



*Te Kāwai Ārahi Pūrongo Mōwaho*  
EXTERNAL REPORTING BOARD

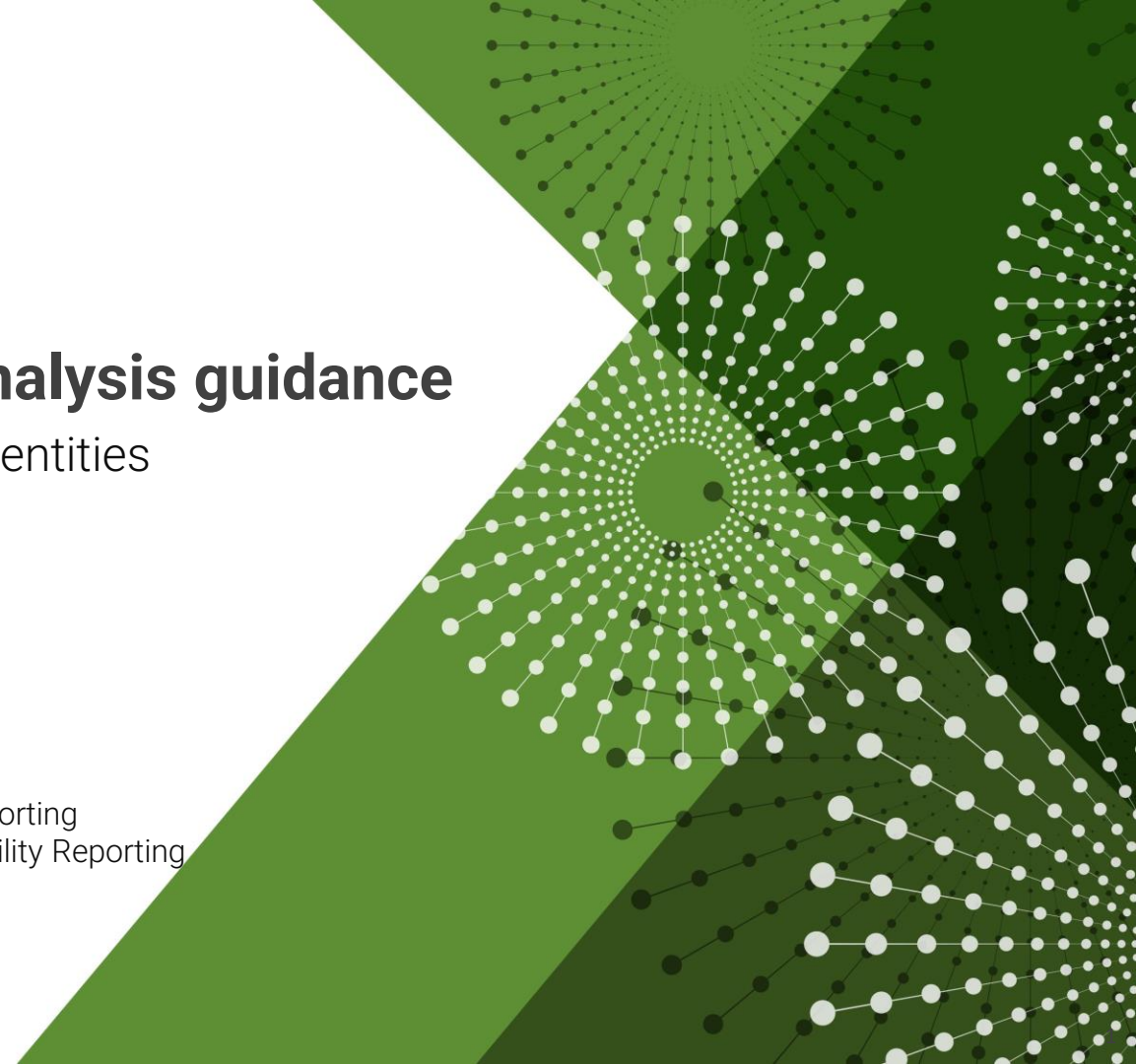
# Entity-level scenario analysis guidance

Non-financial climate reporting entities

Webinar

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# Today's presentation



## 1. Non-financial sector CREs - specific considerations

Examples

Using sector scenarios



## 2. The big picture

Being clear on why scenario analysis is being done

Where scenario analysis fits on the journey to transition planning



## 3. The guidance

The six-step scenario analysis process

# 1. Non-finance sector CREs specific considerations



# Non-financial sector considerations



[FRC Climate Scenario Analysis in Corporate Reporting October 2021](#)

# Non-financial sector considerations



## **A Paradox: How to disclose preparedness for alternate futures while appearing stable and predictable**

'The fact that we have to disclose the scenarios and the impact of those could become a real problem because it discourages business divisions from bringing us the worst-case scenarios. Because there are no mandated scenarios, you can essentially pick what you want. In the worst-case scenarios, do you really want to say if the business will cease to exist? I can't imagine any business being comfortable doing that.' *Interview with communications services company*

[FRC Climate Scenario Analysis in Corporate Reporting October 2021](#)

# Nestlé example



[Scenario Analysis Practical Example Nestle.pdf.downloadasset.pdf](#)  
([accountingforsustainability.org](http://accountingforsustainability.org))

# Nestlé example



## HOW

We started by building an internal cross-functional team with broad skills, experience and perspectives to tackle this issue. Buy-in at senior level was crucial to get the executive support and resources we needed.



We also sought out specific expertise on climate change and scenario modelling that we did not have in-house. In 2019, we collaborated with the University of Lancaster's Pentland Centre for Sustainability in Business, who helped us define our climate scenarios: 'business-as-usual' (4–5°C warming) and 'Paris Agreement' (warming below 2°C). With their advice, we chose appropriate time horizons and framed the key assumptions – for example, that the physical effects of climate change in both scenarios would be similar until around the middle of the century.

### QUALITATIVE AND QUANTITATIVE SCENARIO ANALYSIS

The first phase of our scenario analysis was entirely qualitative. We built our narratives, and started having valuable, in-depth discussions focusing on our most important commodities. We learned a lot in that first year, including that climate change does not mean temperatures rise everywhere at the same rate. Regional changes in temperature and precipitation will mean some regions will receive more rainfall, while others will be exposed to more frequent droughts. For wheat and dairy there is a potential increase in the volatility of regional sourcing due to greater local climate variability but overall we foresee limited impact on global macro yields. Physical risks have a higher probability to impact an origin-sourced commodity, such as coffee, with higher temperatures and water shortages potentially compromising quality and reducing availability. These insights were included as part of our climate disclosure in our 2019 Annual Report.

At the end of 2019, we decided it was the right time to move to a quantitative approach. The assessment was led by our Head of Group Risk, managing a team representing various businesses and functions. We partnered with the University of Cambridge's Centre for Risk Studies to define the methodology and build a climate modelling tool. We considered various climate scenarios, covering a broad spectrum of outcomes, to help provide insight into some of the risks and opportunities that may arise. The modelling simulations evaluated the potential directional financial impacts on Nestlé for both transition and physical risks. We integrated our analysis and the related insights into our overarching climate change strategy to help strengthen our resilience, mitigation and adaptation responses. The in-depth information we generated led to our first full TCFD Report in 2020.

# Exercise caution with models



- There are rising concerns globally that existing models underestimate climate risk, see [here](#) for example
- To help avoid underestimation:
  - Avoid confusing models with reality
  - Follow the six-step scenario analysis method to help ensure impacts are captured that models miss
  - Understand that scenario analysis is not modelling
  - Improve your understanding of the assumptions and limitations of existing climate scenarios
  - Start qualitatively and build in quantification as part of the scenario analysis process
  - Don't think of scenario analysis as something 'done to' your entity but rather some 'done by' yourself

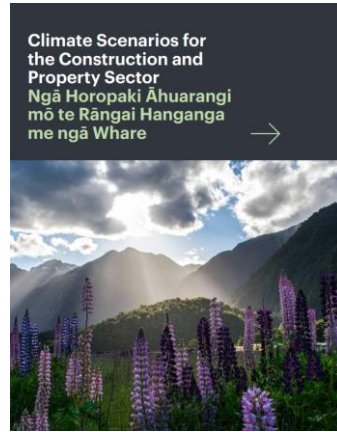


## Using sector level scenarios



- CREs are responsible for their own scenarios.
- Sector level scenarios exist for CREs to draw from, available on the XRB [website](#).
- Use judgment as to whether and how to use existing scenario archetypes.
- They can act as a reference point to add comparability but shouldn't be directly adopted without careful judgment.

# Non-financial sector considerations



Property and construction



Marine

Sector-level scenario analysis » XRB



Retail



Agriculture



Tourism

# Current status of sectors

SECTOR	Planning	Stakeholder engagement	Analysis underway	Scenarios complete
Marine				
General insurance				
Tourism				
Banking				
Agriculture				
Property and construction				
Fund Managers, health and life insurance and KiwiSaver providers				
Retail				
Tertiary Education				
Health care				
Transport				
Energy				
Telecommunications				

## 2. The big picture



# Aotearoa New Zealand Climate Standards

“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 entity's governance body, and the role management plays.

## Strategy

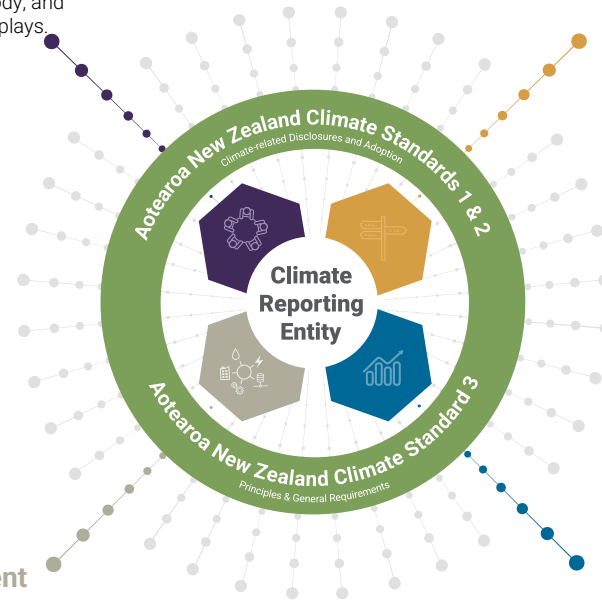
Disclose how climate change is currently impacting an entity and how it may do so in future.

## Risk Management

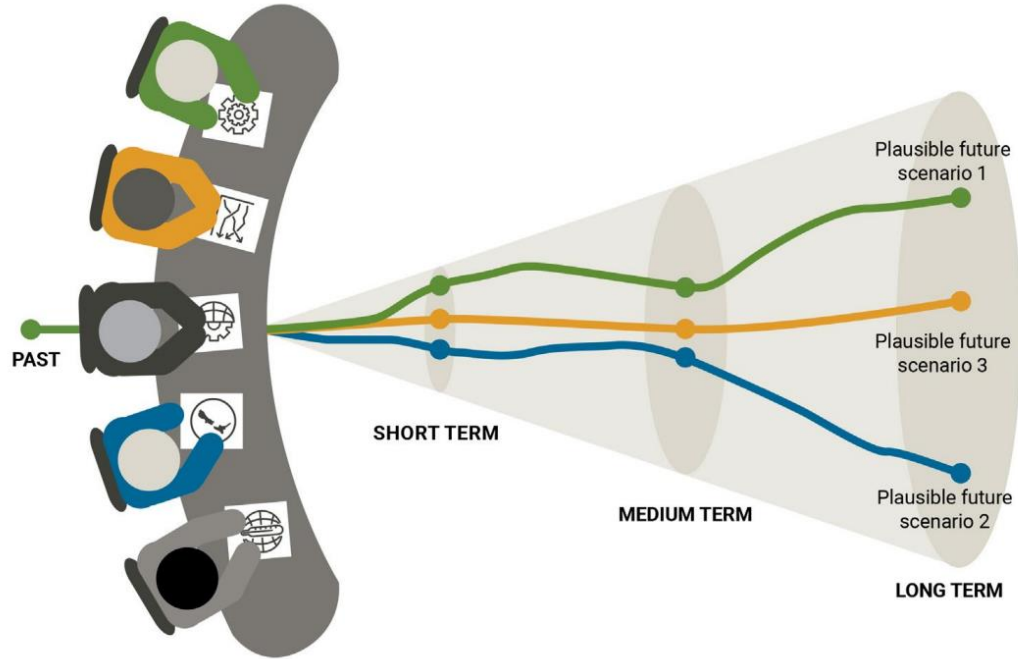
Disclose how an entity identifies, assesses and manages climate-related risks.

## Metrics & Targets

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



# Defining scenario analysis



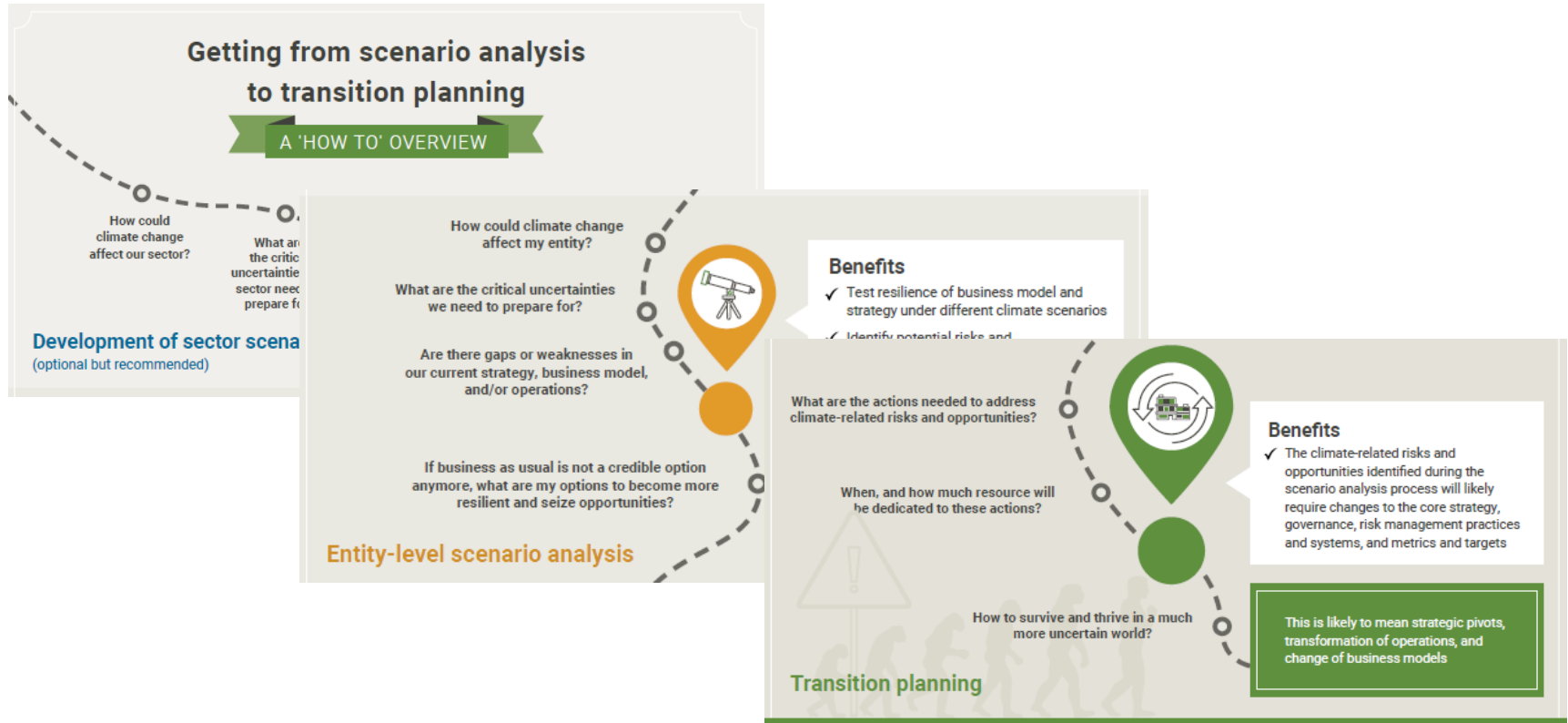
**Figure 1:** Scenario analysis is a process that an entity engages in (board and management) to help to explore its climate-related risks and opportunities, and develop a better understanding of the resilience of its business model and strategy in the face of the different challenges the scenarios present.

# What scenarios are...and are not

Defining what scenarios are and are not	
ARE	ARE NOT
Products of internal insights and collaborative learning	Products of external consultants
Plausible alternative futures	Probabilistic predictions
Significantly different views of the future	Variations around a single reference case or value
Specific, highly decision-focused views of the future	Generalised views of feared or desired futures
Movies of the evolving dynamics of the future	Snapshot descriptions of an endpoint in time

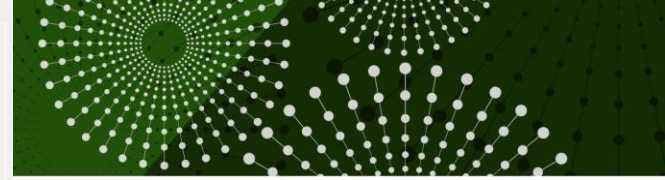
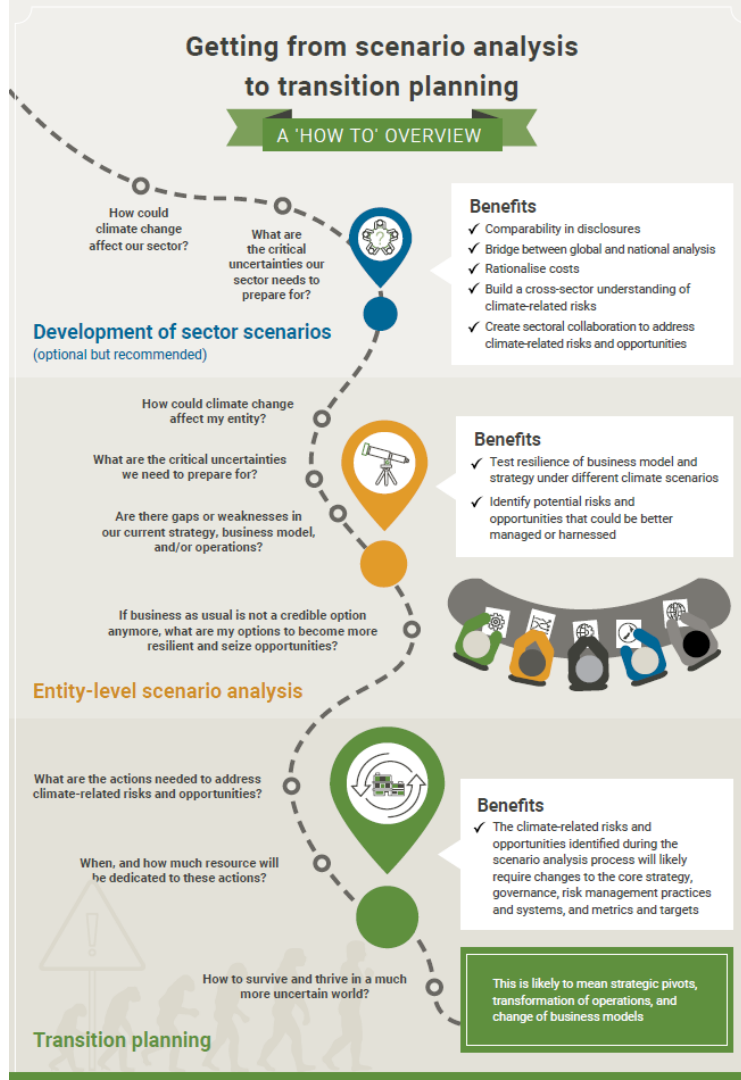
**Table 1: What scenarios are and are not.** The TCFD recommend applying these 'rules of engagement' in framing what scenarios are and are not (adapted from<sup>3</sup>). We recommend entities do likewise in conducting their scenario analysis.

# The journey





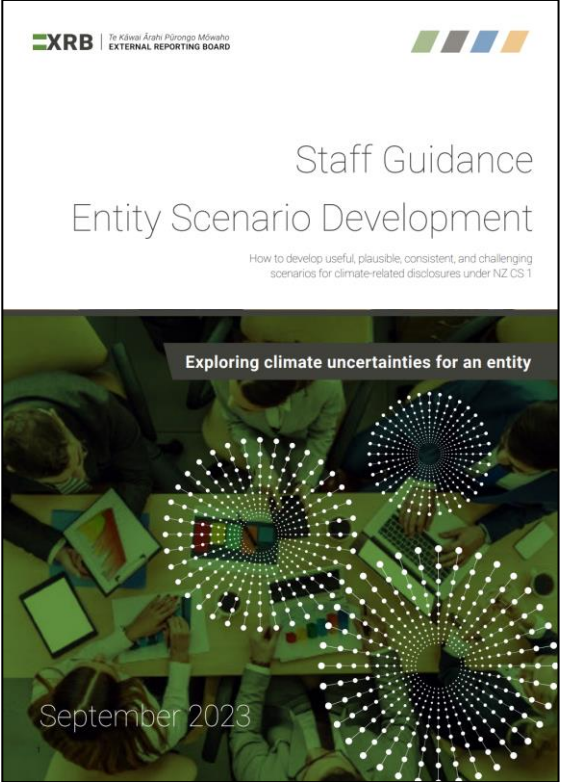
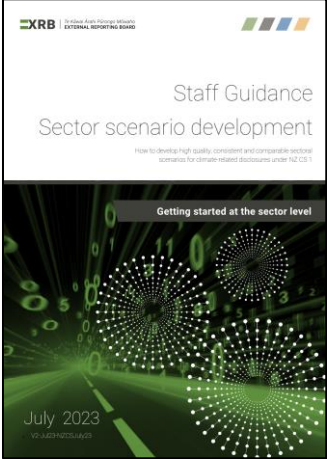
# The journey



# 3. The guidance



# How we developed this guidance



# Scenario analysis in a nutshell



- **Tried and true method:** a strategy tool that has been used since the 1950s



- When done well, scenario analysis proves **useful and powerful**



- **As much an art as a science:** There are many pitfalls, and cognitive biases need to be confronted



- Useless if not used for decision making...

# The bright side



- Anyone can do it



- It is scalable



- Improves connections internally and externally

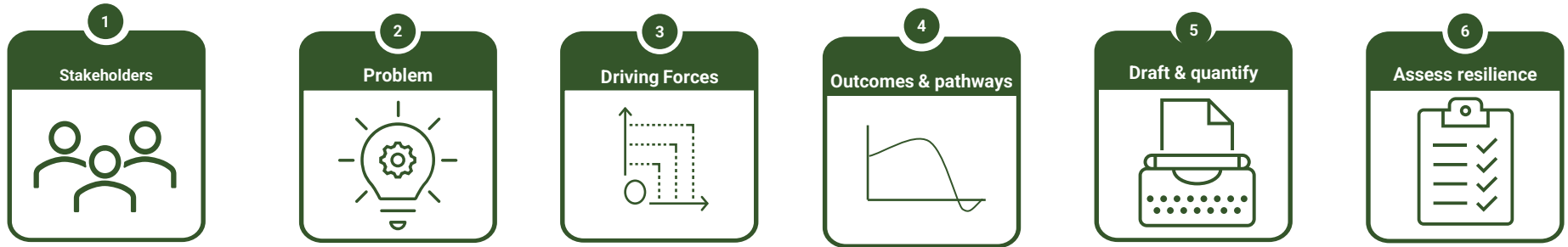


- Useful for identifying opportunities

# The six-step scenario analysis process



# The six-step process



## Each step has:

- **Consistency and comparability** decision points where entities can optimise the alignment of their approach and assumptions
- **Key outputs** which entities might should document
- **Conditions for success** capturing good practice considerations

# Step 1



## STEP



**Engage  
stakeholders and  
prepare an  
effective group**

## KEY TASKS AND PROCESSES

- A strong mandate from the highest governance level is needed
- Coalesce key stakeholders involved with decision-making
- A diversity of perspectives

## OUTPUTS



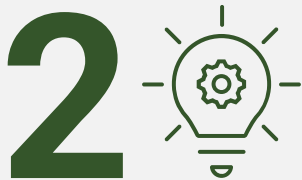
**Briefing  
paper, project  
charter**



# Step 2



## STEP



**Define the problem**

## KEY TASKS AND PROCESSES

- Select a focal question
- Define the scope
- Pick time horizons

**Consistency and comparability:**  
Start with the recommended focal question – “How could climate change plausibly affect our business [model and strategy], what should we do, and when?”

## OUTPUTS



**Focal question, scope, and timeframe**

# Step 3

## STEP



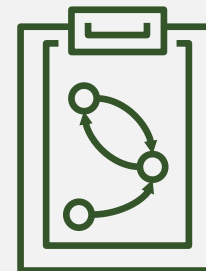
**Identify driving forces and critical uncertainties**

## KEY TASKS AND PROCESSES

- Select driving forces
- Prioritise for their influence & uncertainty
- Select scenario axes
- Develop a simple conceptual model

**Consistency and comparability:**  
Use physical and transition risk scenario axes

## OUTPUTS

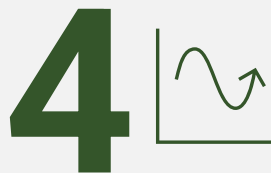


**Driving forces prioritised, scenario axes, conceptual model**

# Step 4



## STEP



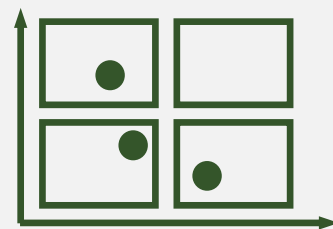
**Select  
temperature  
outcomes and  
pathways**

## KEY TASKS AND PROCESSES

- Explore the implications of different pathways
- Select outcome and pathway combinations to structure scenarios

**Consistency and comparability:**  
**Develop at least three outcome and pathway combinations**

## OUTPUTS



**Scenarios from most  
relevant and  
challenging  
pathways**

# Step 5

## STEP

# 5



**Draft narratives  
and quantify**

## KEY TASKS AND PROCESSES

- Draft scenario narratives
- Synthesise existing data from other scenarios & projections
- Be clear why you are quantifying. Start with size of issues

**Consistency and comparability:**  
Use the scenario architectures  
employed at sector level / in guidance

## OUTPUTS



**Narratives,  
quantified where  
appropriate**

# Step 6



## STEP

# 6



**Assess strategic  
resilience**

## KEY TASKS AND PROCESSES

- Quality check
- 'Stress test' under each scenario
- Start drafting strategy options
- Evaluation criteria
- Monitoring signals
- Review

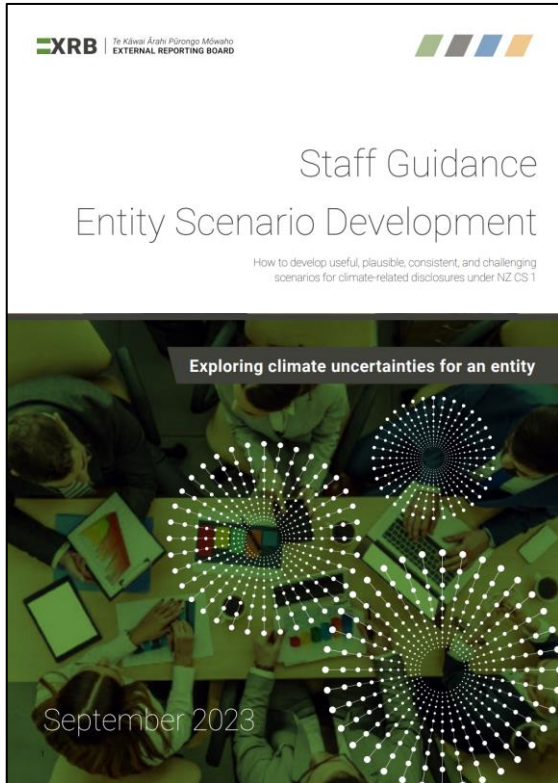
**Consistency and comparability:**  
**Take learnings into an ambitious  
transition plan**

## OUTPUTS



**Final report,  
monitoring and  
reiteration plan**

# Recap of key messages



- This guidance is available now
- Climate scenario analysis will help you improve your strategy
- A strong mandate from the highest governance level, and a diversity of perspectives from across your entity, are key
- Scenario analysis involves grappling with uncertainty and making judgements
- Achieving climate resilience requires a more adaptive and flexible strategy

Ngā mihi  
Pātai?

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