



Know your risks

MODULE 4

IDENTIFYING YOUR RISKS AND OPPORTUNITIES

Understanding the climate-related risks and opportunities facing your business is essential for effective adaptation planning. This section guides you through the process of identifying both the potential adverse impacts and beneficial outcomes associated with climate hazards.



Climate hazards, risks and opportunities

Climate hazards (or *physical* climate hazards) include extreme events like floods, storms and heatwaves, as well as gradual changes such as sea level rise. These hazards can pose risks to your business operations, staff, customers and assets, while also presenting opportunities for innovation and growth.

For example, while a garden centre may face risks from drought affecting its plant stock, it may also benefit from a longer growing season and increased demand for drought-tolerant plants.



If you run a business in Auckland, you can easily discover if your business will be affected by flooding, the causes of flooding, and ways to prepare your property. Go to the [Auckland Flood Viewer](#).



Transition risks and opportunities

Transition risks and opportunities arise as society transitions to a low-carbon economy. They can be driven by policy and regulatory drivers, technology and market changes, or changes in consumer behaviour and preferences.

For example, a transition risk common to all SMEs is the increasing cost of transporting input materials across all sectors due to rising fuel costs. A transition opportunity could be an increase in consumer demand for low emissions products.

Although not addressed in this guidance, which focuses on the physical risks from a changing climate, you may want to consider transition risks as part of your wider planning for the future.

Identifying your risks and opportunities



Know your risks

Identifying direct risks

To identify climate-related risks and opportunities, consider how climate hazards could directly impact two key areas within your value chain:



1. Staff and customers

Identify risks to the health, safety and well-being of your staff and customers following climate hazards such as extreme heat and flooding. These could include illnesses such as heat stress or injuries to key stakeholders.



2. Assets and infrastructure

Identify risks to the assets and infrastructure essential for your business operations, including physical facilities, equipment and inventory. Assess the vulnerability of these assets to climate hazards such as flooding and sea level rise.

Identifying indirect risks (inputs/suppliers)

Indirect risks are risks beyond your business's direct control or ownership. For example, imagine a supplier your business relies on for a key resource experiences operational damage due to a storm.

The inability to source this key resource will directly impact your business if you can't secure another supplier in time. Other examples of indirect risk include outages of key utilities such as internet and power, as well as increases in insurance premiums.

Identifying opportunities

In addition to identifying risks, be proactive in identifying potential opportunities for your business to thrive in a changing climate. Here are two examples:



Anticipating industry trends

Stay ahead of industry changes by anticipating how climate changes create new market demands or change consumer preferences. For example, increasing awareness of environmental sustainability may drive demand for eco-friendly products and services.



Efficient resource use

Explore opportunities to reduce costs and enhance efficiency through sustainable practices, such as energy and water conservation, waste reduction and recycling. Embracing renewable energy sources and eco-friendly technologies can also yield long-term benefits for your business.

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Māori perspectives on risk and opportunity

For Māori-owned businesses and communities, perspectives on risk and opportunity are influenced by cultural values as well as connections to whenua (land) and whakapapa (ancestral lineage). What Māori SMEs identify as 'at-risk' may extend beyond immediate operational concerns, to encompass broader cultural considerations.

Acknowledging the interconnectedness of elements at risk within mātauranga Māori can help strengthen your adaptation planning by taking a more holistic view.

By integrating these perspectives into your adaptation planning, you can make sure your strategies are inclusive, resilient and aligned with the values of all stakeholders.

Consider how climate change may impact cultural values relevant to your organisation. These may relate to the values listed in Module 3.



Ngā tohu taiao (environmental signs)

There are many sources of information that can be drawn on to help inform your business practices and direction.

The maramataka (Māori lunar calendar) is a lived form of practised science — based on the observation of the stars, moon and lunar phases — that you can also use to determine business risks and opportunities.

For climate adaptation there is opportunity to consider an approach that considers the various traditional environmental indicators that are drawn from this body of knowledge. For example, in some iwi regions the onset of severe weather is indicated by the kārearea screaming on a fine day. Other iwi note that when pūkeko move to higher ground stormy weather is approaching.

When it comes to food crops and the levels of productivity and the harvest timings, some iwi understand that when certain trees flower, certain seafood is ready for harvesting. Other iwi tend to take note of which part of the tree flowers first to indicate how plentiful a crop is likely to be.

Identifying your risks and opportunities

TOOL: Climate risk and opportunity identification

Use our climate-related risk and opportunity identification tool to identify your climate-related risks and opportunities. We've pre-populated this tool with key climate hazards to help you get started.



Know your risks

Climate hazard	Have you experienced impacts from this hazard in the past?	If yes, what were the impacts on your business?	Climate hazard trajectory in the future	Do you expect your business to be affected by these hazards in the future? If so, capture the impacts across your business' value chain			What potential opportunities are caused by this hazard?
				Staff and customers	Assets and infrastructure	Inputs and suppliers	
Heatwaves 	Yes, in the context of a small-scale horticultural business in south Auckland	Staff experienced extreme heat stress when working outside over the summer months in 2024	Increase in the frequency, duration and, magnitude of heatwaves	Yes, as heatwaves become more frequent and intense, staff are likely to experience more extreme impacts from heat stress, such as heatstroke	Certain infrastructure may need more maintenance as may deteriorate faster due to heat stress	Yes, as certain crops may suffer from heat stress and may not survive warmer conditions. May face an increased costs of pest management inputs due to an increased number of pests and diseases due to warmer temperatures. Increased water requirements	Warmer conditions and lengthened growing seasons may allow for additional crops to be produced
Wildfires 			Increase in the frequency of wildfires				
Flooding 			Increase in the frequency and extent of flooding				
Coastal inundation and sea level rise 			Increase in coastal inundation and sea level				
Storms 			Less frequent but more intense storms				
Drought 			More frequent and intense drought				
Landslides 			Increase in the frequency of landslides				

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Drafting risk statements

Risk statements provide a clear, concise way of describing identified risks and impacts. Use our risk statement tool to turn your identified risks into risk statements:

- Assign each risk a number for ease of identification.
- Copy the hazard, hazard trajectory, value chain element and risk impact from our climate-related risk and opportunity identification tool.
- Frame the risk statement by starting with the hazard and associated trajectory, followed by the immediate impact on your value chain, and long-term impact on your business.

TOOL: Climate risk statement

Risk ID #	Climate hazard + trajectory	Value chain element	Impact	Risk statement
1	Increase in heatwaves	Staff	Staff experience heat stress	Increase in heatwaves causing heat stress for staff, resulting in a reduction in staff productivity during daylight hours
2				
3				
4				
5				

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Take a moment

Considering these points will help you better understand the content in this module.

- Have you identified current or recent impacts to your business from climate change?
- Do you understand how each climate hazard is projected to change at a high-level?
- Have you identified climate-related risks and opportunities for your staff and customers?
- Have you identified climate-related risks and opportunities for your inputs and outputs?
- Have you identified climate-related risks and opportunities for your assets and infrastructure?

Find out more

I want more information on ...	Resource	Pages
How the climate is changing across New Zealand	National Climate Change Risk Assessment ¹⁵	37
How the climate is changing in Auckland	Tāmaki Makaurau Economic Climate Change Risk Assessment	8
Whether my business and associated infrastructure is at risk of flooding	Auckland Council Flood Viewer	All



¹⁵ This report presents the findings of New Zealand's first National Climate Change Risk Assessment (NCCRA). The risk assessment gives a national picture of how New Zealand may be affected by climate change-related hazards

References

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environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments

Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan:
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