CLIMATE LEADERS COALITION
ON A MISSION TO REDUCE EMISSIONS IN NEW ZEALAND

thinkstep anz

CLC Masterclass | explainer

Assessing climate risk and opportunities for business

Why this matters

Assessing and managing your climate risks and opportunities in a structured way will add value to your business.

It will help your business:

- engage with your stakeholders (internal and external)
- become more resilient
- identify commercial opportunities
- refine your strategy
- improve your access to capital
- comply with financial regulations
- build your brand.

It will help you play your part in helping New Zealand mitigate and adapt to climate change and is a requirement for the Climate Leaders Coalition (CLC) Statement of Ambition.

Getting started

1. Set up your team

Climate risk touches many parts of your business and your working group should reflect this.

To make the best use of your resources and add the greatest value, start by looking at your whole business, at a high level. *Where are the material risks and opportunities for your organisation and supply chain?*

Then focus on the material parts of your business and supply chain. Within these areas, you should involve these functions:

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

If your business is a corporate, these will be distinct functions. If your business is a Small to Medium Enterprise (SME), these functions will be shared across a small number of people.

Multi-nationals generally provide their regional operations with a methodology and let them assess their own risks and opportunities using local data.

2. Agree your scope and boundary

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

OUR TIPS

1. In year one, start broad. Look at your whole operation, at a high level.
2. In years two and beyond, increase your focus. Use what you've learned in year one to develop your understanding of your climate change 'hot spots'.

3. Confirm your time horizons

The table below shows some options.

External Reporting Board (XRB) horizons	ISO14091 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	• 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)

OUR TIPS

1. To give your business the best chance of following up your risk assessment with actions that mitigate or adapt to climate change, use the time horizons that guide your business planning and investment. 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.
2. Consider using shorter-term horizons in your first year to set a baseline. Then extend your horizons in future years.
3. Bear in mind that most physical climate scenarios (and few business plans!) look out to late in the century. Compare the life of your assets, which can be 40 to 50 years, with the long-term time horizons of your climate scenarios (4. below).

4. Choose your climate scenarios

These are our recommendations:

Businesses located in New Zealand	Businesses with international operations and supply chains
NIWA | Taihoro Nukurangi regional scenarios	**IPCC scenarios**
Near term: 2016-2035 Mid term: 2046-2065 Long term: 2081-2100	Near term: 2021-2040 Mid term: 2041-2060 Long term: 2081-2100

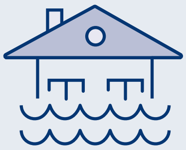
OUR TIP

1. Consider using shorter-term horizons in your first year to set a baseline. Then extend your horizons in future years.

Assessing your risks and opportunities

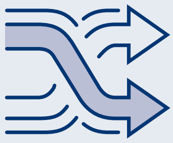
Climate change has physical and transitional impacts on businesses

1



Physical Impacts result from extreme weather events and gradual changes in climate

2



Transition Impacts result from transitioning to a low-carbon economy

Credit: TCFD

Risk Drivers

Physical: rising temperatures, higher sea levels, and more destructive catastrophes

Transition: climate policy changes, innovations in technology; and shifts in consumer preferences

Potential Economic Effects

- Business disruption
- Lower productivity
- Reconstruction, reinvestment, and replacement
- Higher commodity and energy prices

Potential Financial Effects

- Lower property values and asset devaluations
- Lower corporate profits and household wealth
- Financial market losses (e.g. shares)
- Credit market losses (e.g. loans)

Credit: TCFD

Climate risk and business opportunities

For some businesses, climate change brings financial opportunities. For example, redesigning a product to reduce environmental impacts may help your business enter new markets. Moving to a building designed with the climate in mind may reduce the costs of heating and cooling.

Reuse, don't reinvent

Your business probably already has a matrix to assess risk (e.g. your health and safety or business risks). This matrix works, your team and Board are familiar with it, and it complies with the ISO standard – so use it. Here's an example.

Risk Assessment Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	Low	Medium	High	Extreme	Extreme
Likely	Low	Medium	High	Extreme	Extreme
Possible	Low	Low	Medium	High	High
Unlikely	Low	Low	Medium	Medium	High
Rare	Low	Low	Low	Medium	High

Note the different language. In assessing climate risks:

- A hazard is a potential source of harm e.g. hot days >25C
- An impact is the effect on natural and human systems e.g. heat stress

Assessing physical hazards

Here's an example for a supermarket flooded in a storm.

Hazard	Impacts	Risk rating
More storms (frequency and intensity) including tropical cyclones	Disruption to supply chains	High
	Disruption to journey to work	Medium
River and pluvial flooding: changes in frequency and magnitude in rural and urban areas	Disruption to assets (buildings)	Extreme
	Damage to stock	High
	Disruption to journey to work	Medium

OUR TIPS

1. Start with MfE's Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand 2019. It includes 17 physical hazards.
2. Adapt the list to cover the risk hazards that are relevant to your organisation. Use workshops or talk with your stakeholders.
3. Using your business frameworks for managing risks, assess the risk rating for each risk hazard identified.
4. Use language that suits your internal and external audiences.

Assessing transitional hazards

Here's an example for a large manufacturer that has regulated disclosures and a carbon target and is a heavy user of energy.

Hazard	Impacts	Risk rating
Increasing climate policy and regulation	Additional resourcing requirements and costs	**Medium**
	Potential reputational damage	**Low**
Increasing price for carbon	Increased costs of offsetting to meet targets	**Low**
Competitor gains access to new, more energy-efficient technology	Competitor has lower operational costs - more attractive investment	**High**
	Competitor able to undercut others in the same market	**High**

OUR TIPS

1. Start with the categories TCFD uses – resource efficiency, energy source, products and services, markets and resilience
2. Adapt them for your organisation. For example, identify how your suppliers, customers and competitors are likely to react to climate change.

Putting your physical and transitional hazards together

Your aim is to produce a document that will guide your strategy and answer these questions: *What should we include in our strategy? Where should we focus right now?*

1. Rank your risks and opportunities in one document. A top 10 dashboard can work well: five risks, five opportunities
2. Add some commentary.

This is an example for a business in the primary sector.

Climate-related 'hazard'	Impacts	Risk rating	Observation	Adaptation(s)
Increased water stress	Crop loss	**High**	Already experiencing water stress and major regional droughts.	Increase access to and security of water supply. Research and develop drought-resistant varietals
	Reduced production	**High**	As above	As above
	Reduced crop yield	**High**	As above	As above
Increasing climate-related policy and regulation	Increased cost of compliance	**Medium**	Increased consent application costs. TCFD requirements need more resources.	Increase compliance budgets and gain resources needed
	Reduced operational capacity	**Low**		
	Reduced profit		No impact to date	
	Reputational damage		No impact to date	

Using the resulting information

Here are some ways the information will add value.

- Engage and inform leadership and governance
- Inform climate-related strategy – what to include, where to focus, when to act
- Basis for scenario analysis and adaptation planning
- Facilitate external review and audit
- Improve access to capital
- Support disclosures – transparent, consistent, connected

Disclosing your risks and opportunities

CLC signatories are required to assess and disclose their climate change risk. We want our signatories to continue to develop their disclosures so that you get better at assessing your risks and making your stakeholders aware of them. We do not specify how you disclose your climate change risks.

Mandated companies

If you are an organisation with a large turnover or a listed company, you must disclose your climate-related risks in the 2023/24 reporting year. To prepare for this change, you need to understand the Task Force on Climate-related Financial Disclosures (TCFD) guidance and the requirements of New Zealand's External Reporting Board (XRB). There are different recommendations for financial and non-financial sectors.

The Task Force on Climate-related Financial Disclosures (search: Resources/Disclosures) provides examples of disclosures. You can filter by industry and region.

Note that TCFD is one approach, aimed at the investment community. Widening your approach to consider other stakeholders too (e.g. your customers, suppliers, team and community) will add value.

Other companies

Consider disclosing your actions and investments against a relevant target (e.g. New Zealand's longer-term Net Zero target).

The SME Climate Hub is a non-profit global initiative that helps small to medium-sized companies take climate action and build resilient businesses.

This is how CLC signatory ESP is disclosing climate risk.

Where to next?

Assessing and disclosing your climate change risk should become one of your organisation's standard processes. We suggest you take this in stages and start by focusing on the material you can make progress on. You don't need to do everything at once.

The risk assessment process and scenarios set out above will help you mitigate your climate risks and look to those risks too.