector in the transition risk scenarios. In contrast, companies in the pharmaceutical and other sub-sectors tend to have less carbon-intensive processes, naturally leading to lower carbon costs and abatement expenses.
	Pharmaceutical companies	d	d	c	
Metals and mining	Core miners (bulk, base/diversified, precious metals)	d	d	c	As expected, coal-focused companies are heavily impacted under the transition risk scenarios. Energy transition miners, including companies mining lithium or copper, are less impacted due to an increased demand for electrification. Diversified miners also perform relatively better as they are able to shift away from coal to other minerals. Overall, energy transition and diversified miners offset some of the downgrades.
	Pure traders/services	c	c	c	

Lower Impact a b c d e Higher impact

1 This heat map is based on projected change in average credit ratings between 2020 and 2050 of counterparties by sector/sub-sector. Colours are defined based on the distribution of credit rating changes for the six key wholesale sectors. The bigger the credit rating downgrade, the more severely the counterparty is impacted.

Source: [Sasol Climate Change Report 2021 22Sep21.pdf](#)

Case study: Sasol

Sasol provide a description of the scenario analysis conducted for three different pathways and the assumptions for each. They **demonstrate how this testing shaped their strategy**, and some impacts on the business, and provide an overview of areas they will continue to monitor to ensure their business strategy will be resilient to climate-related risks.



Our qualitative robustness testing is reflected alongside and revealed the following key focus areas that directly shaped our strategy:

- Fossil fuel feedstock acceptability is constrained as you move from the Current Pathway to the Accelerating to 1,5°C scenario.** In response, Sasol is reducing our coal feedstock exposure over time, contributing to a lower emissions profile from our existing operations. We are also focusing on a flexible strategy that incorporates incremental gas, with an ability to pivot to green hydrogen, when affordable.
- Local market demand for liquid fuels, while slowly declining in the Accelerating to 1,5°C scenario compared to the Current Pathway, is still relevant to 2030.** In response, Sasol is choosing to be a partner of choice for mobility and commercial customers to preserve returns. We are also considering taking positions in advanced mobility aligned to our strengths. Progressively over time, we will expand opportunities into growing the local green hydrogen economy and participating in the global economy. Examples of areas of interest include, green hydrogen for long distance freight transport and own use, and green ammonia production, locally and for export.

The analysis highlighted several areas that we will track and monitor to reduce vulnerabilities in our strategy. These areas or signposts are indicated below (for additional risk information, see page 44):

- Pace of technology development and implementation, access to new technologies and an enabling environment;
- Carbon tax design uncertainty, especially in the South African context;
- Multiple sustainability obligations and associated costs or investments required; and
- Macro-economic drivers, such as oil and rand/dollar exchange rate.

The introduction and implementation of GHG reduction targets for our affected value chains, particularly in South African mitigates vulnerabilities of our business into the future.

Q2: Which of the following are true of scenario analysis? *(Select all that apply)*

1. It can be both qualitative and quantitative
2. It supports the development of flexible and robust strategies
3. The aim is to predict future business performance
4. Multiple scenarios should be considered
5. It is the same as science-based targets

Risk management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

What do investors want to know?

- Processes used to identify climate-related risks and opportunities, as well as their influence on business, strategy, and financial planning.
- Investors would be able to appropriately evaluate the impacts of climate change on a company's business model by understanding how it identifies and manages climate-related risks and how it takes advantage of opportunities.

Risk management

R
a) Describe the organization's processes for identifying and assessing climate-related risks.

Consider including a discussion of:

- How do you determine the relative significance of climate-related risks vs other risks?
- Do you consider existing and emerging regulatory requirements related to climate change?
- Existing risk classification frameworks used?

Risk management

R
b) Describe the organization's processes for managing climate-related risks.

Consider including a discussion of:

- How do you make decisions to mitigate, transfer, accept, or control those risks?
- How do you prioritise climate-related risks?
- How are materiality determinations made within your organisation?

Risk management

R
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Consider including a discussion of:

- Whether climate risk is considered a business risk?
- If it is material, should it be reported separately?

Case study: Cemex

CEMEX operates in a constantly evolving business landscape which exposes us to several types of risks that could impact the achievement of our strategic and operational objectives.

Aiming to maximize our shareholders' sustainable value, CEMEX has established an Enterprise Risk Management (ERM) framework that sets a proactive and structured approach to manage risks and capitalize on opportunities.

The risk management process, deployed throughout our operations, helps identify, assess, mitigate, and monitor CEMEX's main risks. This process emphasizes risk discussions by decision-makers and risk oversight by the Board of Directors.

Risk agendas are developed at a global, regional, country, and business unit level at least twice a year. Risk agendas include all types of risks, trends, emerging concerns, and opportunities that could impact CEMEX in the short (zero to two years), medium (two to five years), and long term (five to ten years).

Other risk management areas and processes within our company complement the surveillance and risk management function: Process Assessment, Internal Control, Legal, Financial Risk Management, ETHOS Compliance, and Sustainability.

Climate-related risks are **part of the company wider risk assessment**. Moreover, the diagram helps to understand management's role in identifying, assessing, monitoring, and mitigating climate-related risks and opportunities within an overarching Risk Management Process framework.

Risk Management Process

Our risk management process is an ongoing systematic approach present in corporate, regions, countries, and operational business units.

Our risk management process is based on international best practices from the Risk Management Society (RIMS) and Business Continuity Institute

(BCI). It is compliant with ISO 31000:2018-Risk management standards and ISO 22300:2018-Business continuity management systems. Furthermore, this process is conducted in compliance with our company's values, laws of the countries where we operate, and our Code of Ethics and Business Conduct.





Case study: Sainsbury's

Climate change risks are assessed in terms of the impact on our business model (climate resilience) and our impact on the environment. Risks are identified from the bottom-up and emerging risk assessments across the business and then reviewed in a specific climate change risk workshop to assess completeness. Climate resilience risks identified form an integral part of a number of our corporate risks and have been referenced in the existing principal risks we are disclosing, where appropriate. Risks around our impact on the environment are considered in the 'Environment and sustainability' principal risk. See page 15 for more information on our ongoing implementation of the TCFD recommendations.

Climate risk content is included in the main overview of the risk management system.

Business specific approach to managing and integrating climate risk is outlined, with connection to the TCFD chapter.

Environment and sustainability											
Risk	Mitigations										
<p>The environment and sustainability are core to Sainsbury's values, with our Net Zero 2040 commitments forming a key pillar of our strategic priorities. The key focus of the business in this area relates to reducing our environmental impact, which, if not achieved, could result in a financial and/or reputational risk.</p> <p>Direct oversight: Net Zero Steerco, Corporate Responsibility and Sustainability Committee</p> <p>Link to strategy: </p> <p>Movement: </p>	<p>— In line with our commitment made in 2020, we continue to invest £1 billion over 20 years to deliver on our Net Zero strategy, which focuses on becoming Net Zero across our operations by 2040, see page 14 for more information. Specific working groups are responsible for driving and executing the Net Zero Strategy, through delivering on seven commitments:</p> <table><tr><th>Reducing</th><th>Increasing</th></tr><tr><td>Carbon emissions</td><td>Recycling</td></tr><tr><td>Plastic packaging</td><td>Biodiversity</td></tr><tr><td>Water usage</td><td>Healthy and sustainable diets</td></tr><tr><td>Food waste</td><td></td></tr></table> <p>— In February 2021, we cemented our commitment to reducing greenhouse gas emissions by having our Scope 1, 2 and 3 targets approved by the Science Based Targets Initiative which shows our approach is aligned with the climate science and the ambitions of the Paris agreement</p> <p>— The Net Zero Steering Group, which leads the operational execution of the Net Zero plan and oversees working group activity, met 8 times during the year. In each meeting, the working groups provided the Steering Group with an update on progress being made towards our Net Zero commitments</p> <p>— The Corporate Responsibility and Sustainability (CR&S) Committee, which oversees the delivery of our Corporate Social Responsibility agenda, met three times during the year. In each meeting, the Net Zero Steering Group provided the Committee with an update on progress being made on delivering our Net Zero strategy. The CR&S Committee also receives progress updates on wider sustainability initiatives. See page 62 for more information</p> <p>— One of our key metrics used to measure and report on our strategic performance is to “deliver our Net Zero commitment” as explained in the “Our KPIs” section of this report. We will continue to monitor this metric and respond as appropriate to how it changes over time. We also publicly report on progress towards achieving our Net Zero targets twice a year, to ensure transparency</p>	Reducing	Increasing	Carbon emissions	Recycling	Plastic packaging	Biodiversity	Water usage	Healthy and sustainable diets	Food waste	
Reducing	Increasing										
Carbon emissions	Recycling										
Plastic packaging	Biodiversity										
Water usage	Healthy and sustainable diets										
Food waste											

Metrics and targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

What do investors want to know?

- The relationship between the company's strategy and business model, and the metrics and targets that are disclosed.
- The performance trends to get a better understanding of a company's actions.

Metrics and Targets

M
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Consider including a discussion of:



- Which performance metrics are used to assess and manage financially material climate-related risks and opportunities?
- Does the company measure climate-related opportunities, such as revenue from products and services designed for a lower-carbon economy?
- Has the company established an internal carbon price?

TCFD emphasizes seven categories of metrics intended to support comparability

Metrics in these categories are generally considered drivers of climate-related issues, useful for understanding management of those risks and opportunities, widely requested, and/or key inputs for estimating financial impacts.

Characteristics of Effective Climate-Related Metrics

Decision-Useful
Clear and Understandable
Reliable, Verifiable, and Objective
Consistent Over Time <ul style="list-style-type: none"> • Current • Historical • Forward-Looking

Cross-Industry, Climate-Related Metric Categories

GHG Emissions ¹	Absolute Scope 1, Scope 2, and Scope 3; emissions intensity
Transition Risks	Amount and extent of assets or business activities vulnerable to transition risks
Physical Risks	Amount and extent of assets or business activities vulnerable to physical risks
Climate-Related Opportunities	Proportion of revenue, assets, or other business activities aligned with climate-related opportunities
Capital Deployment	Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities
Internal Carbon Prices	Price on each ton of GHG emissions used internally by an organization
Remuneration	Proportion of executive management remuneration linked to climate considerations

Source: <https://www.fsb-tcf.org/>

Metrics and Targets



Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

Consider including a discussion of:

- The company's greenhouse gas emissions, broken down into the relevant scopes aligned to the greenhouse gas protocol.
- A description of the value chain (scope 3) activities which are relevant for the business and the emissions associated with them, or plans to calculate these.
- Relevant methodologies, estimation techniques, and any data gaps for the greenhouse gas calculations.

Metrics and Targets

M Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.
c)

Consider including a discussion of:

- How has the company established and communicated climate-related performance targets?
- Does the organization's targets align with anticipated regulatory requirements, market constraints, or other goals?
- Do disclosures specify whether targets are absolute or intensity-based, the time frames over which they apply, and the base year from which progress is measured?

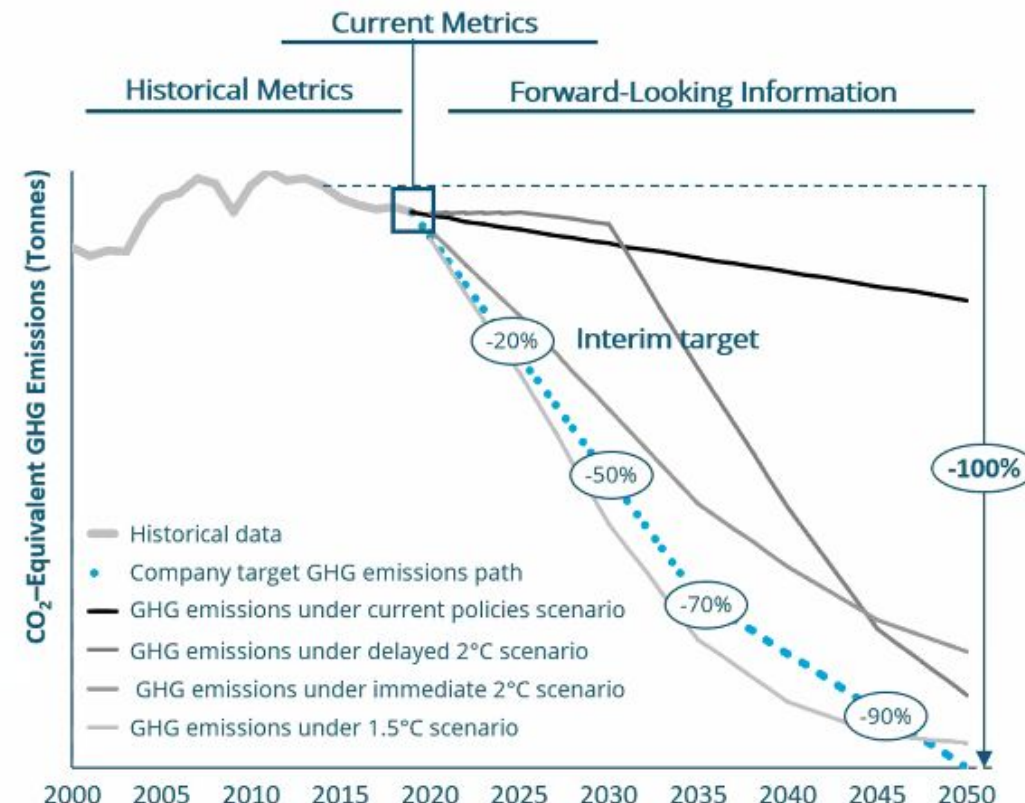
It reinforces key characteristics of effective disclosure of climate-related targets, including the importance of interim targets

Characteristics of Effective Climate-Related Targets

Aligned with Strategy and Risk Management Goals
Linked to Relevant Metrics
Quantified and Measurable
Clearly Specified over Time <ul style="list-style-type: none"> • Baseline • Time horizon • Interim targets
Understandable and Contextualized
Periodically Reviewed and Updated
Reported Annually

Example Relationship between Metrics and Targets (Hypothetical Firm)

Target: Our firm commits to reducing net Scope 1 and 2 GHG emissions—as defined by the GHG Protocol—to zero by 2050, with an interim target to cut Scope 1 and 2 GHG emissions by 50% relative to a 2015 baseline by 2030. We are working with suppliers to reduce Scope 3 GHG emissions.



Case study: British Land

Connecting metrics and targets to risks and opportunities

For each of British Land's identified climate-related risks and opportunities they clearly identify the associated metrics used to understand and manage the issue.

This helps to **demonstrate how the metrics they report against are directly connected to addressing the material risks** that they have identified for their business.

Metrics and targets

Below are the climate-related metrics and targets against which we currently report.

Climate-related risks

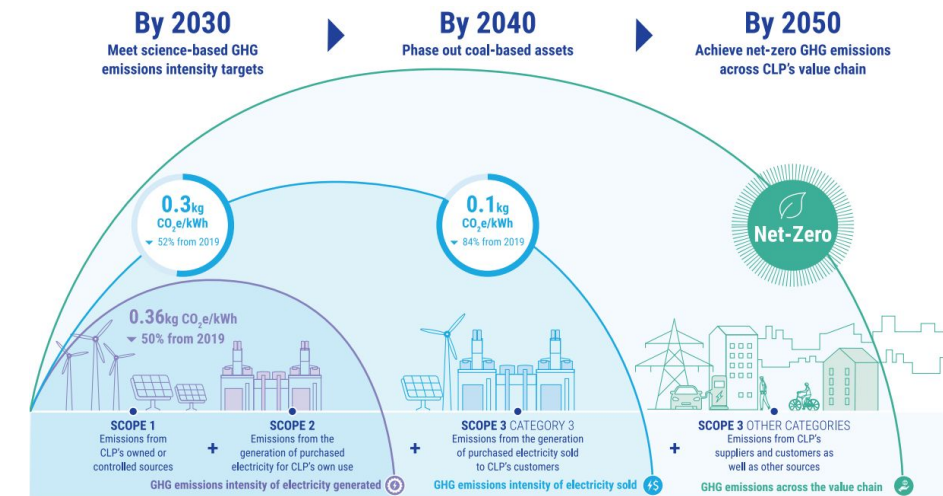
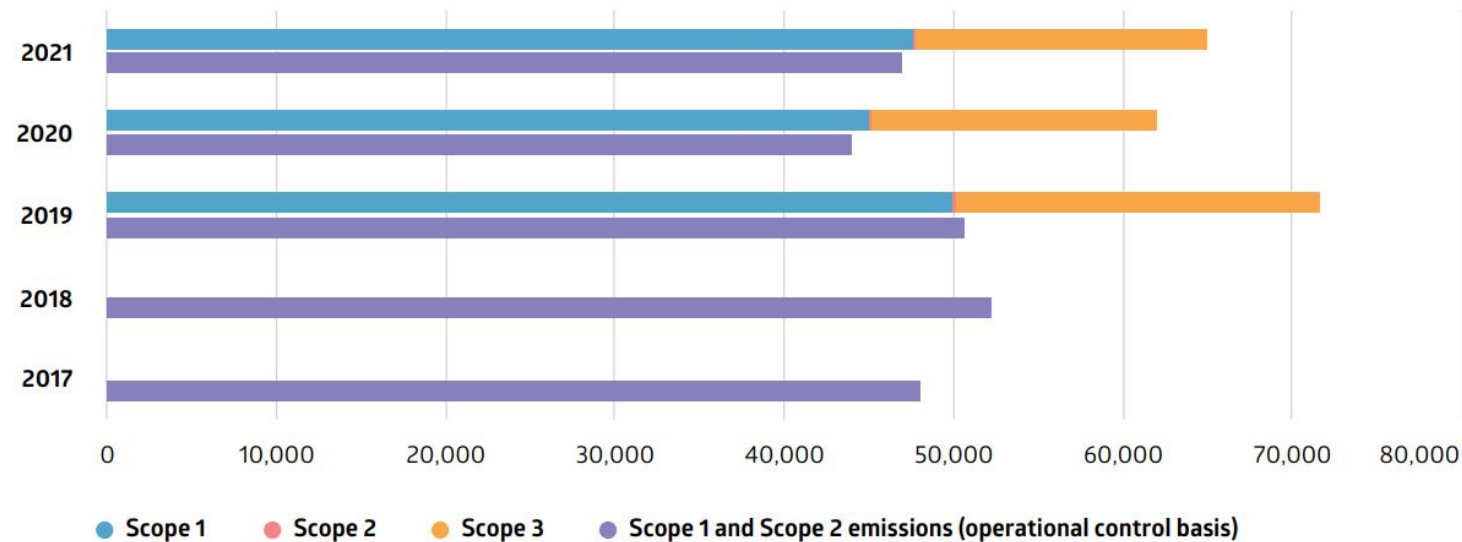
		2021	2020	2019
Policy and legal	EPCs rated F and G	5%	5%	5%
	EPCs rated A and B	24%	25%	22%
Extreme weather	Portfolio at high risk of flood (% by value)	1%	2%	3%
	High flood risk assets with flood management plans (% by value)	99%	100%	100%
Resource supply	Percent of fresh water withdrawn in regions with high or extremely high baseline water stress	To be reported in future years		

Climate-related opportunities

		2021	2020	2019
Resource efficiency	50% improvement in embodied carbon intensity of major developments completed from April 2020 (kg CO ₂ e per sqm)	640	nr	nr
	75% improvement in whole building carbon intensity of the managed portfolio by 2030 vs 2019 (Offices)	41%	23%	–
	25% improvement in whole building energy intensity of the managed portfolio by 2030 vs 2019 (Offices)	31%	16%	–
Energy sources	Electricity purchased from renewable sources	98%	96%	96%
	On-site renewable energy generation (MWh)	1,907	1,763	1,131
Products and services	Portfolio with green building ratings (% by floor area)	27%	24%	18%
	Proportion of gross rental income from BREEAM certified assets (managed portfolio)	53%	nr	nr

Source: <https://www.britishland.com/sites/british-land-corp/files/investors/results-reports-presentations/2021/2021-annual-report.pdf>

Case study: CLP Group




CLP discloses its metrics for its **scope 1, 2, and 3 greenhouse gas emissions** over time and the related risks.

They also set targets for managing their climate related risks and opportunities over **the short, medium and long-term**.

Source: [CLP Group 2021 Climate Related Disclosures Report](#)

Characteristics of good practice



TCFD TO-DO LIST

Effective climate-related financial disclosures must be:

<input type="checkbox"/> Presented – in the mainstream report	<input type="checkbox"/> Prepared – according to the same rigour as financial information
<input type="checkbox"/> Specific – to the reporting entity	<input type="checkbox"/> Coherent – across strategy, finance and impact
<input type="checkbox"/> Supported by leadership – with oversight and involvement from all relevant business areas and functions	<input type="checkbox"/> Qualified – contain a statement of conformance so that the reader understands the limitations
<input type="checkbox"/> Future-oriented – the plan is clear and stands up as being resilient	<input type="checkbox"/> Financed and resourced – current financing arrangements support the delivery of the plan
<input type="checkbox"/> Decision-useful – to providers of financial capital, responsive to your investors' feedback and with a continuous plan for improvement	



Q3: Which of the following are characteristics of effective climate disclosure? *(Select all that apply)*

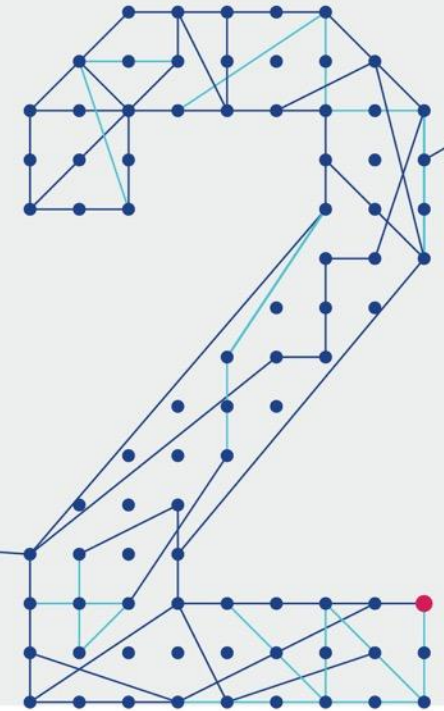
1. Specific to the reporting entity
2. Presented in a separate climate risk report
3. Prepared according to the same rigour as financial information
4. Future oriented



5 minute break

.....
Please return to the session promptly!

Overcoming challenges in internal implementation



Common challenges

How do I get leadership buy-in?

How do I include this in my mainstream report?

What should we report first?

How does this fit with other reporting standards and frameworks?

Why should we disclose information our peers aren't?

How do I get leadership buy-in?

- Assess whether your **key investors** are TCFD supporters
- Provide the **regulatory context** – mandatory disclosure is coming
- **Benchmark** your practices against your peers and sector leaders
- Arrange **training** for board and management on climate risk
- Explain the **strategic and financial implications** of climate change
- Identify potential climate-related **opportunities** for your organisation

How do I include this in my mainstream report?

- Separate TCFD disclosures are often a starting point, but **do not support the connection of climate and financial information.**
- Work with the authors of the different annual report sections to **embed cross references** to climate-related information where relevant, e.g. principal risks.
- Utilising **TCFD mapping and cross referencing tables.**
- Start with any existing content from **other sustainability disclosures**, e.g. CDP.
- Ensure **financially material information** is in the mainstream report; additional **non-material information** may be provided in supplementary reports.

Cross-referencing disclosures

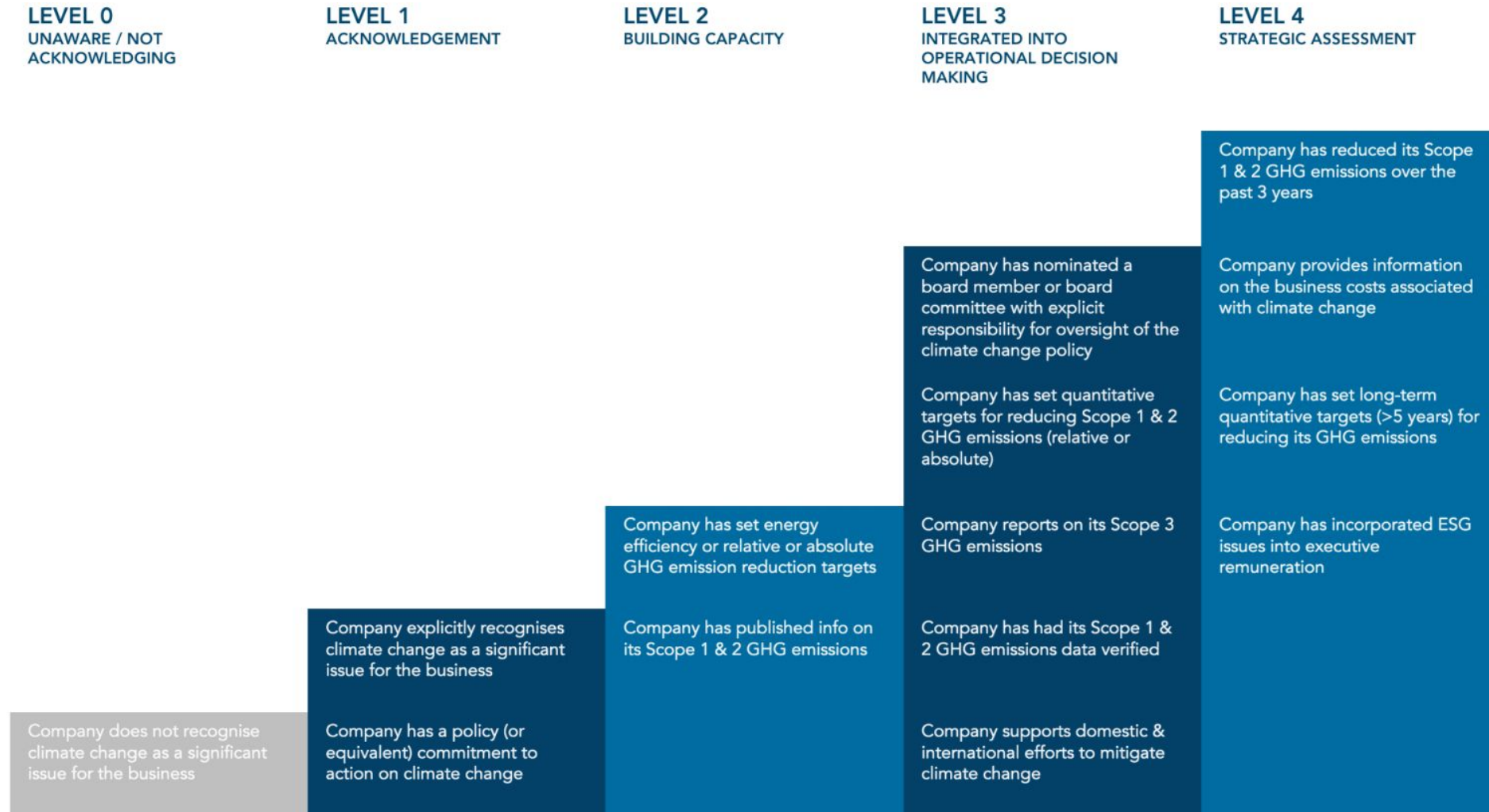
This example taken from TotalEnergies' 2020 Universal Registration Document (page 234) which demonstrates **where relevant information is presented in a number of reports** and cross-referenced in a table format.

TotalEnergies signposts to key sections in the Registration Document, but also to additional information in the Climate Change Report and their CDP disclosure.

Themes	Recommended TCFD disclosures	Source of information in TOTAL's reporting
Governance Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the board's oversight of climate-related risks and opportunities. b) Describe management's role in assessing and managing climate-related risks and opportunities.	URD 2020 – 5.6.1 CR p. 8 CDP C1.1 URD 2020 – 5.6.1 CR p. 1-7 CDP C1.2
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	URD 2020 – 5.6.2 CDP C2 URD 2020 – 5.6.2 CDP C3.1 URD 2020 – 5.6.2 CR p. 10-17
Risk management Disclose how the organization identifies, assesses, and manages climate-related risks	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	URD 2020 – 5.6.3 CDP C2.1, C2.2 URD 2020 – 5.6.3 CDP C2.2 URD 2020 – 5.6.3 CDP C3.1
Metrics & targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	URD 2020 – 5.6.4 CR p. 56 CDP C6, C10 URD 2020 – 5.6.4 CR p. 56 CDP C6, C10 URD 2020 – 5.6.4 CR p. 10-24, CDP C4.1, C4.2

Legend: CR = TOTAL 2020 Climate Report. CDP = TOTAL's 2020 response to the CDP Climate Change questionnaire (available on total.com).

What should we report first?



How does this fit with other reporting standards and frameworks?

- **CDP, CDSB, GRI, IIRC and SASB** frameworks and standards have all been mapped to the TCFD recommended disclosures.
- **Existing information** reported under these frameworks and standards can be used to provide TCFD-aligned climate disclosure, when **integrated within the mainstream report**.
- The **IFRS** are currently working on a prototype climate disclosure standard, **built upon the TCFD recommendations**, as well as existing sustainability reporting standards.
- Refer to the **TCFD Knowledge Hub** for further resources to support connected use of sustainability reporting standards & frameworks.

Why should we disclose information our peers aren't?

- Investors need this information to inform their **capital allocation decisions**.
- The **absence of disclosure** does not mean investors will assume the **absence of climate risk**.
- Investors are already conducting their own analyses to **assess climate risks & opportunities across their portfolios**.
- Providing disclosure ensures **up to date** information is used by investors which **accurately reflects** your organisation.
- Mandatory reporting is coming, disclosing now will enable you to **be prepared for future disclosure regulations**.

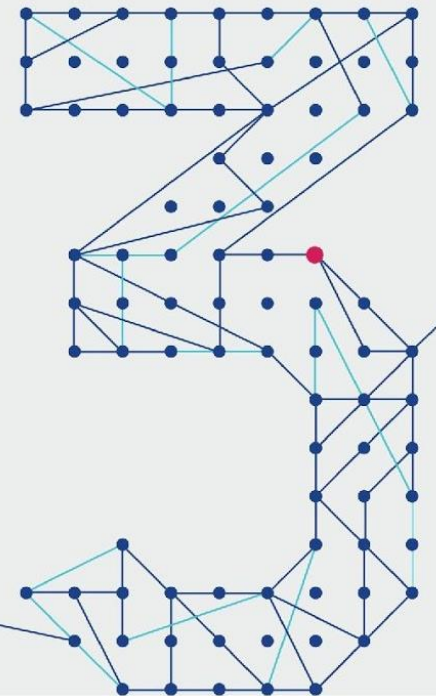
**Just
get
started!**



Q4: Which of the following would be ways to integrate climate disclosure in the mainstream report?

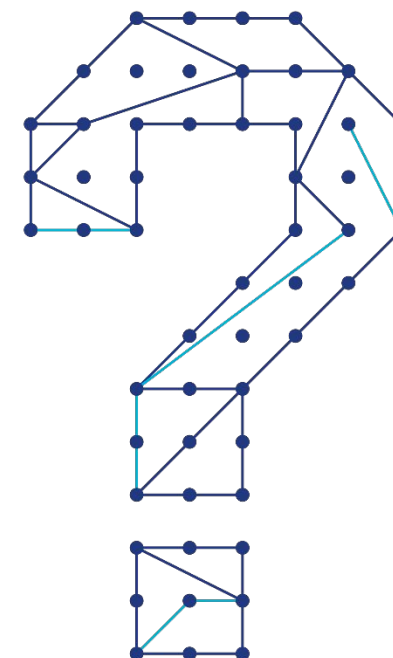
1. Use a cross referencing table to map to content
2. Add a small box on TCFD, but put the main content on your webpage
3. Engage with authors of the different report sections
4. Publish the information in a sustainability report for now

Discussion exercise: Disclosure review



Discussion exercise

- There are three links being shared in the chat box, which will direct you to three different reports.
- Please pick one of the company reports being shared and consider the following questions:
 1. What elements of the extract are particularly good?
 2. What further information could be included?
 3. Which elements could you adopt in your own reporting?
- Take 10 minutes to review an extract and populate your responses in the table included in the word document.

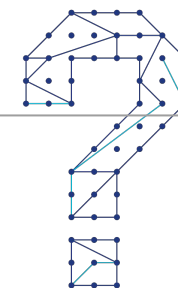


Refer to the chat to find the links to the reports

Discussion exercise

- There are three links being **shared in the chat box**, which will direct you to three different reports.
- Take 10 minutes to **review the pages noted** below for that report and write in the chat box your answers to the following questions (please indicate which company you are referring to).

	Example 1 (Governance) City Development Limited Integrated Sustainability Report (2021) Page 17	Example 2 (Strategy) Vodafone TCFD Report (2021) Pages 9-15	Example 3 (Metrics & Targets) Sunway Sustainability Report 2020 Page 16
A. What elements of the extract are particularly good ?			
B. What further information could be included?			
C. Which elements could you adopt in your own reporting ?			



Governance disclosure review

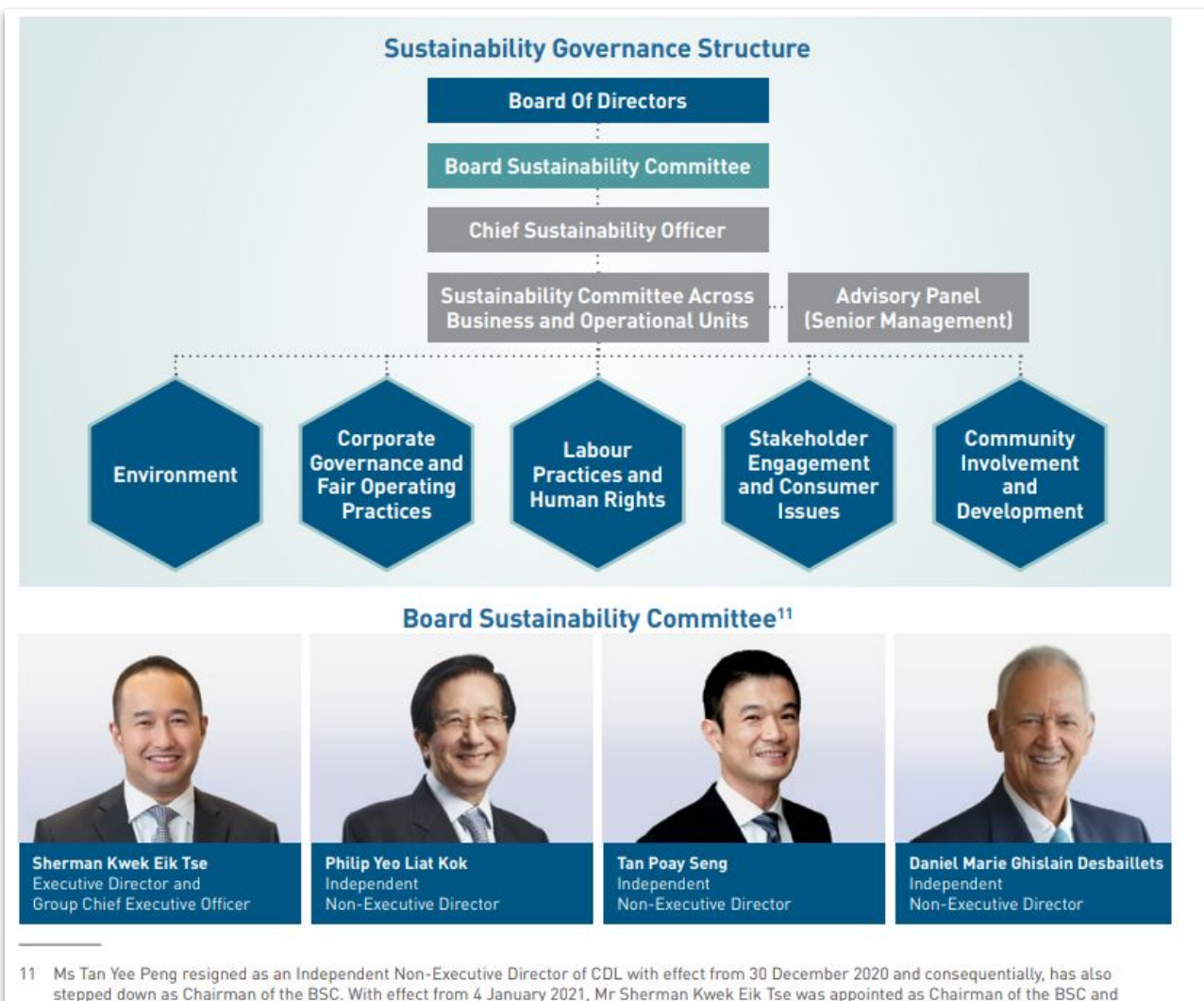
City Development p17

Good practice:

- The roles of relevant individual committees or functions are described
- A visual diagram of the organisation structure
- Timing (quarterly sustainability report)

Improvements:

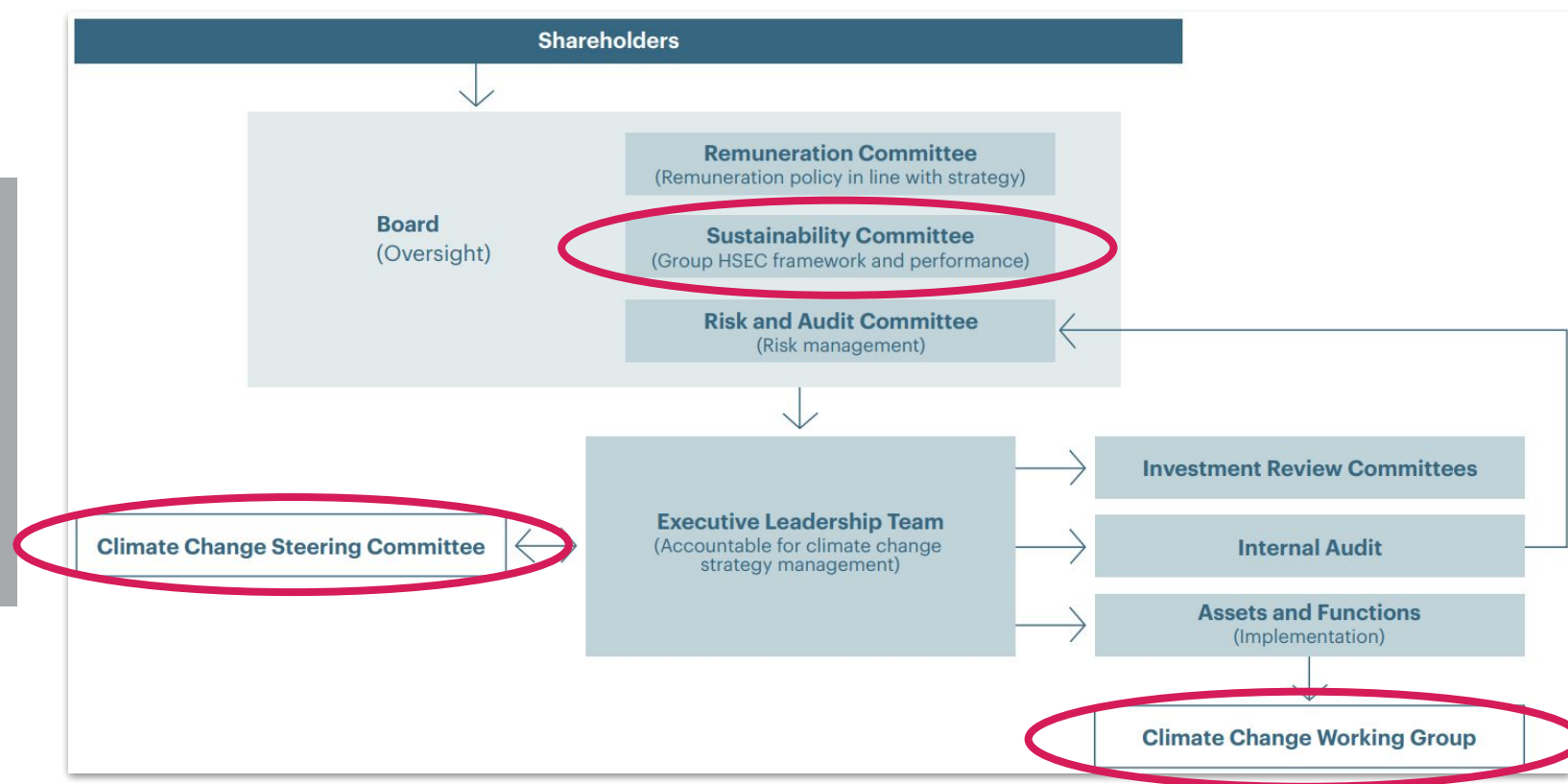
- Detail of responsibilities and feedback mechanisms.



Responsibilities & feedback mechanisms

Case study: BHP

The figure illustrates the role and responsibilities of the Board and management in climate change governance in BHP. Climate change is a Board-level governance issue and is discussed regularly, including during Board strategy discussions, portfolio review and investment decisions, and in the context of scenario triggers and signposts. Feedback mechanisms in place to ensure **communication in both directions**.



Specifying roles and tasks

Case study: Nedbank

Board oversight

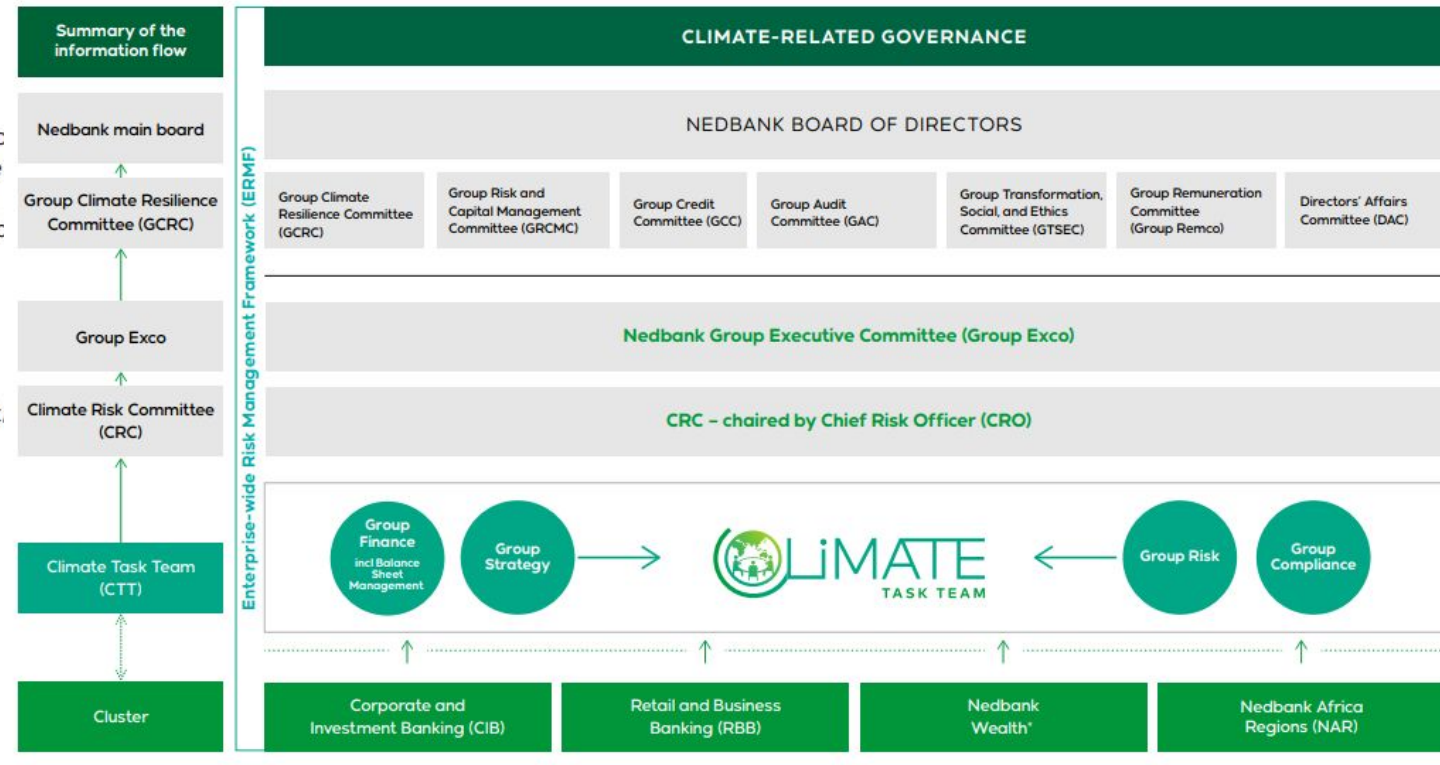
The **board's role** is to monitor, approve, provide oversight and review the defined climate-related risks and opportunities translating into governance, strategy, risk management, as well as metrics and targets to ensure we remain relevant, enabling our operations to be aligned with global best practice.

As climate-related risks and opportunities span various risk types, oversight of them remains incorporated across the various board committees to ensure effective and efficient governance. Other board committees may also be required to oversee climate-related matters, given that climate change impacts aspects across the mandates of various board subcommittees.

Climate risk function

In 2020 a new business unit (Climate Risk/Resilience) was established within Group Strategic Risk (a division of Group Risk), **tasked with** actively managing the climate-related risks and opportunities across the enterprise by providing sound leadership, effective challenge, advice, support, monitoring and oversight within the risk governance framework and processes to embed appropriate alignment with the CRMF and global best practices. The head of Climate Risk/Resilience coordinates collaboration across the enterprise and chairs the CTT meeting every week.

Source: Nedbank TCFD Report



The **specific oversight** provided by the Board is clarified, the **delegation of responsibilities** to board committees and management functions is also outlined in a simple organogram. Furthermore, the summary of the information chart helps to understand how climate related matters are reported to the board. Moreover, the description also provides details on the **Board oversees the climate-related risks and opportunities** and how these risks and opportunities are managed.

Good practice disclosure review

Vodafone (Strategy) Page 9-15

Good practice:

- Material climate-related risks and opportunities.
- Reflects the resilience of the organisation's strategy

Improvements:

- Provide more narratives how strategy has addressed climate risks and how these risks and opportunities inform financial planning processes
- Explain financial impact.

Category	Category overview	Climate factor	Risk/Opportunity impact	
Transition Risk	Growing external pressures and demands for action negatively impact revenues from those companies late to react, and trigger an increase in taxation and energy prices.	Consumer preferences	Changing consumer preferences – Change in sales due to new/lost customers as a result of change in environmental performance	●
		Temperature	Increase in temperature – increases in temperature leading to an increase in the consumption of energy and water for cooling infrastructure, data centres and offices	●
		Offsets	Change in carbon pricing – increasing carbon offset pricing impacting Vodafone's cost to meet its net zero target	●
		Litigation	Increasing risk of litigation – increase in stakeholder class actions against companies due to lack of climate action	●
		Carbon taxation	Increase in taxation & price of purchased products – increasing carbon taxes on purchased products (border carbon adjustments/higher production costs)	●
		Regulation	Change in regulations – change in regulations covering infrastructure efficiency leading to increasing compliance requirements	●
Physical Risk	Increase in temperature and frequency of extreme weather events (e.g. heatwaves, storms) leads to higher energy consumption for cooling and affects the quality of radio frequency and wireless transmission, in addition to damaging equipment and harming people's wellbeing.	Fire	Increase in wildfires – increase in wildfires frequency and severity therefore increasing damage to infrastructure	●
		Flooding	Increase in flooding – increase in flooding frequency and severity therefore increasing damage to infrastructure	●
		Sea level	Rising sea level – increase in sea level leading to flooding and damage of infrastructure	●
		Sea surface temperature	Increase in sea surface temperature – increase in storms frequency and severity therefore increasing damage to infrastructure	●
		Precipitation	Increase in precipitation – increase in precipitation leading to interruption to or reduction in quality of wireless service	●
Opportunity	A shifting business landscape in a net zero world opens new opportunities to capture new market and investment opportunities.	Market valuation	Improvement in Vodafone's share price – improvement in market valuation as a result of changing investor expectations with regard to climate change and Vodafone's ESG performance	●
		Sustainable financing	Improved access to capital – change in the availability and cost of capital due to sustainability performance	●
		Environmental performance	Improvement in energy efficiency – increasing consumer attractiveness and ability to meet net zero through increased energy efficiency of products and services	●

Key: ● advanced financial scenario modelling ● high level analysis

Informing how your strategy addresses risk/opportunities

CDL provides a **concise description of the strategic mitigation or adaptation being undertaken** in order to respond to the risk or identify that has been identified as being financially material. They also indicate what region and business unit this risk applies to and therefore **where in the organization this strategy applies**.

Source:
https://www.cdlsustainability.com/pdf/CDL_ISR_2021.pdf

Key Findings and Strategies

Based on the study, CDL can expect a net negative impact of \$82 million on our operating profits in 2030 in a 1.5°C warmer scenario – using 2018 as the baseline year. A majority of the negative impact is attributed to transition risks, with maximum impact on our Development Properties unit due to anticipated changes in building standards and construction costs. Given the likely impact of relevant climate-related risks on CDL's operations, reputation and profitability, we will consider strategies including:

Relevant Climate-related Risks	Strategies	Applicable Regions	Applicable Business Units (in order of priority)
Transition <ul style="list-style-type: none"> Building standards Carbon pricing 	Meet net zero carbon commitment through building design and material selection: <ul style="list-style-type: none"> Formulate clear steps to achieve net zero operational carbon Offset unavoidable emissions using emerging and innovative technologies May include green building materials, district cooling, incorporating renewables through BIPV and leveraging AI technology to reduce water and energy use 	All	Development Properties, Hotel Operations, Investment Properties
Transition <ul style="list-style-type: none"> Carbon pricing (from waste disposal) 	Leverage technology: <ul style="list-style-type: none"> Tackle food waste generation through management and procurement procedures Leverage advances in AI technology to improve operational efficiency 	All	Hotel Operations
	Promote construction designs for waste reduction and management: <ul style="list-style-type: none"> Embed dedicated waste segregation capabilities within buildings Use materials and components that can be easily reused or adapted to reduce waste 	All	Development Properties
Physical <ul style="list-style-type: none"> Flood 	Conduct physical risk assessments and investing in necessary infrastructure resilience: <ul style="list-style-type: none"> Participate in city infrastructure efforts Include flood risks in properties insurance strategies 	China, UK	Development Properties, Hotel Operations, Investment Properties
Physical <ul style="list-style-type: none"> Heat wave 	Implement additional practices to combat rising heat stress and provide safe working conditions for construction workers: <ul style="list-style-type: none"> Include heat management as part of risk assessments Establish a comprehensive response plan for workers showing signs of heat stress 	Singapore	Development Properties
	Design and construct buildings by considering changing weather patterns: <ul style="list-style-type: none"> Incorporate natural cooling features into the design of new buildings Adjust existing building infrastructure to cope with heating and cooling capability demands 	UK	Development Properties
Physical <ul style="list-style-type: none"> Wildfire 	Strengthen business continuity plans for wildfire events and enhance building resilience to make them less prone to impacts of wildfires: <ul style="list-style-type: none"> Develop robust recovery plans and incorporate preventative features to limit damage in properties in wildfire-prone states 	USA	Hotel Operations, Investment Properties

Informing how your strategy addresses risk/opportunities




1. Risks related to the transition to a decarbonized economy (applying mostly to the 1.5°C scenario)			
Category	Major risks	Time span	Main initiatives
Policy and legal	Increased business costs from the introduction of carbon taxes, fuel/energy consumption taxes, emission trading systems, and other measures	Short to long term	<ul style="list-style-type: none"> • Avoid or mitigate increases in business costs, such as from carbon taxes, by further enhancing production and transport efficiency and promoting the use of non- or low-carbon energy sources
Technology	Loss of sales opportunities due to delays in technology development for products and services	Medium to long term	<ul style="list-style-type: none"> • Contribute to reducing CO₂ emissions by developing and marketing innovative products and services that lead to the achievement of long-term environmental targets and expanding the decarbonization business • Promote the development of low-carbon products by implementing Environmentally Conscious Design Assessments when designing products and services
Market and reputation	Impact on sales due to changes in market values or assessment of our approach to climate issues	Medium to long term	<ul style="list-style-type: none"> • Given growing market concerns about climate change and investor expectations for companies to play more active roles, we revised our long-term environmental targets called Hitachi Environmental Innovation 2050 by setting the goal of becoming carbon neutral

Source: <https://www.hitachi.com/IR-e/library/integrated/2021/ar2021e.pdf>

Strategy

Case study: Meridian

Table 1. Top climate-related financial risks for Meridian Energy

Top Risks			
Risk drivers	 Extreme rainfall in hydro catchments	 Negative demand disruption - emissions intensive industries	 Increase in electricity spot price volatility
Type	Physical	Transition	Transition
Scale	Medium	Medium	Medium
Likelihood	About as likely as not	About as likely as not	Likely
Timeframe	Long-term (30 years)	Long-term (30 years)	Medium-term (5-10 years)
Impacts	Increasing intensity of extreme rainfall events in hydro catchments.	Sudden drop in electricity demand as emissions-intensive industries are disrupted by ambitious climate change legislation or shifting consumer preferences for sustainable goods and services.	As New Zealand increases its share of renewable generation, it may lead to higher levels of electricity spot price volatility.
Financial implications	Increase in intensity of extreme rainfall events may require the lowering of dam water levels (reducing assets' generating capacity) and/or the strengthening of dam structures.	Reduced electricity demand may negatively impact on Meridian's revenue, for example if the dairy industry was curtailed due to climate action policy.	Increased costs of commodity risk management due to increases in the percentage of grid-connected renewable electricity generation.
Quantification	-\$11 million	-\$12 to -\$17 million	-\$1 to -\$40 million
Methodology	Estimated potential financial impact is an annualised figure over a 30 year time horizon of estimated civil construction costs and negative revenue impacts.	Estimated potential financial impact is an annualized figure over a 30 year time horizon, calculated by modelling the impact of a step-change reduction in demand and comparing it to our Evolution scenario. There is significant uncertainty to this calculation.	Estimated potential financial impact is a high-level estimate, an annual cost, and informed by actual costs of current risk instruments and internal views on magnitude of potential changes to electricity spot price volatility.
Management response	Probable Maximum Flood values are reviewed once every ten years to incorporate climate change.	Meridian supports of climate action policy that would increase electricity demand in other sectors, in particular the use of electricity in the transport and industrial heat sectors of the economy.	Meridian has a mature commodity risk framework that includes specific limits for allowable exposure to spot electricity price risk. Within that framework the cost of mitigation is traded-off against the impact of accepting the risk.

Meridian describe the **physical and transition risks** in detail in their report, which is accompanied with this summary table. The table highlights the “top climate-related **financial risks**” and is structured in a simple and easy-to-read way.

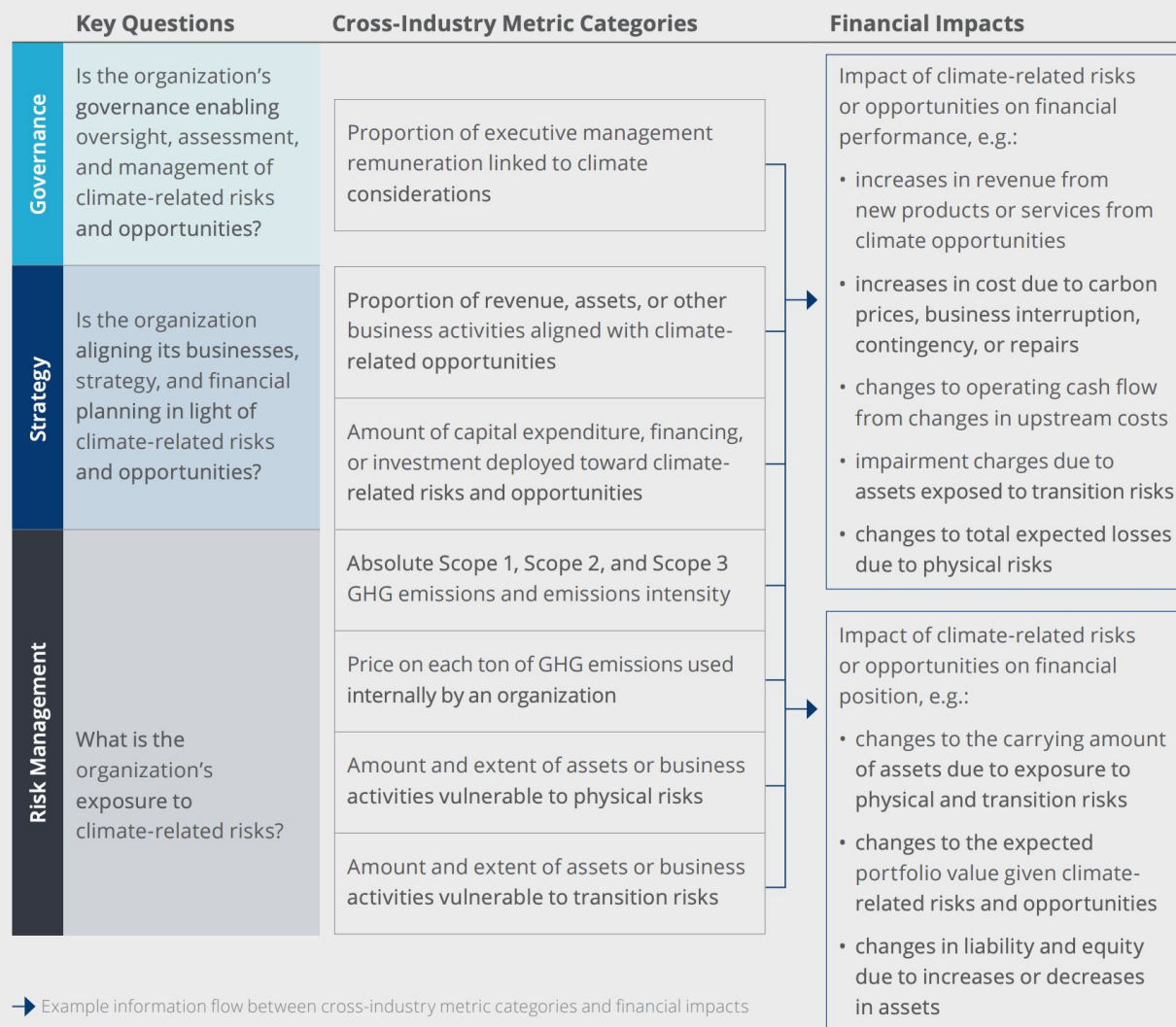
In particular, this disclosure includes the **type, scale, likelihood, timeframe and financial implications** associated with each risk. The financial impacts are described in both qualitative and quantitative information.

Assessing Financial Impact

The Metrics, Targets, and Transition Plans guidance (2021) describes recent developments around climate-related metrics and users' increasing focus on information describing organizations' plans for transitioning to a low-carbon economy. The guidance also describes a set of cross-industry, climate-related metric categories that the Task Force believes all organizations can disclose. Additional financial impacts can be found in the 2021 Implementation Guidance

Figure F2

Relationship between Cross-Industry Metric Categories and Financial Impacts



Metrics and targets disclosure review

Sunway Page 16

Good practice:

- Clearly links targets to goals.
- Clearly demonstrates the performance against targets for the financial year.

Improvements:

- Link targets to risks
- Demonstrate progress over time

ENVIRONMENTAL		
FUTURE VALUE GOALS	2030 TARGETS	FY2020 PERFORMANCE
GOAL 1: TRANSFORMING OUR PORTFOLIOS TO LOW-CARBON SUSTAINABLE CITIES	<ul style="list-style-type: none"> To achieve green building certification for all Sunway-owned and/or managed townships and buildings completed from 2025 onwards 	○ ● ○ Six buildings targeted for completion in 2025 onwards are in the process of green building certification application
	<ul style="list-style-type: none"> To reduce emission intensity of revenue by 10% by 2030 (Baseline year: 2025) 	● ○ ○ Emission intensity of revenue in 2020: 49.51 tonnes CO ₂ e/RM (in million)
	<ul style="list-style-type: none"> To achieve and maintain at least a low limit in Building Energy Intensity (BEI) as defined by the Green Building Index for the following sectors by 2030: 	○ ● ○ (kWh/m ² /yr) Office: 106 Hospitality: 311 Retail: 228
	<ul style="list-style-type: none"> At least 25% of electricity from renewable energy sources by 2030 	○ ● ○ 3% of electricity was generated from our solar panels
	<ul style="list-style-type: none"> 40% waste diverted from landfills by 2030 	○ ● ○ 4% waste diverted
	<ul style="list-style-type: none"> To reduce overall water intensity from municipal potable water supply by 10% by 2030 (Baseline year: 2015) 	○ ○ ● 17% reduction from 2015 levels
	<ul style="list-style-type: none"> All industrial property sites to be ISO 14001:2015 (Environmental Management Systems) certified by 2030 	○ ○ ● 6 out of 6 (100%) building materials sites have been certified with ISO 14001:2015
GOAL 2: ADVOCATING A RESPONSIBLE VALUE CHAIN	<ul style="list-style-type: none"> All ongoing construction sites are ISO 14001:2015 (Environmental Management Systems) compliant 	○ ○ ● 24 out of 24 (100%) ongoing construction sites are ISO 14001:2015 compliant
	<ul style="list-style-type: none"> To record measurable reduction in environmental impact from goods and services procured from suppliers 	○ ○ ● 9,261 tonnes of CO ₂ e avoided from 2015 to 2020 due to the purchase of eco-label products and reducing the purchase of single-use plastic bottles
	<ul style="list-style-type: none"> All Sunway suppliers must comply with all relevant laws, regulations and standards including human rights protection and child labour. Any supplier found to have violated the law will be removed from our supply chain. 	○ ○ ● Zero confirmed incidence of non-compliance with relevant laws, regulations and standards

Connecting metrics and targets to risks and opportunities

For each of British Land's identified climate-related risks and opportunities they clearly identify the associated metrics used to understand and manage the issue.

This helps to **demonstrate how the metrics they report against are directly connected to addressing the material risks** that they have identified for their business.

Metrics and targets

Below are the climate-related metrics and targets against which we currently report.

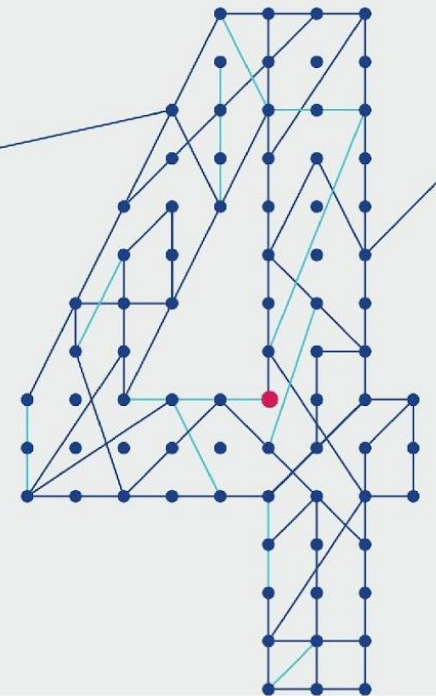
Climate-related risks

		2021	2020	2019
Policy and legal	EPCs rated F and G	5%	5%	5%
	EPCs rated A and B	24%	25%	22%
Extreme weather	Portfolio at high risk of flood (% by value)	1%	2%	3%
	High flood risk assets with flood management plans (% by value)	99%	100%	100%
Resource supply	Percent of fresh water withdrawn in regions with high or extremely high baseline water stress	To be reported in future years		

Climate-related opportunities

		2021	2020	2019
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	75% improvement in whole building carbon intensity of the managed portfolio by 2030 vs 2019 (Offices)	41%	23%	–
	25% improvement in whole building energy intensity of the managed portfolio by 2030 vs 2019 (Offices)	31%	16%	–
Energy sources	Electricity purchased from renewable sources	98%	96%	96%
	On-site renewable energy generation (MWh)	1,907	1,763	1,131
Products and services	Portfolio with green building ratings (% by floor area)	27%	24%	18%
	Proportion of gross rental income from BREEAM certified assets (managed portfolio)	53%	nr	nr

Supporting your TCFD journey



Resources for those building TCFD experience



Resources for those building TCFD experience

Report Database

Search for company reports that include TCFD-related disclosures. These reports include one or more TCFD elements, but are not necessarily considered fully in line with the TCFD recommendations.

Don't see your report in the database? Email us at tcfdhub@cdp.net to submit your reports.

tcfdhub.org

Search

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Type of report

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Sort by

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Industry Group

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Geography

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IFC Disclosure and Transparency Program

Building ESG Disclosure & Transparency Standards in Emerging Markets

HOLISTIC APPROACH

BEYOND THE BALANCE SHEET

Enhancing Disclosure, Transparency & Communication

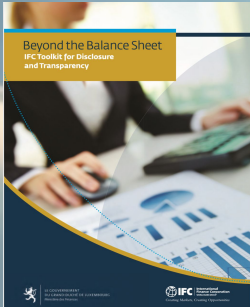
EXPLORE ▾ LEARN ▾ CREATE ▾ ASSESS ▾ CONNECT WITH US

IFC's "Beyond the Balance Sheet" toolkit and platform offers an ecosystem of resources and reporting tools to help emerging market organizations on their journey toward a more open and transparent communication of material environmental, social and governance (ESG) factors.

D&T FRAMEWORK

Helps disclose material aspects of:

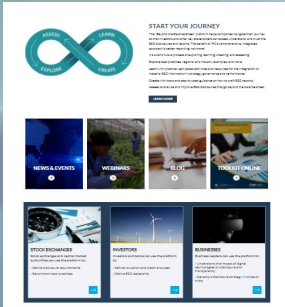
- Strategy & sustainability
- Corporate governance
- Financial & non-financial performance
- Streamlined all reporting frameworks



ONLINE PLATFORM



Facilitates continuous process:

- Exploring global, local, industry resources
- Self-paced learning modules, blended with webinars
- Creating via report generator and community of practice
- Assessing via annual report self-assessment tool



CAPITAL MARKETS

- Policy support to stock exchanges and regulators, developing 145 codes, laws, 30 scorecards and 10 ESG reporting guidelines
- Strategic partnership with UN SSE



WWW.IFC.ORG/SUSTAINABILITY

START YOUR JOURNEY

The TCFD Training Programme



TCFD 102E

*Self-guided online learning:
Supporting your ongoing TCFD
journey*

1. **Deep dive** into aspects of TCFD disclosure you would like to explore further
2. Gain an **applied understanding** of TCFD in the context of different **roles and functions** (e.g. risk management, accounting)
3. Provide ongoing resources to further consolidate issuers' knowledge and expertise on TCFD reporting in a **flexible, self-led way**.

TCFD 102E



learn.tcfdhub.org

1. Introduction to climate-related disclosures: Starting the climate journey

The basics and context of climate disclosure

2. Understanding the recommendations of the TCFD

What the recommendations are & how to apply them
Available in Portuguese

3. Climate-related financial disclosures: Continuing the journey

Follows on from courses 1 & 2, preparing disclosures in-depth

4. Embedding climate change into financial management: Climate-related reporting for accountants

The role of accountants in climate disclosure

5. Governance of climate-related risks & opportunities

The role of the board and senior management

6. Managing the financial risks from climate change

Incorporating financial implications into risk management processes

7. Climate & environmental reporting in the European Union

Reporting under the Non-Financial Reporting Directive

8. Water-related disclosure

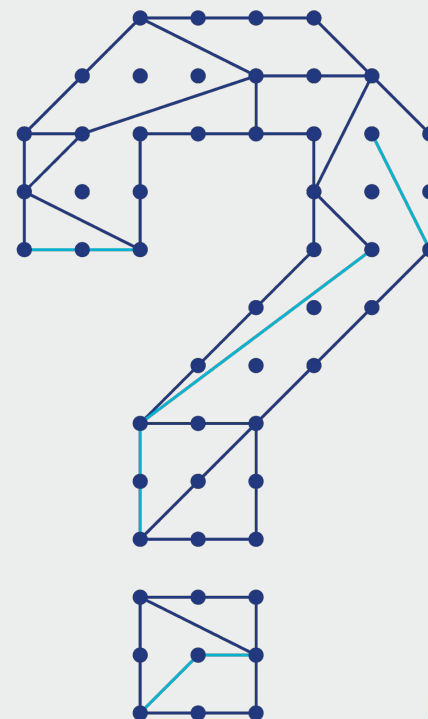
Understanding business impacts, risks and opportunities

Further courses to be added!



Questions & comments

.....
Please raise your hand and unmute when called upon, or use the chat function



Thank you for your participation!

- A short **feedback survey** will be shared in the chat and also issued to all attendees in follow up via email – please share your thoughts to help us continue to improve the training.
- Attendees of today's session will receive a **completion certificate** via the email address they registered for the session within the next week.
- This course is **CPD certified**, which means participants may be able to count their participation towards continuing professional development requirements for professional body memberships (e.g. Chartered Accountants, Auditors, etc.).



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