

New Zealand

Board

# Toolkit

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**Chapter  
Zero** New Zealand  
The Directors' Climate Forum

Hosted by



Institute of  
**DIRECTORS**  
NEW ZEALAND

# Chapter Zero New Zealand Board Toolkit



Hosted by



## Toolkit contributions

We would like to thank the following Chapter Zero New Zealand collaborators for their contributions to this resource: Anthem, Dentons Kensington Swan, Institute of Directors (NZ) Inc, KPMG, the National Institute of Water and Atmospheric Research (NIWA) and the Sustainable Business Council (SBC).

## Foundation Partners

### This Toolkit has been created by Chapter Zero New Zealand

Chapter Zero New Zealand is a member of the Climate Governance Initiative (CGI) and is part of the global network of board directors committed to taking action on climate change. It is proudly hosted in Aotearoa by the Institute of Directors (NZ) Inc.

### Disclaimer

This toolkit is not a comprehensive analysis of the laws, regulations and frameworks concerning climate change in New Zealand and taking climate action. It is not a substitute for legal advice for directors on climate change matters. Our aim is to provide readers with tools, support and encouragement to address climate change as a priority on their boards and within their organisations.



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## How to navigate this document

This toolkit is intended to help directors of small to medium sized organisations in New Zealand address climate change as a priority within their organisations. We've designed this guide as a resource for directors with varying degrees of skill and knowledge on climate issues.

Use the many [links](#) you will find throughout the toolkit to navigate your way around, or to find a more detailed explanation where needed (set out in the Appendices).

You can find quick links to the main sections of the toolkit via this Contents page or in the footer menu.



# Welcome from Chapter Zero New Zealand



## Tēnā koutou katoa

Adapting to the demands of climate change is a complex yet critical issue for every organisation to address. Governance capability in this regard is equally complex and requires time, effort and constant education. We hope every business

and organisation is focused on transitioning towards a lower-emissions future and Chapter Zero New Zealand acknowledges the role of directors in this transition will be paramount.

It has been heartening to see many larger businesses and public sector organisations enlisting internal capability or external support to work through their climate strategies. However, many are still struggling to prioritise and resource climate in the seemingly never-ending list of competing governance challenges.

One of the questions I'm asked most often by my fellow directors is 'where do I start?' This is the reason Chapter Zero New Zealand has focused on a simple five-step process that any director, regardless of their background knowledge or organisational resource, can use to work through the challenge.

I want to thank Chapter Zero UK and its partners The Berkeley Partnership and The Centre for Climate Engagement who created the original version of this toolkit and have generously allowed other chapters to repurpose and adapt it to their local needs.

We hope this toolkit will provide a simple yet useful framework for directors to work through with their boards to promote urgent and decisive action across every board table.

**Dame Therese Walsh**  
**Chair, Chapter Zero New Zealand**  
**Steering Committee**

Mā te ako ka mārama.  
 Mā te mārama ka mātau.  
 Mā te mātau ka ora.

*Through learning comes understanding.*

*Through understanding comes knowledge and wisdom.*

*Through knowledge and wisdom comes life and well-being.*

In a world grappling with climate change, investors, regulators and other stakeholders are challenging organisations to take responsibility by adopting an integrated, strategic response. Directors and boards are at the helm, and have the opportunity and responsibility to be a force in driving action and change within their organisations.

The urgent need to address the climate emergency requires governments and organisations to accelerate the transition to a new economic model, which seeks to limit global average temperature increases to 1.5°C above pre-industrial levels, consistent with the 2018 recommendations of the Intergovernmental Panel on Climate Change (IPCC).

To fulfil their fiduciary duties in the long-term service of their organisations, directors need to:

- Be fully aware of the implications of climate change
- Have the skills, tools, processes and information to act
- Commit to steward their organisations through the challenges climate change presents, and
- Embed climate change within their organisations' overall strategic and risk management planning.

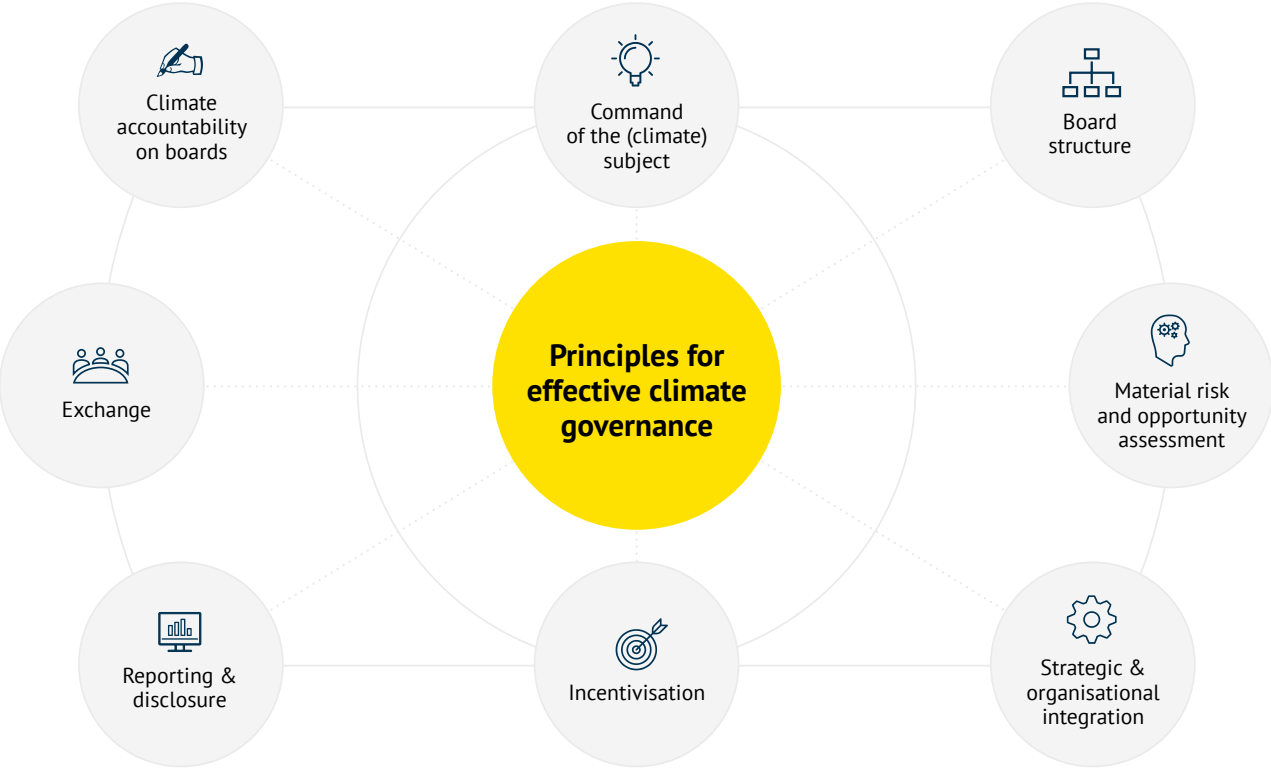
Directors should not underestimate the opportunity to place climate change at the top of their organisations' priorities. They play a key role in staying abreast of the issues and in providing support and encouragement when organisations are making important decisions, and transitioning to a more sustainable future.

The purpose of this toolkit is to provide directors and boards with evidence and support to address climate change as a strategic business issue. It provides a **simple five-step process** to support boards to take timely, positive and decisive climate actions.

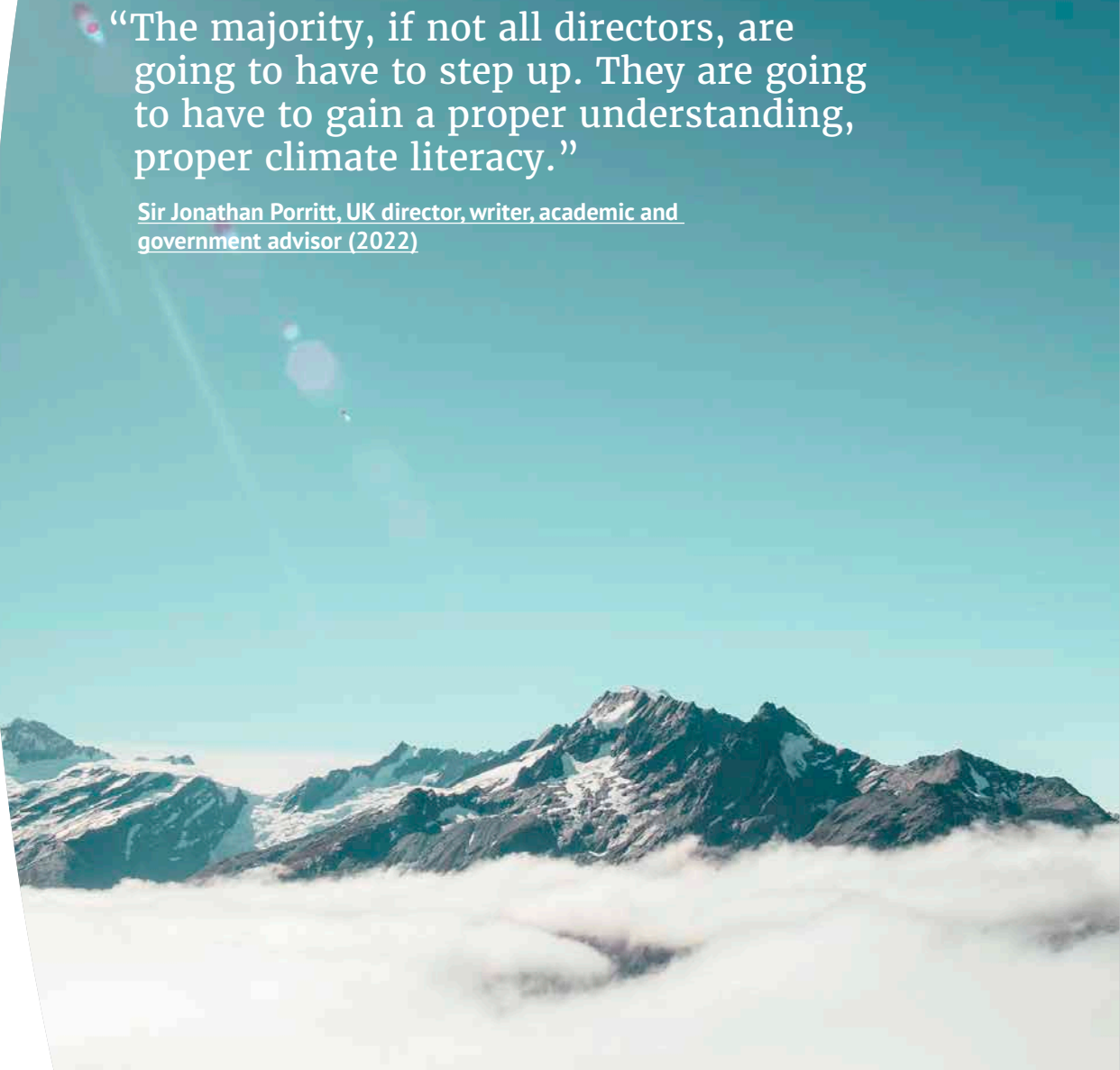
Note: For the purposes of this toolkit use of the word "board" is intended to include all governing bodies of New Zealand organisations.

### Climate governance principles

The World Economic Forum has developed a set of **Climate governance principles** for boards of directors, with a view to enabling directors to gain climate awareness and skills, embed climate considerations into board decision-making, and understand and act upon the risks and opportunities that the climate emergency poses to the long-term resilience and business success of their companies, while taking into account all stakeholders.



Source: [World Economic Forum](#)



“The majority, if not all directors, are going to have to step up. They are going to have to gain a proper understanding, proper climate literacy.”

*Sir Jonathan Porritt, UK director, writer, academic and government advisor (2022)*

Climate change and the transition to a low emissions climate-resilient economy are already having significant and disruptive implications for business competitiveness, viability and shareholder value, and this is expected to continue. Organisations can benefit from taking action quickly, while delaying could make for more challenging transitions and increased cost.

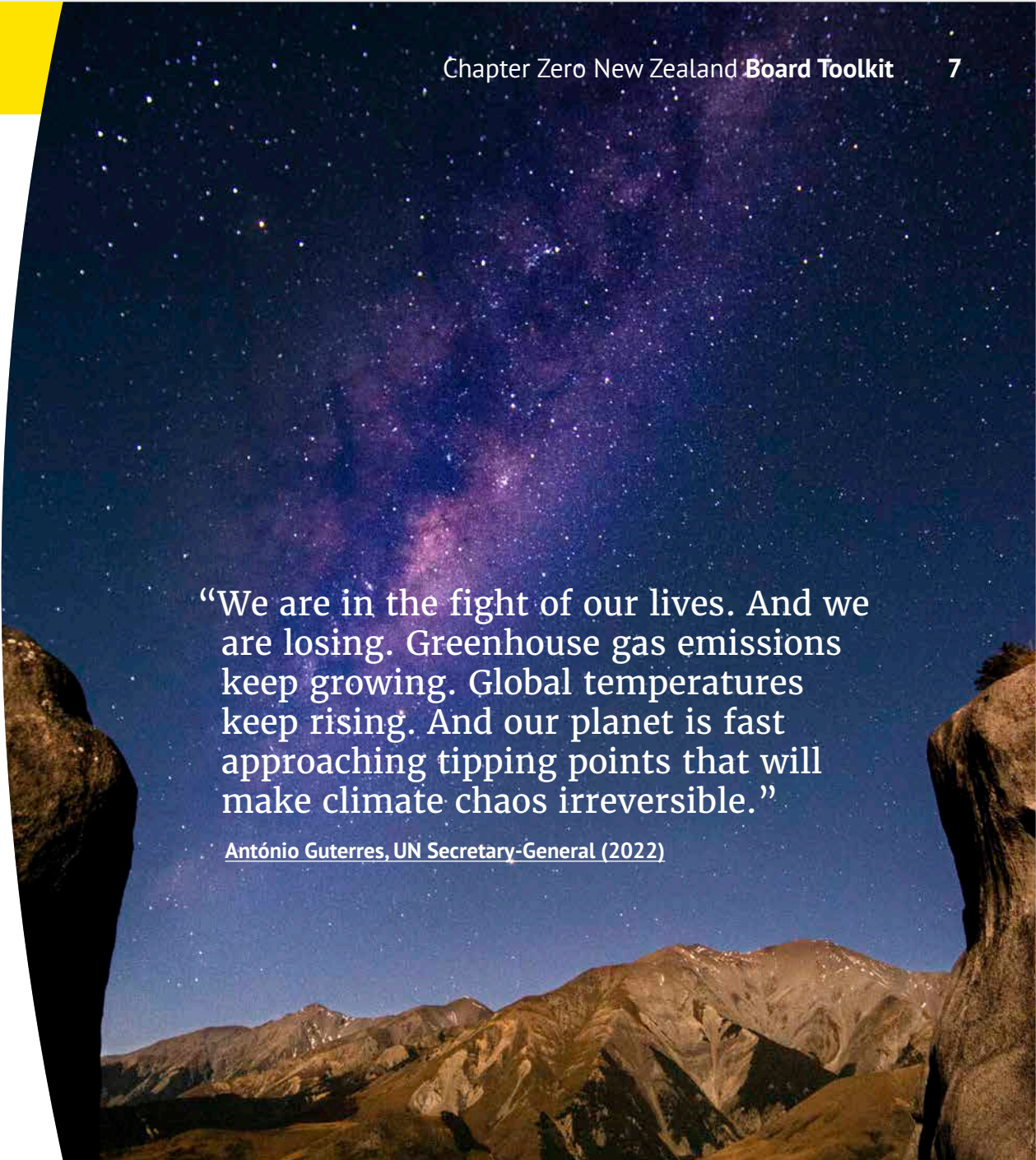
## Opportunity

Fossil fuel prices are volatile and have increased significantly. There are obvious opportunities to drive organisational efficiency and resilience by reducing energy consumption and switching to renewable sources.

However there are far more fundamental and strategic opportunities for organisations leading the transition to a low emissions, climate-resilient economy. In 2023, Deloitte estimated that **decisive climate action could deliver \$64 billion** of additional economic gain to New Zealand's economy by 2050 if warming is limited to 1.5°C. Organisations that harness new technologies and markets and the rapid shift in stakeholder expectations will benefit significantly.

Organisations that proactively address the challenges of climate change can reap the rewards. Delayed action could lead to a more costly and difficult transition. Taking faster action on climate change could **save New Zealand NZ\$30 billion** by 2050.

Addressing climate change supports long-term, strategic planning and foresight as it encourages organisations to think beyond the short term, to 10, 20, 30 year horizons.



“We are in the fight of our lives. And we are losing. Greenhouse gas emissions keep growing. Global temperatures keep rising. And our planet is fast approaching tipping points that will make climate chaos irreversible.”

António Guterres, UN Secretary-General (2022)

## Risk

The risks presented by climate change and the shift to a low carbon economy are significant and already present. The World Economic Forum's **Global Risks Report 2023** revealed climate and environmental risks are the core focus of global risks perceptions over the next decade and are the risks for which we are seen to be the least prepared.

**Physical risks:** losses resulting from climate change, may be chronic (resulting from sustained, long-term effects, such as rising sea levels) or acute (resulting from individual climate-driven events, such as severe storms). The financial impacts of these risks can result in increased insurance costs, damage to infrastructure and assets and disrupted supply chains.

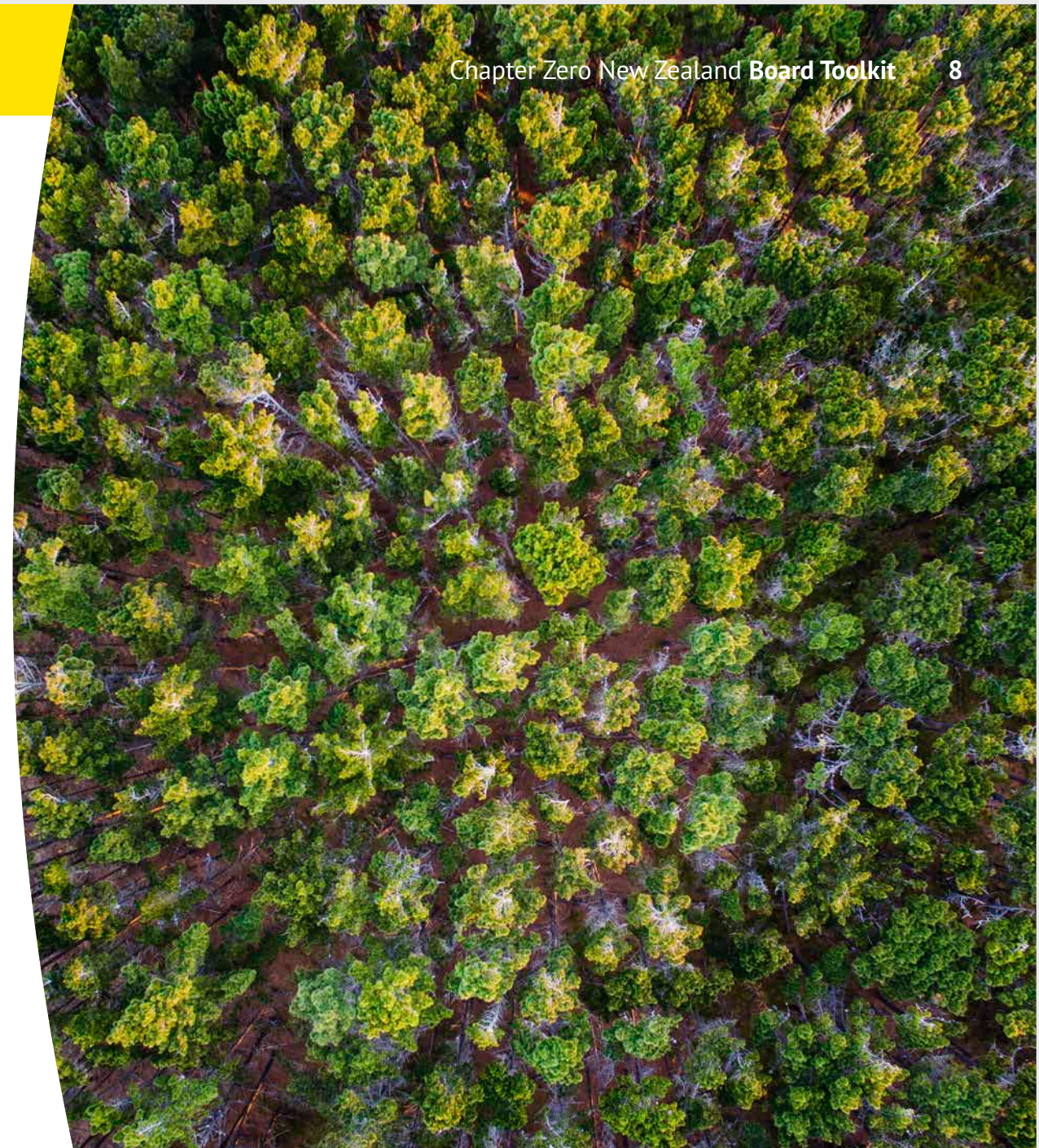
**Transition risks:** result from societal, legislative, technological and economic shifts to a low carbon economy. For example, a company and its products may be rendered obsolete, if it fails to respond quickly enough to new demand or technologies. Or a business may suffer reputation damage if it

is accused of **greenwashing**, or of not adequately addressing climate change.

**Planning risks:** failing to adequately account for climate change, for example when planning major infrastructure projects. As well as the need to consider such things as location, GHG emissions and resilience, there is also the ability to secure financing and insurance for projects with fundamental questions around how climate change is being addressed needing to be answered. Significant changes to business models will also be required to address risks and take advantage of new opportunities.

A failure to manage or appropriately disclose these risks can also lead to litigation risks, for example for breaches of director duties of care, failure to think through climate-related financial risk when making decisions, or misleading disclosures.

[🔗 Further examples and potential financial impacts](#)





## Stakeholders

Stakeholders' expectations and demands are changing and growing. Organisations that are actively addressing and mitigating their impact on climate, and identifying and acting on opportunities, are likely to be more attractive to many stakeholder groups. These groups can include investors, lenders, regulators, customers or employees. In the not-for-profit sector they could also include members, volunteers, donors and funders, as well as the wider community.

Kantar's **Better Futures 2022** report shows that living more sustainably is a big driver of choice for New Zealanders, with 43% of respondents showing a personal commitment to living sustainably in 2021 (up from 36% in the previous year). They are turning away from organisations that are failing to act, making it increasingly difficult for those organisations to compete, secure investment, and attract top talent.

Organisations need to be particularly mindful that many employees expect them to take climate change issues seriously. Taking a strong leadership approach on tackling the issues of climate change can give your organisation a competitive advantage in recruiting and retaining top-quality employees.

Banks and insurers are paying increasing attention to their customers' social and environmental performance. There will be more expectation that organisations will be monitoring their social and environmental risks, and banks will be asking their business customers to demonstrate how they are doing this.

If organisations aren't prioritising climate change responses they may find their access to capital and insurance becomes increasingly difficult and costly, and there may come a time when they won't be able to obtain lending or insurance.

Climate action is no longer a “nice to have” but is fast becoming an expectation from stakeholders and all organisations. Boards and directors need to be ready.

## Regulation and legislation in New Zealand

New Zealand's **Climate Change Response (Zero Carbon) Amendment Act 2019** commits New Zealand to a net-zero emissions economy by 2050. This important statute, which passed into law with the support of both major parties, sets the political environment for all organisations.

From 2023, under the **Financial Markets Conduct Act 2013**, large publicly listed companies, insurers, banks, non-bank deposit takers and investment managers are required to annually report their climate-related risks and opportunities (climate statements). Directors can be held liable for their company's failure to comply.

It is expected small and medium sized enterprises (SMEs) may also need to consider their climate-related impact more carefully due to the downstream effects of these obligations and the requirement for them to report on **Scope 3 (indirect) emissions**. Large entities may require their SME business partners and suppliers to provide their own climate statements in order to verify the integrity of the supply chain. The **Climate Change Commission** is recommending these obligations be extended to other businesses in the future.

Under the **Companies Act 1993** all directors have a duty to act in the best interests of their company, with wide discretion to determine what this means in practice. Directors today may already include ESG (environmental, social and governance) considerations as relevant in decision making or face shareholder pressure to do so. An **amendment** before Parliament in 2023 seeks to clarify that any director may consider matters outside the financial bottom-line and, in particular, may take into account 'reducing adverse environmental impacts' when determining their company's best interests.

All these changes elevate organisations' climate litigation risk. There is already an increase in litigation identifying climate change and/or failure to address climate change as part of a cause of action. The reporting obligations give rise to the potential for new claims including claims against boards and/or individual directors.

## Climate reporting

Climate reporting needs to be factually correct, transparent and honest. It needs to meet any standards applicable and support the reputation of the organisation. If an organisation's reporting fails to meet standards, or is misleading in any way, the organisation risks losing investors, damaging its reputation and potentially being subject to legal action. Increasingly, boards are choosing to report voluntarily.

### **Appendix D: Climate reporting in New Zealand**

For further reading on reporting and the climate disclosure landscape in New Zealand see:

- **Chapter Zero New Zealand**
- **External Reporting Board (XRB)**

In Aotearoa, the Government (as the Crown) has responsibilities under Te Tiriti o Waitangi, including obligations of active protection to Māori in the use of their land and resources.

Te Tiriti obligations are increasingly reflected in legislation and Tikanga Māori (Māori law of Aotearoa) has been recognised by the courts as part of New Zealand law.

Tikanga principles, including manaakitanga and kaitiakitanga are highly relevant to the environment and climate change (noting practice can vary in different contexts and between different iwi, hapū and whānau). These principles emphasise the need to care for and protect the whenua (land) and natural environment (taiao) and the resources within it, to ensure sustainability for future generations. Directors can expect to need an understanding of these wider issues which are gaining momentum and therefore represent increased risk.

# The five steps



# The five steps: to ensure your board is prepared

Here are five key steps that boards can take to ensure their organisations have holistic, robust and deliverable plans for reducing their emissions and responding to the opportunities of the transition to a low emissions climate-resilient future.



### Steps 1–2

Directors can play a lead role in initiating and driving the conversation

### Steps 3–5

Directors can play a key role in ensuring the organisation delivers



# Step 1 | Ensure the right board oversight

Your board can consider a series of questions to establish their level of preparedness. If you can't give clear and well evidenced answers to one or more of the following, it will be a strong indication that more needs to be done to prepare for climate change and the transition to a low emissions climate-resilient future.

While many New Zealand boards now recognise climate change as being important to the strategic success of their organisations, more action is needed. In the Institute of Directors 2022 **Director Sentiment Survey** only 47% of respondents said their board was engaged and proactive on climate change risks and practices and only 20% included disclosures on climate-related risks and/or the impact of climate change on their organisations, in their latest annual reports. In addition:

- 51% listed climate change, water and resource management issues as one of the top 3 future trends they were currently paying attention to.
- 50% of respondents said their boards spend time strategically discussing the environmental impacts of their organisations.

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.





Your organisations and boards are operating in an uncertain world, here are some key questions to ask:

## Leadership capability

- Do we have the right competence on our board and access to the right expertise? Do we have the means to ensure this remains the case?
- Does our board and our organisation appropriately reflect climate change within our culture? Have we connected it to the organisation's purpose and built in accountability?
- Has the board put climate change on the agenda? Is it considered as part of the organisation's wider strategy and risk management planning across the organisation?
- Would it be helpful to establish a separate board committee to address these challenges and ensure adequate attention and time is given to the issues? Do we have clear mechanisms in place to ensure adequate consideration when making key decisions?

## Clarity of intent

- Have we set clear and ambitious goals? What will success look like in the future, and what level of change will this require versus today? Will we take a lead in our sector? What will this mean in practice?
- Have we set clear, SMART objectives, priorities and plans to achieve our stated goals? Given the pace of change in this area, are we reviewing these appropriately?



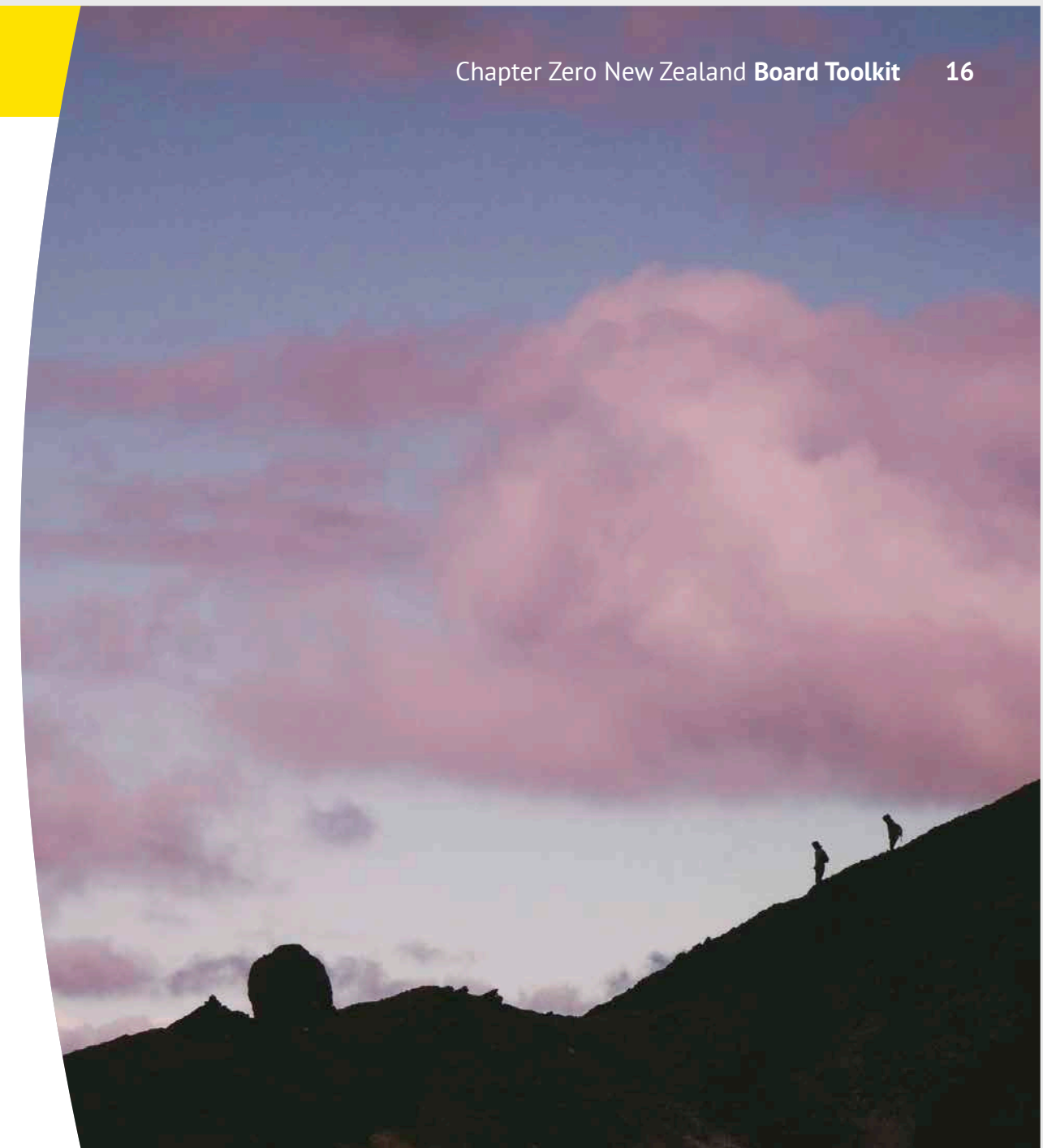


## Ability to deliver

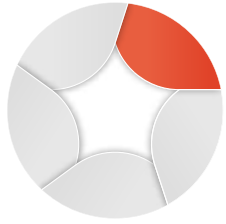
- How will we ensure that management is clear on, and held to account, for delivering on our climate-related goals? How well are our climate-related objectives and priorities embedded into executive performance management?
- Are we clear how much we will need to invest to achieve our goals?
- Are we comfortable we have the right mechanisms and metrics to track progress in delivering our plans? How might we verify the accuracy of it?
- How can we be sure we have dedicated the right resources (people and money) to deliver on our plans?
- Have we fully engaged our supply chain partners and have they committed the resources required to deliver our ambition? What might they need from us to fulfil their own objectives in this regard? Do we have the ability to provide this?
- Are there advantages to collaboration within our sector?
- Have we considered how to engage and update our stakeholders so they can understand our actions in this area and we can understand what they need from us?

## Understanding the drivers of change

- What might our current Greenhouse Gas (GHG) emissions and our forecast GHG emissions look like under a number of scenarios?
- How do we think consumer, customer and investor expectations are changing? How might these changes impact our access to funding and insurance, ability to compete, and ability to attract/retain top talent?
- What is our understanding of the physical and transition risks posed to our assets and value chain? Do we have a plan to manage and/or mitigate them? Will we need to fundamentally rethink our business model?
- What opportunities could the transition to a low emissions climate-resilient future present for our business? (Financial incentives, efficiencies, new tech/products/markets)
- In looking at our emissions, risks and opportunities, how could we thoroughly assess our whole value chain, outside our own operations?
- Have we evaluated how we can comply with current and emerging regulation, including any disclosure requirements?







## Step 2 | Establish the need for change

Once Step 1 has been completed and the board has acknowledged the potential need to do more, the aim of Step 2 is to get a clear, high-level view of where the organisation is now versus where it aims to be in the future.

Step 2 is also designed to help develop a clear understanding of where action is most needed to meet future ambitions. This is usually best achieved through open engagement and discussion at the board level, supported and informed by an objective assessment of current climate-related risks, opportunities, plans and processes. This should include how to incorporate these elements into the organisation's wider strategy and risk management planning.

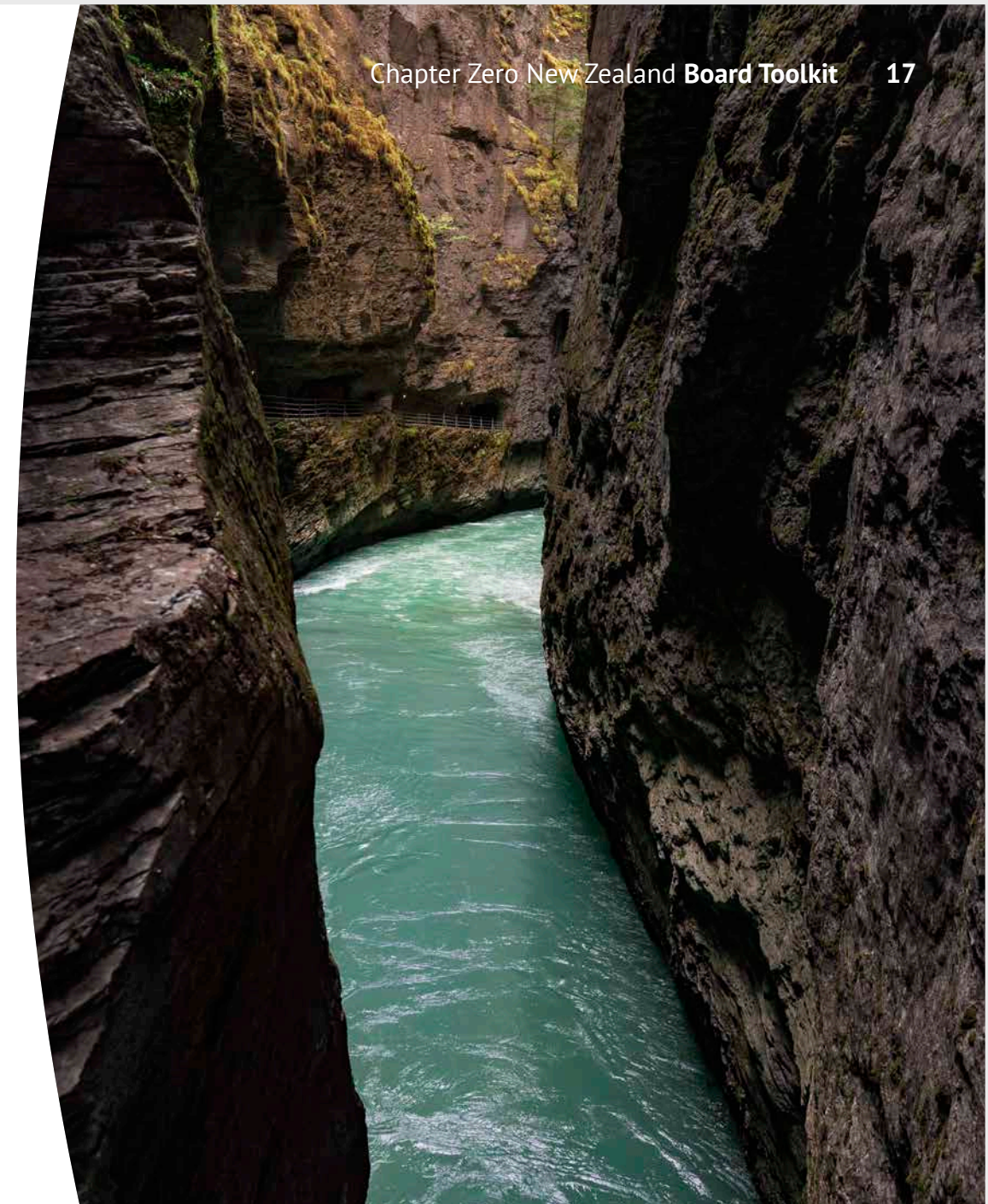
### The Board Scorecard

The Board Scorecard is a tool for use by individual directors to assess where boards are positioned in terms of leadership and evaluation of climate change strategies. The questions are designed to help you assess how effectively your board is tackling the net zero transition and building resilience to climate impacts.

There are 20 questions to answer, which are used to assess a board across four different areas: leadership, ownership, strategy and measurement. This scorecard should take around 10 minutes to complete.

After completing the assessment you can request to be sent a copy of your results. You can use the Scorecard to identify gaps in the performance of your board, help make informed decisions on priorities for action and ask effective questions in the boardroom. You could also invite the rest of your board to complete the Board Scorecard and compare the different results to encourage a deeper discussion.

[🔗 Complete the online Board Scorecard](#)





# Step 3 | Set direction and plan the change

Use the gaps identified in the Board Scorecard (Step 2) to set a direction and plan your strategy.



Check that your board has the following:

- The right competence and access to the right knowledge and expertise, sufficient to set the right strategic direction.
- A comprehensive analysis across all areas of the organisation and its end-to-end value chain (**Scope 1, 2 and 3 emissions**), recognising the importance of assessing Scope 3 emissions from the beginning (rather than leaving them until later on in the process) and:
  - Current and forecast **GHG emissions**
  - A number of scenarios, including short and long term opportunities to reduce emissions
  - A long-term planning horizon (10+ years)

- In light of that analysis, consideration of:
  - Climate change related **opportunities** the organisation could benefit from
  - Climate change related **risks** the organisation needs to mitigate/adapt to
  - Any modifications that may be required to the business model
  - The use of influence and positioning to support the low carbon transition

→ A clear strategic plan and targets including a vision, statement of intent and priorities, with climate action clearly embedded in the organisation's overall strategic and risk management planning for the organisation.

→ To align with science-based emission reduction targets efforts should be focused primarily on absolute reduction of GHG emissions, with **offsetting** used only to address residual emissions that are unfeasible to eliminate, by permanently removing equivalent amounts of CO2.

→ The vision and key priorities embodied into SMART strategic objectives for the organisation. In particular, evidence of a credible set of targets to achieve **emission reductions** (such as a net zero target supported by reductions in line with science-based targets).

→ A comprehensive, integrated assessment of the change required to deliver on the above action areas and objectives, across all areas of the organisation and the end-to-end value chain.

→ Defined strategic plans and business cases to deliver the change over the short, medium and longer term (10+ years), in all of the areas of change identified and as an integral part of broader business planning.

→ **Sufficient resources allocated** to deliver the change, both within the organisation and its supply chain partners.

→ The right **metrics and mechanisms** in place to track delivery, which can be verified if necessary.

→ Climate change priorities that are incorporated in investment and other decision-making throughout the organisation.

🔗 For further support for small to medium organisations, please refer to the tools and resources provided by the **Sustainable Business Network**.

For examples of how to transition and influence see the Climate Leaders Coalition **Statement of Ambition**.



# Step 4 | Embed and sustain the change

A checklist to ensure climate change is embedded through the organisation.



**Check that your board has the following:**

- Leadership (from the top down, for example, the Chair or CEO) is actively setting the right tone to inspire the required change in culture and behaviours - not only what the organisation says but, more importantly, what it does.
- All activities are aligned behind the organisation’s climate action goals.
- Effective leadership has been put in place to oversee climate impact, risks, opportunities and action in line with the **World Economic Forum principles** and/or any applicable legislation and regulations.
- Robust, evidence-led, board reviews of climate-related targets, plans, risks, opportunities and progress, carried out at least quarterly.

- The board and management factor climate action into all relevant decision-making, in a robust, transparent and measurable way.
- The board has and retains the right competence and access to the right expertise and insight in relation to climate change and impact/opportunity assessment.
- Comprehensive inclusion of **climate-related risks and opportunities** within financial disclosures either:
  - in accordance with any applicable regulations or legislation, or
  - otherwise in line with commonly accepted national or international standards and guidelines, such as the **Aotearoa New Zealand Climate Standards** or the **TCFD recommendations**. These recommendations make business sense. Organisations should not wait to be required by law.

- Ownership, accountability and targets for climate action is embedded throughout the organisation including the board (ie. it is not just a specialist sustainability function).
- Management incentives are aligned to promote the long-term prosperity of the organisation. The board should explore ways it can transition management remuneration to meet the long-term goals of the organisation, including considering climate-related targets and indicators in their management incentive schemes or key performance indicators, where appropriate.
- **Effective communication and engagement** across all key stakeholder groups underpinned by the training, education and support they need to make the change happen.

### Stakeholder communication, transparency and engagement

Broad-based communication, transparency and engagement across the full gamut of stakeholders is vital. Transparency is becoming a regulatory issue, a question of authenticity and a determinant of social license as it is an aspect of reputation and delivering on purpose. In some cases, the most advanced engagement takes the form of a partnership. Collaboration across groups is a critical aspect of climate change transition planning.

A clear and compelling narrative with realistic targets and timeframes is important to engage and build rapport with all audiences.

- 🔗 For examples on how to engage with different stakeholder groups:
  - **Chapter Zero UK: Board Toolkit** (pg 46)
  - **External Reporting Board (XRB): Director Preparation Guide**



# Step 5 | Monitor and optimise

A checklist to ensure your board is actively and appropriately monitoring progress and providing support and encouragement.



Check that your board is doing the following:

→ **Actively monitoring targets**

Ensure targets are met as part of business as usual, continuing to create stretch, and motivating ongoing improvement. This approach needs to be embedded throughout the organisation.

→ **Using credible data**

Ensure the organisation uses credible data on current emissions and trends to inform changes and continuous improvement in targets. For example, if emissions are forecast to increase in a particular area of the organisation, total reduction targets should be increased to take account of this.

→ **Supporting and encouraging**

Provide ongoing support to the organisation to actively monitor changes in climate science, policy and regulation, including any climate-related technology innovations. Then use these insights to identify and implement any changes required to plans and targets.

→ **Listening**

Leadership is providing clear communication channels for stakeholders (employees, customers, suppliers, investors, lenders, etc.) to share their climate action and net zero ideas, and actively listening to and acting on stakeholder suggestions.

→ **Incentivising**

Leadership is actively encouraging stakeholders (eg employees, suppliers) and incentivising them to develop improvement ideas. Incentives do not need to be monetary (for example, competitions

to come up with the best ideas and/or make the biggest difference are a great way of making the topic front of mind and getting people to positively engage).

→ **Benchmarking**

Levels of ambition and achievement are being proactively compared with those of peer and comparator organisations and adjusted accordingly, to achieve target positioning.

→ **Collaborating**

There is proactive networking and collaboration across the end-to-end value chain. This should include businesses and stakeholders within your organisation’s sector and more broadly to share and action improvement ideas and innovations.

# Case studies



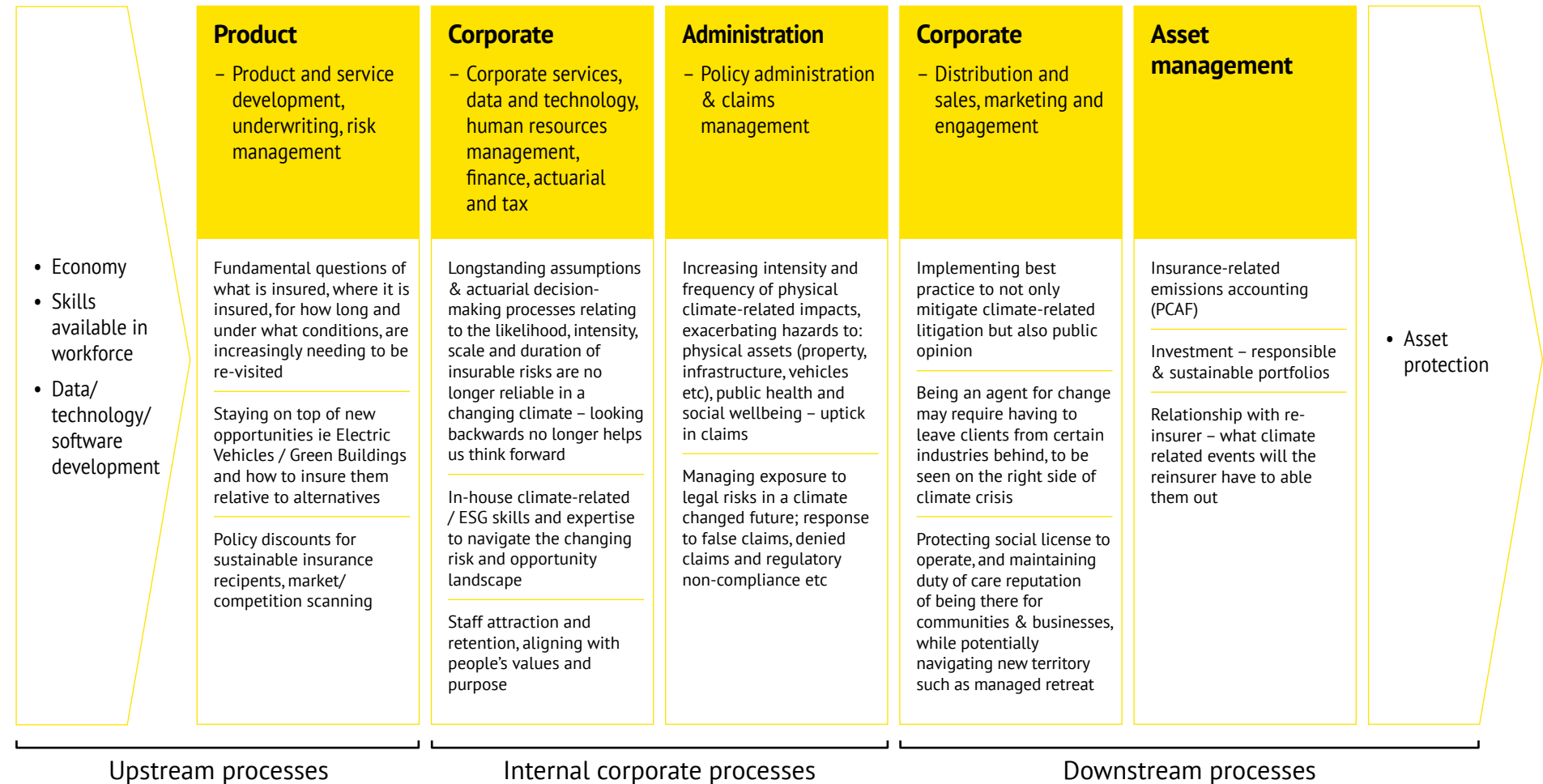
Different industries and sectors will need to take into account varying climate-related considerations across all areas of their organisations and their end-to-end supply chains. Set out below are four case studies of climate-related considerations relating to the general insurance, not-for-profit, banking and agriculture sectors.

Directors may wish to develop a similar approach to identify the considerations within their specific sector. Many sectors or industry organisations may provide useful information for assistance with this work.

Thanks to **KPMG New Zealand** for their support in creating these case studies.

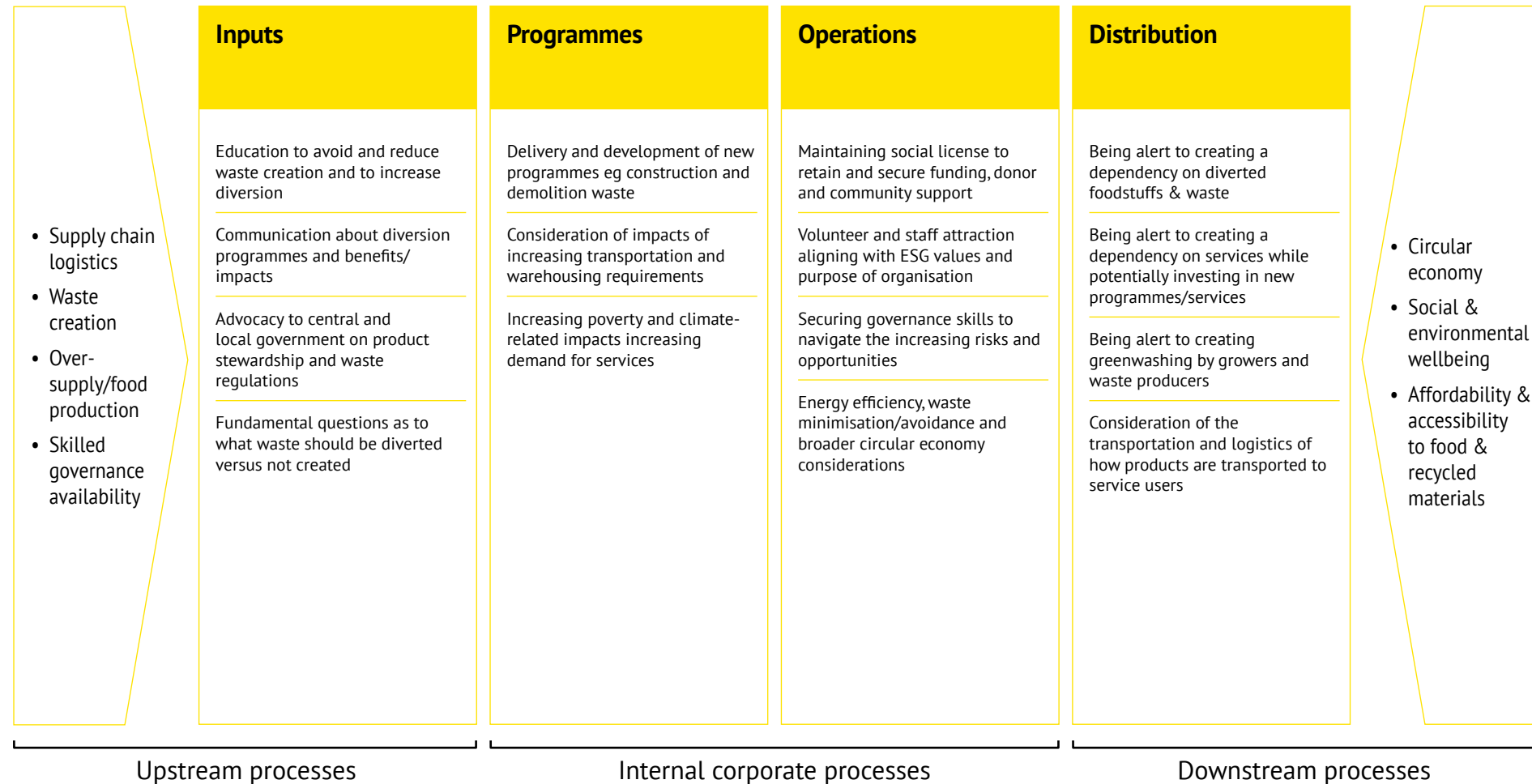
### General insurance

Climate-related considerations across the value chain for general insurance.



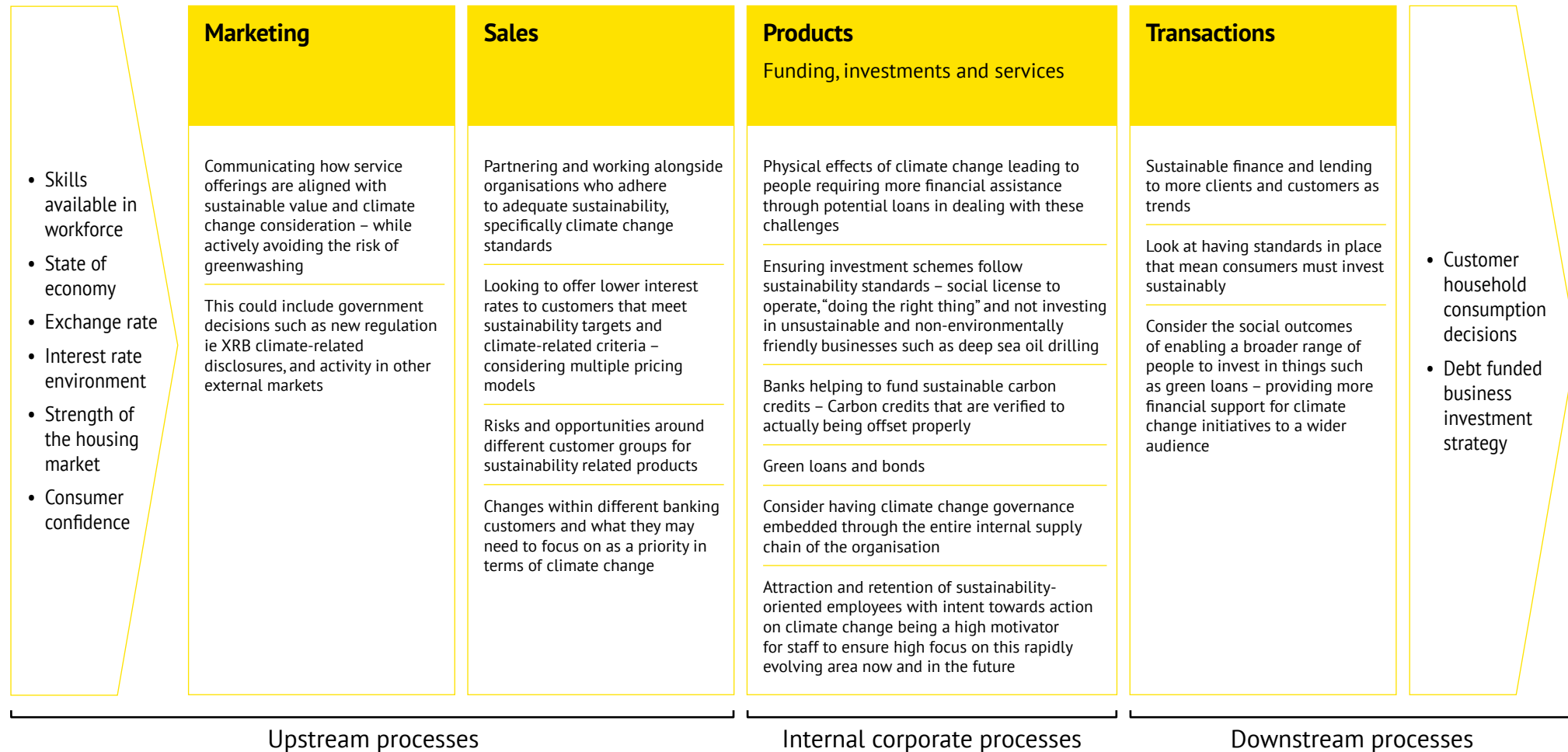
### Not-for-Profit

Climate-related considerations across the value chain for the waste sector (not-for-profit organisation).



## Banking

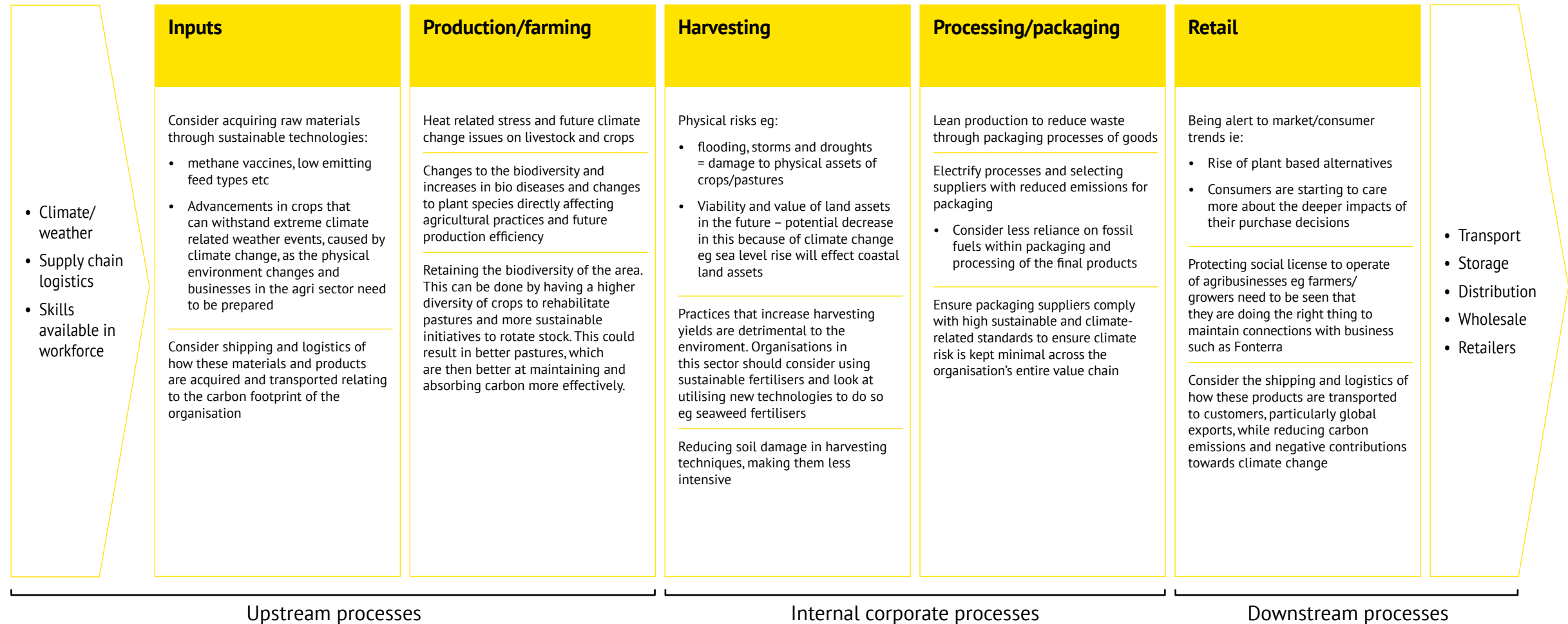
Climate-related considerations across the value chain for the banking sector.





## Agriculture

Climate-related considerations across the value chain for the agriculture sector.



# Where to go for more help and information



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Useful New Zealand websites and resources:

- [Institute of Directors \(IoD\)](#)
- [Climate Action Toolbox](#)
- [Climate Leaders Coalition](#)
- [He Pou a Rangi - Climate Change Commission](#)
- [Manatū Mō Te Taiao - Ministry for the Environment](#)
- [Sustainable Business Council \(SBC\)](#)
- [Sustainable Business Network \(SBN\)](#)
- [Taihoro Nukurangi - National Institute of Water and Atmospheric Research \(NIWA\)](#)
- [Te Kāwai Ārahi Pūrongo Mōwaho - External Reporting Board \(XRB\)](#)
- [The Aotearoa Circle](#)
- [Toitū Tahua - Centre for Sustainable Finance](#)

Useful international organisations helping to support climate action:

- [Chapter Zero UK](#) (and other national chapters)
- [Climate Governance Initiative](#)
- [Taskforce on Climate-related Financial Disclosures \(TCFD\)](#)
- [Taskforce on Nature-related Financial Disclosures \(TNFD\)](#)
- [The Berkeley Partnership](#)
- [The Centre for Climate Engagement](#)
- [The Chancery Lane Project Toolkit](#)
- [The International Panel on Climate Change \(IPCC\)](#)
- [United Nations Climate Change Conference \(COP\)](#)
- [World Economic Forum](#)

We hope you find this Toolkit valuable. If you would like to get in contact or would like more information, please get in touch at [chapterzero.nz](https://www.chapterzero.nz)

# Appendices



## Climate change impacts and imperatives

Greenhouse gas emissions caused by human activity act to retain heat and increase global warming, driving changes to the climate **at an unprecedented rate**. Global temperatures have already risen by **1.2°C above pre-industrial levels** and a recent **United Nations report** shows the world is currently on track for around 2.5°C of warming by the end of the century.

The urgent need to address the climate emergency requires governments and business to accelerate the transition to a new economic model, which seeks to limit global average temperature increases to 1.5°C above pre-industrial levels, consistent with the recommendations of the **Intergovernmental Panel on Climate Change** (IPCC).

Keeping global temperature rises to 1.5°C will require a **reduction of CO<sub>2</sub> emissions** of 48 percent (from 2019 levels) by 2030. By contrast, emissions are currently **forecast to grow 5 percent** over the same period. It will require concerted and immediate global efforts to address the climate emergency and achieve a credible pathway to 1.5°C.



[The] IPCC Working Group report is a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable. [...] If we combine forces now, we can avert climate catastrophe. But, as [the report] makes clear, there is no time for delay and no room for excuses.”

António Guterres, UN Secretary-General (2021)

## Environmental impact

Even small changes in global temperatures can have **catastrophic effects on the environment** – many of which are already starting to be felt, including droughts, rising sea levels, wildfires, flooding, storms and loss of biodiversity.

**Keeping global temperature rises to 1.5°C** above pre-industrial levels can avert the most devastating impacts of climate change. Above this level, environmental **impacts grow sharply in intensity** with increasing temperature.

Globally, extreme weather events were responsible for **US\$326 billion of economic losses** in 2017, nearly triple those of 2016.



## Human consequences

The environmental impacts of climate change have **profound consequences for humanity** – both directly (for example, through food shortages, water shortages and property damage) and indirectly (for example, through conflict and migration). The World Health Organization (WHO) deems climate change **the single biggest health threat facing humanity**.

The **Just Transition Declaration** agreed at COP26 recognised the need to ensure that no one is left behind in the transition to net zero economies. **The IPCC report published in February 2022** noted that the world's most vulnerable people will feel the worst impacts of climate change. At COP27 agreement was reached on a dedicated loss and damage fund to compensate developing countries for climate-related impacts.

## Urgency

Urgent action is required on emissions to avert the most extreme consequences of climate change – and avoid triggering **'tipping point' events** which could cause climate change to spiral sharply and irreversibly beyond our control.

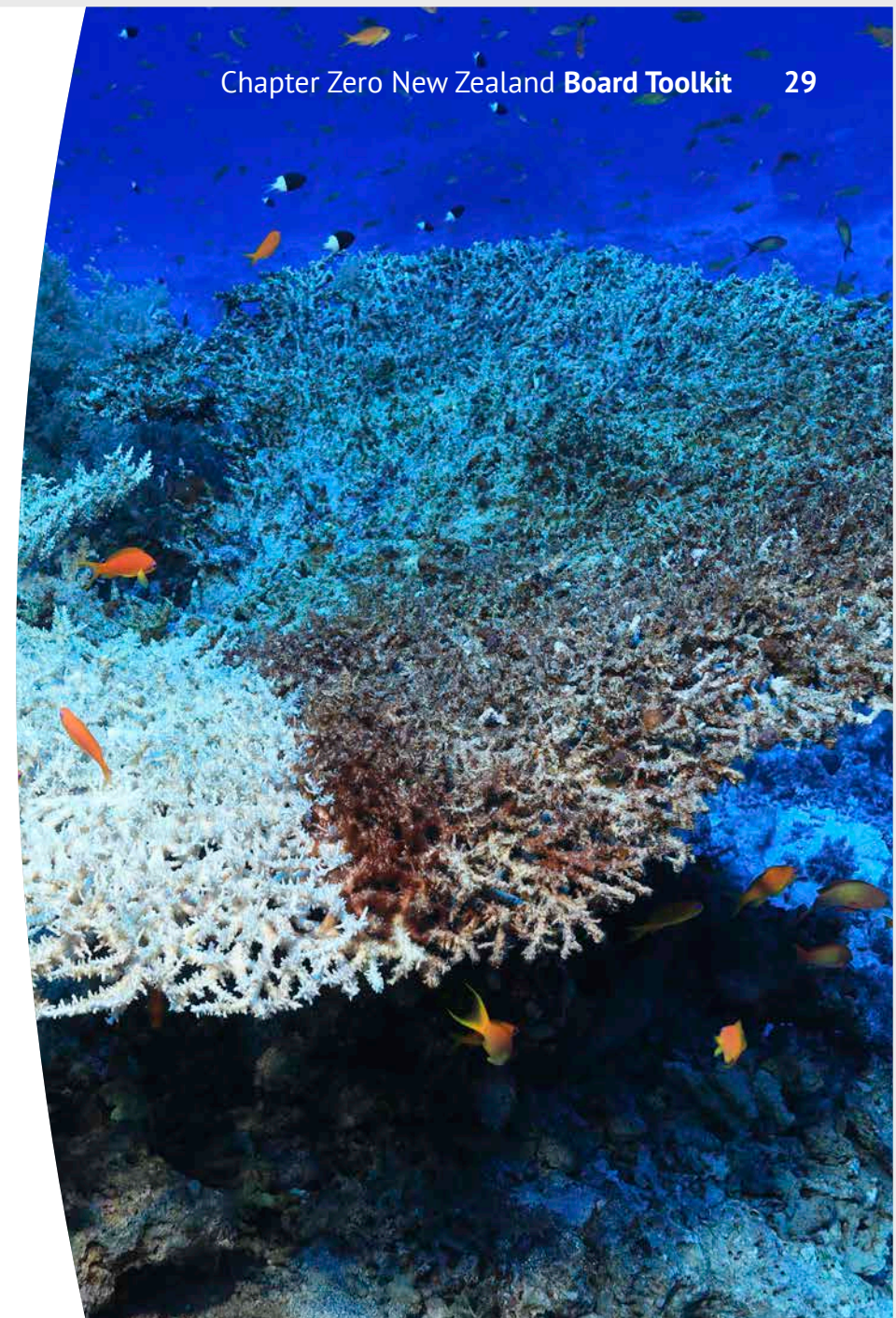
The **26th UN Climate Change Conference (COP26)** saw 124 countries **'ratchet up' climate targets** by submitting new Nationally Determined Contributions (NDCs), with some also setting new domestic net zero goals. However COP27 revealed a lack of progress by countries to keep within the 1.5°C of warming by 2050 and to view this as a limit, not a target. Only **35 out of 198 countries** increased their national climate target at COP27.

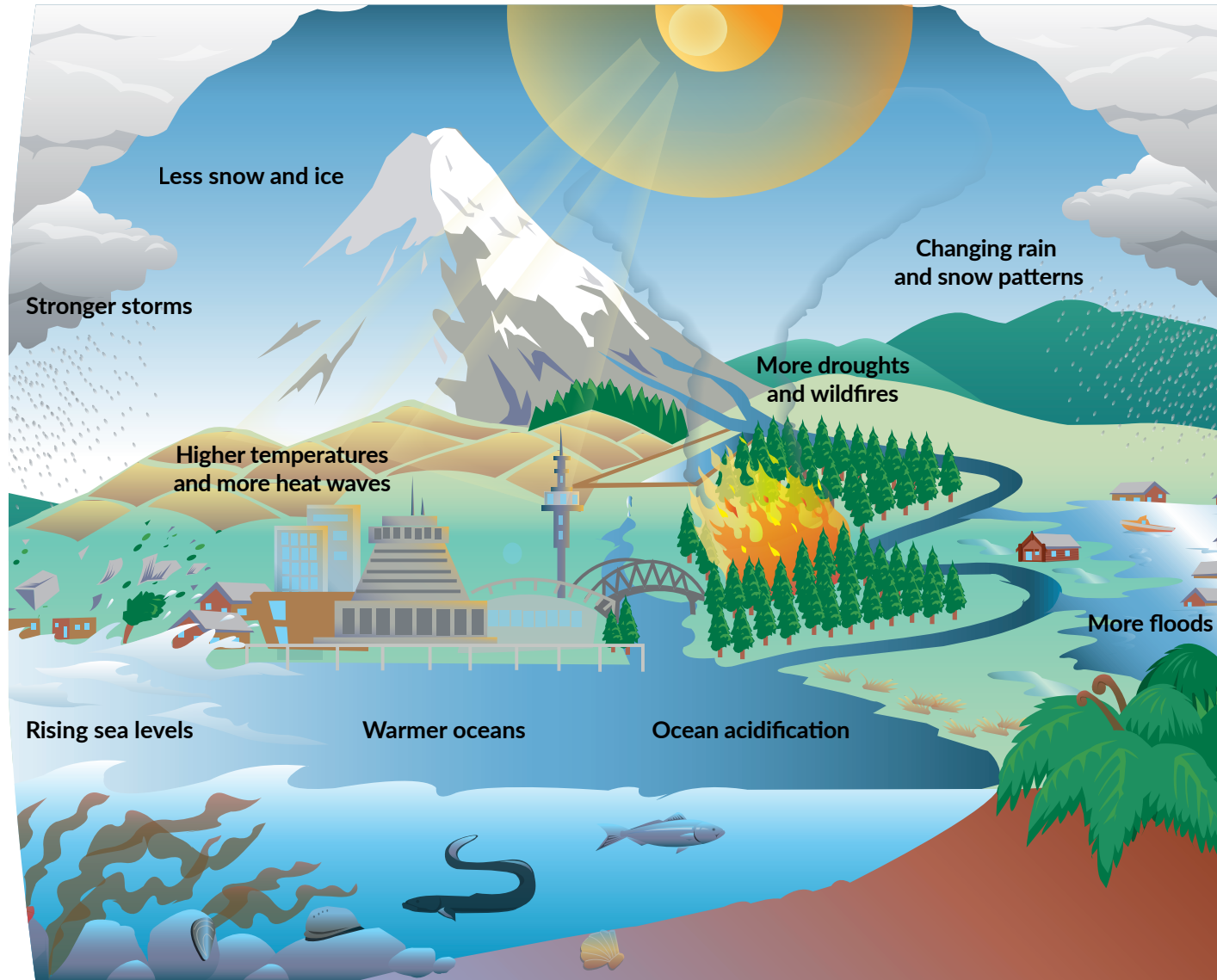
About US\$4 trillion per year needs to be invested in renewable energy up until 2030 to be able to reach net zero emissions by 2050 and a global transformation to a low-carbon economy is expected to require investment of **at least US\$4-6 trillion per year**.

For further reading on the global impacts of climate change see:

- [United Nations: Causes and effects of climate change](#)
- [World Economic Forum: Climate Change](#)
- [The Intergovernmental Panel on Climate Change](#)
- [Climate Action Tracker](#)
- [World Meteorological Organisation](#)

For more information about the economic and business imperatives for climate action, refer to the **Business imperatives** section.





Source: [Ministry for the Environment: National Climate Change Risk Assessment Snapshot](#)

A report by the [Royal Society Te Apārangi](#) highlights six key risks from climate change to New Zealand:



**Coastal change:**

Many New Zealanders live either on coasts or on floodplains, exposing us to coastal inundation and flood events.



**Flooding:**

Many New Zealanders live on floodplains and damaging flood events will occur more frequently.



**Freshwater resources:**

New Zealanders rely on the availability of freshwater. Increased pressure on water resources is almost certain in future.



**Ocean:**

Changes in ocean temperature, water chemistry and currents due to climate change will have impacts on New Zealand's marine life, fishing, aquaculture and recreation use.



**Ecosystem change:**

Over half of New Zealand's more than 50,000 species are found nowhere else in the world; over three quarters of the vascular plants, rising to 93 percent for alpine plants, and over 80 percent for the more than 20,000 invertebrates.



**International impacts:**

New Zealand is strongly dependent upon international connections. The way other countries respond to climate change will influence New Zealand's international trade relationships, and potentially migration patterns.

## Extreme heat and drought

2022 was New Zealand's warmest year on record, surpassing the record set in 2021. The nationwide average temperature for 2022 was 13.76°C, being 1.15°C above the 1981-2010 annual average. The **top-four warmest years on record** have now all occurred since 2016, consistent with **global trends**.

Climate change is making droughts more severe. Most North Island regions, as well as those in eastern regions of the South Island (especially Canterbury and eastern Southland) are expected to spend **5-10% more of the year in drought** by the middle of the century.

## Ocean acidification

The ocean absorbs about 30 percent of the carbon dioxide that is released in the atmosphere, making them more acidic, **damaging marine organisms and ecosystems**. Acidity has increased by 26 percent since the beginning of the industrial revolution and **could hit 170 percent by 2100**.

We have already lost around 50 percent of warm-water coral reefs. If we do not limit global warming to well below 2°C we could lose the **vast majority of coral systems**.

In New Zealand our oceans continue to become more acidic, with **ocean acidity increasing 8.6 percent** in our subantarctic surface water off the coast of Otago between 1998 and 2020. The warming seas have had a direct impact on businesses. For example farming salmon in the Marlborough Sounds has become more challenging with one leading producer forced to **shut some of its salmon farms** after a mass die-off of fish.



## Fires

As with super-storms and hurricanes, climate change significantly increases the scale and frequency of wildfires. **Extreme drought in Australia in 2020** caused bush fires of unprecedented intensity, burning up to 19 million hectares, with 33 lives lost and around 3,094 homes destroyed. The same year saw New Zealand's largest wildfire in seven decades near Nelson.

## Flooding (rainfall and rising sea levels)

Globally, **flooding has quadrupled** since 1980 and doubled since 2004. Seventy per cent of the largest European cities have areas **vulnerable to rising sea levels**, while scientific simulations show the Arctic could become practically **sea ice-free in September before 2050**.

Climate change has been identified as the cause of recent severe flooding in Nelson and Marlborough in 2022 and **Auckland and the upper North Island in early 2023** causing widespread devastation and hundreds of people being evacuated due to flooding and slips.

It is estimated that between 2007 and 2017 climate change related floods and droughts cost the New Zealand economy **NZ \$840 million**.





## Super-storms and hurricanes

Climate change changes the frequency, duration, timing, coverage and intensity of these events. In 2021, **ten separate extreme weather events** caused over US\$1.5 billion damage each.

General insurance losses for extreme weather events in New Zealand in 2021 **totalled \$324 million**. This does not include costs incurred by the Earthquake Commission (EQC), Councils and Waka Kotahi NZ Transport Agency.

The worst storms to affect New Zealand in the last 50 years were Cyclone Gabrielle in February 2023, Cyclone Bola in March 1988, causing more than NZ\$200 million of damage, and **Tropical Cyclone Gisele** (the Wahine storm) in 1968 in which 51 people lost their lives.

## Reduced nutritional value of crops

Warmer temperatures increase the amount of sugars in crops such as rice and wheat. This means lower nutrient levels such as protein, iron, calcium and zinc, risking **mineral deficiencies for millions of people**, leading to **ill health and malnutrition**.

In the year ending March 2020, agriculture contributed 4.3 percent of New Zealand's Gross Domestic Product (GDP), **equating to NZ\$14 billion**. However the biodiversity of soil is not routinely monitored in New Zealand, and understanding soil biodiversity and its effects on the wider environment remains a large knowledge gap.

## Reduced biodiversity

**The Living Planet Index**, which tracks populations of mammals, birds, fish and amphibians, reveals an average 69 percent decrease in monitored wildlife since 1970.

A million plant and animal species are **threatened with extinction**, we have lost half of the world's corals, and we lose forest areas the size of 27 football fields every minute.

New Zealand has the highest proportion of **threatened indigenous species** in the world. This includes 90 percent of all seabirds, 84 percent of reptiles, 76 percent of freshwater fish and 74 percent of terrestrial birds.

## Human impacts

Māori are among the first to be **directly affected by climate change**, due to their close relationship with the environment and its resources, impacting the loss of important cultural sites and taonga (precious) species.

The Pacific Islands are only responsible for 0.03% of global greenhouse gases but they are being **disproportionately affected by climate change** with flooding, coastal erosion and storm surges threatening many of the low-lying islands.

The World Bank estimates that **200 million people could be forced into migration by 2050**, dwarfing the **6.8 million Syrian refugee crisis**. A fifth of the world's population could face **mass migration by 2100** if climate change is not sufficiently curbed.

For further reading on climate change impacts specific to New Zealand see:

- **Ministry for the Environment: National Climate Change Risk Assessment Snapshot**
- **Ministry for the Environment: How Climate Change Affects New Zealand**
- **NIWA: Climate Change Impacts for New Zealand**

"New Zealand's first National Climate Change Risk Assessment was published in 2022. **The summary of key findings** show how New Zealand may be affected by climate related hazards.

## Reporting and the climate disclosure landscape

While New Zealand is the first country to have mandated disclosures (see right), several other countries including Australia, are also moving towards it. In addition, many organisations worldwide already voluntarily report on various sustainability, ESG and climate change measures. There is an evolving and interconnected landscape of climate targets, metrics, reporting standards and frameworks to assist, with some like the **Task Force on Climate-related Financial Disclosures** (TCFD) focused on climate change and others on the broader topic of sustainability.

## In New Zealand

**Aotearoa New Zealand's Climate Standards** developed by the External Reporting Board (XRB) come into effect in 2023 and are based on existing frameworks and standards, including the TCFD. They have also taken into account the work being done by the **International Sustainability Standards Board** (ISSB) on its draft standards (see next page).

While they are only intended to apply to New Zealand's largest organisations initially, their scope may well be extended over time, and there may also be some public and private organisations who choose to voluntarily adopt them.

Smaller organisations may find they are asked by larger organisations in their supply chains to provide information to assist the larger organisations to meet their obligations under the climate standards. In order to comply with these requests, and to ensure consistency in reporting, many SMEs may choose to voluntarily adopt the NZ Climate Standards.

🔗 For more on reporting and the climate disclosure landscape:

- **External Reporting Board (XRB) Climate-related Disclosures Director Preparation Guide**
- **Deloitte, Sustainable Business Council and Toitū Tahua: Directors Guide to Climate Governance**



## Overseas developments

In November 2021 the **International Financial Report Standards** (IFRS) Foundation launched the International Sustainability Standards Board (ISSB) with the intention of creating more comparable global sustainability standards and data. The ISSB has issued two draft disclosure standards, based on existing frameworks such as the TCFD and the industry-based disclosure requirements under the **Sustainability Accounting Standards Board** (SASB). One relates to the **general requirements for disclosure of sustainability-related financial information** (IFRS S1) and the other relates specifically to **climate-related disclosures** (IFRS S2).

The global Taskforce on Nature Related Disclosures (TNFD) has released a **beta reporting framework** that looks at how to identify, assess, manage and disclose nature-related dependencies, impacts, risks and opportunities.

## What does this mean for my organisation?

These developments, both in New Zealand and overseas, show there is increasing focus and growing attention to the environment, specifically in relation to reporting and risk management. Even smaller organisations can expect to see a growing demand for climate change disclosures, including reporting on greenhouse gas emissions, the risks of climate change to their organisations, and the plans their organisations have in place to mitigate or manage the impacts of climate change.



## Good climate reporting and communication

Climate reporting needs to be factually correct, transparent and honest. It needs to meet any standards applicable and support the reputation of the organisation. If an organisation's reporting fails to meet standards, or is misleading in any way then it risks losing investors, damaging its reputation and potentially being subject to legal action. The Australian Securities and Investment Commission recently **issued its first penalty** for greenwashing, finding Australian company Tlou Energy AU\$53,280 for making false or misleading sustainability-related statements to the ASX.

Chapter Zero New Zealand's webinar on **how to communicate effectively on climate-related issues** stresses the importance of knowing your audience and how the organisation is addressing climate risks and opportunities. It includes the following advice from **Anthem** (Official Communications Partner of Chapter Zero NZ):

- Be measured and realistic, honest and authentic
- No one expects perfection from the start but they do expect progress and honesty
- Set reasonable expectations from the beginning – remember that you are setting the stage for reporting in future years
- Avoid marketing speak and jargon
- Be aware of your stakeholders' information needs and interests
- Avoid engaging in a tick-box exercise

### UN Guidance against greenwashing published

The **UN High Level Expert Group** on the Net Zero Commitments of Non-state Entities, has released a report with recommendations for businesses and financial institutions on **how to avoid greenwashing** when setting net zero commitments.

🔗 For more on effective climate reporting see:

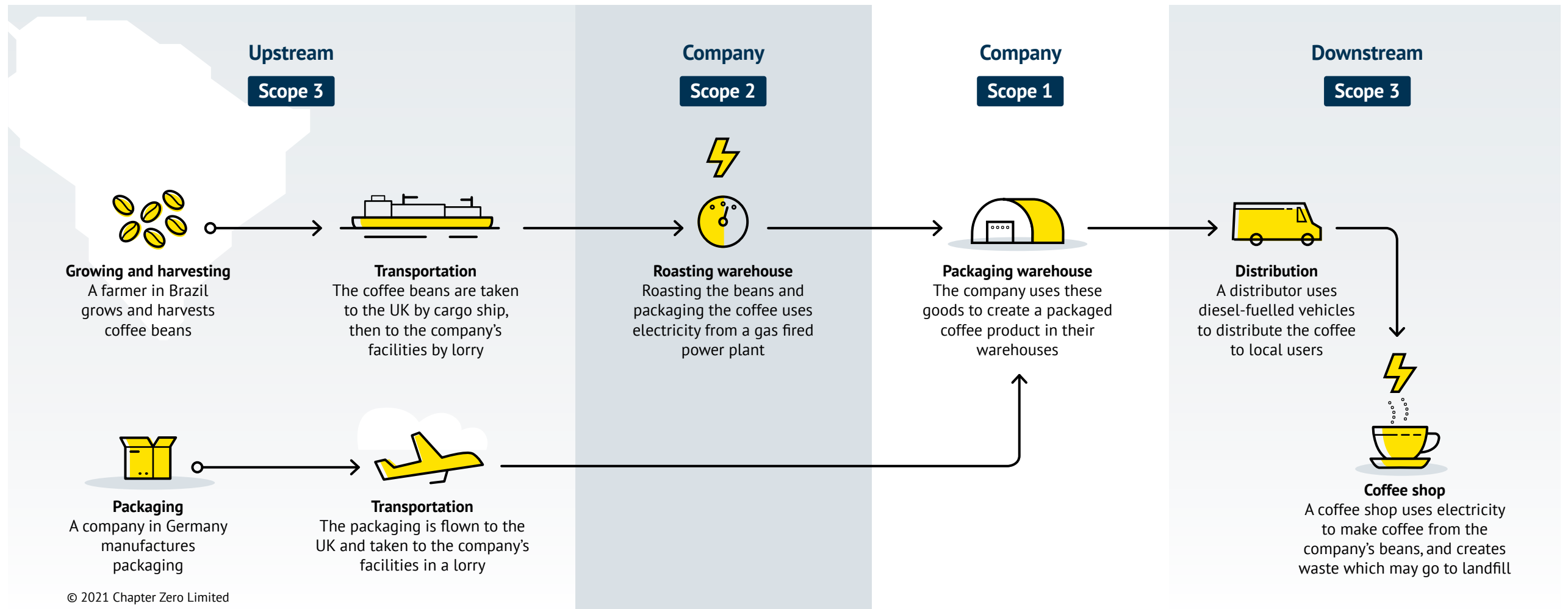
- **Chapter Zero New Zealand: Climate Lexicon**
- **Sustainable Business Network webinar: 'Avoiding greenwash - How to get your environmental claims right'**
- **Commerce Commission New Zealand: Environmental Claims Guidelines**



“ We must have zero tolerance for greenwashing.”

Antonio Guterres, UN Secretary General (2022)

To fully understand and manage climate risks and opportunities, a full value chain perspective is essential. From a climate-action perspective, the value chain is typically categorised into the three ‘Scopes’:



## Scope 1

Covers direct emissions from sources owned or controlled by the company. This includes emissions from company-owned or operated facilities and vehicles.

## Scope 2

Covers emissions from consumption of purchased electricity, heat or steam.

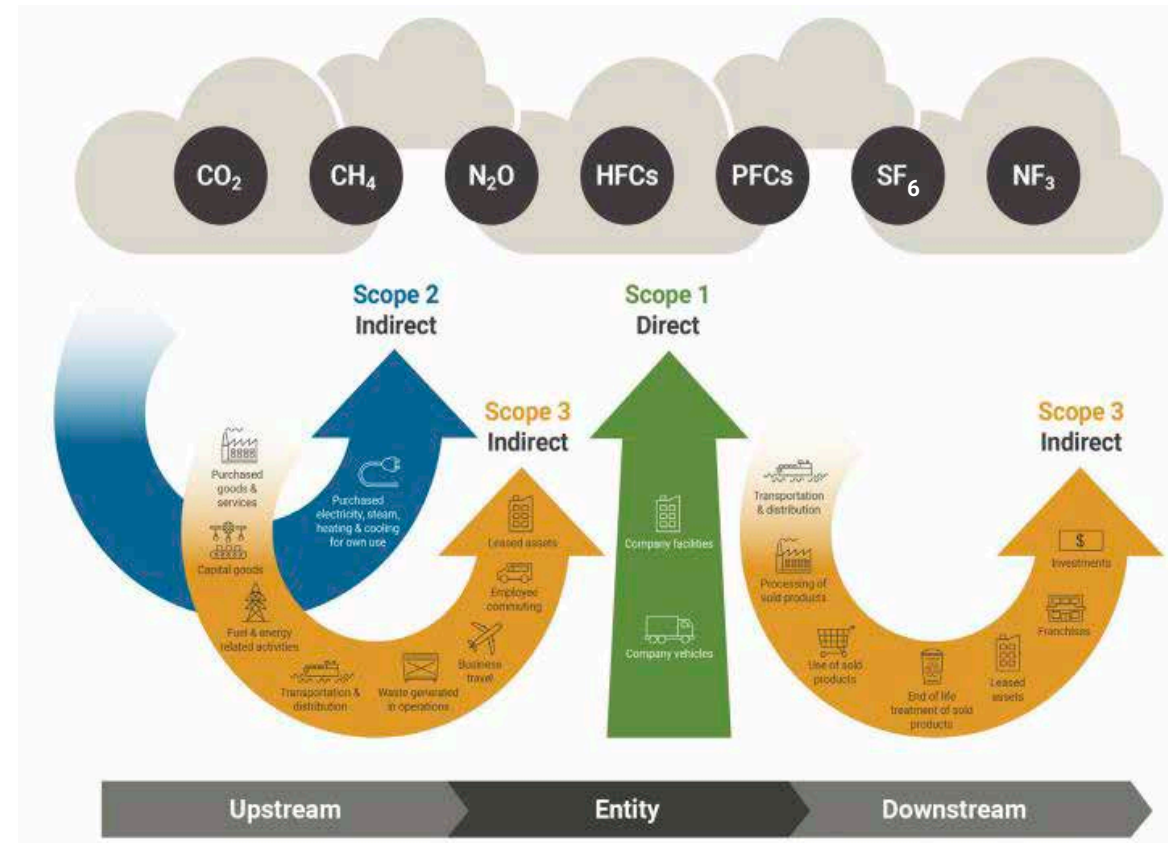
## Scope 3

Refers to all other indirect emissions within a company's value chain.

Despite being less directly related to a company's main activity, these emissions can make up a significant portion of a company's impact on the climate. Scope 3 can be broadly grouped into two categories:

**Upstream emissions** from activities involved in the creation of a company's services or goods. This includes emissions from employee travel and commuting to work, and emissions in the supply chain from the production of purchased goods and services the company uses or sells.

**Downstream emissions** occur from the distribution or use of a company's goods including the disposal of products. If a product indirectly consumes energy during use, for example because it needs to be heated by another appliance, including these emissions in Scope 3 is optional.



Source: [Getting started on your emissions](#)

For more on measuring and reducing emissions:

- [External Reporting Board \(XRB\): Getting Started on Measuring Greenhouse Gas Emissions](#)
- [Chapter Zero UK: Board Toolkit](#) (pg 35)
- [Ministry for the Environment: Regulated Product Stewardship](#)

Set out below is guidance from the XRB on examples of key risks and opportunities which may emerge from mitigating and adapting to climate change in New Zealand. Opportunities should be assessed across the entire value chain, and against a range of temperature scenarios, to maximise synergies/efficiencies and to ensure complete/integrated adaptation and mitigation.

Type	Illustrative risks	Type	Illustrative opportunities
Transition	<p>Increasing Emission unit (NZU) price under the Emissions Trading Scheme (ETS) imposing additional costs on an entity.</p> <p>Mainstream adoption of alternative proteins in key dairy and red meat export markets undermining market share for primary sector entities.</p> <p>Shift away from New Zealand as tourist destination due to carbon-footprint of traveller air-miles, reducing revenues for tourism and hospitality sector entities.</p>	Transition	<p>Energy efficiency gains in process heat triggered by emissions reduction obligations reducing overhead costs for industry.</p> <p>Emergence of new, high-value markets in low emissions, low-intensity primary produce.</p> <p>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.</p>
Physical	<p>Extra-tropical cyclones tracking across New Zealand and damaging farmlands, infrastructure.</p> <p>Extended drought conditions hitting key water-sensitive dairy areas.</p> <p>Increasing incidence of fluvial flooding (river flooding) striking urban centres and densely populated suburbs.</p> <p>Sea-level rise accelerating coastal erosion, undermining water and electricity infrastructure.</p>	Physical	<p>Development of new fisheries as sub-tropical species migrate into New Zealand’s exclusive economic zone (EEZ).</p> <p>Longer growing period and greater number of growing-degree days enabling the development of new horticultural enterprises.</p> <p>Warmer winter temperatures reducing the energy demand and costs of heating.</p>

🔗 For more on key climate risks and opportunities see:

- [Deloitte, Sustainable Business Council and Toitū Tahua: Directors Guide to Climate Governance](#)
- [External Reporting Board \(XRB\): Aotearoa New Zealand Climate Standards](#)

Source: [XRB NZ CS 1: Guidance for all sectors \(Working draft\)](#)

There is no hard and fast rule which says how much resource (finance, people, knowledge) needs to be assigned to deliver on an organisation’s strategies and plans for a low emissions climate-resilient future. It will depend on the specific context and changes which the organisation in question needs to implement. However, as with any major investment, directors can ensure appropriate rigour by challenging how management has arrived at its estimates and how delivery will be tracked.

**Things for you to check up-front, before implementation starts:**

- Are plans linked directly to the delivery of clearly defined, SMART objectives which are independently and scientifically verifiable? If not, there will be limited means of checking whether commitments are being met. (If you were being asked to invest in a business case whose goal was to reduce operational cost, you’d expect to see in specific, measurable terms how cost savings will be tracked and reported. Climate goals should be no different.)
- The primary focus of the organisation is on eliminating emissions not offsetting. Ensure that offsetting is only used to compensate for residual or ‘tail end’ emissions, which it can be clearly evidenced are not feasible to eliminate from the organisation’s operations or value chain (Scopes 1, 2 and 3). When offsetting is used, ensure that the emissions benefits it delivers are also independently and scientifically verifiable. (Some claim that offsetting is often used by organisations as a means of appearing to be climate positive, but without taking enough tangible action to address their own emissions impact.)

*Note:* Some organisations may also consider insetting. This is where an organisation offsets its emissions through a carbon offset project within its own value chain. This may include tree planting, capturing methane gas or using solar energy and hydropower. Unlike a typical carbon offset project, emissions are avoided, reduced or sequestered upstream or downstream within the organisation’s own value chain.

- Can management evidence how they have estimated the resources required to deliver the plans? Have the estimates been subject to an independent verification by someone with the right experience?
- Can management demonstrate, in measurable terms, how they will regularly track and independently verify whether intended outcomes are being delivered on schedule?
- Are management accountable for, and incentivised to achieve, delivery of outcomes in line with the plans?

**Things for you to check during implementation of change:**

- Is the board being provided with regular, measurable and independently verified updates on progress against plans and outcomes?
  - If delivery of intended outcomes is delayed, can management provide evidence, in clear measurable terms, why? Bear in mind cause and effect. Have they encountered unexpected issues? Were there management failings? Was it a lack of resources? What are the mitigating actions?
  - If outcomes and objectives change during implementation, can the reason and impact on strategic goals be independently verified? The aim here is to limit unplanned ‘mission drift’ and reduce the risks of ‘greenwashing’ claims mentioned previously.
- 🔗 For more on resourcing and support please refer to the [Chapter Zero New Zealand website](#)



This Toolkit has been adapted from the UK version of the Chapter Zero Board Toolkit, created by Chapter Zero (UK), The Berkeley Partnership and the Centre for Climate Engagement. We thank these organisations for permitting Chapter Zero New Zealand to use, alter and adapt their Board Toolkit to create this version.



### Chapter Zero (UK)

Chapter Zero, the Directors' Climate Forum, is building a broad community of Non-Executive Directors (NEDs) equipped to lead crucial UK boardroom discussions on the impacts of climate change. Its members are helping ensure their companies are fit for the future and that global net zero ambitions are transformed into robust plans and measurable action. Established in 2019, Chapter Zero UK offers its members tailored events, toolkits, relevant information and a peer network to draw on for experience, inspiration and ideas.

[chapterzero.org.uk](https://chapterzero.org.uk)



### The Berkeley Partnership

The Berkeley Partnership is a management consultancy, based in London and New York, that helps organisations transform under the most complex, challenging, and high-stakes circumstances to achieve their ambitions. Its consultants are experienced transformation specialists and act as trusted partners to clients' leadership teams, from strategy development through to delivering large-scale change programmes. Berkeley developed the original Toolkit on a pro bono basis as part of its commitments to sustainability and corporate responsibility.

[berkeleypartnership.com](https://berkeleypartnership.com)



### The Centre for Climate Engagement

The Centre for Climate Engagement plays a unique role in bringing leading academic research to a targeted audience of chairs and non-executive directors to accelerate climate leadership on boards in the private and public sectors. The Centre is uniquely placed to develop insights drawing on academic expertise from across the University of Cambridge and the wider research community, together with independent expertise from the business sector.

[climatehughes.org](https://climatehughes.org)



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