XRB | Te Kāwai Ārahi Pūrongo Mōwaho
EXTERNAL REPORTING BOARD

Climate-related Disclosures Staff Guidance

Guidance for All Sectors

May 2023

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1. How to read this guidance

Section 2: Provides an overview of the climate-related disclosure framework. It also provides information on the primary legislation underlying the climate-related disclosure regime.

Section 3: Discusses each of the standards that, together, make up Aotearoa New Zealand Climate Standards (NZ CS). It contains critical contextual information about the topics and requirements contained within various parts of NZ CS.

Sections 4 and 5: Provides guidance on the key concepts and principles, and the general requirements, in NZ CS 3 General Requirements for Climate-related Disclosures.

Sections 6 to 9: Provide disclosure-by-disclosure guidance relating to the four main thematic areas of NZ CS 1: Climate-related Disclosures;

 **Governance**  **Strategy**  **Risk Management**  **Metrics and Targets**

Section 10: Discusses coherence with financial statements.

Section 11: Provides questions that an entity make wish to answer, when conducting a holistic

While much of this guidance provides useful information covering all of NZ CS, this document is also intended to be a reference document, which preparers can dip in and out of as they get to grips with individual disclosure requirements.

1.1. Approach to this guidance - important note

This guidance aims to support entities required to prepare climate-related disclosures in accordance with Aotearoa New Zealand Climate Standards (NZ CS). It has been prepared to set out XRB's views as to the broader 'why and how' of climate-related risk and opportunity management in the context of NZ CS.

The guidance also aims to foster consistency through clarity of understanding. Climate-related disclosure is an evolving field, and the greater the freedom an entity has to innovate and improve its analysis – while maintaining comparability and coherence and complying with NZ CS – the better.

While this guidance seeks to illustrate the XRB's views as to how an entity can approach the required disclosures, an entity must exercise its own judgement so that its climate-related disclosures comply with NZ CS.

Illustrative examples featured throughout this guidance are not to be considered as endorsements or necessarily as 'good' or 'best' practice.

The XRB may at times revise this guidance including as experience with NZ CS builds and as circumstances change, but entities and others should themselves keep updated.

1.2. Status and disclaimer

This guidance is not mandatory or binding on entities. It does not have the force of law, nor does it amend, or provide any binding interpretation, of NZ CS. Only the Courts can make binding interpretations of climate standards under the Financial Reporting Act 2013.

Entities subject to NZ CS are not required to observe with this guidance in order to state compliance with NZ CS. Nor does observance of this guidance necessarily mean compliance with NZ CS.

This guidance does not constitute advice. Entities subject to NZ CS must apply their own mind to the standards and take their own advice in considering and applying them.

To the fullest extent permitted by law, XRB disclaims and shall not be liable for any mistake or omission in this guidance nor does XRB accept any liability to any reader or user in relation to this guidance.

NZ CS is the definitive statement of requirements.

2. Climate-related disclosure framework

2.1. Transition to a low-emissions, climate-resilient future

The climate-related disclosure framework is made up of three climate standards, which are collectively referred to as Aotearoa New Zealand Climate Standards (NZ CS).

NZ CS 1 *Climate-related Disclosures*
NZ CS 2 *Adoption of Aotearoa New Zealand Climate Standards*
NZ CS 3 *General Requirements for Climate-related Disclosures*

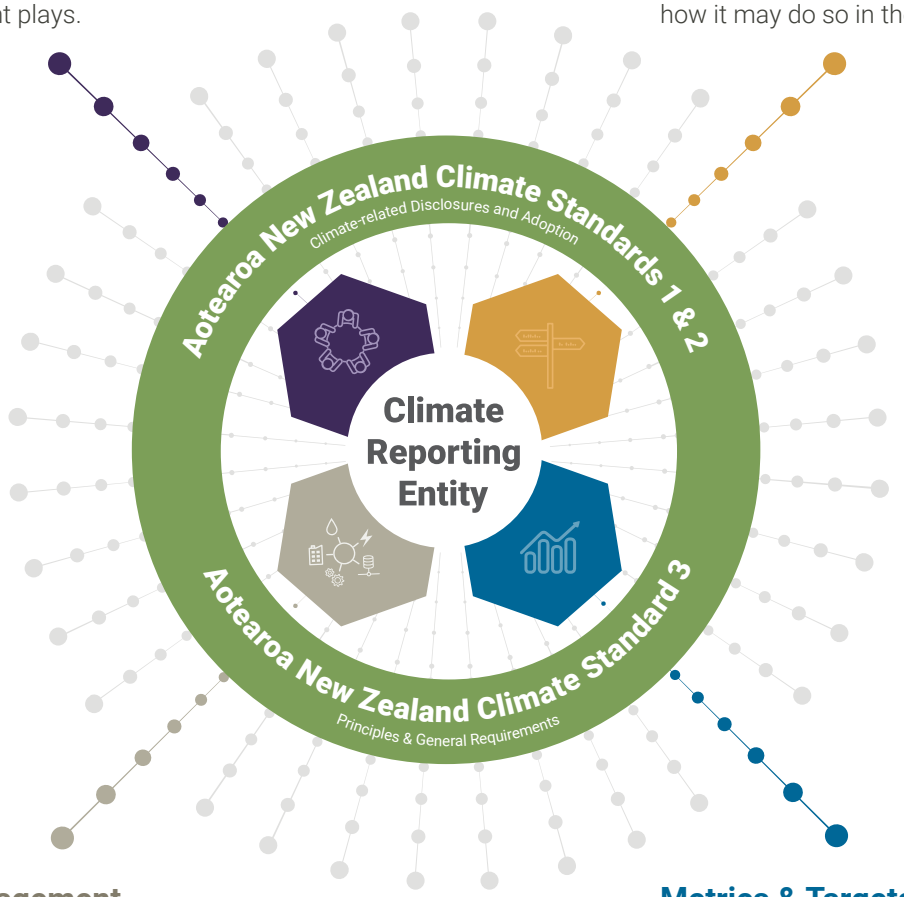
The ultimate aim of Aotearoa New Zealand Climate Standards is to support the allocation of capital towards activities that are consistent with a transition to a low-emissions, climate-resilient future.

Governance

Disclose the oversight of an entitity's governance body, and the role management plays.

Strategy

Disclose how climate change is currently impacting an entity and how it may do so in the future.



Risk Management

Disclose how an entity identifies, assesses and manages climate-related risks.

Metrics & Targets

Disclose the metrics and targets an entity uses to measure and manage climate-related risks and opportunities.

The three standards are designed as a package and it is important that they are read together. For example, NZ CS 3 contains the principles that an entity must apply when preparing and presenting climate-related disclosures required by NZ CS 1. NZ CS 2 provides a limited number of adoption provisions from the disclosure requirements in NZ CS 1 and NZ CS 3.

In each of the three standards, both the defined terms and application date are included in appendices. These appendices are integral to the standard and are part of the requirements. It is important to read the defined terms carefully. All three standards also have a **Basis for Conclusions,** which accompanies the requirements, but is not part of them. They explain the XRB Board's decision-making process during the standards' development.

2.2. Read the primary legislation

NZ CS set out 'what' entities are required to disclose. They do not determine 'who' is required to make climate-related disclosures. This is contained in primary legislation: see Part 7A of the *Financial Markets Conduct Act 2013* (FMCA 2013).

If an entity is unsure whether it is required to make climate-related disclosures, we advise seeking independent legal advice. If it is still uncertain, an entity may contact the Climate-Related Disclosures team at the Financial Markets Authority (FMA).

Part 7A of the FMCA 2013 includes requirements for keeping proper CRD records, lodgement of climate statements, approval by directors, and making information available in an entity's annual report.

The primary legislation also sets out what is required to be assured. This guidance does provide reminders about some of the requirements in the FMCA 2013; however, it is the responsibility of the entity to determine its own obligations under the FMCA 2013.

Further guidance

The Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 inserted the new Part 7A into the FMCA 2013. It also amended the Financial Reporting Act 2013 and the Public Audit Act 2001.
The FMA website contains the latest information from the FMA about regulatory matters relating to climate-related disclosures, such as record-keeping.

3. Overview of each standard

All three standards also have a Basis for Conclusions, which explains the XRB Board's decision-making process during the standards' development.

3.1. NZ CS 1 Climate-related Disclosures

NZ CS 1 | NZ CS 2 | NZ CS 3

NZ CS 1 contains the climate-related disclosure requirements for each of the four thematic areas. These thematic areas are the same as used by the TCFD: Governance, Strategy, Risk Management, and Metrics and Targets. NZ CS 1 also identifies the scope of the mandatory assurance that is required over the greenhouse gas (GHG) emissions disclosures.

Each of the four thematic areas has a separate section in NZ CS 1, and each of the sections has been structured in the same manner:

Heading	Content
Disclosure objective	The purpose of the disclosure objective is to describe why the information is useful to primary users. The disclosure objective assists entities when making materiality judgements, so that material information is provided to primary users.
Disclosures	To meet the disclosure objective, these are the items of information that an entity must disclose.
Sub-disclosures	In most cases the disclosures have sub-disclosures, which further specify items of information that must be disclosed.

The disclosures should not be used as a checklist. Rather, entities will need to apply judgement to determine what disclosures and information are material, and whether the information provided satisfies the disclosure objective.

It is important that an entity applies the requirements to its own specific facts and circumstances, and there may be cases where an entity may need to provide additional information to show a fair presentation [NZ CS 3 paragraphs 6-9].

NZ CS 1 is short and succinct, focusing more on high-level areas for disclosure rather than being overly prescriptive. This means that it should be sufficiently flexible to allow reporting entities to provide more or less information, depending on the extent to which they are impacted by climate change.

This document provides detailed guidance under each of the four thematic areas contained in NZ CS 1.

3.2. NZ CS 2 Adoption of Aotearoa New Zealand Climate Standards

NZ CS 2 contains a limited number of adoption provisions from the requirements in both NZ CS 1 and NZ CS 3. This recognises the fact that it may take time to develop the capability to produce high-quality climate-related disclosures, and that some disclosure requirements, by their nature, may require an exemption.

An entity can choose which, if any, adoption provisions it wishes to use. If an entity does elect to apply an adoption provision, the entity is required to disclose its use [NZ CS 2 paragraph 23].

NZ CS 2 contains two types of adoption provisions: those that can be used once (i.e., when an entity first applies NZ CS), and those that can be used more than once if necessary.
The table below summarises the adoption provisions in NZ CS 2.

Name	Standard, section, and paragraph	Adoption provision		
		First reporting period	Second reporting period	Third reporting period
Adoption provision 1: Current financial Impacts	NZ CS 1 Strategy [Paragraph 12(b)] [Paragraph 12(c)]	Exemption provided	–	–
Adoption provision 2: Anticipated financial impacts	NZ CS 1 Strategy [Paragraph 15(b)] [Paragraph 15(c)] [Paragraph 15(d)]	Exemption provided	–	–
Adoption provision 3:# Transition planning#	NZ CS 1 Strategy [Paragraph 16(b)] [Paragraph 16(c)]	Exemption provided Alternative disclosure required: describe its progress towards developing the transition plan aspects of its strategy	–	–
Adoption provision 4: Scope 3 GHG emissions	NZ CS 1 Metrics and Targets [Paragraph 22(a)(iii)]	Exemption provided Choose to apply to all or selected subset	–	–
Adoption provision 5: Comparatives for Scope 3 GHG emissions. Can only be used if an entity uses Adoption provision 4 in its first reporting period	NZ CS 3 Comparatives for metrics [Paragraph 40]		No Scope 3 comparatives required	One year of Scope 3 comparative information required

Name	Standard, section, and paragraph	Adoption provision		
		First reporting period	Second reporting period	Third reporting period
Adoption provision 6:* Comparatives for metrics	NZ CS 3 Comparatives for metrics [Paragraph 40]	Exemption provided	One year of comparative information required	–
Adoption provision 7:* Analysis of trends	NZ CS 3 Comparatives for metrics Paragraph 42	Exemption provided	Exemption provided	–

means an alternative disclosure **must** be made

***** represents the adoption provisions that can be used **more than once**

3.3. NZ CS 3 General Requirements for Climate-related Disclosures

NZ CS 1 NZ CS 2 **NZ CS 3**

NZ CS 3 is the foundation of the climate-related disclosure framework. It contains the principles, underlying concepts, and general requirements. NZ CS 3 should be read first and referred to when applying the disclosure requirements in NZ CS 1.

We have included some reminders of the application of the principles and the general requirements when providing guidance on the NZ CS 1 requirements.

3.4. Application date

Entities must apply the three standards for annual reporting periods beginning on or after 1 January 2023. Assurance of GHG emissions applies to annual reporting periods that end on or after 27 October 2024.

Each of the standards contains an appendix [Appendix B], which sets out when an entity must apply the standards from. NZ CS apply for annual reporting periods beginning on or after 1 January 2023.

NZ CS 1 includes two application dates because the application date for assurance of GHG emissions was set in primary legislation [NZ CS 1 Appendix B, paragraph B2]. Note that the date refers to periods that **end on or after**.

4. Principles in NZ CS 3

4.1. Fair presentation and principles [NZ CS 3 paragraphs 6-13]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

Fair presentation is the overarching principle in NZ CS.
Underpinning fair presentation is a set of principles, contained in Tables 1 and 2 in NZ CS 3. Table 1 includes principles that make information useful to primary users (relevance, accuracy, verifiability, comparability, consistency and timeliness). Table 2 includes the principles on presentation of information (balance, understandability, completeness and coherence).
To achieve fair presentation, an entity must apply these principles when preparing and presenting climate-related disclosures.

The principle of timeliness is included for those entities that voluntarily apply NZ CS. The FMCA 2013 includes requirements on when climate-related disclosures should be made available.

Section 461ZI of the FMCA 2013 states that within 4 months* after balance date, climate statements are to be delivered to the registrar for lodgement.
Section 461ZJ of the FMCA 2013 establishes an additional requirement for entities that are required to prepare an annual report. The entity must include a copy of its climate statements in its annual report or provide a weblink to the climate statements.
* Note: In practice this may be earlier, depending on an entity's other reporting requirements. For example, NZX-listed equity and debt issuers must complete and submit their annual reports to the NZX for market release within 3 months of their balance date. Therefore, to comply with the FMCA 2013, entities will need to be aware of the timing requirements for their various reporting obligations.

4.2. Materiality [NZ CS 3 paragraphs 27-39]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

The need for materiality judgements is pervasive in the preparation and presentation of all disclosure requirements in NZ CS. NZ CS 3 defines 'material' as follows: "Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions primary users make on the basis of an entity's climate-related disclosures."

However, NZ CS 3 also states that if, when applying the disclosure requirements to its own specific facts and circumstances, an entity determines the resulting information is not material, it need not disclose it. In these cases, an entity should document this decision (including the rationale) for internal record-keeping purposes.

Further guidance on materiality

Chatertered Professional Accountants of Canada, 2019. Disclosing the impacts of climate change: a process for assessing materiality.

5. General requirements in NZ CS 3

NZ CS 3 includes several general requirements. Some of these enable coherence with an entity's financial reporting, such as requirements in relation to the reporting entity, reporting period and reporting currency.

5.1. Location of disclosures [NZ CS 3 paragraphs 14-20]

NZ CS 1 NZ CS 2 **NZ CS 3**

NZ CS 3 does not prescribe a specific location for an entity's climate-related disclosures. Cross-referencing is permitted under NZ CS 3; however, paragraphs 17-19 of NZ CS 3 outline the requirements for using cross-referencing.

5.2. Value chain [NZ CS 3 paragraph 22]

NZ CS 1 NZ CS 2 **NZ CS 3**

NZ CS have aligned closely with the TCFD view that when an entity considers its exposure to climate-related risks and opportunities, it should also consider the exposure of its value chain. NZ CS 3 includes a requirement for an entity to consider its value chain.

The value chain includes the full range of activities, resources and relationships related to an entity's business model and the external environment in which it operates. These activities may include investments that an entity has in other entities; for example, associates and joint ventures 'Value chain' is a defined term [NZ CS 3 Appendix A].

Further guidance: Case studies of value chains

Chapter Zero New Zealand, 2023. Board Toolkit contains four case studies of climate-related considerations relating to the general insurance, not-for-profit, banking and agriculture sectors across their value chains. See pages 22-25.

5.3. Comparatives [NZ CS 3 paragraphs 40-46]

NZ CS 1 NZ CS 2 **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Ideally, these metrics would be consistent from one reporting period to the next [NZ CS 3 paragraphs 40 and 42]. If an entity discloses a new metric in the current reporting period, the entity is not required to disclose comparative information [NZ CS 3 paragraph 41].

Illustrative example for reporting in FY26

	FY26	FY25	FY24
	Current reporting period	Comparative information	
Metric A	XX	XX	XX

Adoption provisions NZ CS 1 NZ CS 2 NZ CS 3

Adoption provisions in NZ CS 2 provide some relief from these requirements [NZ CS 2 Adoption provisions 6 and 7].

If an entity changes what it discloses, or the methods used, it must explain the changes and the effect on the current reporting period's climate-related disclosures. For instance, if entity A has changed the method it uses to measure the methane leakage of gas pipelines from estimations to satellite data, then entity A should disclose that fact. Entity A should also disclose that the emissions from methane have reduced by 25% applying this new method, and that this is due to a change in method rather than a reduction in emissions [NZ CS 3 paragraph 43].

NZ CS 3 does not require the restatement of comparative information for a change in method used. It does, however, require restatement of comparative information to correct a material error [NZ CS 3 paragraph 45].

While NZ CS 3 does not require the restatement of comparative information (apart from the correction of material errors), it is acknowledged that restatements will assist primary users to assess trends and make comparisons with information provided by an entity in previous reporting periods. For instance, if entity A has changed the method it uses to estimate emissions from one of its major suppliers and it had the data available to be able to apply the method to previous reporting periods, then the entity may choose to restate data for the previous reporting periods. In these circumstances an entity should provide the reasons for the restatement and the effect of the restatement.

The type of comparative analysis that is encouraged includes, where appropriate:

- Cross-reference to targets, baselines and other criteria used for analysing performance
- Any significant changes to performance, impacts, or unexpected results due to:
    - Changes in the entity's strategy, policies and governance
    - Changes in the method or key performance indicators (KPIs) used for calculating results
    - Changes due to acquisitions, divestments, organic growth or decline, efficiency or process improvements, alterations to processes for collecting data, practices in satellite operations, missing data etc.
    - Changes in operating contexts, business relationships, or the entity's activities
- The extent to which forward-looking disclosures made in previous reporting periods have been borne out, including how and why the performance of the organisation is short of, meets, or exceeds previously made forward-looking disclosures.

5.4. Methods and uncertainty [NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

The use of uncertain data, and reasonable estimates based upon them, is an essential part of preparing climate-related disclosures. There may also be disclosures for which the methods available to entities are relatively novel or uncertain. The usefulness of the information disclosed is not undermined if the use of a novel or uncertain method, assumption, or uncertain data and estimation, is accurately and transparently described and explained.

Disclosures about methods and assumptions, and data and estimation uncertainty, are vital to ensure primary users are provided with information to understand the context of an entity's climate-related disclosures [NZ CS 3 paragraph 49].

An entity must focus on those assumptions and other sources of estimation and data uncertainty that have the most influence on an entity's climate-related disclosures, or that required an entity's most difficult or complex judgements.

5.5. Statement of compliance [NZ CS 3 paragraphs 55-56]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

As part of its climate-related disclosures, an entity must make an explicit and unreserved statement of compliance. This statement must be presented prominently within an entity's climate-related disclosures.

Example illustrative disclosures

Entity ABC's climate-related disclosures on pages xx to xx comply with Aotearoa New Zealand Climate Standards issued by the External Reporting Board.
These climate-related disclosures comply with Aotearoa New Zealand Climate Standards issued by the External Reporting Board.

If an entity has taken advantage of one or more adoption provisions in NZ CS 2, then an entity must include a description of the adoption provisions used in conjunction with the statement of compliance [NZ CS 2 paragraph 23].

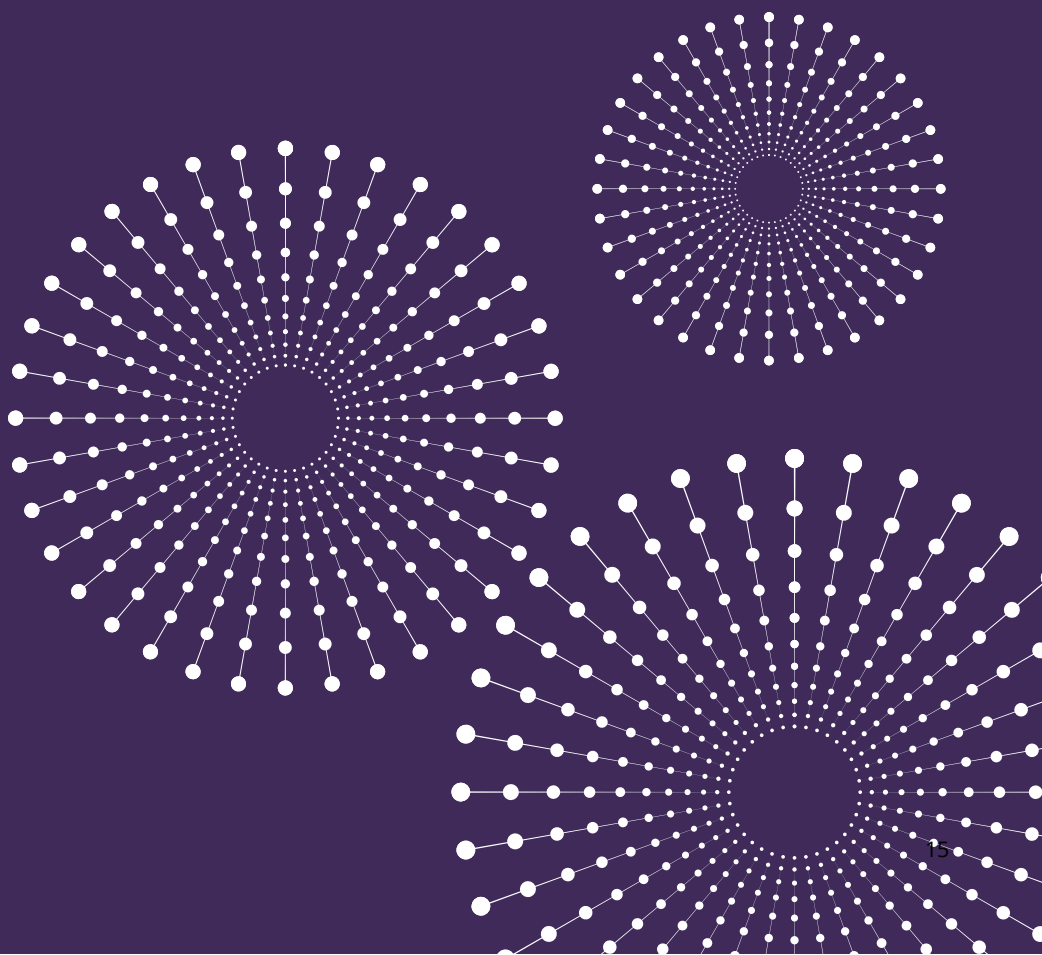
Example illustrative disclosure including adoption provision

These climate-related disclosures comply with Aotearoa New Zealand Climate Standards issued by the External Reporting Board. In preparing its climate-related disclosures, Entity A has elected to use Adoption provision 6: Comparatives for metrics. This adoption provision exempts Entity A from disclosing comparative information for each metric disclosed for the immediately preceding two reporting periods.

Note: If a climate-reporting entity is required to prepare an annual report, section 461ZJ of the FMCA 2013 requires a statement that the entity is a climate-reporting entity for the purposes of the FMCA 2013.

Example illustrative disclosure in an annual report
Entity ABC is a climate-reporting entity under the Financial Markets Conduct Act 2013.

Governance



6. Governance

"Achieving the right board oversight requires the right knowledge, whole value chain transparency, and a shift from seeing climate action as compliance to seeing it as a fundamental strategic imperative. "

(extracted from New Zealand Board Toolkit)

The quality of governance structures and functions is a key factor in determining whether an entity can successfully identify, analyse, and manage its climate-related risks and opportunities. For this reason, the TCFD places the Governance disclosures in the outer, all-encompassing ring of the four that illustrate its thematic areas of recommended disclosure (Figure 1).

Climate governance is a relatively new field, but examples of good practice and 'how to' guidance are emerging. For instance, in relation to establishing effective climate governance on boards (or 'highest-level governing bodies' for those entities without a board), the World Economic Forum (WEF) has established eight guiding principles (Table 1).

Note: The WEF guidance includes several helpful guiding questions under each of the principles.

Figure 1: The positioning of governance in relation to the other TCFD categories (adapted from TCFD 2021: Implementing the recommendations of the TCFD, p. 14)

Chapter Zero New Zealand is the national chapter of the Climate Governance Initiative. The mission of Chapter Zero New Zealand is to mobilise, connect, educate, and equip directors and boards to make climate-smart governance decisions, thereby creating long-term value for both shareholders and stakeholders. In March 2023, Chapter Zero New Zealand issued the New Zealand Board Toolkit. It provides a simple five-step process to support governing bodies of New Zealand organisations to take timely, positive, and decisive climate actions.

Remember that there are record-keeping requirements in Part 7A of the FMCA 2013. An entity may be asked to produce underlying documentation such as board charters, policies, terms of reference for committees or meeting minutes.

Table 1: WEF guidance on the implementation of its eight principles for the establishment of effective climate governance at board (or equivalent) level (adapted from WEF guidance How to Set Up Effective Climate Governance on Corporate Boards Guiding principles and questions)

Principle	Implementation actions
1. Climate accountability	The governance body is ultimately accountable for the long-term stewardship of the entity. Accordingly, the governance body should be accountable for the entity's long-term resilience with respect to potential shifts in the business landscape that may result from climate change. Failure to do so may constitute a breach of directors' duties.
2. Command of the subject	The governance body should ensure that it can access sufficient knowledge, skills, experience, and background to effectively debate and take decisions informed by an awareness and understanding of climate-related risks and opportunities.
3. Board structure	As the stewards for long-term performance and resilience, the governance body should determine the most effective way to integrate climate considerations into its structure and committees.
4. Material risk and opportunity assessment	The governance body should ensure that management assesses the short-, medium-, and long-term materiality of climate-related risks and opportunities on an ongoing basis. The governance body should further ensure that the entity's actions and responses to climate are proportionate to the materiality of climate to the primary user.
5. Strategic integration	The governance body should ensure that climate systemically informs strategic investment planning and decision-making processes and is embedded into the management of risk and opportunities across the entity.
6. Incentivisation	The governance body should ensure that executive incentives are aligned to promote the long-term prosperity of the entity, including climate-related targets and indicators in their executive incentive schemes, where appropriate.
7. Reporting and disclosure	The governance body should ensure that material climate-related risks, opportunities, and strategic decisions are consistently and transparently disclosed to all stakeholders – particularly to investors and, where required, regulators. Such disclosures should be made in financial filings, such as annual reports and accounts, and be subject to the same disclosure governance as financial reporting.
8. Exchange	The governance body should maintain regular exchanges and dialogues with peers, policymakers, investors, and other stakeholders, to encourage the sharing of methodologies and to stay informed about the latest climate-relevant risks, regulatory requirements, etc.

6.1. Governance disclosure objective [NZ CS 1 paragraph 6]

NZ CS 1 | NZ CS 2 | NZ CS 3

The objective of the Governance disclosures is to enable primary users to understand both the role an entity's governance body plays in overseeing climate-related risks and opportunities, and the role management plays in assessing and managing those climate-related risks and opportunities.

Both governance body and management are defined terms in NZ CS [NZ CS 1 Appendix A].

6.2. Governance body identity [NZ CS 1 paragraph 7(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to know where the ultimate responsibility for the oversight of climate-related risks and opportunities lies within an entity. This information will support capital allocation decision making by primary users who wish to place a premium on prioritising climate change.

An entity is presumed to operate with a board and an executive management team governance structure. The board is assumed to be ultimately responsible for the oversight of the entity, with management carrying out the entity's core functions. Where this description holds true, preparers should refer to the board as the governance body responsible for oversight of climate-related risks and opportunities.

For entities without a board (for instance, in the context of a managed investment scheme, an investment committee rather than a board), the entity should identify the highest level of its governance hierarchy which oversees its climate-related risks and opportunities.

The entity should also list any committees of the highest governance body that are responsible for decision making and overseeing the management of an entity's climate-related risks and opportunities.

6.3. Governance body oversight [NZ CS 1 paragraph 7(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to understand the extent to which climate-related risks and opportunities have been incorporated into the mainstream oversight functions of an entity's highest-level governance body. This will give context to an entity's prioritisation of climate-related risk for many primary users.

This disclosure requires an entity to describe the governance body's oversight of climate-related risks and opportunities. Sub-disclosures in paragraphs 8(a) to 8(d) form the basis of disclosure 7(b).

Many of these disclosures may work well as figures or tables. For instance, an entity may choose to provide an organisation chart to clearly communicate its governance structure and the processes involved in oversight of climate-related risk and opportunity.

Example voluntary disclosure

Vector has included a visual to complement its governance disclosures. See page 6 of its 2022 TCFD Report: Vector's journey to a new energy future.

Governance body oversight – processes and frequency [NZ CS 1 paragraph 8(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

This disclosure requires an entity to describe the processes and frequency by which the governance body is informed about climate-related risks and opportunities.

This disclosure gives primary users an insight into the extent to which the entity's highest-level governance body prioritises climate-related risks and opportunities in its core oversight duties.

An entity may consider including governance metrics such as frequency of meetings, proportion of time, or number of board meetings allocated to climate-related risks and opportunities.

NZ CS 1 NZ CS 2 NZ CS 3

Governance body oversight > skills and competencies
[NZ CS 1 paragraph 8(b)]

As mentioned above, one of the WEF's guiding principles for effective climate governance on corporate boards is having a command of the subject. Climate change is a disruptor to business as usual. As with any form of disruption, governance bodies should be composed of individuals who collectively have sufficient awareness and understanding of the ways in which climate change may affect the entity they govern.

This disclosure informs primary users as to the level of subject-specific capability the governance body has established to ensure it can provide appropriate oversight of climate-related risks and opportunities. Primary users want to know that an entity has the right skills and competence on its governance body, and access to the right expertise. Primary users also want to know that an entity has mechanisms in place to ensure the retention of such competence – for example, ensuring that skills and competencies do not reside in one individual.

If an entity is in the process of building and developing skills and competencies at the governance level, it should include a description of its progress to date and its plans to further develop skills and competencies.

Example voluntary disclosure

This example disclosure includes information about the current climate-related expertise of an entity's governing body (in this case a Board of Directors).

Board climate expertise

"Last year, the Board Nominations Committee endorsed, and the Board approved, E&S [Environmental and Social] as a reference skill in the Board Skills Matrix. Non-executive Directors are required to have significant experience across multiple Board skill areas and are expected to contribute to all elements of the strategy and risk framework, including E&S risk. No one director assumes responsibility for a singular topic. The Board collectively exercises its responsibilities. The Board considers the complexity of issues that impact on strategy and risk and operations. Directors are assessed as 'high competency', 'practised' or 'aware' on skills outlined in the Board Skills Matrix, based on their professional or non-executive experience relating to a skill. On E&S skill, five Directors have been assessed as 'high competency', reflecting the broad scope of E&S, diverse experience of directors and heightened focus on E&S education."

The entity then went on to provide information on how it was continuing to build climate capability at the Board level.
"Our Board continues to expand its E&S expertise through education sessions. Two climate-focused education sessions were held for the Board in the last six months. These were led by external experts and covered: Australia's path to net zero emissions; the key policies and geopolitical considerations to enable the global transition; and implications for Australia."

Retrieved from pages 11 -13 of Commonwealth Bank 2022 Climate Report

Governance body oversight > integration [NZ CS 1 paragraph 8(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users seek clarity on the governance body's approach to integrating climate-related risks and opportunities into strategy development and implementation. This information helps to illustrate the merits of an entity's claims of the weight it attaches to climate-related risks and opportunities in its core strategic processes and helps to contextualise subsequent Strategy disclosures.

This disclosure provides an entity with an opportunity to demonstrate the coherence of its efforts to integrate climate-related risk and opportunity in the development and execution of its strategy.

Governance body oversight > monitor progress [NZ CS 1 paragraph 8(d)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Disclosure 8(d) offers primary users a view of how the governance body makes climate-related risk and opportunity metrics and targets a tangible, meaningful component of management's core responsibilities, linked to management performance evaluation criteria.

Incentivising appropriate members of management for meeting and fulfilling climate-related targets and policies is a means of ensuring ownership of performance, and disclosing such arrangements is a means of communicating that commitment.

An entity should set out how their highest-level governance body goes about selecting climate-related metrics and targets as disclosed in NZ CS 1 paragraphs 21(a) to 21(d), monitors progress toward them, and oversees their achievement. The entity should make specific reference to any linked remuneration policy related to the achievement of these metrics and targets [NZ CS 1 paragraph 22(h)].

Further guidance on governance

World Economic Forum (WEF), 2019. How to Set Up Effective Climate Governance on Corporate Boards Guiding Principles and questions
Chapter Zero, 2023. New Zealand New Zealand Board Toolkit
Chapter Zero New Zealand has a resources section on its website that may be helpful.
Climate Governance Initiative also has a resources section on its website.

6.4. Management's role [NZ CS 1 paragraph 7(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to understand how the assessment and management of climate-related risks and opportunities is assigned to management-level positions or committees. This information will add depth to a primary user's understanding of how the governance body's strategic direction on climate-related risk and opportunities is implemented by management.

This disclosure requires an entity to describe management's role in assessing and managing climate-related risks and opportunities. Sub-disclosures in paragraphs 9(a) to 9(d) form the basis of disclosure 7(b).

An entity should describe its organisational structure(s), using figures or diagrams where appropriate.

How other risks are managed within the entity (and by whom) could in many cases serve as an indicator of where climate-related risk-management responsibilities might best be assigned.

Management is defined in NZ CS as 'executive or senior management positions that are generally separate from the governance body'.

NZ CS 1 NZ CS 2 NZ CS 3

Management's role > responsibilities assigned [NZ CS 1 paragraphs 9(a)]

Primary users want information on how climate-related responsibilities are assigned to management-level positions or committees.

An entity should focus on the 'who' and 'how' of climate-related risk and opportunity management in completing disclosure 9(a), documenting the assignment of responsibilities with respect to climate-related risks and opportunities.

This disclosure also requires an entity to provide information on the process and frequency by which management-level positions or committees engage with the governance body. The use of the word 'engage' in this disclosure requirement was intentional to reflect that the dialogue with the governance body is clearly seen as two-way engagement, rather than mere reporting from management to the governance body.

Example voluntary disclosure

This example disclosure shows how responsibilities have been assigned to specific management-level roles and committees. It shows the management position or committee within the organisation and the climate-related responsibilities assigned to each role or committee.
Adapted from page 4 of *BNZ's Climate Report 2022*

Position/Committee	Responsibilities
CEO	The BNZ CEO has delegated authority from the Board for the bank's management of climate-related risk and opportunities in accordance with BNZ's Climate Strategy. Day-to-day management of risks and opportunities within specific business units is delegated to Executive Team members.
The Executive Risk and Compliance Committee (ERCC)	The Executive Risk and Compliance Committee (ERCC) is the key management oversight body responsible for management of climate risk. All Executive Team members sit on the ERCC. The ERCC sets BNZ's overall response to climate change in accordance with BNZ's Climate Strategy, and holds responsibility for BNZ's internal and external climate-related targets and commitments. At a customer level, the ERCC sets the BNZ's appetite to onboard and lend to customers exposed to climate-related risks, and approves position statements for material sectors, including emissions-intensive industries. The ERCC receives regular ESG reporting on how BNZ is integrating climate-related impacts into its business, as well as progress updates against its external commitments. Reporting is also provided via the Risk Appetite Settings (RAS) dashboard.
The Environmental, Social, Governance Risk Management Committee (ESGRMC)	The Environmental, Social, Governance Risk Management Committee (ESGRMC) is a subcommittee of the ERCC responsible for delivery and management of, and reporting on, targets, commitments and strategic initiatives under BNZ's Climate Strategy, as well as proposing climate-related targets and metrics to the ERCC for adoption. Key Executive Team direct reports from each business unit sit on the ESGRMC.

Position/Committee	Responsibilities
CRO	Specific responsibilities sit with the following BNZ Executive Team members: The BNZ's CRO is responsible for the BNZ's Climate Risk Management Framework. The CRO also produces a monthly report for the ERCC which includes sustainability risk.
The Executive, Commercial Services and Responsible Business	The Executive, Commercial Services and Responsible Business is responsible for: the preparation and publication of climate-related reporting; BNZ's Climate Strategy and the development of overall organisational appetite in relation to lending to, and onboarding, customers impacted by climate change and the BNZ's overall response to climate change; the BNZ Sustainable Finance Framework; and the development of position statements in regard to sectors that are materially impacted by climate.
The Executive, Customer, Products and Services	The Executive, Customer, Products and Services is responsible for product development in relation to sustainability and, specifically, climate.
The Chief Customer Officers	The Chief Customer Officers for Corporate and Institutional Banking and Partnership Banking are responsible for working with BNZ's business and personal customers to manage climate risk, reduce emissions and deliver sustainable finance.
The Executive, Operational Excellence	The Executive, Operational Excellence is responsible for managing climate risk and reducing emissions in BNZ's operations and with its suppliers.

Management's role > organisational structure [NZ CS 1 paragraph 9(b)]

NZ CS 1 NZ CS 2 NZ CS 3

This disclosure gives primary users a contextual overview of where assigned responsibilities lie within the entity.

An entity should illustrate the position(s) within management hierarchies where the assigned management-level responsibilities described in 9(a) reside. An entity should include information about the reporting lines back to the governance body.

Management's role > processes [NZ CS 1 paragraph 9(c)]

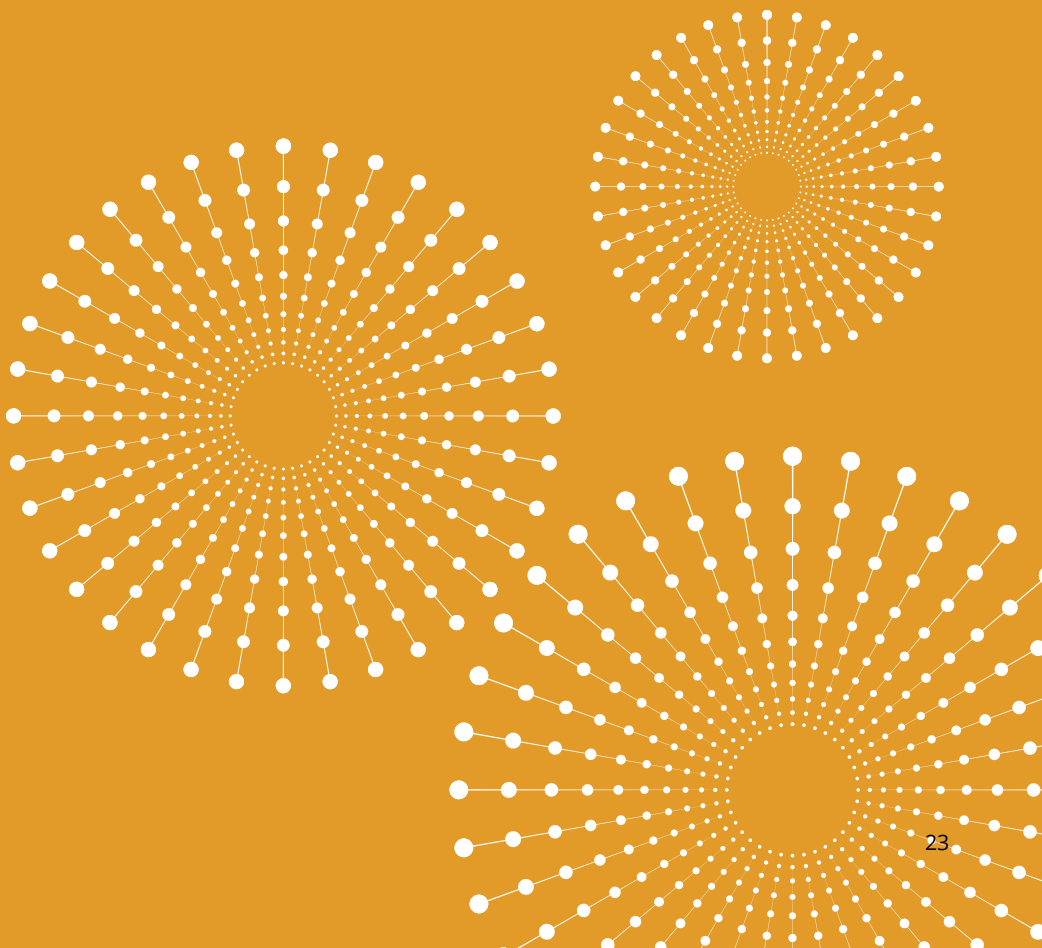
NZ CS 1 NZ CS 2 NZ CS 3

Primary users are interested in understanding the extent to which management actively engages in exercising the climate-related roles and responsibilities assigned to them by the governance body.

Disclosure 9(c) should involve a summary of how and how often management is involved in monitoring and making decisions about climate-related risks and opportunities.

An entity may consider including any dedicated controls or procedures that are in place.

Strategy



7. Strategy

The Strategy section of NZ CS 1 requires an entity to cover a broad range of issues. An entity must demonstrate that it understands the current and anticipated impacts, and financial impacts, of climate change. These impacts may need to be expressed in range estimates due to both the uncertainties associated with climate change and the relatively early stage of this type of analysis.

The Strategy section also includes disclosures on the use of scenario analysis to test the resilience of an entity's business model and strategy under different temperature outcomes. An entity will need to disclose which scenarios it has used and their related methods and assumptions [NZ CS 3 paragraph 51]. Starting qualitatively is advisable, primarily to avoid a pursuit of precise quantification.

Sector-level collaboration on scenario analysis can play an important role in enabling individual entities to provide high-quality, consistent, and comparable disclosures to primary users. If adapted well at entity level, it can assist preparers in satisfying primary users that the tool of scenario analysis has been deployed in a way that has challenged the entity's thinking and led to genuine improvements to the entity's business model and strategy.

The sector-level scenario analysis page on the XRB website contains the indicative status of New Zealand sectors on scenario analysis. It also contains links to the website where the sector-level scenarios are held, when these are available.

An entity also needs to disclose the transition plan aspects of their strategy, and how aligned this is with internal capital deployment and funding decision-making processes.

"Many companies too often translate the complexities of climate change into strategic options that align with business as usual practices. The underlying assumption for business as usual interpretations is that 'current economic and social conditions will continue to flourish regardless of unfavorable biophysical conditions in Earth's natural and climate systems…'
Adaptive strategies allow a company to make corrections in its strategy along the way and avoid significant errors."

TCFD Guidance on Scenario Analysis for Non-Financial Companies, page 39.

Further guidance on strategy

UK Transition Plan Taskforce, 2022. A Sector-Neutral Framework for private sector transition plans: Call for Evidence, page 4.
TCFD, 2021. Implementing the Recommendations of the Task-Force on Climate-Related Financial Disclosures, page 18.
TCFD, 2020. Guidance on Scenario Analysis for Non-Financial Companies, page 39.
XRB Climate-related disclosures >> Resources

7.1. The fundamentals of climate-related risk

Before diving into the disclosure requirements, this section briefly outlines the fundamentals of climate-related risk, to help put the following information into context.

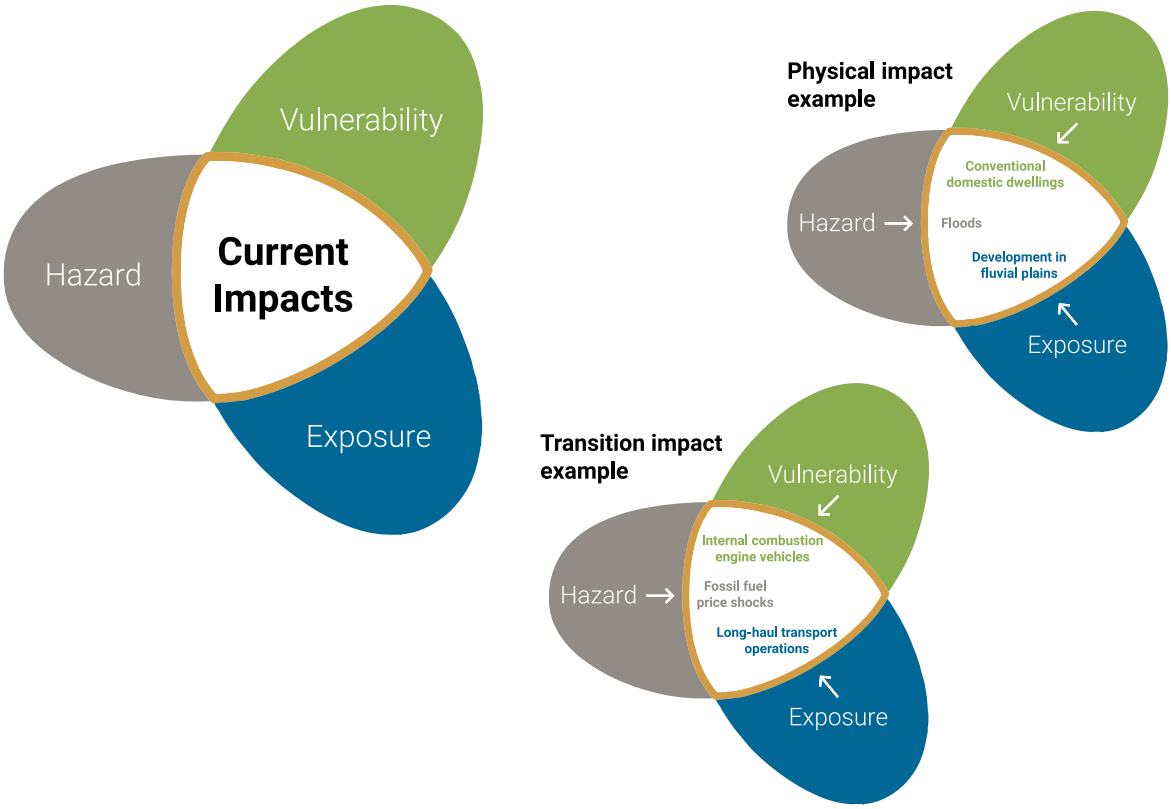
The IPCC views climate risk as the potential for adverse consequences for human or ecological systems, resulting from both physical and transition-related climate factors. The TCFD notes that climate risks have unique characteristics, which means they need to be thought about differently to other typical business risks and opportunities (see Table C1 on page 5 of the TCFD's Guidance on Risk Management Integration and Disclosure).

Building from the IPCC framing, the current impacts of climate change occur at the intersection of three core concepts.

- **Hazard** – "The potential occurrence of a natural or human-induced physical event or trend that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources" (IPCC, 2022 Full Report, p.43). In the context of climate-related risk disclosure, the concept of a 'hazard' may be extended to incorporate transition events or trends with a potential to cause loss or damage to livelihoods, service provision,
or the achievement of an entity's strategic aims.
- **Exposure** – "The presence of people; livelihoods; species or ecosystems; environmental functions, services, and resources; infrastructure; or economic, social, or cultural assets in places and settings that could be adversely affected" (IPCC, 2022 Full Report, p.43).
- **Vulnerability** – "The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt" (IPCC, 2022 Full Report, p.43).

These concepts, and the relationships between them, are perhaps best explained by figures and illustrative examples. Figure 2 illustrates how current climate-related impacts can occur at the intersection of hazard, vulnerability, and exposure.

Figure 2: The current (or observed) impacts of climate change occur where climate-related hazards intersect with the exposure of vulnerable risk areas (adapted from adapted from IPCC WGII Sixth Assessment Report, Chapter 16, page 2419). An example would be where a flood hazard affects a suburban development in an exposed fluvial plain, impacting single-storey homes vulnerable to inundation damage. Another may be where a fossil fuel price shock hazard affects a long-haul transport operator which is reliant on an internal combustion engine fleet.



The dimensions of hazard, exposure, and vulnerability can be applied to both current impacts and anticipated impacts of climate-related risks. Uncertainty is a key factor in any analysis of future anticipated impacts. In Figure 3 the arrows extending from the darker shaded regions of the diagram illustrate how risk may increase or diminish over time, as efforts to reduce hazard, vulnerability, and exposure in human and natural systems play out. Entities can think about these uncertainties when determining anticipated impacts of (future) climate-related risks and opportunities.

Figure 3: Risks occur at the intersection of future hazard, vulnerability and exposure, all of which are subject to uncertain degrees of plausible change (represented by the arrows) (adapted from IPCC WGII Sixth Assessment Report, Chapter 16, page 2419). Actions taken to reduce hazards, vulnerabilities, and exposures may result in reduced risk, and, conversely, failure to act may see risks increase.

Climate-related risks and opportunities should be described in terms of their anticipated timeframe of occurrence (i.e., short, medium, and long terms, with an explanation of what these timeframes mean for the entity and how they have been defined) and their type (i.e., whether physical or transition).

7.2. Strategy disclosure objective [NZ CS 1 paragraph 10]

NZ CS 1 NZ CS 2 NZ CS 3

The objective of the Strategy disclosures is to enable primary users to understand how climate change is currently impacting an entity and how it may do so in the future. This includes the scenario analysis an entity has undertaken, the climate-related risks and opportunities an entity has identified, the anticipated impacts and financial impacts of these, and how an entity will position itself as the global and domestic economy transitions towards a low-emissions, climate-resilient future.

7.3. Current impacts and financial impacts [NZ CS 1 paragraph 11(a)]

NZ CS 1 NZ CS 2 NZ CS 3

Primary users want insight into how climate currently affects an entity. The crux of this disclosure therefore lies in an entity's understanding of the current physical and transition impacts of climate change.

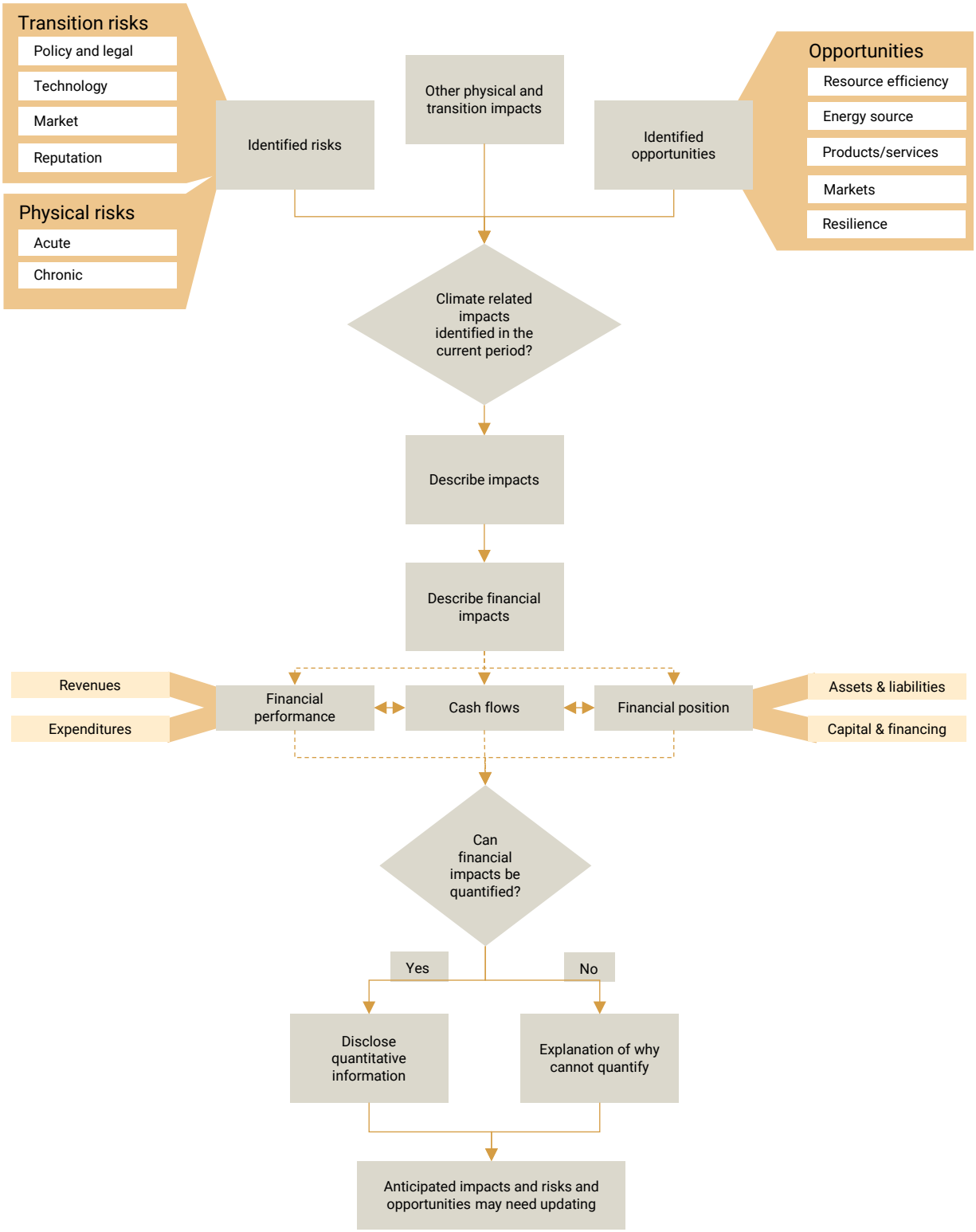
This is a relatively new area of disclosure globally, with little precedent available to draw from. Nevertheless, it is an important area of disclosure as it enables primary users to ascertain whether an entity is aware of current climate-related impacts, rather than seeing climate-related impacts as a long-term issue. This sets the entity up to more robustly cross-check their future-looking risks, opportunities, anticipated impacts, and financial impact disclosures with current-day impacts and financial impacts. From a primary user perspective, this also provides insight into the entity's level of exposure to future climate events. Changes in an entity's financial performance, financial position, and cash flows in the current reporting period can help identify these impacts, but it will unlikely be instructive alone and requires broad thinking about what has happened across the economy, society, and environment in the recent past.

Climate-related metrics can be used for measuring and describing these impacts on the entity [NZ CS 1 paragraphs 21(a) to (c)].

This disclosure requires an entity to describe current climate-related impacts. Sub-disclosures in paragraphs 12(a) to 12(c) form the basis of disclosure 11(a).

Current impacts are those which have been experienced by the entity in the reporting period covered by the climate-related disclosures. In other words, they have moved from being a risk or opportunity (both future-looking) to something that has occurred, i.e., an impact.

Figure 4: Current impacts and financial impacts (adapted from Figure 3, page 10 TCFD: Implementing the recommendations of the TCFD)



Further guidance on current impacts and financial impacts

TCFD, 2021. Implementing the Recommendations of the TCFD, page 18.

NZ CS 1 NZ CS 2 NZ CS 3

Current impacts
[NZ CS 1 paragraph 12(a)]

This disclosure provides primary users with information on an entity's current physical and transition impacts. The impacts should be described in a way that is granular and specific to the entity, rather than broad impacts that have impacted whole economies, countries or regions.

An entity's current impacts may have occurred via multiple routes, many of which may be indirect. See examples in Table 2.

If an entity considers that climate-related events are a significant driver behind an impact, then it can classify this a climate-related impact. For example, flood damage is an impact resulting from the exposure of an entity's vulnerable premises to the climate-related hazard of increased extremes of precipitation. There is no need for the entity to attempt to calculate what proportion of the impact of a given flood event resulted from climate change, above and beyond a 'business as usual' flood event.

In another example, if an entity considers that the imposition of an emissions charge is a significant driver increasing the cost of a raw material, then this would be considered a current transition impact. The entity is not required to calculate a percentage of the cost increase related to climate change.

Ultimately, judgement will be needed as to whether the entity considers the impacts to be climate-related or not. There will likely be situations where the role of climate change is not discernible to the entity, or the role is considered to be minor or uncertain.

An entity is not expected to undertake analysis to compare an event and its impacts with a world where climate change does not exist. However, scientific climate change attribution studies are becoming increasingly common, and can provide an entity with more concrete links between impacts and climate change. It may also provide more detailed analysis for use within an entity. For example, there is attribution analysis available from climate scientists with respect to the connection between Cyclone Gabrielle and climate change. However, no analysis has yet been undertaken for the early 2023 Auckland flooding events.

Identifying current impacts

This section provides examples of an entity working through the identification process outlined in the flowchart in Figure 4. The examples stop at the point of the identification (or not) of a current impact.

1. **Review previously identified climate-related risks, opportunities, and anticipated impacts. Have any of these anticipated impacts been experienced in the current reporting period?**

Example thought process of identified opportunity with no current impact

Entity X had previously identified an opportunity in the development and sale of low-emissions meat products. Entity X will start substantive R&D work, and start incurring associated expenses for this work, in the near future.
In this example thought process, Entity X concluded that its previously identified opportunity did not have a current impact.

Example thought process of identified risk with current impact

Entity X experienced increased insurance premiums in some locations. Entity X considers this may be related to recent climate-related extreme weather events. This is also a risk in terms of increased insurance premiums and the possibility of insurance unavailability in future in some areas and for some risks. An associated impact has been increased staff time in negotiating insurance coverage and finding alternative insurers.
In this example thought process, Entity X concluded that its identified transition risk did have current impacts in the form of increased staff time in negotiating and finding alternatives, and increased insurance premiums.

2. **Think back across the current reporting period and consider:**

- acute/discrete events (e.g., physical storms, droughts, transition-related protests, legal action, new taxes or tariffs, new contractual terms, managed retreat), or categories of events where an individual event is too granular to meaningfully assess;
- chronic/ongoing, multi-faceted change (e.g., the cascading effects of changing physical temperatures, intensity and distribution of precipitation, transition-related prices, regulations), which are likely harder to distinguish from non-climate related changes; or
- benefits realised (e.g., via market changes, resource efficiencies).

Include events that may have taken place in locations of relevance to the entity (which could be limited to Aotearoa New Zealand, or further afield).

3. Have any of these events or actions of others identified in question 2 impacted the entity? And if so, were these events related to physical changes and transition changes being driven by climate change?

Example thought process of identified event with current impact

The impacts of Cyclone Gabrielle on Entity X's business were significant. Entity X had not previously identified cyclones and their associated impacts/indirect impacts as risks. Entity X experienced damage to land it owns, damage to assets including livestock, buildings, vehicles and other on-farm infrastructure. Entity X was initially unclear as to its connection to climate change and whether it was made more likely, more intense, or otherwise, by climate change. After doing some desktop analysis, including reviewing scientific attribution information, Entity X's view is it was a climate-related event.
In this example thought process, Entity X concluded that the identified physical event had a current impact on Entity X's property in the form of damage to land and assets, disrupted operations and movement of goods.

Example thought process of identified event with no current impact

A significant event in 2023 was the physical Auckland flooding events. Entity X has not been able to find any scientific evidence, but Entity X assumes that the event was made more intense, more likely, or both, due to climate change. There were no impacts on Entity X's business that it was able to identify. Entity X has heard about others having supply disruptions, Entity X's products go to market by travelling south so Entity X may have avoided impacts that others in Entity C sector felt from that event.

In this example thought process, Entity X has concluded that while it had identified a climate-related physical event it had no current impact on Entity X.

In some cases, it is not straightforward to separate climate-related from non-climate-related impacts – or indeed, to separate climate-related impacts from other sustainability-related impacts. Some (particularly chronic) impacts may have originated in previous years, but if they present a current impact, primary users will expect an entity to describe how these impacts continue to affect the entity, at least at a high level.

For example, snow cover or number of snow days may present a clear impact for a ski field operator, but the connection to climate change may initially be unclear to the entity. For an aquaculture company, ocean temperature may be something with a clear impact that was previously not understood to be climate-related (but rather something that genuinely fluctuated).

Entities may use the National Climate Change Risk Assessment (NCCRA) to help identify physical impacts. It is, however, relevant to note that the NCCRA is national-level in focus so may not include hazards and variables specific to individual entities. The Emissions Reduction Plan and information on the Ministry for the Environment (MfE)'s website on its climate change work programme can inform transition impacts. In some instances, entities will be of the view that their entity has not been impacted by physical and/or transition impacts, and their disclosure(s) will reflect this.

Example voluntary disclosure

Vector has described the current impacts of climate change in its TCFD Report 2022: Vector's journey to a new energy future, pages 18-28.

Table 2: Illustrative examples of current climate-related impacts on an entity (adapted from TCFD, 2021, p.18)

Area	Examples of current physical and transition impacts of climate change from an entity's perspective
Business model (including operations)	A taxi company changing its own business model to become a ride-sharing company as part of a broader strategy to reduce emissions and reduce its transition risks. This includes changing its internal capabilities and organisational resources by investing in data centres, new IT equipment and staff with software and data skills. This replaces its previous business model of using long-term contracts with drivers in a limited geographical area.
Products and services	Developed a new certification service for contracted supply chain partners to verify their on-farm climate-resilience practices
Supply chain and/or value chain	Flooding at supplier's warehouse resulted in two-week delay in supply of packaging material, causing a subsequent delay in our orders being shipped to our customers
Adaptation and mitigation activities	Contracted property search agent to secure new long-term lease on cool-store and packaging plant, relocating operations out of fluvial floodplain to reduce insurance costs and risk of disruption Purchased a new electric distribution fleet and sold internal combustion vehicles to reduce emissions and avoid rising fossil fuel costs
Investment in R&D	Invested in research into drought-resistant variants of existing horticultural products
Acquisitions or divestments	Acquired regenerative farming consulting business to help our contracted supply chain partners to reduce their on-farm emissions and enhance their environmental outcomes achieved on farm, improving brand
Access to capital	Developed a climate-related risk disclosure to gain access to European capital markets

Further guidance on current impacts

TCFD, 2021. Guidance on Metrics, Targets, and Transition Plans, pages 46-52.
TCFD, 2021. Status Report, pages 56-74.
European Union, 2019. Guidelines on reporting climate-related information, pages 13-14.
BEIS, 2022. Mandatory climate-related financial disclosures by publicly quoted companies, large private companies and LLPs Non-binding guidance, pages 12-14.
IPCC: AR6 Synthesis Report, Summary for Policymakers, page 7.
MFE, 2020. National Climate Change Risk Assessment for New Zealand, Table 8.
MFE: Climate Change Work Programme
MFE, 2022. Emissions Reduction Plan

NZ CS 1 NZ CS 2 NZ CS 3

Current financial impacts
[NZ CS 1 paragraph 12(b)]

This disclosure provides information about the current financial impacts of an entity's physical and transition impacts identified in paragraph 12(a). This is the translation of impacts into financial impacts on an entity's financial performance, financial position, and cash flows, within the current reporting period. For primary users, this illustrates the entity's current financial sensitivity to climate-related impacts. Primary users can use this information to determine how well the entity is managing the current climate-related impacts it is experiencing, and as a gauge of the extent to which future climate-related risks and opportunities might affect its financial position, financial performance, and cash flows.

NZ IFRS and PBE Standards (the accounting standards that apply to Tier 1 and Tier 2 reporting entities) already require consideration of climate-related matters, when the effect of those matters is material in the context of the financial statements as a whole (see '10. Coherence with financial statements').

The guidance and illustrative examples provided in this section are not intended to provide any interpretation on the application of the recognition, measurement, or disclosure requirements contained in the accounting standards. Rather, the guidance and illustrative examples are intended to illustrate how the information provided in an entity's climate-related disclosures can supplement and complement information provided in an entity's financial statements.

One of the principles in NZ CS 3 is coherence. This principle is described as 'presenting disclosures in a way that explains the context and relationships with other disclosures of the entity' [NZ CS 3 paragraph 13]. Information provided will be more useful to primary users if connections are made to the financial statements – for example, by cross-referencing to notes in financial statements, or identification of the impacted line items in the financial statements.

Illustrative example of a current financial impact and cross-referencing to financial statements

Our storage warehouse was damaged by a flood, impacting all inventory supplies stored there. Those inventories were written down to net realisable value, as disclosed in Note X of the financial statements.

An entity is required to disclose quantitative information unless it is unable to do so, in which case it must describe the current financial impact in qualitative terms. It is important to note that quantitative and qualitative information are not mutually exclusive. If an entity can quantify the current financial impacts, understanding the context (in a qualitative sense) is relevant and material information. And so quantitative information should be disclosed together with the qualitative information, and not instead of it.

Where quantitative information is disclosed, it can be expressed as a single value or as a range. Where current financial impacts carry significant uncertainties, they should be expressed as ranges.

As noted above, disclosing information on current financial impacts can supplement information provided in an entity's financial statements. In practice, this may mean that when disclosing current financial impacts an entity may include additional information that has not met the recognition, measurement, or disclosure requirements in the accounting standards.

Illustrative example of providing additional information to that in financial statements
In February 2023, our orchard in the Hawke's Bay was devasted by Cyclone Gabrielle. Consequently, we have been unable to fulfil our orders, which has resulted in a loss of revenue for the current reporting period of $X.

There may be instances when an entity has identified a current physical or transition impact, but there are no financial impacts in the current reporting period. Disclosing that there are no current financial impacts can provide material information.

Illustrative example of no current financial impact
During this reporting period our office premises have been subjected to three different protest events. These have included protesters blocking our staff from entering the premises, and on one occasion staff were unable to leave the premises. The protesters were insisting we reduce our emissions and were the first such protests we have experienced. While these impacts led to lower staff productivity over those days, significant media coverage, and potentially raises further reputational risks for us, there are no material current financial impacts.

Fair presentation
[NZ CS 3 paragraphs 6-9]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity is not required to disclose what proportion of an impact resulted from climate change. However, if an entity believes this information would be material to its primary user, it may include attribution information within its reporting. For example, if reputable published evidence states that an event was 1.2 times the magnitude the event would have been without climate change, then an entity may include this additional information.

Adoption provision 1
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

An entity may choose to apply adoption provision 1 providing an exemption from this requirement in its first reporting period.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose the methods, assumptions, and estimation uncertainty associated with the disclosure of current financial impacts. See NZ CS 3 Methods and assumptions, and data and estimation uncertainty. Materiality applies when disclosing information on methods and uncertainty.

Further guidance on current financial impacts

TCFD, 2021. Guidance on Metrics, Targets, and Transition Plans, pages 46-52.
TCFD, 2021. Implementing the Recommendations of the TCFD, pages 74-78.

Current financial impacts > unable to quantify
[NZ CS 1 paragraph 12(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity should provide a brief description of the process it has followed in attempting to quantify the current financial impacts. Explaining what was considered, why its quantification is challenging, and how these challenges might be overcome in future may assist primary users in evaluating these disclosures.

Adoption provision 1
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

If an entity chooses to apply adoption provision 1 for an exemption from the disclosure requirement in NZ CS 1 paragraph 12(b), it is also excluded from this requirement in its first reporting period.

7.4. Scenario analysis
[NZ CS 1 paragraph 11(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

This guidance document focuses on the **disclosure requirements** in NZ CS relating to scenario analysis. This differs from the separate guidance focused on helping entities to get started on the underlying **process or method** of scenario analysis as a strategy tool.
By the end of 2023, this suite of guidance will comprise:

- Scenario analysis: Getting started at the entity level (without sector scenarios)
- Scenario analysis: Getting started at the entity level (with sector scenarios)
- Scenario analysis: Getting started at the sector level

To avoid doubt, by 'scenario analysis process' we intend to generally refer to the TCFD's six-step scenario analysis method, which includes the steps of constructing climate-related scenarios as well as analysing them by placing their business model and strategy inside them. This is further elaborated on in our scenario analysis guidance referred to above.

Primary users want to understand, with as much clarity and coherence as possible, how future risks and opportunities might affect the business model and strategy of an entity.

However, there is significant uncertainty surrounding the sensitivity of the climate to the concentration of atmospheric GHGs, and further uncertainty regarding the extent to which global efforts to reduce GHG emissions will be successful. These and other critical uncertainties make it very difficult for an entity to assess future climate-related risks and opportunities, or the impacts that these may carry.

Scenario analysis offers one of the few routes available to an entity to systematically explore and prepare for uncertain future change.

Scenario analysis offers one of the few routes available to an entity to systematically explore and prepare for uncertain future change. As such, it is an important step to enable other strategy disclosures to be considered credible by primary users. Primary users will be interested in understanding the scenario analysis process the entity has followed, as well as what the core assumptions underpinning the analysis were and whether these align with those used by peers. See the discussion below relating to NZ CS 3 methods and assumptions disclosures for further information.

The focus of this disclosure requirement is on the **process** of scenario analysis rather than the impacts themselves, which should instead appear in the disclosures under NZ CS 1 paragraph 15 on anticipated impacts. In addition, entities may choose to employ scenario analysis to better understand the future-facing aspects of:

- the climate-related risks and opportunities disclosed under NZ CS 1 paragraph 11(c);
- the anticipated impacts and financial impacts of climate-related risks and opportunities disclosed under NZ CS 1 paragraph 11(d); and
- how their business model and strategy might change to address their climate-related risks and opportunities, disclosed under NZ CS 1 paragraph 16(b).

Scenario analysis is not a one-time process, as entities typically refresh their scenarios and conduct their scenario analysis as part of their strategic planning cycle. This occurs at varying frequencies, often determined by the characteristics of the market or markets in which the entity operates. These disclosures are required at each reporting date, even when the underlying scenario analysis has been conducted in a prior reporting period. These disclosures may therefore remain unchanged until a new or refreshed scenario analysis is undertaken.

This disclosure requires an entity to describe the scenario analysis it has undertaken. Sub-disclosure in paragraph 13 forms the basis of disclosure 11(b).

Scenario analysis undertaken [NZ CS 1 paragraph 13]

NZ CS 1 NZ CS 2 NZ CS 3

The intent is to give primary users satisfaction that challenging and plausible climate-related scenarios have been used, that the business model and strategy have been tested, and that the entity is integrating this tool into their business.

The implications of scenario analysis for the entity's business model and strategy should be, due to the nature of climate change itself, profound and of critical strategic relevance. The results of scenario analysis are not so much about written outputs, rather an increased understanding by the entity of the need for transformation, and the fundamental lack of resilience that most business models and strategies have to a diverse range of climate outcomes. If the implications are not indicative of a lack of resilience and need for transformation, the scenario analysis is unlikely to meet the TCFD's criteria of plausible, challenging, and coherent.

If an entity's sector has undertaken scenario analysis at the sector level, this should provide helpful inputs for this disclosure (assuming the entity has used similar assumptions in its own scenario analysis). If different assumptions have been made, it would be useful to a primary user to know what these differences are.

"Limiting warming to 1.5°C above pre-industrial levels would require transformative systemic change, integrated with sustainable development. Such change would require the upscaling and acceleration of the implementation of far-reaching, multilevel and cross-sectoral climate mitigation and addressing barriers. Such systemic change would need to be linked to complementary adaptation actions, including transformational adaptation, especially for pathways that temporarily overshoot 1.5°C (medium evidence, high agreement)."

IPCC, 2018 Global Warming of 1.5˚C

Illustrative example for an insurance entity

In March 2023, our board and senior management engaged in a process of scenario analysis. This involved adapting the climate-related scenarios for the general insurance sector in New Zealand. We were involved with developing the sector scenarios as part of our sector group in 2022, facilitated by our industry body XX. Our entity analysed a 1.5°C degree orderly scenario, a 3°C degrees hothouse world scenario, and a second 1.5°C degree disorderly scenario (available HERE).

We added further detail to the sectoral scenarios by making further and different assumptions, particularly more focus on our largest business lines (XX insurance product) and the competitive dynamics within those markets, including the actions and outcomes for the key competitors of strategic interest.

See XX methods and assumptions disclosures below for more detail of the scenarios we analysed. We first had our team construct the scenarios for our specific risks and opportunities and by slightly adapting the sectoral scenarios and adding the assumptions noted above. These were then signed off by the Board.

We then engaged a consultant to facilitate five workshops, three with staff from XYZ departments, then two with the Board and senior management whereby the focus was on considering how our business model and strategy would play out in each scenario and options we could take to improve their performance.

We are now conducting transition planning work that is leveraging the learnings from the scenario analysis process and this includes changes to our core business model and strategy.

[NZ CS 3 paragraph 51(a)(i)]

NZ CS 1 NZ CS 2 NZ CS 3

Description of scenario narratives

A scenario narrative should be a coherent, vividly realised illustration of events unfolding over time in response to the cause-effect relationships of drivers of change. To fit the TCFD's definition, a scenario narrative "tells a story with a sequence of events; a plot; a beginning, middle, and end; characters, and a setting describing developments in the scenario around different economic, technical, environmental, and social dimensions".

The description needs to be an accurate reflection of the full underlying scenario. An entity should think of this like creating a movie trailer of the underlying movie. The key defining characteristics of the movie should be included, so that the general plot is understood. For example, the marine sector's scenarios (pages 21 and 27) include around five brief paragraphs describing the underlying scenarios. This description should get as specific to the sector and entity level as possible.

In most cases we would expect that this description will be sufficiently high level to avoid concerns about the disclosure of commercially sensitive information. However, it does need to be accurate, and commercial sensitivity should not be used as an excuse to not disclose. See the discussion below regarding the disclosure of commercially sensitive information in risks and opportunities [NZ CS 1 paragraph 11(c)].

As noted by the TCFD at page 43 of its Guidance on Scenario Analysis For Non-Financial Companies, "Companies are unlikely to face material legal risk in disclosing forward-looking climate-related information if they take necessary precautions to ensure that their disclosures are not materially misleading or inaccurate, including cautionary statements."

Time horizons, emission reduction pathways, relevance, data sources

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 3 paragraph 51(a)(ii)-(v)]

The requirements in paragraph 51(a)(ii) to (v) are designed to focus on the assumptions about climate change and the other related high-level assumptions required to build plausible scenario 'worlds', rather than all assumptions that make up the scenarios or the actual climate-related scenarios themselves.

As noted by the TCFD at page 52 of its Guidance on Scenario Analysis For Non-Financial Companies, "Unlike information that a company may use to differentiate itself in the marketplace, climate-related risks affect the economy and companies systemically. How a particular company anticipates managing its climate-related risks may not be a source of material competitive advantage, especially in light of the cooperative and interdependent efforts needed to address such risks (climate-related opportunities may be another matter)."

An entity may choose to omit assumptions considered to be commercially sensitive, but this should not be used as a reason to avoid making any disclosures at all. Judgement will be required by entities. For instance, detailed assumptions at the level of competition dynamics within markets the entity operates in involving individual named competitors, or internal business model and intellectual property assumptions, are likely to be commercially sensitive. More generic assumptions at the level of whole economics and issues clearly impacting the whole sector are less likely to be, and may be more suitable for disclosure.

'Emission reduction pathways' refers to global emission reduction pathways, which should also cover assumptions made about New Zealand's domestic emission reduction pathways.

Standalone or integrated

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 3 paragraph 51(b)(i)]

This is intended to provide primary users insights as to whether the scenario analysis process is being done in an adhoc way or whether it is being integrated into core strategy processes. Primary users want to see that entities integrate scenario analysis into core strategy processes, to ensure the entity is setting itself up to develop a coherent and ambitious long-term strategy and not multiple competing short- and long-term plans and strategies. Our understanding is that this area of integration is still nascent for many, and therefore primary users will be able to use it to identify those that are more advanced.

Modelling

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 3 paragraph 51(b)(iii)]

This disclosure is not intended to cover data that entities have used in constructing their scenarios, i.e., the use of existing data that is effectively somebody else's modelling outputs. Often, such modelling has been undertaken for different purposes and the related limitations should be understood.

Undertaking modelling is different from scenario analysis as defined in NZ CS, although the two are sometimes conflated. There is too much complexity involved with climate change to only use one model to inform an entity's strategy. Scenario analysis is a structured process that helps entities to grapple with high degrees of complexity and uncertainty. Modelling is also inherently more quantitative than how scenario analysis is defined in NZ CS. See section 1.2 of the 2020 TCFD scenario analysis guidance for the broad types of modelling envisaged to be disclosed against this requirement.

Further guidance on scenario analysis

XRB, 2022. Scenario analysis: Getting started at the sector level
TCFD, 2017. Final Report: Recommendations of the TCFD
TCFD, 2020. Guidance on Scenario Analysis for Non-Financial Companies, pages 15-41 and 70-83.

MITSloan, 2017. Using Scenario Planning to Reshape Strategy.
The Aotearoa Circle, 2020. Climate-related risk scenarios for the 2050s, Exploring plausible futures for aquaculture and fisheries in New Zealand, pages 21 and 27.

IPCC, 2018. Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty

7.5. Risks and opportunities [NZ CS 1 paragraph 11(c)]

NZ CS 1 NZ CS 2 NZ CS 3

Primary users want to understand the material climate-related risks and opportunities that an entity has identified, to allow them to gauge the entity's viability as an investment option.

Disclosure of commercially sensitive information: Concerns about the disclosure of commercially sensitive information have been raised both internationally and in New Zealand, particularly regarding the disclosure of opportunities.

The TCFD is clear that an entity should not claim business confidentiality as a reason for avoiding disclosure. As a matter of principle, an entity should err on the side of disclosure.

As a matter of principle, an entity should err on the side of disclosure. However, judgement will be required as to the level of granularity of disclosures, particular with respect to opportunities. In exercising that judgement, the entity should have regard for TCFD's suggested considerations from its Guidance on Scenario Analysis for Non-Financial Companies:

- whether the information provides the organisation with an economic benefit that translates into a competitive advantage because the information is unknown to its competitors
- whether making such information public may cause a considerable economic loss for the organisation
- consider a stepwise approach to disclosure – rather than decide not to disclose. For example, a company may start by disclosing **broader**, qualitative information and move to more **specific,** quantitative data and information over time.

Disclosures should be as specific as an entity deems to be practically and commercially possible.

Further guidance on commercial sensitivity

TCFD, 2020. Guidance on Scenario Analysis for Non-Financial Companies, page 52, section 3.4, consideration 4: Business Confidentiality.
TCFD, 2021. Guidance on Metrics, Targets, and Transition Plans, page 37.
TCFD, 2022. Strategy Workshop Session 3 – Strategy, slide 30.

Example voluntary disclosure

Zespri provided an example of opportunity disclosure in its 2021 Climate Change Risks and Opportunities report (page 9). The information is described at a high level, avoiding specifics which could create any loss of competitive advantage:

"The primary opportunity for Zespri and its supply chain partners is to increase investment in climate adaptation practices over the short-term to increase resilience, before both physical and transition climate-related risks mount to pose altogether more challenging circumstances. There is some evidence the physical impacts of climate change could act in favour of kiwifruit production. For example:

Warmer temperatures and longer growing seasons in some regions may result in higher quality fruit (e.g., increased dry matter) and yield.

Warmer temperatures may make existing sites with sub-optimal growing conditions (e.g., colder) more favourable, and alternative growing locations may become more suited to production."

This disclosure requires an entity to describe the climate-related risks and opportunities identified. Sub-disclosures in paragraphs 14(a) to 14(c) form the basis of disclosure 11(c).

Risks and opportunities > define time horizons [NZ CS 1 paragraph 14(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to know how an entity has assessed and incorporated the time horizons involved in climate-related risks and opportunities in their strategic planning processes. Some risks and opportunities may already be evident, while some may evolve over periods of years or even decades into the future. Primary users need to clearly understand to what extent an entity's operational and strategic planning horizons align with the timescales of the climate-related physical and transition risks and opportunities it has identified. For instance, business-as-usual risk management may only consider time horizons under 10 years.

An entity should explain how it has selected short-, medium-, and long-term time horizons of relevance to the analysis of climate-related risks and opportunities, referencing how these relate to the entity's strategic planning and investment processes. It should take into consideration the useful life of the entity's assets or infrastructure, and the fact that climate-related issues often manifest themselves over the medium and longer terms.

The entity should consider explicitly pointing out any instances where a time horizon of climate-related risk and opportunity analysis [NZ CS 1 paragraph 19(b)] does not align with the time horizons of its strategic planning and/or investment decision-making process, explaining why the incompatibility is immaterial or how it will be addressed.

Risks and opportunities > physical or transition [NZ CS 1 paragraph 14(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users have come to expect risks and opportunities to be characterised as either physical or transitional, as this is a framework for risk comparison which is now globally accepted.

Physical risks and opportunities are those resulting from climate change itself, including via temperature, rainfall, storms, extreme events, and sea-level rise.

Transition risks and opportunities are those resulting from the economic, regulatory, social, technological, and legal responses to climate change (Figure 5).

An entity should provide a short summary or table describing the characteristics of the climate-related risks and opportunities it has identified. The TCFD provides several examples of climate-related risks and opportunities (see further guidance below). Additional examples of climate-related risks and opportunities in a New Zealand context are illustrated in Table 3.

Figure 5: A conceptual breakdown of physical and transition risk

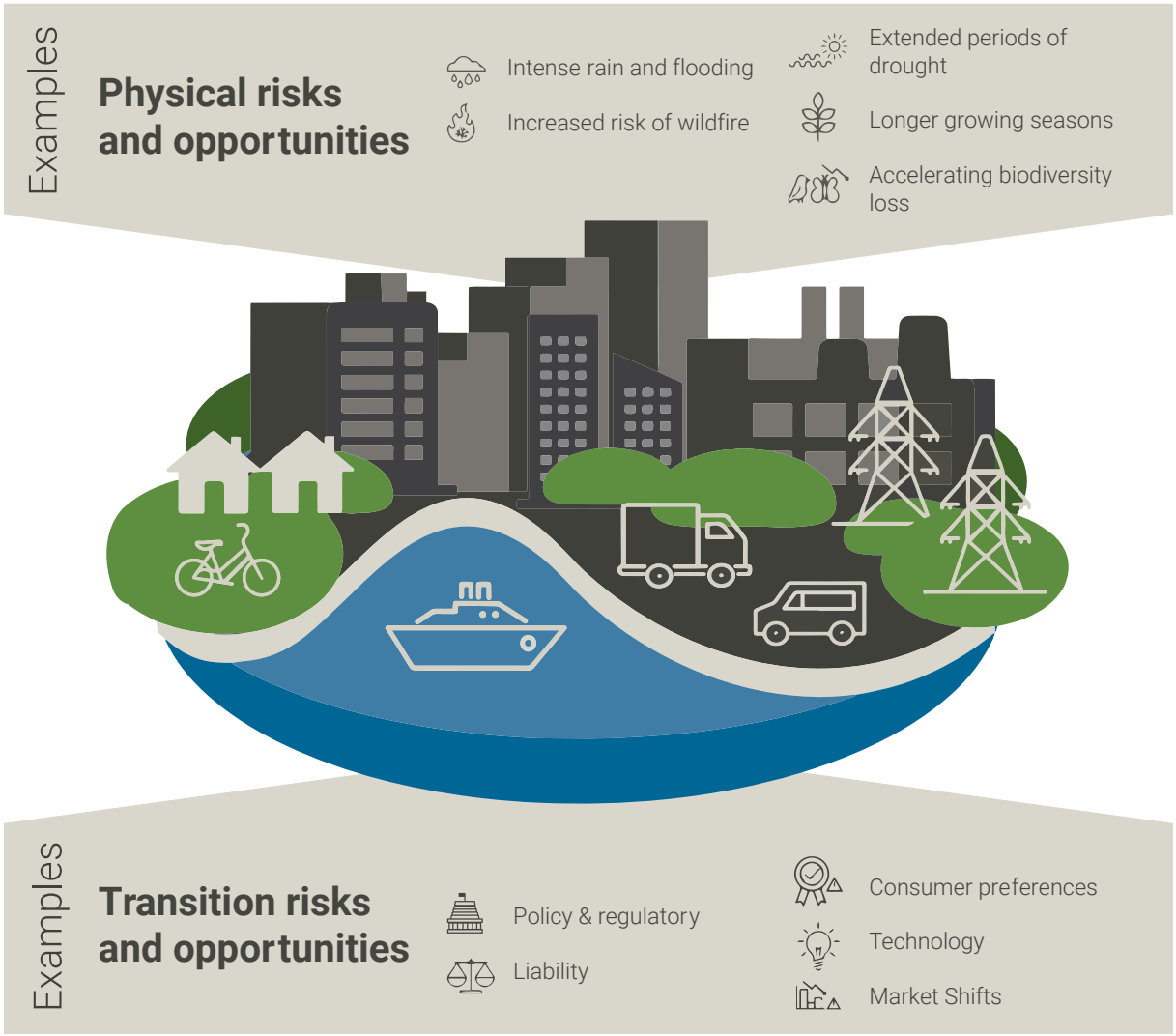


Table 3: Illustrative examples of climate-related physical and transition risks and opportunities in a New Zealand context

Type	Illustrative risks
Transition	Increasing NZU price under the NZ ETS imposing additional costs on an entity
	Mainstream adoption of alternative proteins in key dairy and red meat export markets undermining market share for some primary sector entities
	Shift away from New Zealand as a tourist destination due to emissions footprint of traveller air-miles, reducing revenues for tourism and hospitality sector entities
Physical	Extra-tropical cyclones tracking across New Zealand and damaging farmlands, infrastructure etc.
	Extended drought conditions hitting key water-sensitive dairy areas
	Increasing incidence of fluvial flooding (river flooding) striking urban centres and densely populated suburbs
	Sea-level rise accelerating coastal erosion, undermining water and electricity infrastructure
Type	**Illustrative opportunities**
Transition	Energy efficiency gains in process heat triggered by emissions reduction obligations reducing overhead costs for industry
	Emergence of new, high-value markets in low-emissions, low-intensity primary produce
	Transport mode shifts to reduce emissions (cycling, walking, mass transit, clean vehicles) improving productivity by reducing worker sick days and cutting commute/transit times lost to traffic gridlock
Physical	Development of new fisheries as sub-tropical species migrate into New Zealand's exclusive economic zone (EEZ)
	Longer growing period and greater number of growing-degree days enabling the development of new horticultural enterprises
	Warmer winter temperatures reducing the energy demand and costs of heating

Box: Sources of publicly available climate-related risk information that can inform more granular sectoral or individual entity level climate-related risk identification, assessment, and management

Scale	Source	Description	Physical / transition
Global to regional	The Intergovernmental Panel on Climate Change (IPCC)	The world's leading climate scientists are called on by the IPCC to prepare an assessment report approximately every 4-5 years. The reports cover the physical science underpinning climate analysis, the current and anticipated impacts of climate change, and global progress on mitigating climate change at source.	Primarily physical risks, but with an increasing focus on the nature and scale of transition risk
	The Network on Greening the Financial System (NGFS)	The NGFS regularly develops climate scenarios which employ integrated assessment modelling (IAM) to produce impact data. While the limitations of using IAMs to produce data of this kind are well known, it may still be useful as an indicator of plausible trajectories of change.	Physical and transition risks and opportunities
	The International Energy Agency (IEA)	The IEA publishes a World Energy Outlook report every year, which updates the Agency's future projections of global energy usage under three transition scenarios. The projection data developed by the IEA is therefore a useful guide to plausible future trends in energy supply and demand.	Transition risks and opportunities
Aotearoa New Zealand	He Pou a Rangi Climate Change Commission (CCC)	The CCC has developed projections of emissions sources, carbon price, land use, employment, GDP, and many other variables, under differing transition assumptions. In future, the CCC will also be responsible for conducting National Climate Change Risk Assessments (the first of which was undertaken by MfE in 2020).	Transition risks and opportunities
	National Institute of Water and Atmospheric Research (NIWA)	NIWA provides annual and seasonal climate change impact projections across several key climate variables at both national and local scales. NIWA employs a suite of global climate models running projections of four IPCC Representative Concentration Pathways, over multiple timeframes out to 2100.	Physical risks
	Ministry for the Environment (MfE)	MfE provides regular updates on the state of our atmosphere and climate, and concise reports which aggregate the impacts of climate change nationally. MfE also provides up-to-date information about New Zealand's emissions reduction targets and projected emissions to 2050.	Physical and transition risks and opportunities

Further guidance on examples of climate-related risks and opportunities

TCFD, 2021. Implementing the Recommendations of the TCFD, Appendix 1(page 74) and Tables A1.1 and A1.2 (pages 75-76) provide examples of climate-related risks and opportunities. Please note that the sub-category risks and examples described under each major category are not mutually exclusive, and some overlap exists.

NZ CS 1 NZ CS 2 NZ CS 3

Risks and opportunities > input to processes
[NZ CS 1 paragraph 14(c)]

This disclosure informs primary users about the relative prominence of climate-related risks and opportunities as an input into its internal capital funding and decision-making processes. This information also provides context for primary users about the entity's statements regarding risk mitigation, and transition planning to follow.

An entity could meet this disclosure by providing a brief narrative description, figure, or table illustrating how its analysis of climate-related risks and opportunities is integrated within its wider capital deployment and funding processes.

NZ CS 1 NZ CS 2 NZ CS 3

7.6. Anticipated impacts and financial impacts
[NZ CS 1 paragraph 11(d)]

Primary users expect an entity to have a clear understanding of the anticipated impacts of climate-related risks and opportunities the entity faces. As with the climate-related risks and opportunities identified under 11(c), their anticipated impacts and financial impacts will help to inform a primary user's view of the entity's viability as an investment option.

It is important that preparers bear in mind that this information need not be precise to be relevant – in most cases it can and should remain high level. An entity should provide information conveying its considered opinion of the potential scope and scale of anticipated impacts, translating these estimations into financial terms to as great a degree as possible, so that primary users can understand how material these impacts could be.

This disclosure requires an entity to describe the anticipated impacts of climate-related risks and opportunities. Sub-disclosures in paragraphs 15(a) to 15(d) form the basis of disclosure 11(d).

NZ CS 1 NZ CS 2 NZ CS 3

Anticipated impacts
[NZ CS 1 paragraph 15(a)]

While disclosure 12(a) explores the current climate-related impacts facing an entity, this disclosure aims to inform primary users about plausible **future** impacts an entity may face resulting from climate-related risks and opportunities.

As with the current impacts disclosed under 12(a), an entity could describe the anticipated physical and transition impacts of:

- acute/discrete events (i.e., physical storms, droughts, transition-related protests, legal action, new taxes or tariffs, new contractual terms, managed retreat), or categories of events where an individual event is too granular to meaningfully assess;
- chronic /ongoing, multi-faceted change (i.e., the cascading effects of changing physical temperatures, intensity and distribution of precipitation, transition-related prices, regulations), which are likely more difficult to draw out; or
- benefits realised (via market changes, resource efficiencies, etc.).

Figure 6: Anticipated impacts and financial impacts (adapted from Figure 3, page 10 TCFD: Implementing the recommendations of the TCFD)

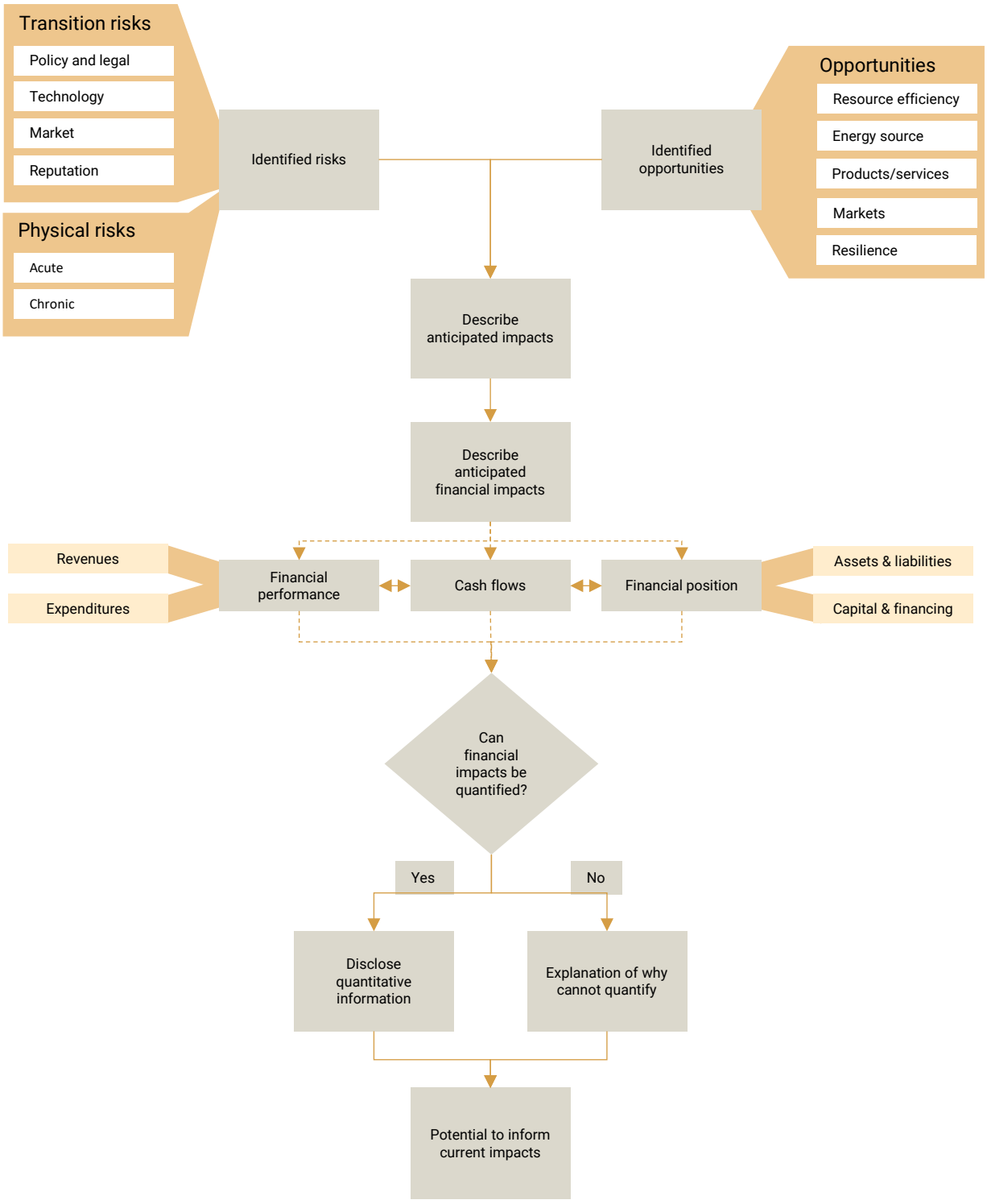


Table 4: Illustrative examples of anticipated climate-related risks and opportunities and the areas via which they may affect entities (adapted from TCFD 2021, p.18)

Area	Examples of anticipated climate-related impacts from risks
Business model (including operations)	The need to eliminate face-to-face customer interactions with international clients in future to meet emissions reduction targets
Products and services	The planned phasing out of a product line based on an anticipated future shift in consumer preference toward a zero-emissions alternative
Supply chain and/or value chain	Anticipated future scarcity in a key supply chain component due to a globally signalled drive to de-carbonise the transport sector
Adaptation and mitigation activities	Committing to emissions reduction measures to achieve net-zero status by 2035, with associated trade-offs in the entity's other investment choices
Investment in research and development	Research budgeted for transition risk-resilient product lines
Acquisitions or divestments	Divestments to diminish stranded asset risk in response to the enactment of net-zero emissions targets
Access to capital	Development of climate-related risk disclosure to facilitate access to European capital markets may carry cost/resourcing impacts
Area	**Examples of anticipated climate-related impacts from opportunities**
Business model (including operations)	Cost savings and additional market growth opportunities due to a shift toward virtual rather than face-to-face customer interactions
Products and services	Creation of new market niches and expansion of existing markets for low-emissions products/services
Supply chain and/or value chain	Development of new upstream supplier options with shorter lead times and fewer logistical choke points due to need to reduce Scope 3 GHG emissions and manage physical risks
Adaptation and mitigation activities	Enhanced market credentials and international financing options resulting from documented and verified emissions reduction measures
Investment in research and development	Creation of new value propositions through disruption to existing emissions-intensive products/services create scope for growth
Acquisitions or divestments	Acquisition of IP (or existing entities) which provides entry to low-emissions markets/niches
Access to capital	Increased access to (and reduced costs of) capital via sustainability-linked loans/ green financing options

Example voluntary disclosure

Vector has described the potential impacts of risks and opportunities in its TCFD Report 2022: *Vector's journey to a new energy future*, pages 18-28.

Further guidance on anticipated impacts

TCFD, 2021. Implementing the Recommendations of the TCFD, pages 10-11, 18.

Anticipated financial impacts [NZ CS 1 paragraph 15(b)]

NZ CS 1 NZ CS 2 NZ CS 3

This is a critical disclosure supporting primary users' capital allocation decisions, based on risk appetite. Investors' differing requirements in relation to anticipated risk and return need to be catered for by providing financial impact information which is as relevant, accurate, and verifiable as can be practically achieved.

An entity is expected to make reasonable efforts to disclose the anticipated financial impacts of climate-related risks and opportunities on its financial performance, financial position, and cash flows. The TCFD has some useful tables of examples of climate-related risks and opportunities, and potential (anticipated) financial impacts (see further guidance below).

Alongside the analysis of different climate-related scenarios, the TCFD suggests an entity draw on its metrics, targets, and transition planning in attempting to gauge anticipated financial impacts.

An entity is required to disclose quantitative information unless it is unable to do so, in which case it must describe the anticipated financial impact in qualitative terms. It is important to note that quantitative and qualitative information are not mutually exclusive. If an entity can quantify the anticipated financial impacts, understanding the context (in a qualitative sense) is relevant and material information – in which case that quantitative information should be disclosed together with the qualitative information, and not instead of it.

Where anticipated financial impact information is provided quantitatively, an entity should consider using range estimates. Disclosing a range enables an entity to communicate the estimation uncertainty of potential outcomes. If the outcome is considered to be relatively certain and unambiguous, a single value may be more appropriate than a range.

Identifying anticipated financial impacts should build on the work identifying the anticipated impacts disclosed under paragraph 15(a). An entity should use caution when using past data in forward-looking analysis due to the novel nature of climate change.

The TCFD considers the factors affecting an entity's financial impacts from climate change to include:

- the entity's exposure to, and anticipated effects of, specific climate-related risks and opportunities;
- the entity's planned responses to manage its risks or seize opportunities; and
- the implications of the entity's planned responses on its income statement, cash flow statement, and balance sheet.

The entity should disclose the anticipated financial impacts of its climate-related risks and opportunities if no action is undertaken.

Example voluntary disclosure

Meridian has provided a quantification of estimated potential financial impacts in Tables 1 and 2 Climate-related disclosure for FY22, pages 8-10.

In the narrative accompanying disclosure 15(b), the entity may wish to cross-reference actions set out in transition plan disclosure 16(b) or other information, explaining the extent to which it believes its planned actions may reduce anticipated financial impacts, were they to be successfully implemented and effective.

Fair presentation

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 6-9]

Disclosing the financial impact after the effect of transition planning is not a required disclosure. If an entity believes this information is material to its primary user, this should be disclosed separately to the disclosure of anticipated financial impacts. If not presented separately, it may mislead primary users of the anticipated financial impacts should the transition planning not be actioned or achieved. It could also encourage overconfidence in the degree to which entities can avoid financial impacts arising due to climate change through transition planning. This is because some financial impacts may be unavoidable due to the impacts of climate change, or they may be largely dependent on the actions of others.

Illustrative example of anticipated financial impacts

One of the biggest contributors to our Scope 1 GHG emissions is our fleet of diesel-powered delivery vehicles.
We anticipate the price of diesel and NZUs to increase significantly, leading to higher expenses of up to $X per year, assuming diesel prices of $X and NZU prices of $Y (disclosure 15(b)). This price increase has been factored into our impairment testing in Note X of the financial statements.

Additional optional information

Transition plan aspects of our core strategy include replacing each vehicle with a fully electric model when the diesel van reaches the end of its economic life. We have reviewed the residual values and concluded that no changes to depreciation rates or the useful lives are required. Accordingly, there are no effects on the current period financial statements arising from changes in the depreciation for these vehicles.
Shifting to electric vehicles will require additional capital investment of $X to $X per vehicle plus $X to $X for the installation of charging points at our facilities and in the homes of our drivers. We have 100 delivery vehicles, and the replacement programme is for 20% of the vehicle fleet to be replaced each year.

Adoption provision 2
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provision 2 providing an exemption from this requirement in its first reporting period.

Methods and uncertainty
[NZ CS 3 paragraphs 47-50]

NZ CS 1 | NZ CS 2 | NZ CS 3

Preparers also need to read NZ CS 3 paragraphs 47-49, which require the disclosure of significant assumptions and sources of estimation uncertainty.

It is important to note the limitations imposed by the uncertainty of forward-looking projections of change. These limitations mean that primary users will seek transparency on how anticipated financial impacts have been calculated. Any significant assumptions, and other sources of estimation uncertainty, should be made clear.

Further guidance on anticipated financial impacts

TCFD, 2021. Guidance on Metrics, Targets, and Transition Plans, pages 46-52. This section provides additional guidance for entities to assess and disclose the financial impacts of climate-related risks and opportunities.
TCFD, 2021. Implementing the Recommendations of the TCFD, Tables A1.1 and A1.2 (pages 75-76) provide examples and potential financial impacts related to the specific categories of climate-related risks and opportunities the TCFD identified. Please note that the sub-category risks and examples described under each major category are not mutually exclusive, and some overlap exists. Table A1.3 (pages 77-78) provides additional examples of how entities could be affected by climate-related financial impacts.

Anticipated financial impacts – time horizons
[NZ CS 1 paragraph 15(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Investors globally are seeking a deeper understanding of the financial impacts of climate-related risks and opportunities. There is a growing desire among primary users to understand, at least in broad terms, when financial impacts might reasonably be anticipated to affect entities.

To begin with, an entity may opt to estimate the time horizon (and perhaps the scale) of financial impacts it anticipates encountering in categorical rather than precise terms. For instance, the entity may choose to group risks and opportunities into broad categories of short, medium, and long term in year 1 (Table 5), refining the precision of these descriptions to as great a degree as possible thereafter.

Table 5: if an entity has identified five risks and three opportunities with anticipated financial impacts, they may opt to provide categorical variable estimations of when each risk and opportunity might arise, and with what scale of financial impact

Scale of anticipated financial impacts	Time horizon		
	Short term (x-x years)	**Medium term (x-x years)**	**Long term (x-x years)**
Small ($x to $x)	Transition Risk 1; Transition Risk 2	Physical Risk 1	Physical Opportunity 1; Physical Opportunity 2
Moderate ($x to $x)	**Transition Opportunity 1**	**Physical Risk 2**	**Transition Opportunity 4; Physical Risk 3**
Large ($x to $x)	**Transition Risk 3; Transition Opportunity 2**	**Transition Opportunity 3**	Physical Risk 4

Adoption provision 2
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

If an entity chooses to apply adoption provision 2 for an exemption from the disclosure requirement in NZ CS 1 paragraph 15(b), it is also excluded from this requirement in its first reporting period.

Further guidance on time horizons

TCFD, 2021. Implementing the Recommendations of the TCFD, pages 11, 17.
TCFD, 2021. TCFD Guidance on Metrics, Targets, and Transition Plans, pages 46-52.

Anticipated financial impacts > unable to quantify
[NZ CS 1 paragraph 15(d)]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity should provide a brief description of the process it has followed in attempting to quantify the financial effects of the anticipated climate-related impacts it faces. Explaining what was considered, why its quantification is challenging, and how these challenges might be overcome in future may assist primary users in evaluating these disclosures.

Adoption provision 2
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

If an entity chooses to apply adoption provision 2 for an exemption from the disclosure requirement in NZ CS 1 paragraph 15(b), it is also excluded from this requirement in its first reporting period.

7.7. Strategic position
[NZ CS 1 paragraph 11(e)]

NZ CS 1 NZ CS 2 NZ CS 3

This disclosure provides an opportunity for an entity to communicate to primary users how it intends to transform itself to contribute to a low-emissions, climate-resilient economy. How well the entity communicates its intentions may influence the confidence of primary users in allocating capital.

The entity should describe how it will position itself to thrive in a world that is attempting to rapidly reduce its emissions and adapt to the consequences of climate change. This transition will pose challenges for most entities. Acknowledging these challenges, while setting out a case for how they could be overcome, would likely reassure primary users that their investments may be more resilient to climate-related risk.

Under NZ CS 1, a 'transition plan' is defined as "…an aspect of an entity's overall strategy that describes an entity's targets, including any interim targets, and actions for its transition towards a low-emissions, climate-resilient state". Preparers should note that this definition broadens the scope of what a transition plan should cover, removing the need for an entity to develop an adaptation plan.

Climate-related metrics are vital to monitoring the effectiveness of transition planning aspects of an entity's strategy [NZ CS 1 paragraphs 21(a) to (c)].

This disclosure requires an entity to describe how it will position itself for a low-emissions, climate-resilient future. Sub-disclosures in paragraphs 16(a) to 16(c) form the basis of disclosure 11(e).

A transition plan is an aspect of an entity's overall strategy that describes an entity's targets, including any interim targets, and actions for its transition towards a low-emissions, climate-resilient future.

Further guidance on transition planning

Some of these sources do not include adaptation within the scope of transition planning. An entity should keep this in mind when using these sources.

Cambridge Institute for Sustainability Leadership, 2022. Net Zero Business Transformation – A framework for accelerating change in an era of turbulence and complexity
FCLT Global, 2022. Sustainability or Strategy: Bridging the gap between climate change and long-term value creation
UK TPT, 2022. A Sector-Neutral Framework for private sector transition plans: Call for Evidence, pages 10-22.
CA100+, 2022. Climate Action 100+ Net Zero Company Benchmark v1.1, pages 1-6.
UN, 2022. United Nations High Level Expert Group on the Net Zero emissions commitments of non-state entities – Integrity matters: Net zero commitments by businesses, financial institutions, cities and regions
CLC, 2022. Statement of Ambition Information for Sustainability Practitioners, pages 12-13.
TCFD, 2021. Guidance on Metrics, Targets, and Transition Plans, pages 39-44.
IGCC, 2022. Corporate climate transition plans: a guide to investor expectations, pages 6-16.
GFANZ, 2022. Recommendations and Guidance: Financial Institution Net-zero Transition Plans, pages 19-101.

Strategic position > business model
[NZ CS 1 paragraph 16(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to understand in general, high-level terms what the entity's business model and strategy is. This contextualises the disclosures to follow that illustrate changes to the business model and strategy.

The disclosure should be a brief description that summarises the entity's business model and strategy as concisely as possible. This may include a simple diagram of the entity's business model and a short paragraph describing the key components of its strategy.

A business model describes the entity's architecture for how it creates and delivers value, and the mechanisms employed to capture a share of that value. It includes the flows of costs, revenues, and profits. The design and operation of business models rely on the entity's capabilities and are interdependent with strategy. Strategy guides business model design and is partly shaped by it.

A strategy describes how the entity will compete in its relevant market(s). This is about how the entity intends to create and maintain its advantage, i.e., what choices it is making about what to do and how it will do it, rather than just what aspirations it has. Strategy should not be assumed to refer to a 'strategic plan', although this is a common approach to strategy. Strategy is increasingly understood to require more adaptive approaches that involve continuous processes that generate a living, dynamic plan informed by testing, learning, triggers, and signposts – rather than a static plan that is informed by forecasting of markets and deterministic thinking about meeting narrow objectives, assuming all else remains equal.

Further guidance on business model and strategy

David Teece, 2018. Business models and dynamic capabilities, section on *Business models in the dynamic capabilities framework.*

Michael Mankins and Mark Gottfredson, 2022. Strategy-making in turbulent times

Strategic position > transition planning
[NZ CS 1 paragraph 16(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity is expected to inform its primary users about the role it will play in reducing the level of climate-related risks facing present and future generations. For investors, this expectation is expressed as a demand for credible transition planning among those they invest in.

Primary users of this disclosure will therefore seek to understand how an entity's statements in regard to their transition toward a low-emissions, climate-resilient future state are consistent with the entity's core business model and strategy, and that its stated aspirations are backed up by concrete actions.

This disclosure also provides primary users with information about the options available to an entity in response to the climate-related risks and opportunities it has identified. Primary users will be looking for information indicating flexibility in the face of uncertain future change, represented by the strategy and business model options that the entity envisions are feasible to pursue as circumstances demand.

An important component of transition planning is the extent to which an entity's business model and strategy might change to enable the achievement of its transition targets and objectives. The entity should describe any options to enhance the resilience of its business model and strategy it sees as feasible to implement, over what timescale, and, where possible, under which conditions it will make choices between them.

Adoption provision 3
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provision 3 providing an exemption from this requirement in its first reporting period. However, if it elects to use the adoption provision, it must instead provide a description of its progress.

Strategic position > alignment
[NZ CS 1 paragraph 16(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

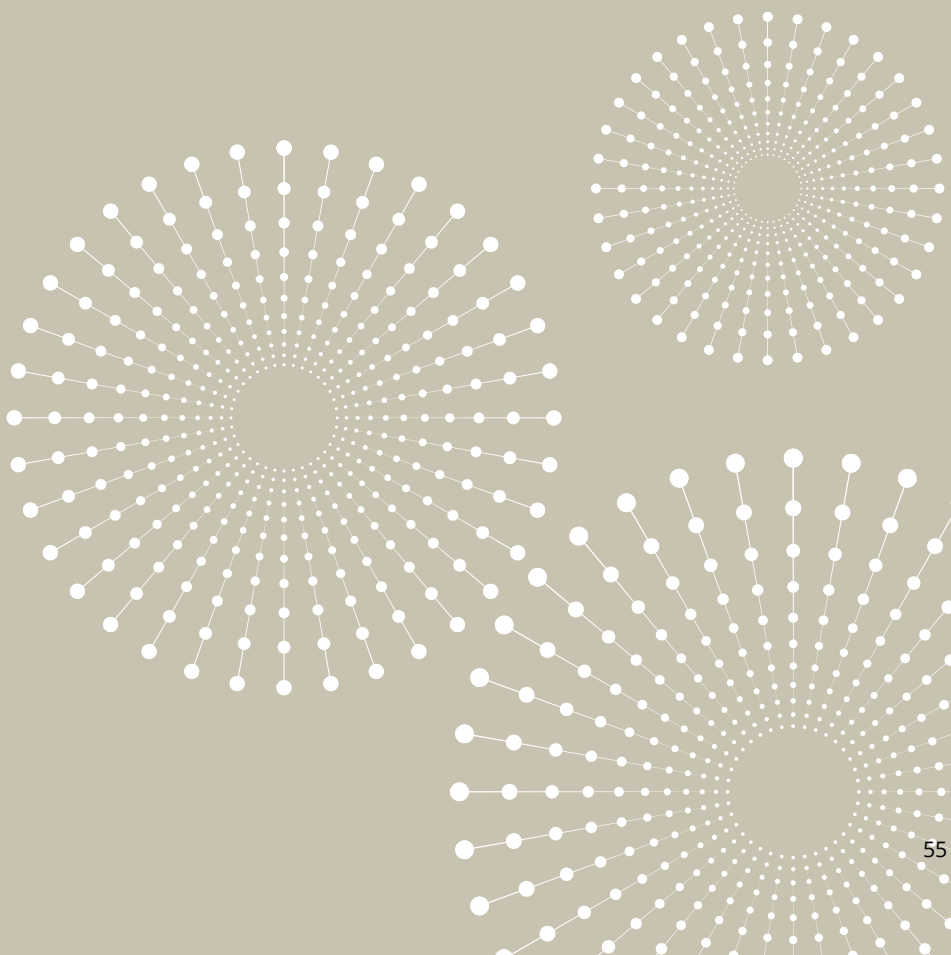
Primary users will want information that illustrates the extent to which an entity's statements regarding transition planning are backed by clear linkages to capital deployment and funding decision-making processes.

Adoption provision 3
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provision 3 providing an exemption from this requirement in its first reporting period. However, if it elects to use the adoption provision, it must instead provide a description of its progress.

Risk Management



8. Risk Management

Some may perceive climate-related risk management as complex and unknown territory. However, the process of establishing sound climate-related risk management is relatively straightforward.

The Climate Financial Risk Forum (CFRF) has set out how entities can move through the practical implementation of climate-related risk management over six key steps (Table 6). These take the entity through the fundamentals of climate risk assessment and integration processes. They show that the processes, disciplines, and approaches involved are common to the management of other forms of risk. The CFRF also observes that "…a common approach is to perform a materiality assessment and initially focus on a small set of risks with scope and sophistication increasing over time."

Table 6: The CFRF sets out six core steps to address climate-related risks (adapted from CFRF 2020, p.3)

Step	Key Actions
1. Establish risk governance	Establish Board (or highest-level governance body) oversight Delegate roles within senior management
2. Determine risk appetite	Consider business strategy in relation to type of risks faced and establish first pass assessment of climate risk appetite Engage with Board to probe findings Develop a qualitative risk statement, and establish clear climate-related risk metrics to communicate risk appetite
3. Find and use data/tools	Explore internal data sources Assess external data providers Develop non-traditional data and tool familiarity, via academia, impact modelling, tools for management under uncertainty
4. Assess risks	Assess physical and transition climate-related risks affecting the entity via direct and indirect channels Account for potential impacts via economy and financial system
5. Integrate under ERM framework	Integrate climate risk within ERM, either as a standalone risk, cross-cutting risk, or combination of both Develop a risk taxonomy/categorisation
6. Training and culture	Why – Relate risk to strategy Who – Ensure roles are appropriately distributed across entity What – Horizon scanning, monitoring, training, and development across entity

There are also useful crossovers between some of the tools and methods which are used in support of strategy disclosures, such as scenario analysis (as per paragraph 11(b)), and those that contribute to the identification and analysis of climate-related risk. An entity should consider adopting a coherent, integrated approach to their use.

Before reading further, preparers should engage with the TCFD's primary guidance resources on Risk Management. These provide readers with an awareness of the unique characteristics of climate-related risks, an introduction to the various tools and approaches available to help identify and assess climate-related risks, and insight into what is involved in integrating those risks within broader risk management frameworks. The following guidance either explicitly refers to this material, or will be more readily understood if preparers have a prior understanding of this TCFD material.

Further guidance on risk management

TCFD, 2019. Taskforce on Climate-related Financial Disclosures: Status report, pages 56-57.
CFRF, 2020. Climate Financial Risk Forum Guide – Risk Management Chapter, page 3.
TCFD, 2020. Guidance on risk management integration and disclosure, pages 1-46.
TCFD, 2021. Implementing the Recommendations of the TCFD, page 20.
ISO 14091:2021. Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment
ISO/TS 14092:2020. Adaptation to climate change – Requirements and guidance on adaptation planning for local governments and communities

8.1. Risk disclosure objective [NZ CS 1 paragraph 17]

NZ CS 1 | NZ CS 2 | NZ CS 3

The objective of the risk management disclosures is to enable primary users to understand how an entity's climate-related risks are identified, assessed, and managed, and how those processes are integrated in existing risk management processes.

8.2. Identifying and assessing risks [NZ CS 1 paragraph 18(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Climate-related risks can be highly uncertain. This can make their assessment and prioritisation using standard risk management 'likelihood times consequence' approaches difficult for primary users to evaluate. Furthermore, even calculating the likelihood of complex, interdependent climate-related risks is problematic in many cases. This can prompt primary users to instead seek information about the processes underpinning an entity's risk prioritisation processes, to help them make appropriate judgements.

If a primary user considers an entity's climate-related risk identification, analysis, and management processes to be robust, they may also have greater confidence in disclosures relating to the resilience of an entity's strategy and business model.

Entities may find the following factors relevant when considering risk assessment and prioritisation.

- The speed of onset risk
- The duration of risk's effect on the entity over time
- The complexity of the risk in terms of its scope, interdependencies, and potential for exhibiting tipping-point or non-linear characteristics
- The preparedness of the entity to cope with the risk via its access to timely risk information, knowledge of the nature of the risk and its effects, and the structural controls in place to warn of its occurrence
- The adaptability of the entity in responding to the risk with sufficient resilience to maintain core structures, functions, and a capacity to produce value
- The recovery time the entity would endure should the risk be realised.

Entities may consider disclosing how these (or other relevant) criteria have been applied in their climate-related risk assessment and prioritisation processes.

The risks identified as part of this process are disclosed under paragraph 11(c). Metrics can be incorporated into the processes for identifying, assessing, and managing climate-related risks [NZ CS 1 paragraphs 21(a) to (c)].

This disclosure requires an entity to describe its processes for identifying, assessing, and managing climate-related risks. Sub-disclosures in paragraphs 19(a) to 19(e) form the basis of disclosure 18(a).

Further guidance on identifying and assessing risks

TCFD, 2020. Guidance on risk management integration and disclosure, pages 1-5.
TCFD, 2021. Implementing the Recommendations of the TCFD, page 20.
COSO/WBCSD, 2018. Enterprise Risk Management: Applying enterprise risk management to environmental, social and governance-related risks, pages 49-51.

Identifying and assessing risks > tools and methods [NZ CS 1 paragraph 19(a)]

NZ CS1 NZ CS2 NZ CS3

This disclosure gives primary users a means of evaluating the merits of an entity's subsequent statements regarding their understanding, prioritisation and integration of climate-related risks into wider risk management and strategic planning processes.

The tools and methods entities use are a significant contributing factor in determining whether they identify and assess climate-related risks robustly. Subsequent risk management disclosures illustrate further aspects of how comprehensively a given tool or method has been applied by an entity.

The TCFD provides an overview of risk identification and assessment tools (adapted in Table 7). These provide preparers with a range of tools and methods that will enable them to address the unique characteristics of climate-related risks, which include:

- divergence in potential climate change impacts based on scale, location, and activity affected;
- temporal horizons which are unlike any other in traditional business planning and investment processes;
- novelty and uncertainty, due to historically unprecedented rates and scales of change in climatic variables;
- non-linear dynamics and threshold behaviour of climate-influenced systems, involving sudden changes as systems move from one partial equilibrium state to another; and
- complex interdependencies between biophysical and socioeconomic systems, with feedback effects that are frequently difficult to predict.

Table 7: An overview of tools and methods of climate risk identification, analysis, and response (Adapted from TCFD 2020, p.43-44). Scenario analysis is often highlighted as a key risk identification tool and is a useful means of encouraging structured exploratory thinking on how risks might emerge, evolve, and intersect. Where data are limited and uncertainty unavoidable, scenario analysis may be one of the only tools available to help entities think through the implications of risk in a structured manner.

Tools/ methods	Description	Application	Risk process:		
			Identify	Assess	Respond
Scenario Analysis	A process for identifying and assessing potential implications of a range of plausible future states under conditions of uncertainty	Explore and develop an understanding of how climate-related risks and opportunities might plausibly impact an entity over time	✓	✓	✓
Stakeholder Engagement	A means of obtaining input for decision making from those parties who may be affected by the decision or have knowledge that may inform the decision	Seek insight from a range of stakeholders within and outside a company (e.g., management executives, suppliers), who can provide feedback on changing conditions and potential impacts associated with climate-related risks	✓	✓	
Delphi Method	Structured communication method for eliciting information and opinions from experts	Conduct interviews or collect expert input from business leaders, actuaries, insurers, meteorologists, oceanographers, climate, and atmospheric scientists	✓	✓	
Economic Scenario Generator	Models that simulate possible future states of economies and financial markets based on risk factors to identify unexpected but plausible outcomes	Test valuation models under a broad range of possible economic and financial conditions (e.g., considering climate change and socioeconomic factors)	✓	✓	

Tools/methods	Description	Application	Risk process: Identify	Assess	Respond
Forecasting	An approach for predicting the impact of a future event based on past and present data	Use historical data and lookback studies to understand previous climate-related impacts to inform estimates of potential future impacts, changing key parameters (e.g., frequency, duration, intensity) within plausible ranges	✓		
Hazard Maps	Location-level information on the extent or severity of perils using assumptions on the frequency, severity, and location parameters of primary events and dependencies with secondary perils	Present peril event scenarios based on current and potential future states considering the impact from climate change, which will result in different frequency and severity of events affecting certain locations	✓	✓	
Probabilistic Modelling	*General models.* Systems modelling involving probabilistic inputs, processes, and outputs	Numerical weather and climate predictions that allow a representation of uncertainties, a reduction of systematic biases, and improved representation of long-term climate variability	✓		
	Catastrophe models. Probabilistic models based on deep understanding of the physical parameters that define a natural hazard (e.g., wind speeds) and characteristics of the exposures (e.g., location)	Estimate potential losses from natural catastrophes	✓	✓	✓
Sensitivity Analysis	Statistical analysis that examines the change in a desired output relative to a change in input parameters	Analyse a company's sensitivity to changing climate-related conditions (e.g., carbon or commodity prices or demand)	✓		
Simulation	Use of models to imitate a situation many times to estimate the likelihood of various possible outcomes (e.g., Monte Carlo method)	Assess the likelihood or propensity of different climate-related scenario pathways accommodating multiple variables and parameters	✓		
Horizon Scanning	Systematic and proactive approach to risk identification based on available information	Identifying various climate-related risk types across different spatial and temporal scales	✓		

Further guidance on tools and methods

TCFD, 2020. Guidance on risk management integration and disclosure, pages 5, 12-17, 43-45
UNEP FI, 2021. United Nations Environment Program Finance Initiative (UNEP-FI) provided The Climate Risk Landscape: A comprehensive overview of climate risk assessment methodologies in 2021, followed up by a supplement offering implementation case study insights in 2022.
CFRF 2020. The Climate Financial Risk Forum (CFRF) provided a database of climate risk data providers tools and methodologies

Identifying and assessing risks > time horizons [NZ CS 1 paragraph 19(b)]

NZ CS 1 NZ CS 2 NZ CS 3

Primary users are seeking insight on how the complex, frequently long-term risks of climate change are integrated within an entity's wider risk management frameworks. Climate-related risks which are manifest over timescales exceeding business-as-usual risk management processes (i.e., beyond 5-10 years) may be of particular concern for primary users, unless an entity can illustrate how longer-term factors will inform risk-reduction decisions taken in the short to medium term.

Entities will already have nominated the time horizons they view as appropriate for the analysis of climate-related risks (and opportunities) under disclosure 14(a). An entity should consider using the same time horizons for these analyses, as continuity between the timeframes nominated in disclosures 14(a) and 18(b) will better integrate risk and strategy processes.

Further guidance on time horizons

TCFD, 2020. Guidance on risk management integration and disclosure, page 12.

Identifying and assessing risks > value chain [NZ CS 1 paragraph 19(c)]

NZ CS 1 NZ CS 2 NZ CS 3

A comprehensive approach to the identification and assessment of risk includes all stages of the value chain. For example, primary users may be concerned about the future marketing potential of emissions-intensive products, or an entity's reliance on a key production component sourced from a distant supply chain partner vulnerable to sea-level rise and coastal inundation.

An entity should describe whether any value chain stages are excluded by climate-related risk identification and assessment processes. Climate-related risks and opportunities relate to activities, interactions and relationships – and to the use of resources – along an entity's value chain. These may include investments that an entity has in other entities, for example, associates and joint ventures. An entity's value chain is related to its business model which has been disclosed under paragraph 16(a).

Entities may consider providing a rationale for why a given value chain component has been excluded.

The WBCSD provides an example of how risk may be identified and assessed across the entire value chain, illustrated via reference to the Building and Materials sector (other sectoral examples have been developed under the WBCSD's TCFD preparer forum).

Further guidance on risks in the value chain

TCFD, 2020. Guidance on risk management integration and disclosure, pages 39-42.
WBCSD, 2020. Construction and Building Materials TCFD Preparer Forum: Communicating collective and individual climate-related challenges and action, pages 16-26.

Identifying and assessing risks > frequency [NZ CS 1 paragraph 19(d)]

NZ CS 1 NZ CS 2 NZ CS 3

The TCFD describes processes for the integration of climate-related risk in entity risk management processes as needing to be iterative. This means requiring review and revision at regular intervals to maintain relevance and currency. Primary users want to know how entities have interpreted this in the context of their own risk management processes.

An entity should disclose how frequently their climate-related risk assessment process is undertaken.

Further guidance on the frequency

TCFD, 2020. Guidance on risk management integration and disclosure, pages 8-12.

Identifying and assessing risks > priority [NZ CS 1 paragraph 19(e)]

NZ CS 1 NZ CS 2 NZ CS 3

Primary users are looking for insight into an entity's prioritisation of climate-related risks relative to other risks. There are likely to be some sectors and entities in the economy which face greater climate-related risk exposure than others, and primary users will likely want to see climate-related risk prioritisation differentiated accordingly.

An entity should disclose the method or approach(es) it takes to prioritising climate-related risks relative to other types of risks. The TCFD identifies four principles of integration, which an entity may find useful in this context.

- Interconnections: requires analysis and collaboration across the entity
- Temporal orientation: risks should be analysed across short-, medium-, and long-term horizons
- Proportionality: proportionate in the context of the entity's other risks
- Consistency: methods should be used consistently

Further guidance on prioritisation

TCFD, 2020. Guidance on risk management integration and disclosure, page 7.

8.3. Integration into overall risk management [NZ CS 1 paragraph 18(b)]

NZ CS 1 NZ CS 2 NZ CS 3

The climate-related risk processes of disclosure 18(b) are typically implemented via an entity's existing enterprise risk management (ERM) framework. For example, the CFRF sets out five expectations for entities seeking to operationalise their climate-related risk governance objectives (Table 8). Entities may refer to these when integrating climate-related risk into their ERM.

Table 8: Five recommendations put forward by the CFRF for entities operationalising their climate-related risk governance objectives via their enterprise risk management framework (adapted from CFRF 2020, p.8-9).

CFRF recommendations: Risk frameworks	
1	Climate-related risk should be treated as a cross-cutting issue that directly or indirectly affects most of the entity's other risks. The interdependencies between climate-related risks and the entity's non-climate risks should be analysed and understood by the entity.
2	The entity should use appropriate tools to identify and assess both physical and transition risks (see Table 7), calling on external expertise where necessary if internal capacities to employ tools or interpret findings is currently lacking.
3	The entity's existing risk frameworks and policies should be updated to include climate-related risks.
4	A uniform risk taxonomy and categories (appropriate to the operations and activities of the entity) should be developed to allow the concertation of risk to be monitored.
5	Climate-related risk management information should be integrated with existing risk reporting channels to the board or highest-level governance body.

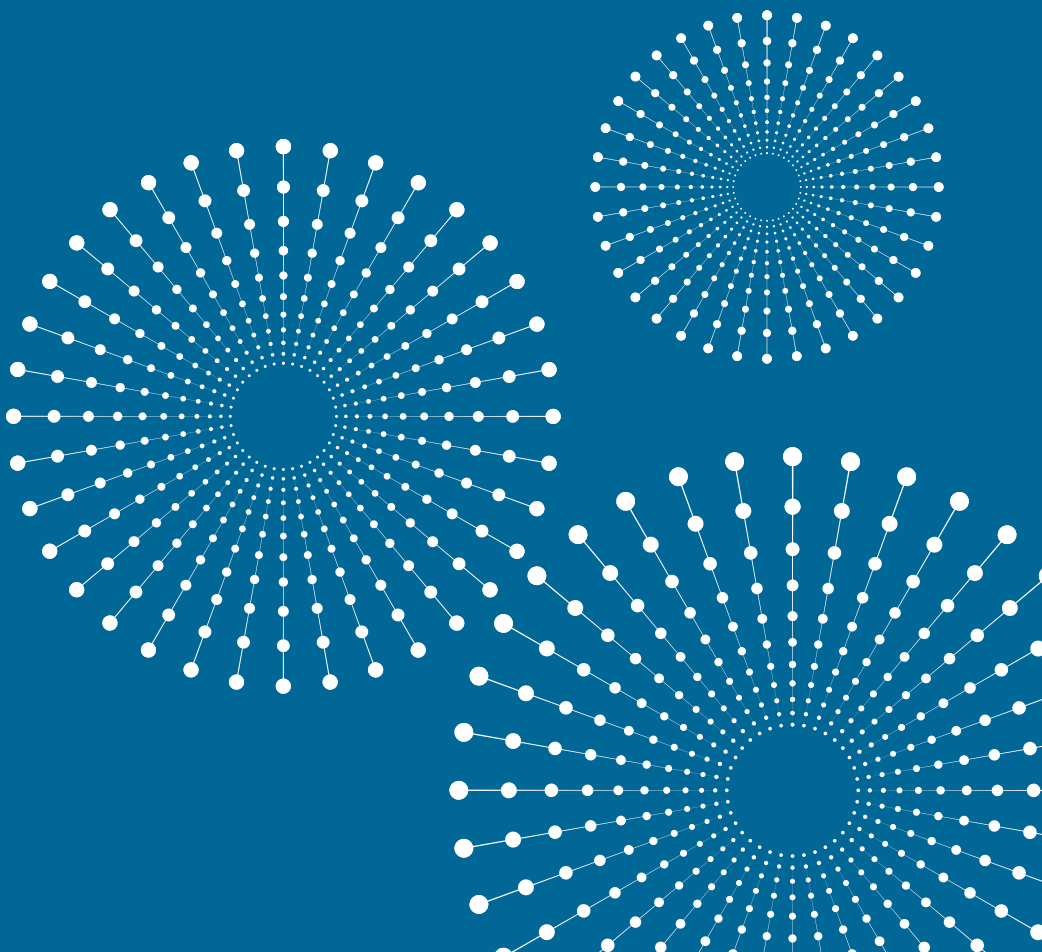
Established ERM frameworks (for example, COSO ERM or ISO 31000) provide useful guidance on the selection and use of risk control measures. Entities incorporating these frameworks should refer to them when disclosing their risk control decision process. Entities relying on an alternative approach to decision making about risk control should provide a description of their process.

In completing disclosure 18(b), an entity should describe how climate-related risk identification, assessment, and management are integrated within its existing processes and practices. Metrics can be incorporated into this process [NZ CS 1 paragraphs 21(a) to (c)].

Further guidance on integration into overall risk management

TCFD, 2020. Guidance on risk management integration and disclosure, pages 7, 15-16, 38.
COSC/WBCSD, 2018. Enterprise Risk Management: Applying enterprise risk management to environmental, social and governance-related risks, pages 47-66.
CFRF, 2020. Climate Financial Risk Forum Guide – Risk Management Chapter, pages 8-9.

Metrics & Targets



9. Metrics and Targets

Metrics should inform, and be informed by, an entity's governance, strategy and risk management processes. They enable the creation of a feedback loop over time, in the same way that other key performance and risk indicators are used to inform an entity's management processes beyond climate.

Governance interrelationships

Climate-related metrics enable an entity's governance body and management to direct the entity more effectively by measuring and describing the impacts of climate-related risks and opportunities on the entity [NZ CS 1 paragraphs 7(b) and 7(c)]. Metrics are also essential for informing primary users about how the governance body tracks and manages climate-related risks and opportunities [NZ CS 1 paragraph 8(d)]. The inclusion of performance metrics in remuneration policies can show how directors and managers are incentivised to achieve climate-related objectives.

Strategy interrelationships

Climate-related metrics are vital for measuring and describing the impact of climate-related risks and opportunities on an entity. These include current climate-related impacts [NZ CS 1 paragraph 11(a)] and the description of how it will position itself as the global and domestic economy transitions towards a low-emissions, climate-resilient future state [NZ CS 1 paragraph 11(e)]. Metrics also help an entity to monitor the effectiveness of the implementation of the transition plan aspects of its strategy [NZ CS 1 paragraph 16(b)].

Risk management interrelationships

Climate-related metrics support the measurement of risk exposures and levels as part of an entity's broader risk management processes. Metrics can be incorporated into the processes for identifying, assessing, and managing climate-related risks [NZ CS 1 paragraph 18(a)] and how these are incorporated into its overall risk management processes [NZ CS 1 paragraph 18(b)].

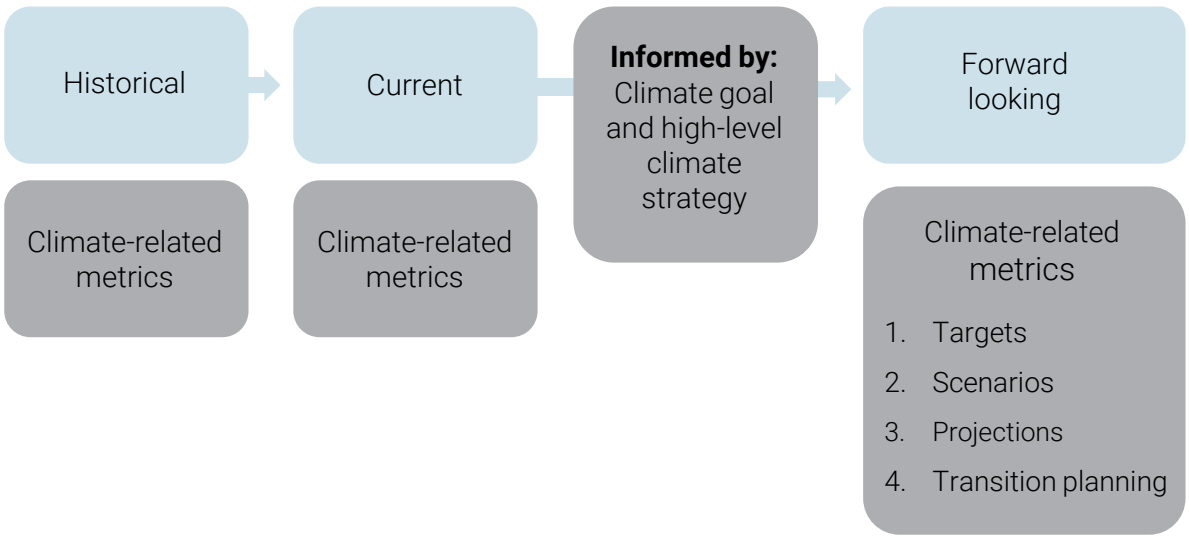
Metrics in the context of climate-related risks and opportunities

Metrics should be:

- relevant
- accurate and verifiable
- comparable and consistent.

It is helpful for preparers to disclose metrics consistently from year to year to facilitate comparative and trend analysis, and to clearly identify the time horizon over which climate-related metrics are measured. Metrics are most effective when the same item is reported across all time periods, as shown in Figure 7.

Figure 7: Time horizons for climate-related metrics (adapted from TCFD Metrics and Targets Guidance 2021, p.12)



Further guidance on metrics and targets

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 11-13.

9.1. Metrics and Targets disclosure objective [NZ CS 1 paragraph 20]

NZ CS 1 | NZ CS 2 | NZ CS 3

The objective of the Metrics and Targets disclosures is to enable primary users to understand how an entity measures and manages its climate-related risks and opportunities. Metrics and targets also provide a basis upon which primary users can compare entities within a sector or industry.

9.2. Metric categories [NZ CS 1 paragraph 21(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

These metric categories are widely requested by primary users and provide key inputs for estimating financial impacts of climate change on entities.

For all metric categories, an entity should consider using a metric which is commonly used in its sector or industry, rather than developing its own metrics (refer to the industry-based metrics section later in this document for sources of industry-based metrics).

These metrics can be presented as point estimates or ranges. Some may work well presented as figures or tables.

This disclosure requires an entity to disclose metrics for each of the categories set out in paragraphs 22(a) to 22(h), where material to the primary user.

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 NZ CS 2 **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 NZ CS 2 **NZ CS 3**

NZ CS 3 requires disclosure of material methods, assumptions, and uncertainties associated with the metric. This information may be presented along with the metric or separately, as long as primary users are directed to this information.

Further general guidance on metrics

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 14-28.

Metric category > GHG emissions
[NZ CS 1 paragraph 22(a)]

NZ CS 1 NZ CS 2 NZ CS 3

This disclosure provides primary users with information to understand where an entity has the greatest exposure to, and therefore greatest risk from, GHG emissions in its value chain.

For an entity, developing a GHG emissions inventory (incorporating Scope 1, Scope 2, Scope 3 GHG emissions) enables it to understand its emissions impact across its full value chain and therefore focus mitigation efforts where they can have the greatest impact. Scope 3 GHG emissions are usually the largest source of emissions and present the most significant opportunities for reductions.

An entity must report its gross Scope 1, 2 and 3 GHG emissions. NZ CS 1 does not mandate a single approach for measuring GHG emissions. Rather, an entity must disclose the standards it used to measure its GHG emissions. Commonly used measurement standards are discussed below.

Gross emissions are total GHG emissions excluding any removals, and excluding any purchase, sale, or transfer of GHG emission offsets or allowances. Scope 2 emissions must be calculated using the location-based

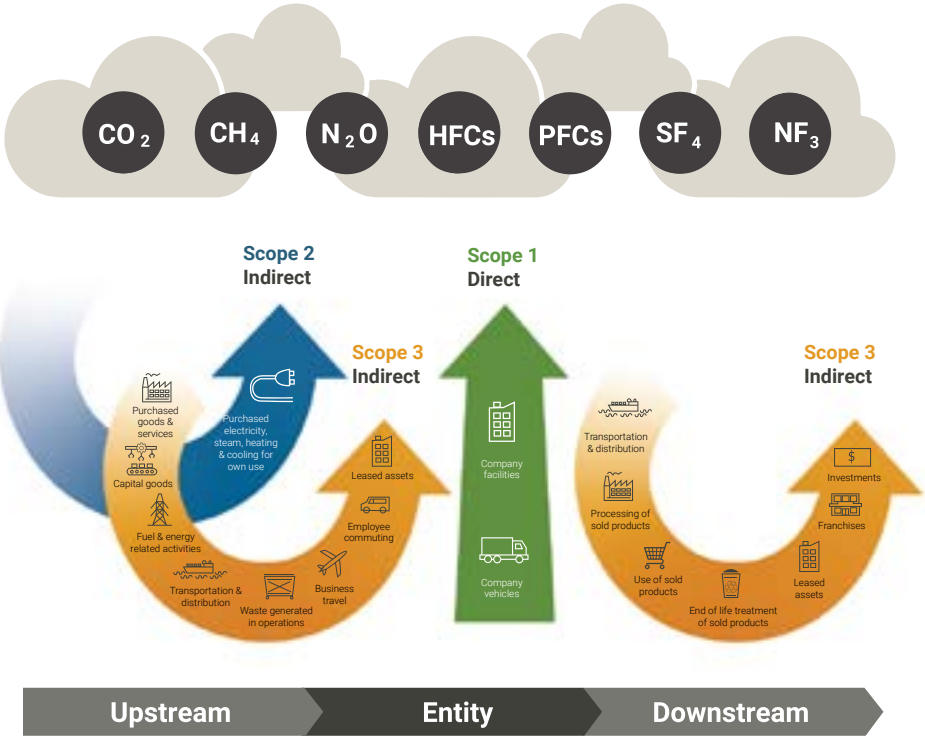
NZ CS 1 requires that the location based method is used to quantify Scope 2 GHG emissions. This method is based on average energy generation emission factors for defined geographic locations, including local, sub-national, or national boundaries. In the New Zealand context this means applying grid-average emission factors to Scope 2 electricity consumption.

Scope 3 GHG emissions occur in the value chain of the reporting entity and include both upstream and downstream sources (Figure 8). If using the GHG Protocol, both the GHG Protocol Corporate Standard and the GHG Protocol Value Chain (Scope 3) Standard should be used by an entity to calculate its full value chain emissions.

The GHG Protocol uses the following categories for Scope 3 emissions:

1. Purchased goods and services
2. Capital goods
3. Fuel- and energy-related activities
4. Upstream transportation and distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Upstream leased assets
9. Downstream transportation and distribution
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Downstream leased assets
14. Franchises
15. Investments

Figure 8: Overview of GHG Protocol scopes and emissions across the value chain (adapted from GHG Protocol)



Alternatively, an entity may wish to use ISO 14064-1:2018, which also includes a requirement to disclose value chain emissions. ISO has four categories that equate to Scope 3 GHG emissions. The sub-categories for these are identified in Annex B of ISO 14064-1:2018. These subcategories align closely with the GHG Protocol categories identified above. Table 9 illustrates this alignment.

Table 9: Comparison GHG Protocol scopes and categories with ISO categories and sub-categories

GHG Protocol Scope	ISO Inventory Category	ISO example sub-category (Annex B)	GHG Protocol
1	Direct GHG emissions	Stationary combustion Mobile combustion Process Fugitive Land use, land use change, and forestry (LULUCF)	Stationary combustion Mobile combustion Process Fugitive Land use, land use change, and forestry (LULUCF)
1	Direct GHG removals	Process Land use, land use change, and forestry (LULUCF)	Process Land use, land use change, and forestry (LULUCF)
2	Indirect GHG emissions from imported energy	Electricity Energy	Electricity Energy
3	Indirect GHG emissions from transportation	Upstream transport and distribution for goods Downstream transport and distribution for goods Client and visitor transport Business travel	4. Upstream transportation and distribution 9. Downstream transportation and distribution 7. Employee commuting 6. Business travel 3. Fuel- and energy-related activities
3	Indirect GHG emissions from products used by the organisation	Purchased goods Capital goods Waste disposal (liquid and solid) Equipment leased by reporting organisation Services not described above	1. Purchased goods and services 2. Capital goods 5. Waste generated in operations 8. Upstream leased assets 1. Purchased goods and services
3	Indirect GHG emissions associated with use of products from the organisation	Use stage of product Downstream leased assets End-of-life stage of product Investments	11. Use of sold product 13. Downstream leased assets 12. End-of-life treatment of sold products 15. Investments 10. Processing of sold products
3	Indirect GHG emissions from other sources		14. Franchises

Financial institutions assessing and disclosing the GHG emissions associated with financial activities should refer to the PCAF (Partnership for Carbon Accounting Financials) Standard. This standard contains three parts: Part A – Financed Emissions, Part B – Facilitated Emissions (this part is expected to be launched in 2023), and Part C – Insurance Associated Emissions.

While this guidance discusses the GHG Protocol, ISO and PCAF standards, entities may choose to use other measurement standards or methods that are more relevant for their particular scope of operations. There are requirements to disclose the standard and methodologies used, and any base year restatements [NZ CS 1 paragraph 24(a)] and [NZ CS 3 paragraphs 52-54].

Entities are encouraged to review reporting requirements for the GHG Protocol Corporate, GHG Protocol Value Chain (Scope 3), and/or ISO 14064-1:2018, and/or PCAF standards for guidance as to what might be required for internal record-keeping and assurance purposes.

This disclosure requires an entity to disclose its GHG emissions. Sub-disclosures in paragraphs 24(a) to 24(c) form the basis of disclosure 22(a). A GHG inventory report is not required to be disclosed.

GHG measurement standards

GHG Protocol, Corporate Standard (revised edition)
GHG Protocol, 2011. Corporate Value Chain (Scope 3) Standard
ISO, 2018. 14064:2018-1 Greenhouse gases – Part 1
PCAF, 2022. The Global GHG Accounting and Reporting Standard for the Financial Industry

Further guidance on measuring GHG emissions

MFE, 2022. Measuring and reporting greenhouse gas emissions: guide for organisations
CDP, 2023. CDP technical note: Relevance of Scope 3 by sector
SBTi, 2018. Value Change in the Value Chain: Best Practices in Scope 3 Greenhouse Gas Management – shows the average breakdown of scope 3 emissions for highest-emitting sectors, page 16.
GHG Protocol, 2013. Technical Guidance for calculating scope 3 emissions (version 1.0)
GHG Protocol: Scope 2 guidance
GHG Protocol, 2006. Hot Climate, Cool Commerce. A service sector guide to GHG management
WRI Report, 2006. Appendix F Categorising emissions associated with leased assets
PCAF/CRREM/GRESB, 2023: Accounting and Reporting of GHG Emissions from Real Estate Operations – offers additional specifications on a range of technical, data, and standards issues relating to GHG from real estate.
Initiative Climate International, 2022. Greenhouse gas accounting and reporting for the private equity sector

Further guidance on preparing for GHG emissions assurance

GHG Protocol, 2011. Corporate Value Chain (Scope 3) Standard – Appendix C provides an outline of a data management plan which can help entities prepare for an assurance engagement.

Fair presentation

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 6-9]

An entity must be transparent about which GHG emissions disclosures have been assured. If comparatives have not been assured but the current year disclosures have, this should be made clear. For transparency, an entity may choose to include the label 'not assured' alongside any comparatives that have not been assured.

Illustrative example

	FY26	FY25	FY24
	Assured (Limited)	Not assured	Not assured
Scope 1	XX	XX	XX
Scope 2	XX	XX	XX
Scope 3	XX	XX	XX

An entity is not required to disaggregate gases for Scope 1, 2, and 3 GHG emissions under NZ CS 1. However, an entity should consider whether the disaggregation by constituent gases (such as identifying methane emissions for an entity in the agriculture sector) would provide material information to primary users. If so, an entity must disclose this information.

An entity is not required to report Scope 2 using the market-based method. However, if an entity is using the market-based method for setting GHG emission reduction targets, and if this information is considered material, the entity must also report current Scope 2 emissions using the market-based method.

An entity is not required to report removals occurring in, or offsets applied to, the current reporting period. If an entity considers this is material information for its primary user, it must disclose this information.

Comparatives

[NZ CS 3 paragraphs 40-46]

NZ CS 1 **NZ CS 2** NZ CS 3

An entity must disclose two years of comparative data from the immediately preceding reporting periods and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 4, 5, 6, and 7
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provision 4 providing an exemption from reporting Scope 3 GHG emissions in its first reporting period. However, the XRB Board strongly encourages entities to start measuring their Scope 3 GHG emissions immediately. Beginning the measurement process will put entities in good stead for disclosing these emissions as part of their second year of reporting. As discussed above, for most entities Scope 3 GHG emissions are where their most significant emissions risks and opportunities lie. Obtaining a clear picture of the scale and scope of these emissions sources will greatly assist entities to understand their climate-related risks and opportunities, and assist with transition planning.

If an entity chooses to apply adoption provision 4 in its first reporting period, it may apply adoption provision 5 in its second and third reporting periods.

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its GHG emissions disclosures. See NZ CS 3 paragraphs 52-54 for additional GHG emissions disclosure requirements.

As for all disclosures, materiality applies.

Financial entities calculating financed emissions using the PCAF standards should consider making all the data and data quality disclosures required or recommended by the PCAF standard.

An entity must also provide an explanation of any base year GHG emission restatements.

Sources of guidance on uncertainty

GHG Protocol. GHG Protocol Corporate Standard – Chapter 7 covers managing inventory quality.
GHG Protocol, 2011. GHG Protocol Corporate Value Chain (Scope 3) Standard – Appendix B covers uncertainty in Scope 3 emissions.
ISO, 2018. ISO 14064-1:2018 – section 8.3 covers assessing uncertainty.
GHG Protocol. The GHG Protocol also has guidance on measurement and estimation uncertainty of GHG emissions and Scope 3 uncertainty calculation

Metric category > GHG emissions> standards used
[NZ CS 1 paragraph 24(a)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users want to know which standard (or standards) have been used to calculate GHG emissions. This should be a concise statement identifying the standard(s) used.

Example illustrative disclosures

Our GHG emissions have been calculated in accordance with the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard (revised version) and Corporate Value Chain (Scope 3) Accounting and Reporting Standards.
Our GHG emissions have been calculated in accordance with ISO 14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
We complied with the PCAF Global GHG Accounting and Reporting Standard Part A Financed Emissions second edition for our Scope 3 financed emissions.

Metric category > GHG emissions > consolidation approach [NZ CS 1 paragraph 24(b)]

NZ CS 1 NZ CS 2 NZ CS 3

Both the GHG Protocol and ISO have three consolidation approaches. These are equity share, financial control, and operational control. Preparers must identify which consolidation approach was used to calculate GHG emissions An entity may consider explaining how the chosen consolidation approach differs to that used in the preparation of its financial statements.

Example illustrative disclosure

We used the operational control consolidation approach.

Metric category > GHG emissions > emission factors and global warming potential [NZ CS 1 paragraph 24(c)]

NZ CS 1 NZ CS 2 NZ CS 3

An entity must disclose the source or sources of emission factors and the global warming potential (GWP) rates used.

GWPs are values that allow direct comparison of the impact of different GHGs in the atmosphere by comparing how much energy one tonne of a particular GHG will absorb compared to one tonne of carbon dioxide. The IPCC updates these values periodically to take into account improved scientific understanding of the physical properties of GHGs. The latest values are defined in the IPCC Sixth Assessment Report (AR6).

MfE provides a suite of documents on measuring and reporting an entity's GHG emissions. Included in this suite are New Zealand-specific emission factors and some advice on where you might locate additional emission factors if required. The emission factors released by MfE in 2022 were based on the 100-year GWP values (GWP_{100}) for the IPCC's Fourth Assessment Report (AR4).

Differences in sources or GWP can materially alter GHG emissions estimations. An entity should consider using the latest emission factors available which are appropriate for its emissions sources, geography, and reporting period.

GWP_{100} is the most used emissions factor for international reporting. However, if an entity's primary users' decisions are driven by assessment of shorter-term impact, entities could consider also providing GHG emissions impact over a shorter time (using GWP_{30} for example).

New Zealand source of emission factors

MFE, 2022. Measuring Emissions for Organisations, A Detailed Guide 2022 – contains emission factors. These are also available in an Excel or flat file.

Metric category > GHG emissions > exclusions [NZ CS 1 paragraph 24(d)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Primary users expect transparency regarding any exclusion of GHG emissions sources. A concise summary of material exclusions of sources, including facilities, operations or assets, and the justification for their exclusion is required. An entity may consider providing a short explanation for any plans to include them in future.

Metric category > emissions intensity [NZ CS 1 paragraph 22(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Where entities use the same method for calculating GHG emissions intensity, this can help primary users to compare between entities.

If an entity covers more than one industry, it should select an intensity metric that is representative of its business as a whole.

Intensity ratios express GHG emissions per unit of physical activity or unit of economic output. A physical intensity ratio is suitable when aggregating or comparing across entities that have similar products. An economic intensity ratio is suitable when aggregating or comparing across entities that produce different products. A declining intensity ratio reflects a positive performance improvement.

Examples of intensity ratios

- tCO_2e (tonnes of carbon dioxide equivalent) per full-time equivalent (FTE)
- tCO_2e per customer
- tCO_2e per gross written premium
- tCO_2e per MWh electricity generated
- tCO_2e per dollar invested
- tCO_2e per m^2 floor space
- tCO_2e per dollar of sales revenue
- Weighted average carbon intensity (WACI) of investment portfolio
- Weighted average carbon intensity (WACI) of insurance premiums
- Physical emissions intensity for each investment portfolio
- Economic emissions intensity for each investment portfolio

Comparatives

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 40-46]

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

When disclosing the analysis of the main trends of a GHG intensity metric, an entity should be transparent about when a change in the intensity metric is due to emission reductions or a change in the denominator. For instance, when discussing a reduction in tCO_2e per $ revenue, a price increase will reduce the $tC0_2e$ per $ of revenue, and it would therefore be misleading to claim this was an emission reduction.

Adoption provisions 6 and 7

NZ CS 1 **NZ CS 2** NZ CS 3

[NZ CS 2]

An entity may choose to apply adoption provisions 6 and 7 providing exemptions from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 47-54]

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its GHG emission intensity metric. As for all disclosures, materiality applies.

When disclosing its emissions intensity metric, an entity should be transparent about what emissions are, and are not, included in the calculation. For instance, does the calculation include only selected emissions sources, only Scope 1, or all emissions sources?

If using an economic intensity ratio, the entity should consider how the denominator aligns with its financial statements. If there is a difference, the preparer should consider explaining why the amount is different to that reported in its financial statements and how to reconcile the two. For instance, this difference could be due to the different consolidation approaches between GHG accounting and financial accounting.

Further guidance on emissions intensity metrics

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 16, 6.1
TCFD, 2021. Implementing the Recommendations of the TCFD – Weighted average carbon intensity, page 52.
ISSB, 2022. Appendix B – [draft] Industry based disclosure requirements – highlights metrics relevant to a particular industry.

Metric category > transition risks
[NZ CS 1 paragraph 22(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Disclosure of the amount or extent of an entity's assets or business activities vulnerable to climate-related transition risks allows primary users to better understand anticipated financial vulnerability. This may include issues such as possible impairment or stranding of assets, effects on the value of assets and liabilities, and changes in demand for products or services.

An entity can be vulnerable to several types of climate-related transition risks.

- Policy, regulation, and legal risks reflecting changes in policy and litigation action
- Technology risk as emerging technologies impact the competitiveness of certain organisations
- Market risk from changes to supply and demand
- Reputational risks tied to changing customer or community perceptions

Example metrics

- Volume of real estate collaterals highly exposed to transition risk
- Concentration of credit exposure to fossil-fuel-related assets
- Percent of revenue from coal mining
- Percent of business exposure to direct ETS liabilities
- Percent of business exposure to tax penalties for high-emitting vehicles

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose two years of comparative data from the immediately preceding reporting periods and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing exemptions from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its transition risk metric. As for all disclosures, materiality applies.

When disclosing its transition risk metric, an entity should be transparent about how this has been calculated (where not apparent), including how it has defined 'vulnerable'.

Further guidance on transition risk metrics

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 21, 61.
ISSB, 2022. Appendix B – [draft] Industry based disclosure requirements – highlights metrics relevant to a particular industry.

Metric category > physical risks

NZ CS 1 | NZ CS 2 | NZ CS 3

[NZ CS 1 paragraph 22(d)]

Disclosure of the amount or extent of an entity's assets or business activities vulnerable to material climate-related physical risks allows users to better understand anticipated financial vulnerability. This may include issues as impairment or stranding of assets, effects on the value of assets and liabilities, and cost of business interruptions.

When considering the types of climate-related physical risks that an entity might be vulnerable to, an entity must consider both:

- acute risks, such as storms, floods, and wildfires, that are event-driven; and
- chronic risks, such as higher temperatures and sea-level rise, that refer to longer-term shifts in climate patterns.

In determining vulnerability to physical risks, entities should consider their climate-related hazards and exposures to those hazards. Risk equals hazard times exposure. Refer to guidance in section 7.1.

Physical risks will be specific to the geography where the assets or activities are located and their likely exposure or vulnerability to the risk. For example, certain assets or activities may be most vulnerable to acute risks from storms or wildfires, while others are more at risk from chronic changes in average temperature, sea-level rise, or drought.

Example metrics

- Number and value of mortgage loans in 100-year flood zones
- Wastewater treatment capacity located in 100-year flood zones
- Revenue associated with water withdrawn and consumed in regions of high or extremely high baseline water stress
- Proportion of property, infrastructure, or other alternative asset portfolios in an area subject to flooding, heat stress, or water stress
- Proportion of real assets exposed to 1:100 or 1:200 climate-related hazards

Comparatives

NZ CS 1 | NZ CS 2 | NZ CS 3

[NZ CS 3 paragraphs 40-46]

An entity must disclose two years of comparative data from the immediately preceding reporting periods and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7

NZ CS 1 | **NZ CS 2** | NZ CS 3

[NZ CS 2]

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty

NZ CS 1 | NZ CS 2 | **NZ CS 3**

[NZ CS 3 paragraphs 47-54]

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its physical risk metric. As for all disclosures, materiality applies.

When disclosing its physical risk metric, an entity should be transparent about how this has been calculated (where not apparent), including how it has defined 'vulnerable'.

Further guidance on metrics for physical risk

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 21, 61.
ISSB, 2022. Appendix B – [draft] Industry based disclosure requirements

Metric category > opportunities

NZ CS 1 | NZ CS 2 | NZ CS 3

[NZ CS 1 paragraph 22(e)]

Disclosure of the proportion of revenue, assets, or business activities aligned with climate-related opportunities provides insight into the position of entities relative to others in their industry. It also allows users to understand likely transition pathways and anticipated changes in revenue and profitability over time.

There are several categories of climate-related opportunities that an entity can capture. Examples include:

- improved resource efficiency from reducing energy, water, and waste;
- use of energy sources that emit low or no GHG emissions;
- development of new products and services;
- access to new markets; or
- improved adaptive capacity and resilience.

Example metrics

- Net premiums written related to energy efficiency and low-emissions technology
- Revenues from products or services that support the transition to a low-emissions economy
- Number of (1) zero-emissions vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold
- Proportion of homes delivered certified to a third-party, multi-attribute green building standard

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its opportunities metric. As for all disclosures, materiality applies.

When disclosing its opportunities metric, an entity should be transparent about how this has been calculated (where not apparent).

Further guidance on opportunities metric

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 21, 62.
ISSB, 2022. Appendix B – [draft] Industry based disclosure requirements

Metric category > capital deployment
[NZ CS 1 paragraph 22(f)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Deployment of capital in low-emissions technologies, business lines, or products may demonstrate that an entity is investing to make its business model resilient to transition risk or to capture climate-related opportunities.

In addition to having different climate-related risks and opportunities, entities differ in the extent to which they are deploying capital to manage their climate-related risks and increase their climate-related opportunities. For example, entities that are hardening infrastructure in response to increased incidence of physical risks can signal that short-term debt might increase as the entity upgrades its assets, but long-term costs may be lower.

Capital expenditures, capital investments, or the amount of financing for new technologies, infrastructure, or products can be reported.

It can be helpful for entities to present traditional disclosures alongside climate-related disclosures, to allow users to understand the scale of investment in different types of activities – for example, investments in fossil fuels compared to investments in alternative energy sources.

Example metrics

- Percentage of annual revenue invested in R&D of low-emissions products/services
- Investment in climate adaptation measures (e.g., soil health, irrigation, technology)
- Investment in energy efficiency upgrades
- Investment in emissions measurement and management software
- Investment in transition to electric boilers as replacement for coal boilers

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its capital deployment metric. As for all disclosures, materiality applies.

When disclosing its capital deployed metric, an entity should be transparent about how this has been calculated (where not apparent). An entity should also consider if this amount aligns to what is reported in its financial statements, and if it does not, it may wish to explain why.

Further guidance on capital deployment metrics

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 24, 62.
ISSB, 2022. Appendix B – [draft] Industry based disclosure requirements

Metric category > Internal emissions price

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 22(g)]

The disclosure of internal emissions prices can help primary users to identify which entities have business models that are vulnerable to future policy responses to climate change, and which are adapting their business models to ensure resilience to transition risks. Internal emissions prices also provide primary users with an understanding of the reasonableness of an entity's climate-related risk and opportunity assessment and strategy resilience.

Internal emissions pricing is a mechanism by which entities put a value on a unit of tCO_2e. This price varies depending on the individual entity's circumstances and objectives. The internal emissions price is a strategic planning tool that, when implemented correctly, can help entities in the transition to a lowemissions economy.

For instance, non-financial entities may use an internal emissions price to understand the anticipated future costs associated with developing new assets. Financial entities may use internal emissions prices to inform their decision making – for example, by considering the impact of a given emissions price on an entity's profitability as part of the investing, lending, or insurance underwriting process.

While internal emissions prices can take a variety of forms and amounts, an increasing number of entities are setting an internal notional or actual price on the amount of GHGs emitted from assets and investment projects. This is so they can see how, where, and when their GHG emissions could affect their strategy, financial performance, and investment choices. Entities commonly use two types of internal emissions prices.

The first type is a shadow price, which is a theoretical cost or notional amount that the entity does not charge, but that can be used in assessing the economic implications or trade-offs for such things as risk impacts, new investments, net present value of projects, and the cost-benefit of various initiatives.

The second type is an internal tax or fee, which is an emissions price charged to a business activity, product line, or other business unit based on its GHG emissions (these are internal taxes or fees like intracompany transfer pricing).

There is no definitive source on what an entity's emissions price should be, and there is a variety of ways that the cost of GHG emissions can be integrated into an entity's practices. An entity may wish to provide an explanation of how it is applying an internal emissions price in decision-making (for example, investment decisions, transfer pricing, or scenario analysis).

An entity may wish to consider providing some context around the significance of the internal emissions price in decision making. For instance, for a given internal emissions price, the discount rate used will typically significantly influence the financial indicators of a given project (i.e., a higher discount rate will reduce the effectiveness of an emission price). Another typical example is the future prices used for various sources of energy.

Comparative information, consistency of reporting, and restatement of comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and assumptions, and data and estimation uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its internal emissions price metric. As for all disclosures, materiality applies.

Further guidance on internal emissions pricing

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 25, 59-60, 62.
CDP, 2023. Carbon Pricing: CDP Disclosure best practice, pages 11-18. This technical note provides additional guidance for companies to understand and effectively respond to CDP's carbon pricing questions, which include questions on internal carbon pricing.
CDP. What is internal carbon pricing and how can it help achieve your net-zero goal? This document has been prepared for India but contains some useful general information.
Treasury, 2020. Guide for departments and agencies using Treasury's CBAx tool for cost benefit analysis – has been expanded to include climate change shadow prices to enable agencies to make consistent assumptions, pages 67-69.

Metric category > remuneration
[NZ CS 1 paragraph 22(h)]

NZ CS 1 | NZ CS 2 | NZ CS 3

This disclosure provides information to primary users regarding how management is incentivised to achieve climate-related KPIs. Incentivising management to meet climate-related targets and policies is a means of fostering ownership of performance, and disclosing such arrangements is a means of communicating that commitment to primary users. 'Management' is a defined term [NZ CS 1 Appendix A].

The ways in which entities link management compensation to performance on issues related to climate change will be specific to them and their governance structure. Some entities choose to report the percentage of the executive's pay linked to climate considerations, while others discuss weighting factors or total amount of compensation that could be impacted.

An entity should consider disclosing the link between targets and remuneration policies (if any).

Example metrics

- Portion of employee's annual discretionary bonus linked to investments in climate-related products
- Weighting of climate targets on long-term incentive scorecards for executive directors
- Weighting of performance against operational emissions targets for remuneration scorecard

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | **NZ CS 2** | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | **NZ CS 3**

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its remuneration metric. As for all disclosures, materiality applies.

Further guidance on remuneration metrics

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 25, 63.

9.3. Industry-based metrics
[NZ CS 1 paragraph 20(b)]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity should report those industry-based metrics which it uses for management purposes. These might include metrics on climate-related risks associated with water, energy, land use, and waste management, where relevant and applicable. Using common metrics within an industry increases comparability across entities for primary users.

An entity should consider, where possible, using an industry-based metric for cross-industry metric categories in disclosures 22 (b), (c), (d), (e), and (f).

Comparatives
[NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7
[NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty
[NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose the methods, assumptions, and estimation uncertainty associated with each industry-based metric. As for all disclosures, materiality applies.

Further guidance on industry-specific metrics

ISSB, 2022. Industry-specific metrics proposed by the ISSB in Appendix B – [draft] industry-based disclosure requirements of their [draft] climate-related disclosures standard. The industry-based requirements are organised according to the Sustainable Industry Classification System® (SICS®) and have been drawn from the SASB Standards.
TCFD, 2021. Sector-specific metrics suggested by the TCFD: Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, pages 24-68.
GRI: The Global Reporting Initiative is continuing to develop sector standards which may contain useful sector-specific metrics.

9.4. Other key performance indicators [NZ CS 1 paragraph 20(c)]

NZ CS 1 | NZ CS 2 | NZ CS 3

This disclosure informs primary users of any additional metrics and KPIs which an entity is using to manage their climate-related risks and opportunities.

If an entity is using KPIs to measure and manage its climate-related risks and opportunities which are not cross-industry or industry-based metrics, these should be disclosed.

Comparatives [NZ CS 3 paragraphs 40-46]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose two years of comparative data from the immediately preceding reporting periods, and an analysis of the main trends for each metric disclosed. Refer to NZ CS 3 for further details on when these requirements may not apply.

Adoption provisions 6 and 7 [NZ CS 2]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity may choose to apply adoption provisions 6 and 7 providing an exemption from reporting two years of comparatives in its first reporting period, and one year of comparatives in its second reporting period and an analysis of trends.

Methods and uncertainty [NZ CS 3 paragraphs 47-54]

NZ CS 1 | NZ CS 2 | NZ CS 3

An entity must disclose the methods, assumptions, and estimation uncertainty associated with its KPI metrics. As for all disclosures, materiality applies.

9.5. Targets [NZ CS 1 paragraph 20(d)]

NZ CS 1 | NZ CS 2 | NZ CS 3

Disclosure of targets provides a forward-looking orientation that is essential for primary users to assess the potential for strategies to succeed, and to give them a basis against which to assess future performance. Descriptive progress reporting is important, but so are the metrics used to measure this progress.

A climate-related target refers to a specific level, threshold, quantity, or qualitative goal that the entity wishes to meet over a defined time horizon to address its climate-related risks and opportunities. An entity's climate-related targets should inform, and be informed by, its strategy and risk management and be linked to its climate-related metrics.

An entity should consider targets such as those related to GHG emissions, water usage, energy usage, etc., in line with the metric categories NZ CS 1 paragraphs 22(a) to (h), where relevant, and in line with anticipated regulatory requirements or market constraints or other targets (see, for example, Table 10). Other targets may include efficiency or financial targets, financial loss tolerances, avoided GHG emissions through the entire product life cycle, or net revenue targets for products and services designed for a low-emissions economy.

Some entities select climate-related metrics and then define climate-related targets that allow them to operationalise their high-level climate strategy. Others set targets and then select climate-related metrics to measure and track progress related to their targets.

Targets should be:

- aligned with an entity's strategy and risk management goals;
- linked to relevant metrics;
- quantified and measurable;
- clearly specified over time;
- understandable and contextualised;
- periodically reviewed and updated; and
- reported annually.

Table 10: Example targets for cross-industry metrics (adapted from TCFD, 2021. Guidance on Metrics, Targets and Transition plans, page 33)

Cross-industry metric category	Example climate-related metric target
Greenhouse gas emissions: Scope 1, 2, & 3 emissions	• Reduce net Scope 1, Scope 2, and Scope 3 GHG emissions to zero by 2050, with an interim target to cut emissions by 70% relative to a 2015 baseline by 2035
Greenhouse gas emissions intensity	• Reduce GHG emissions intensity of portfolio by 30% by 2035 relative to a 2020 baseline
Transition risks: assets or business activities vulnerable ($ or %)	• Reduce percentage of asset value exposed to transition risks by 30% by 2030, relative to a 2019 baseline
Physical risks: assets or business activities vulnerable ($ or %)	• Reduce percentage of asset value exposed to acute and chronic physical climate-related risks by 50% by 2050 • Ensure at least 60% of flood-exposed assets have risk mitigation in place in line with the 2060 projected 100-year floodplain
Climate-related opportunities: revenue, assets or business activities ($ or %)	• Increase net installed renewable capacity so that it comprises 85% of total capacity by 2035
Capital deployment: capital expenditure, financing or investment ($)	• Invest at least 25% of annual capital expenditure into electric vehicle manufacturing • Lend at least 10% of portfolio to projects focused primarily on physical climate-related risk mitigation
Internal emissions price: ($ per tCO_2e)	• Increase internal emissions price to $150 by 2030 to reflect anticipated changes in policy
Remuneration: management remuneration linked (% or weighting or description or $)	• Increase amount of executive management remuneration impacted by climate considerations to 10% by 2025

This disclosure requires an entity to describe the targets that are used to manage climate-related risks and opportunities. Sub-disclosures in paragraphs 23(a) to 23(e) form the basis of disclosure 20(d).

Principles

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 10-13]

Entities must keep the principles in mind when reporting on progress against targets. It is important to be transparent about an entity's progress and when this may be attributable to factors other than improved climate performance.

Methods and uncertainty

NZ CS 1 NZ CS 2 **NZ CS 3**

[NZ CS 3 paragraphs 47-54]

Disclosures of targets should be supported by contextual, narrative information on items such as scope, underlying data, and assumptions, including those around the use of offsets.

For GHG emissions targets, an entity should be clear about the scope of the target.
For example:

- whether the target includes all Scope 1, 2, and 3 emissions or only a selected subset; or
- whether the target is for tCO_2e or CO_2 only.

Further guidance on climate-related targets

TCFD, 2021. Guidance on Metrics, Targets and Transition Plans, pages 30-37.

Targets > timeframes

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(a)]

This is the defined time horizon by which targets are intended to be achieved. Short-, medium-, and long-term time horizons should be consistent across an entity's targets and, if feasible, consistent with key dates tracked by key national and international organisations, such as the IPCC or regulators.

Targets > interim targets

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(b)]

An interim target is a checkpoint between the current period and the target end date, in which an entity assesses its progress and makes any adjustments to its plans and targets.
Any medium- and long-term targets should have interim targets set at appropriate intervals (e.g., 5-10 years), covering the full medium or long-term target time horizon.

Targets > base year

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(c)]

This is a clear definition of the baseline time period against which progress will be tracked. It is preferable to have a consistent base year across GHG emissions targets.

Targets > performance against targets

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(d)]

This is a concise description of how an entity is performing against each target. This should include where an entity has met/not met its target and the reason. An entity should be transparent when performance is attributable to something other than better climate performance.

Targets > GHG emissions targets

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(e)]

An entity should prioritise GHG emission reductions over offsetting and compensation practices.

An entity may wish to describe whether it has explicitly incorporated the principle of equity and justice into its targets, and, if so, how the entity has determined its fair share of the global burden of reducing emissions.

Further guidance on setting GHG emissions targets

SBTi: The Science Based Targets initiative (SBTi) provides guidance and workbooks to help entities set targets aligned with science.
SBTi: Science-based targets initiative sector guidance supports sectors in setting science-based targets.
ISO, 2022. IWA 42:2022 Net Zero Guidelines – provides guiding principles and recommendations to enable a common approach with a high level of ambition, to drive organisations to achieve net zero GHGs as soon as possible and by 2050 at the latest.

Targets > GHG emissions targets > absolute or intensity

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(e)(i)]

An absolute target is defined by a change in absolute emissions over time – for example, reducing CO_2e emissions by 47% below 2020 levels by 2030. An intensity target is a target defined by a change in the ratio of emissions to a metric over time – for example, reduce CO_2e per tonne of product by 50% from 2020 levels by 2030.

An entity is encouraged to think carefully when setting an intensity target to ensure that it provides meaningful insights. Take the example of reducing tCO_2e per $ revenue. Revenue has two elements: quantity and price. This target only provides meaningful insights if it is measured on the quantity element. If it is done in combination, all price increases will reduce the tCO_2e per $ of revenue and could therefore be misleading.

Targets > GHG emissions targets > 1.5 degree alignment

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(e)(ii)]

For each GHG emissions target, an entity must provide its view as to how the target contributes to limiting global warming to 1.5 degrees Celsius. This may be a sectorial decarbonisation approach.

The sectorial decarbonisation approach is a method for setting physical intensity GHG reduction targets that align with the sectoral pathway of an underlying climate change mitigation scenario. Emissions intensity targets are defined by a reduction in emissions relative to a specific business metric, such as production output of the company (in this case, kg CO_2e per kWh). A central principle of the approach is that all companies in a sector must converge to a certain emissions intensity by a chosen year, usually 2050.

Targets > GHG emissions targets > basis for view

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(e)(iii)]

An entity should describe how it formed its view on the contribution to limiting global warming and any reliance which was placed on third parties.

For example, an entity may have formed its view by:

- using the workbooks provided by SBTi;
- having their targets validated by SBTi in alignment with 1.5 degrees;
- having their targets developed by a third party in alignment with 1.5 degrees; or
- having their targets reviewed by a third party for alignment with 1.5 degrees.

Example illustrative disclosure

Our targets were approved by the Science Based Targets initiative (SBTi).
Our emissions reduction target is validated by the Science Based Targets initiative (SBTi).
Our target was developed by a third party in 20XX, based on the SBTi guidance at the time.

Targets > GHG emissions targets > offsets

NZ CS 1 NZ CS 2 NZ CS 3

[NZ CS 1 paragraph 23(e)(iv)]

An entity should prioritise GHG emission reductions over offsetting and compensation practices.

Where an entity is relying on the use of offsets to achieve emission reduction targets, it must make additional disclosures on the source of these offsets. It is important for a primary user to know this information to determine whether these offsets are credible.

MfE periodically releases guidance on voluntary mitigation (offsetting) claims in New Zealand. This guidance states that for claims of voluntary climate change mitigation to be considered credible, the action must:

- be transparent, clearly stated, and publicly available
- be real, measurable, and verified
- be additional to business-as-usual activity
- not be double used
- not result in leakage of emissions elsewhere
- be permanent.

The guidance also states that surrendering units that are part of compliance requirements under the NZ ETS does not count towards voluntary mitigation.

An entity's reliance on offsets, how the offsets it uses are generated, and the credibility and integrity of the scheme from which the entity obtains the offsets have implications for an entity over the short, medium and long term. For example, the carbon capture and storage technology may prove ineffective, or changing regulations may discourage or ban the use of specified emissions offsets after abrupt leakages, food shortages, regime changes, or advocacy efforts. Significant uncertainty about future prices for offsets implies additional climate-related (pricing) risks and opportunities.

Further guidance on offsetting claims

MFE, 2022. Interim guidance for voluntary climate change mitigation – refers to voluntary actions undertaken to reduce or remove GHG emissions outside of an organisation's operations or borders, that otherwise would not have occurred.

10. Coherence with financial statements

One of the principles in NZ CS 3 is coherence. This principle is described as "presenting disclosures in a way that explains the context and relationships with other disclosures of the entity … coherence also requires an entity to present information in a way that allows primary users to relate information about its climate-related risks and opportunities to the entity's financial statements" [NZ CS 3 Table 2].

It is important that climate-related disclosures and information in financial statements provide a complete, coherent, and consistent picture to primary users. Information provided in an entity's climate-related disclosures should complement and supplement information provided in an entity's financial statements.

Information provided in an entity's climate-related disclosures will be more useful to primary users if connections are made to the financial statements – for example, by cross-referencing to notes in financial statements, or identification of the impacted line items in the financial statements. Information is also more useful to primary users if differences are explained – for example, differences in estimates and assumptions used in producing the financial statements to those used in the climate-related disclosures.

10.1. Including climate-related matters in financial statements

NZ IFRS® and PBE Standards (the accounting standards that apply to Tier 1 and Tier 2 reporting entities) already require consideration of climate-related matters, when the effect of those matters is material in the context of the financial statements as a whole.

From a financial statement perspective, information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions made by primary users.

Climate-related risks and opportunities could impact many aspects of an entity's financial statements. For example, they could be:

- recognised within assets, liabilities, revenue, and expenses, or included in cash flows, to the extent they relate to past events or transactions and meet the recognition and measurement criteria;
- incorporated into judgements, estimates, and assumptions underpinning the financial statements;
- disclosed in accordance with specific requirements or overarching disclosure objectives in individual accounting standards.

Potential financial implications arising from climate-related risks and opportunities are also broad and can include, but are not limited to:

- asset impairment (including goodwill);
- changes in the useful life of assets;
- changes in the valuation of assets;
- changes in provisions for onerous contracts because of increased costs or reduced demand;
- changes in provisions and contingent liabilities arising from fines and penalties; and
- changes in expected credit losses for loans and other financial assets.

Guidance on the application of accounting standards

In November 2019, Nick Anderson, a member of the International Accounting Standards Board (IASB), published an article, IFRS® Standards and climate-related disclosures, which discussed how climate change and other emerging risks are captured by existing standards, despite not being referenced directly.
This was followed up by educational material issued by the IFRS® Foundation in November 2020 on the Effects of climate-related matters on financial statements. This sets out examples illustrating when IFRS® Standards may require entities to consider the effects of climate-related matters.
In April 2019, the Australian Accounting Standards Board and the Australian Auditing and Assurance Board jointly published a bulletin: Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB/IASB Practice Statement 2. Page 5 contains a decision flowchart.

10.2. Climate-related disclosures and financial statements

Climate-related disclosures made in climate statements do not replace the need for adequate reflection of climate-related risks and opportunities in financial statements when the recognition, measurement, and disclosure criteria are met. Primary users' expectations may make climate-related risks and opportunities 'material' when preparing financial statements, regardless of their numerical impact.

Primary users are looking for connections/coherence between the more forward-looking information provided in an entity's climate-related disclosures and information provided in an entity's financial statements.

When preparing financial statement disclosures, entities need to consider two overarching requirements. These are:

- disclosure of information not specifically required by NZ IFRS® and PBE Standards and not presented elsewhere in the financial statements, but that is relevant to an understanding of any of the financial statements;
- consideration of whether any material information is missing from its financial statements – i.e., an entity is required to consider whether to provide additional disclosures when compliance with the specific requirements in NZ IFRS® and PBE Standards is insufficient to enable primary users to understand the impact of particular transactions, other events, and conditions on the entity's financial position and financial performance.

In considering these overarching requirements in relation to climate-related matters, entities may consider:

- whether and how climate-related risks affect their financial statements and how to disclose these considerations;
- whether net zero commitments (or other climate-related commitments) result in recognition of liabilities, disclosure of contingent liabilities, or otherwise impact financial statements, or whether the lack of impact requires disclosure;
- whether and how to factor long-term uncertainties into the measurement of amounts in the financial statements and what disclosures are required.

By way of an example, say Entity ABC includes a net zero target/commitment in its climate-related disclosures, so primary users will be looking to see connections to the financial statements.

Primary users might ask the following questions

- Are the assumptions and judgements used in producing the financial statements in line with this commitment?
- Have any provisions been recognised because of this commitment, such as provisions for onerous contracts?
- Have any emissions-intensive assets been impaired?
- Have useful lives of these emissions-intensive assets been reduced?
- Have contingent liabilities been disclosed?

Lastly, if the net zero target/commitment has not resulted in an impact in the financial statements, but primary users would reasonably expect that it would have, has the entity considered whether additional disclosures are required to explain the lack of impact?

11. Holistic review

An entity must fairly present is climate-related disclosures.

As discussed at the beginning of this document, fair presentation is the overarching principle in NZ CS.

Once an entity has prepared its climate-related disclosures in accordance with the principles, disclosure objectives, and disclosure requirements in NZ CS, we would recommend an entity undertake a holistic review. In conducting this review, an entity may wish to consider the following questions:

Do the entity's climate-related disclosures meet the fair presentation principles in NZ CS 3?

- Has the entity considered whether it needs to include any additional disclosures?
- Has the entity thought about relevance? Are the disclosures specific to the entity's own facts and circumstances?
- Is the entity able to verify the information it has disclosed?
- Can the information be compared to previous reporting periods? What about comparisons to targets and baselines, or comparisons to information provided by other entities in the same sector?
- Is the information disclosed free from material error or misstatement?
- Has the entity presented the information in a balanced manner? Has it identified the opportunities as well as the risks? Is the information free from bias?
- Is the presented information complete? Is there any information omitted that could cause the information to be false or misleading to the entity's primary users?
- Is the information consistent to support comparability? If not, has the entity explained why?
- Has the information been presented in a clear and concise manner? Have any acronyms and terms used in the disclosures been explained?
- Has the information been presented in a coherent manner? Are the linkages between the four thematic areas clear? Are connections to an entity's financial statements clear?

12. Glossary

BEIS	UK Department for Business, Energy and Industrial Strategy
CDSB	Climate Disclosure Standards Board: The CDSB was an international consortium of business and environmental NGOs which developed the framework that formed the basis for the TCFD recommendations. CDSB has now been consolidated into the IFRS Foundation, but its guidelines and good practice resources are still relevant and useful.
CFRF	Climate Financial Risk Forum: The CFRF is jointly chaired by the UK Prudential Regulation Authority and Financial Conduct Authority. It aims to advance the UK financial sector's responses to the financial risks from climate change by supporting the development of climate capacity across UK financial regulators and the financial industry.
COSO	Committee of Sponsoring Organisations of the Treadway Commission
Emissions reduction pathway	The trajectory of emissions reduction taking place in the economy, often characterised by the timing of peak emissions, and the angle of the downward slope of the curve. Emissions reduction pathways with later peak emissions typically involve steeper angles of decline if the most dangerous risks of climate change are to be avoided. For example, an early peak followed by relatively steady emissions reductions is described as an 'orderly' transition pathway, while a later peak and steeper emissions reduction slope is described as a 'disorderly' transition pathway. Emissions pathways which don't keep climate change within 'safe' temperatures involve emissions pathways which do not decline toward net zero emissions, known as a 'hothouse world' pathway, or fail to reach peak emissions in a timeframe that allows net zero emissions to be achieved, known as 'too little too late' emissions pathways. See also NGFS climate scenarios
Exposure	"The presence of people; livelihoods; species or ecosystems; environmental functions, services, and resources; infrastructure; or economic, social, or cultural assets in places and settings that could be adversely affected." – IPCC, 2022, p.18
GRI	Global Reporting Initiative: The Global Sustainability Standards Board (GSSB) under the auspices of the GRI develops and issues the GRI Standards.
Hazard	"The potential occurrence of a natural or human-induced physical event or trend that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources." – IPCC, 2022, p.22 In the context of climate-related risk, the concept of a 'hazard' may be extended to incorporate transition events or trends with a potential to cause loss or damage to livelihoods, service provision, or the achievement of an entity's strategic aims.
IPCC	Intergovernmental Panel on Climate Change: The primary source of global climate data, information, and knowledge. The IPCC is the key reference point for all climate-related risk and resilience work undertaken globally.
ISSB	International Sustainability Standards Board: Independent standard-setting board governed and overseen by the IFRS Foundation Trustees. The intention of ISSB is to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies' sustainability-related risks and opportunities, to help them make informed decisions.
NGFS	Network for Greening the Financial System: A voluntary network of central banks and supervisors which has agreed to develop and share among central banks best practices in environmental and climate risk management.
NZ CS	Aotearoa New Zealand Climate Standards (incorporates all three standards)
NZ CS 1	Aotearoa New Zealand Climate Standard 1 – Climate-related Disclosures

NZ CS 2	Aotearoa New Zealand Climate Standard 2 – Adoption of Aotearoa New Zealand Climate Standards
NZ CS 3	Aotearoa New Zealand Climate Standard 3 – General Requirements for Climate-related Disclosures
PCAF	Partnership for Carbon Accounting Financials: PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.
PRA	UK Prudential Regulation Authority: The Bank of England's prudential regulator, overseeing more than 1,500 banks, building societies, credit unions, insurers, and investment firms.
Resilience	"The capacity of interconnected social, economic and ecological systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation." – Arctic Council, 2016, cited in IPCC, 2022, p.37
TCFD	Taskforce on Climate-related Financial Disclosure: 'The Financial Stability Board created the TCFD to develop recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing a specific set of risks – risks related to climate change."
Transition	"The process of changing from one state or condition to another in a given period of time. Transition can occur in individuals, firms, cities, regions and nations, and can be based on incremental or transformative change." – IPCC, 2022, p.45. In the context of climate-related risk, transition can refer to the process of reducing emissions and enhancing resilience in the face of uncertain future risk.
UNEP-FI	United Nations Environment Programme – Finance Initiative: "UNEP-FI is a partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development. UNEP FI works with more than 400 banks, insurers, and investors and over 100 supporting institutions – to help create a financial sector that serves people and planet while delivering positive impacts."
Vulnerability	"The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt." – IPCC, 2022, p.47
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum

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