Adapting to climate change (including disclosures)

About these guides

These practical guides explain important sustainability topics for businesses. Share them with the people in your organisation who are working together to meet your environmental, social and governance goals.

Guiding principle: Whakapapa

Whakapapa in the context of climate is understanding our place in the world, our relationship with others and with te taiao (the environment). It includes our connection to our tupuna (ancestors) and descendants. It is a source of strength – providing a sense of identity, purpose and belonging. Climate change is having an impact on our world today, and will continue to impact the world of tomorrow. By approaching climate change from a perspective of whakapapa and connection, organisations can better position themselves to be more resilient, and be part of more resilient communities.

Climate change brings risks and opportunities for organisations across the globe. It affects companies directly and indirectly too, including through its impacts on financial markets.

To respond to climate change, your business needs to:

1. **Understand** the financial implications of risks and opportunities that a changing climate may present for your business
2. **Adapt** your operations or protect your assets due to the changing climate
3. **Mitigate** your impact on the climate (i.e. reduce your greenhouse gas emissions) *Refer to the guide about climate mitigation for more information.*
4. **Disclose** how climate change affects you and how you are responding.

What does climate change mean for business?

Climate change poses operational and financial risks. For example, extreme weather events like floods may disrupt operations (a business risk) and make a building uninsurable (a financial risk). It can also create business and financial opportunities (e.g. a new product results in higher profits.)

Opportunities to connect with employees and communities of a wide range of cultures may present themselves as the impacts of climate change are felt within your organisation and supply chain.

A note on language

In assessing climate risks:

- A risk is a potential source of harm to your assets, operations, people and value chain
- An impact is the effect on natural and human systems.

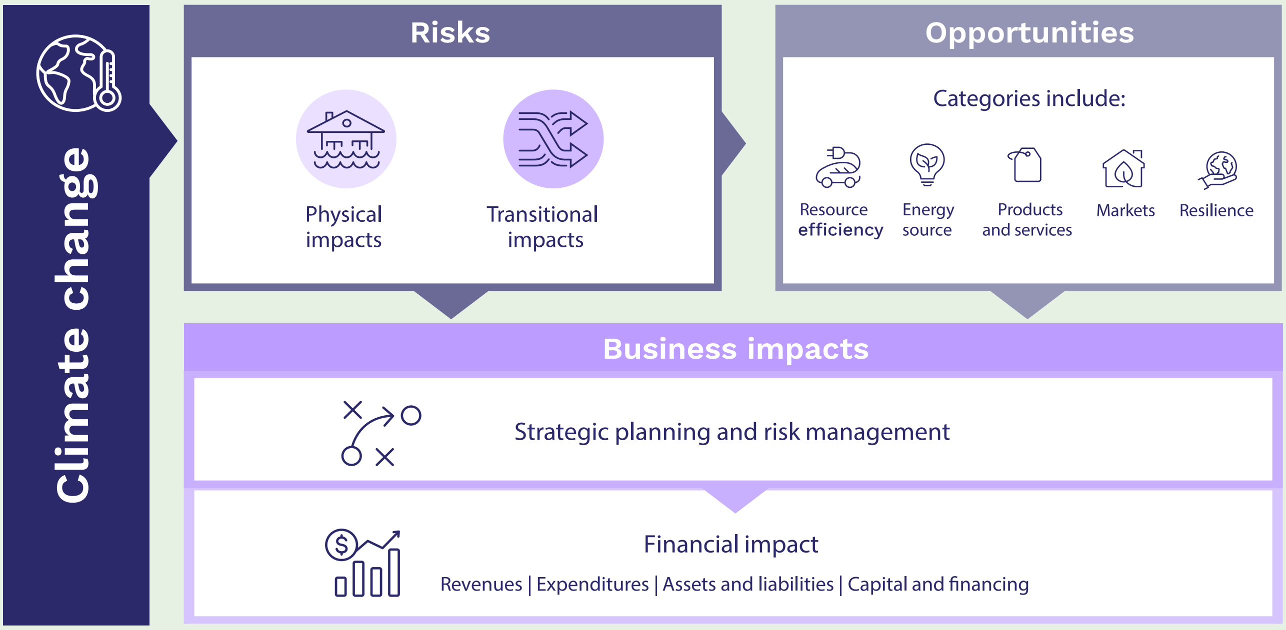
How do businesses benefit from adapting, mitigating and disclosing?

Adapting to climate change, reducing your greenhouse gas emissions and producing accurate climate-related disclosures benefit businesses in many ways.

Business opportunities	Business results
• Identify and manage your risks and opportunities • Improve your strategic planning • Show your investors and insurers best practice • Comply with regulations • Protect your brand and reputation • Build relationships with your team, suppliers and community • Understand indigenous knowledge and the relationship your business has with Māori communities	• Lower risks and costs • More revenue • Lower costs • A more resilient organisation • Access to loans, capital and insurance • Stronger relationships • Social licence • Support Te Tiriti o Waitangi (and all the business results above)

1. Understanding the impacts of climate change

Climate change has potential physical and transitional impacts on businesses.



Credit: Taskforce for Climate-related Disclosures

Physical impacts

These can be **acute** or **chronic**.

Acute impacts	Chronic impacts
Extreme weather events include storms, floods and droughts. They affect people's health and safety and damage property and infrastructure. Individual, community and business wealth and productivity suffer. These events can also disrupt economic activity and trade and create shortages of food and other resources. Plus, the money businesses spend resolving extreme weather events (e.g. mopping up after a flood) could be spent more productively (e.g. investing in their people).	These are gradual changes in climate. They include increases in temperature or wind. Temperature increases of more than 1.5°C–2°C can pose major risks to human health and food security. Adverse changes, such as prolonged drought, can make regions less liveable for humans, plants and animals.

Transitional impacts

These are the costs and changes involved in moving to a low-carbon economy. They include adapting to changing climate policy and consumer preferences, and investing in innovation and new technology.

Some changes can be managed. For example, businesses can decide to invest in lower-emission plant and equipment or redesign a product to appeal to climate-conscious consumers. These planned changes can be disruptive and expensive, but they are easier to deal with than sudden, unplanned changes.

Other impacts may be outside businesses' control. These may include a new carbon tax.

In understanding transitional impacts and/or developing a transition plan we also need to consider the impacts of a fair and just transition, the intergenerational traumas and privileges (and opportunities for healing) that exist within employees and how these will show up and affect which pathway to take.

Consider the intergenerational risks of the decisions you're making today. How will they affect people in terms of making a fair and just transition into the future?

The resulting business and financial impacts

Potential business impacts	Potential financial impacts
• Disrupted operations • Needing to repair, reinvest and replace assets • Supply impacts e.g. disrupted supply, higher prices, difficulties insuring assets • Market impacts e.g. lower incomes and household wealth • Workplace impacts e.g. lower productivity, absences	• Higher costs • Lower revenue • Lower profits • Devalued assets, including property • Increased financial risks • Higher cost of borrowing • Financial losses (e.g. shares) • Credit losses (e.g. loans)

How does climate change create financial opportunities for businesses?

For some businesses, change brings financial opportunity. For example, redesigning its product to reduce environmental impacts may help a business access a new market. A double-glazing manufacturer can help businesses reduce their carbon footprint and save on heating and cooling costs.

For some businesses, change brings social opportunity, too. For example, engaging with indigenous communities on climate change and its impact can increase employee hauora (health and wellbeing) by increasing their knowledge of the country (and communities) they are part of. Increased wellbeing reduces sick leave and increases a sense of belonging and connection to the business they work in and products and services provided.

Identifying the risks and opportunities for your business

Take time to understand what climate change means for your business. Whether you later disclose this information publicly or not, working through the issues thoroughly will ensure you can adapt as smoothly and quickly as possible.

1. Set up your team

Climate touches many parts of your business. Your working group should reflect this. Involve these functions:

- Executive and governance
- Sustainability
- Risk
- Finance
- Communications
- Legal/Corporate Affairs
- Operations/asset management
- People/Health Safety and Environment.

If your business is a corporate, these will be distinct functions. Multi-nationals generally provide their regional operations with an approach to follow and let them assess their own risks and opportunities using local data. If your business is a Small to Medium Enterprise (SME), the functions above will be shared across your team.

When setting your team up, consider those who 'aren't in the room'. For example, think about future generations, indigenous communities, migrants and the environment (especially if your business is designed around an environmental process or product like forestry, fishing, energy generation). Set some time aside to consider the views of these groups. If you can invite anyone from these groups to share their views, this is the ideal time to do this.

2. Agree your scope and boundary

Will you include all your operations? All your locations? Your entire supply chain? All at once or staged?

Tips: Build in 'double materiality'

1. Start broad. Look at your whole operation, at a high level. Focus on areas where you understand your risks and opportunities relatively well.
2. Expand your focus in future years. Consider areas where you need to build your knowledge or gain more certainty before you make investment decisions. Use what you've learned to understand more about your climate change 'hot spots'.

3. Confirm your time horizons

These are some options.

XRB (New Zealand) and Australian Accounting Standards Board (Australia) horizons	Adaptation to Climate Change: ISO 14091 horizons	Your business planning/ investment Horizons
• Useful life of your assets or infrastructure • Availability of your data	• Lifetime of the system at risk • Timescales over which the impacts of climate change become critical • Lead time for adapting to address impacts	• Lead time for adapting to address impacts • Short-term – 1 to 3/5 years • Mid-term – 3/5 to 10 years (match 2030 or 2050 emission reduction targets) • Long-term – 10 to 50 years (match 2030 or 2050 emission reduction targets and/or asset lifetimes)

Tips

1. To give your business the best chance of adapting, use the time horizons that guide your business planning and investment.
2. Your time horizon will depend on the nature of your business. For example, an infrastructure company is likely to have longer-term planning horizons than a retailer.
3. Consider using shorter-term horizons in your first year to set a baseline. Extend your horizons in future years.
4. Most physical climate scenarios (and few business plans!) look to late in the century. Compare the life of your assets, which can be 40 to 50 years, with climate scenarios modelled by the regions modelled above.

4. Choose your climate scenarios

Use your scenarios to test your risks. Some regulators and industries are creating industry scenarios. Here's a handy metaphor that may help: *your plane (business) needs to be able to fly (operate) in all kinds of weathers.*

Businesses located in New Zealand	Businesses located in Australia	Businesses with international operations and supply chains
NIWA | Taihoro Nukurangi regional scenarios	CSIRO Climate Change Centre with regional climate modelling	IPCC scenarios

Businesses located in New Zealand	Businesses located in Australia	Businesses with international operations and supply chains
Near-term: 2016-2035 Mid-term: 2046-2065 Long-term: 2081-2100	Near-term: 2011-2030 Mid-term: 2041-2060 Long-term: 2081-2100	Near-term: 2021-2040 Mid-term: 2041-2060 Long-term: 2081-2100

5. Identify your risks and opportunities

Use the information that's out there already. Adapt it to suit your business' operations and the language you use.

Physical risks	Transitional risks
New Zealand The Ministry for the Environment's Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand 2019 includes 17 physical risks	Consider how your suppliers, customers and competitors are likely to react to climate change
Australia The Bureau of Meteorology and CSIRO State of the Climate Report 2022 includes eight physical risks	Start with these categories: resource efficiency, energy source, products and services, markets and resilience

6. Assess your risks and opportunities

Your business probably uses a matrix to assess risks already. This matrix works, it's familiar and it complies with the ISO standard – so use it. Bonus: you'll show that climate risks are core business risks. You'll find an example of a risk matrix under point 7 below.

2. Adapting to the impacts of climate change

7. Plan how to adapt

How will you act on the risks and opportunities you identify? Here's an example of 'adaptation activities' for a business in the primary sector.

Climate-related risks

Climate-related risk	Impacts	Risk rating	Type of risk	Observation	Adaptation
Increased water stress	Lower production	High	Physical	Already experiencing droughts in region	Install secure water supply Change to more drought-resilient varietals
	Crop loss	Medium	Physical		
Increasing focus on sector emissions	Reputational and potential market impacts	Medium	Transitional	Sector is responding and taking positive action	Promote emissions profile of products to market Reduce on-farm emissions

Climate-related opportunities

Climate-related opportunity	Type of opportunity	Observation	Opportunity
Products and services	Transitional	Drought-resilient varietals on market are currently limited	Develop and market new varietal ourselves

Tips

1. Plan in detail: who, how, when, how much.
2. Look at your whole business. For example, if you plan to develop a new product, you'll need to train your team and update your marketing. Your plan needs to capture all these tasks.
3. Measure the costs and benefits of your actions.
4. Review your plan regularly.

3. Mitigating (reducing) your impact on the climate

Mitigating involves reducing your greenhouse gas emissions. Think of mitigation as the fence at the top of the cliff and adaptation as the ambulance parked at the bottom. Strengthening the fence reduces the need to invest in more ambulances to manage potential falls (the impacts of a changing climate). ***Refer to the guide on climate mitigation for more information***.

When considering mitigation and reducing your impact on the climate, consider what this would look like for generations to come. Mokopuna decisions are those that benefit not only us, but also future generations.

4. Disclosing how climate change affects your business

Why are climate disclosures important?

Climate change causes financial risk for the global economy because it affects financial markets and businesses. In some cases, it creates financial opportunities too. The communities your organisation works within and impacts may be affected when your business is affected. Understanding and sharing these risks may better position your organisation and the communities around it in the face of climate change.

Reporting based on the TCFD* framework:

- helps businesses manage their climate risks and opportunities
- provides the quality information financial markets need to operate efficiently and continue to offer lending, insurance and investments.

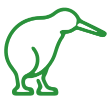
*The Task Force for Climate-related Financial Disclosures (TCFD) has completed its work.

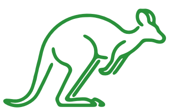
The International Sustainability Standards Board (ISSB) now oversees climate-related financial disclosures. This guide continues to use TCFD as shorthand for climate-related disclosures as many people are familiar with it.

If, like many companies, you are fielding requests for climate disclosures, using the TCFD framework makes it easy to provide this information.

What do mandatory climate disclosures mean for your business?

Climate disclosures are mandatory for many organisations in New Zealand from 2023/24 and in Australia from the following year.





Country	Mandatory for	Timing	Relevant guidelines
New Zealand	Organisations with a large turnover and listed companies	2023/2024 reporting year	New Zealand External Reporting Board (XRB)
Australia	Organisations with a large turnover and listed companies (to be phased in)	Three-year period from 2024/2025 reporting year	Australian Accounting Standards Board

What do you need to disclose?

The TCFD framework has four parts: governance, strategy, risk management, metrics and targets. Each involves recommended disclosures.

Part of TCFD framework	What this includes	Examples of disclosures
Governance	The organisation's governance of climate-related risks and opportunities (e.g. policies and processes)	*We have a climate change policy.* *Our executive team and Board review our risks and opportunities monthly.*
Strategy	The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning	*These risks could force us to close our factory and pull out of the market.* *We need to change the way we price and provide our services to remain profitable.*
Risk management	The processes the organisation uses to identify, assess, and manage climate-related risks and opportunities – plus the risks and opportunities	*Using climate scenarios provided by XYZ national meteorology service, we identify potential risks to our business. We assess how likely these risks are to occur, how severe they would be, and what we need to do to manage them. We also identify and assess opportunities.*
Metrics and targets	The metrics and targets the organisation uses to assess and manage relevant climate-related risks and opportunities	*We have developed a greenhouse gas inventory and associated emission reduction targets.*

Guidance by industry group

The framework provides guidance by industry group:

- Financial sector: banks, insurers, asset managers and owners
- Non-financial groups: energy, transport, materials and buildings, agriculture, food and forestry products.

How does my business get started with climate disclosures?

Follow steps 1 to 7 above. Then:

8. Disclose to your regulator

The TCFD guidelines and local regulations guide what you disclose. How you disclose matters too. While not all your stakeholders will want to read your detailed disclosures, help those who do by using:

- plain English: simple, concise language that makes complex technical issues easy to understand
- strong design to simplify complex technical issues and help people through your report.

Consider using case studies that bring your content to life and make it relevant.

9. Communicate with your stakeholders

Share your climate disclosures (or a summary) with your stakeholders. This will help you enlist their support to adapt to climate change and reduce your emissions. It will also assure them that these activities are top-of-mind for your business.

Looking ahead

Expect to respond to change even more quickly in future. Anticipate emerging issues and how these will affect your stakeholders and business and build this into your strategy. 'Dynamic material assessments' will help you.

About us

The **Sustainable Business Council (SBC)** is a CEO-led membership organisation that mobilises over 130 ambitious businesses to build a thriving and sustainable future for all.

thinkstep-anz is an independent trans-Tasman sustainability firm. We offer a full range of sustainability services and specialise in plain English sustainability communications and design. thinkstep-anz's sustainability communicators have written this guide.

Kaitiaki Collective promotes transformational thinking through sustainability, environmental and stakeholder engagement. We reflect whakaaro me mātauranga Māori in everything we do.

More information

You'll find the other guides in this series here: sbc.org.nz/sustainability-toolkit

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