Climate Related Risk Management & Opportunity Guidance Document

Introduction

The transformation to an efficient and renewable energy portfolio underpins the Contact26 Strategy which is founded on decarbonising Aotearoa New Zealand toward a more renewable and sustainable economy.

Contact plays an enabling role in this transformation where the future energy sector is both digitised and decarbonised. That future state requires Contact to play an active and enduring role in the management of our climate related risks and opportunities.

Purpose

The XRB have recently introduced Aotearoa New Zealand climate standards, The objectives of the standards are to enable primary users to assess the merits of how entities are considering climate related risks and opportunities and then make decisions based on those assessments.

New Zealand Climate Standard 1 (NZ CS 1) contains the climate related disclosure requirements for each of the four thematic areas: Risk, Strategy, Governance, Metrics and Targets. Clauses 17, 18 and 19 of NZ CS1 cover the Risk Management pillar which is the focus of this document.

This document sets out the process for identifying, assessing, managing, and integrating climate related risks in accordance with the clauses above. The steps undertaken by Contact in FY24 to meet clauses 17, 18 and 19 are also recorded. It does not cover Contacts process for climate change scenario analysis however the risks identified as part of the processes in this document form the starting point for climate change scenario analysis step.

This guidance material has been developed in accordance with Contact's Risk Management Policy & Risk Management Framework.

For a glossary of terms please see appendix 1.

Risk Appetite Statements

Contact Energy's risk appetite statements define the amount and type of risk we are prepared to pursue, retain or take in pursuit of achieving our strategy and objectives. The statements need to be aligned to our Contact 26 Strategy to lead New Zealand's decarbonisation and ensure that our risk appetite enables growth, and does not hinder our ability to achieve the objectives.

The board's risk appetite for Climate Change is currently integrated into our strategic expanded risk appetite statements.

NZ CS 1 Clauses covering Risk Management

The relevant sections of NZ CS 1 related to Risk Management are set out below:

Clause 17: The overall objective is to enable primary users to understand climate-related risk management in overall risk management

Clause 18: An entity must disclose a description of its processes for identifying, assessing and managing climate-related risks and how these processes are integrated its overall risk management framework.

Clause 19: When addressing clause 18, include tools and methods used, time horizons considered, parts of the value chain excluded, frequency of assessment, how climate related risks are prioritised relative to other risks.

Process Steps for Identifying, Assessing and Managing Climate-Related Risks & Opportunities

The following section describes the key steps needed to meet clauses 17, 18 and 19 and how Contact has met these requirements.

Step 1: Engage Stakeholders

Bring internal and external SME's and stakeholders to help contextualise climate related risks and opportunities. This could be in the form of an introductory/launch workshop to familiarise participants with climate change science, key definitions and the XRB standards and requirements. Ensure that participants include a range of SME's from across the business that represent Contact's value chain.

In FY24, the initial engagement with stakeholders included a presentation from an expert climate scientist to understand the science and impacts of climate change and an education session on the new XRB climate standard requirements,

Step 2: Define the Scope Boundary

Value Chain

Before you begin to identify climate change risks and opportunities, you must understand the scope boundary for climate change which is essentially Contact's value chain.

The scope boundary should consider the following:

- Contact's operating environment (e.g. competitive electricity market overseen by the Electricity Authority our emissions profile, regulatory settings, asset lifecycle, dependency on natural resources) and;

- Contact's Generation Activities - the location of Contact's assets and type

The boundaries should *be 'of such size that it could reasonably be expected to influence decisions that primary users make on the basis of that information'* (ref XRB 2023)

Contact's organisational boundaries are summarised in the value chain diagram below:

Contact's Value Chain

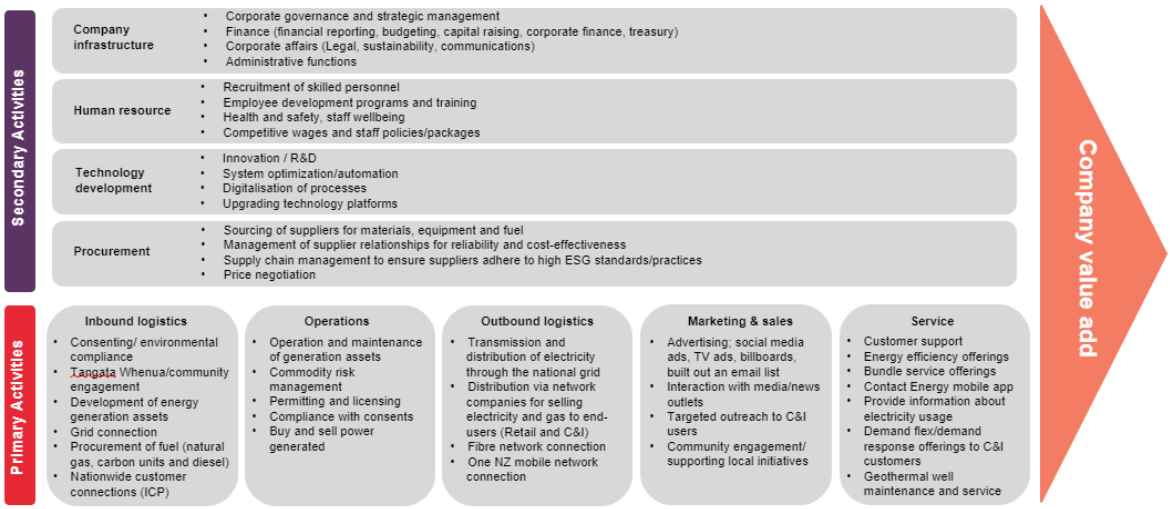

Figure 2

No parts of the value chain were excluded in identifying the climate change risks and opportunities in FY 24.

Step 3: Define Time Horizons in the context of climate change risk

Contact had to establish time horizons for its climate related risk and opportunity assessments. In selecting time horizons, a range of factors were considered including emissions reduction targets, the useful life of assets or infrastructure commonly employed in the sector, and the availability of supporting data.

These time horizons will be regularly reviewed based on emerging trends and as the climate science matures.

Step 4: Identify physical and transitional climate related risks and opportunities across Contact's value chain.

This step was executed by running a virtual workshop with internal SME's across Contact's value chain to identify physical and transitional risks in FY 24. Further information around the science of climate change and examples of physical and transitional risks impacting the energy industry were also covered to build participant understanding.

In FY 24, the purpose of the Risk and Opportunities Identification Workshop was to:

a) Identify the most significant climate-related physical and transition risks and opportunities that are priority for action by Contact Energy.

b) Increase understanding of climate related risks and opportunities to help inform Contact Energy's strategic and operational resilience planning.

The STEEP analysis tool was used to help participants identify the transitional risks.

Physical risks were identified by considering both acute and chronic risks arising from changes to the climate or extreme weather events.

Workshop participants were moved to [virtual] break out rooms and assigned different parts of the STEEP framework as they brainstormed risks. Participants were then rotated around rooms so the same risks were re-tested by each group within the workshop.

Step 5: Assessing Climate Related Risks & Opportunities

This involved a second workshop with the climate risk and opportunity owners and relevant SME's. Risk owners were agreed and assigned to each climate related risk or opportunity at both a leadership team and operational level.

In FY 24, the purpose of the Risk and Opportunities Assessment Workshop was to:

a) Assess Contact's newly identified climate-related transition and physical risks to determine their current risk ratings using Contact's Enterprise Risk Management Framework.
b) Identify action plans and mitigations to manage these risks.

During and following this workshop, the following tools and methods were used to identify and to assess the scope, size, and impact of Contact's identified climate-related risks and opportunities:

<u>Physical Risks</u>

- Physical risks were assessed using a vulnerability and exposure tool that evaluated the impact on Contact's value chain if the hazard occurred and Contact's sensitivity and level of adaptability to that hazard.
- The vulnerability and exposure tool allowed consideration of the physical risks over a longer time horizon as Contact's core business relies on assets that have useful lives over the longer term.
- A second step was then introduced to assess the physical risks against the enterprise risk matrix using the same risk levels (low to severe) other enterprise risks are rated against.
- The likelihood categories in Contact's enterprise risk matrix were reviewed and can accommodate the longer time horizons that are needed to assess the impact of

physical climate risks. Specific descriptors were added to the likelihood categories to guide users assessing climate change risk,

- Using the enterprise risk matrix as well as the vulnerability x exposure tool to assess our physical risks ensured consistency when comparing, evaluating and prioritising all risks across Contact as well as a better understanding of the impacts to Contact of our physical climate change risks. Figure 5 below illustrates how the tools worked together during the assessment phase of our climate related risks and opportunities.

Risk Management Tools Working Together

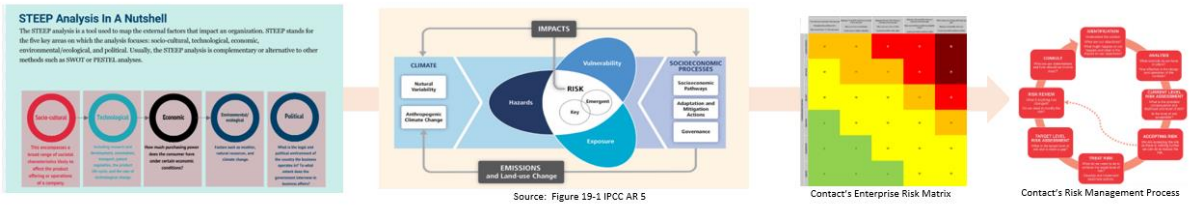

Figure 5

Transitional Risks

Transitional risks were assessed using the traditional likelihood and consequence categories on the enterprise risk matrix because they are typically short to medium term in nature. The impact of a climate related risk could impact any one of the six consequence categories in Contact's enterprise risk matrix; people safety & wellbeing, compliance, environment, financial performance, customers, partners & stakeholders. As part of the workshop the consequence categories were tested to ensure they accommodated the transitional impacts of climate change.

Assessing all of the climate related risks as a collective team ensured the relative risk ratings were considered against each other for consistency. The enterprise risk matrix has a risk rating scale from low to extreme. Once a risk rating is calculated, the outcome of the risk assessment is used to help the risk owner to understand the relative risk and prioritise appropriate risk treatment actions to reduce the risk down to an acceptable level. Other factors to consider when performing a risk assessment include:

- The speed of onset
- The duration of the risk's effect on Contact over time
- The complexity of the risk in terms of scope and its interdependencies
- Contact's ability to prepare and cope with the risk and it's impact
- Contacts level of adaptability to respond to the risk
- Contact's recovery time should the risk be realised.

Step 6: Managing the Risk

Once the physical and transitional risks and opportunities were assessed, they were recorded in Contact's central risk management database, including the risk controls and risk treatment actions in accordance with our risk management framework.

Given climate risk is not a typical stand-alone risk and is cross cutting, individual risk owners also considered whether the physical and transitional risks identified should sit as a risk in their own right or be consolidated with an existing enterprise risk. Plans are in place to update relevant policies such as our treasury policy to incorporate climate change risk when managing liquidity risk etc.

After a risk is entered into our risk database it is the responsibility of the Risk owner to ensure the risk is managed and the risk treatment plans are being acted on to reduce the risk to an acceptable level.

Risk Owners should consider the following when determining how to treat a risk:

- **Eliminate** – Stop the activity completely or choose an alternative activity or remove the causes of the risk. Avoid the high-risk activity.

- **Mitigate** – Implement new controls, improve existing controls and deliver risk treatment actions to further reduce the impact (consequence) or the chance of the risk occurring (likelihood) therefore reducing or minimising the level of risk.

- **Transfer** – Use tools to transfer the risk such as insurance policies or commercial contracts where the liability lies with another party. This is also called sharing the risk. It is seldom possible to transfer the full impact of a risk.

Step 7: Frequency of Review & Assessment

A full refresh of the climate related risks and opportunity assessment will be periodically starting from 2024:

- The strategy setting process involves an environmental scan of climate related risks and opportunities. The outputs from this process or any new risks and opportunities identified will be incorporated into our enterprise climate related risk and opportunities assessment and management process.
- An annual review of emerging risks will also act as an opportunity to identify new potential climate related risks and opportunities.
- Quarterly risk reviews will be performed across the business (including climate change risks) to ensure existing risks are being actively managed in line with our risk management framework. New climate change risks will also be identified as part of the quarterly risk review process.
- At an operational level, climate risks will be actively reviewed and managed on an ongoing basis through normal business processes (e.g. plant status reviews, CAPEX planning etc)
- Enterprise climate change risks will be reported to and discussed with the Audit and Risk Committee as part of our standard governance reporting process.

Step 8: Related risks and integration

Contact's enterprise risk management policy provides the framework and guidance for identifying, assessing and managing all risks, including climate related risks. Contact subscribes to ISO 31000 Risk Management Guidelines. Our Risk Management Policy is published on our website and is the foundation for our risk management framework.

All of Contact's climate related risks are recorded in the central risk management database; a key tool for ensuring risks are integrated into the business at the right level of management and oversight. This ensures all risks, including climate related risks are actively managed, reviewed and communicated, and risks with high or severe ratings are escalated to the appropriate leadership team member and Audit & Risk Committee.

The output of the climate related risks assessments is integrated into Contact's business planning and prioritisation process (Mau Taniwha). Any climate related risk treatment actions for material climate related risks that require funding or shared resources to reduce the risk to an acceptable level need to be prioritised by the business as per the Mau Taniwha workflow. Severe or high rated risks (including severe or high climate related risks) will generally be prioritised first for funding and allocation of shared resource.

Appendix 1: Defined terms

The tables below set out the key definitions used throughout this guidance document

Term	Definition
Climate Change	Climate change can refer to long term changes to temperature and weather patterns. It is sometimes defined as changes caused by anthropogenic emissions. According to the UNFCC, climate change is a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Exposure	Refers to the presence of …assets (elements) in places and settings that could be adversely affected by a climate hazard
Hazard	The potential occurrence of a natural or human induced physical (PICC, 2014a)
Impact	The effects on natural and human systems of extreme weather and climate events and of climate change (IPCC, 2014a)
Physical climate change Risk	Risks arising from changes to the climate or extreme weather events and is usually divided into two categories; Acute physical Risks and Chronic Physical Risks (see table 2 below for further information)
Risk	The potential for adverse consequences for human and ecological systems. They can arise from the potential impacts of or human responses to climate change
STEEP	A framework to gauge how the external environment will impact a given company's strategic plan to remain competitive. STEEP is an acronym for: Social, Technological, Economic, Ecological (Environmental) and Political
Transitional climate Risk	Risks arising from the process of adjusting to a low carbon economy and are usually divided into four categories: Policy & Legal Risk, Market and Economic Risk, Technology Risk and Social/Reputational Risk (see table 2 below for further information)
Value Chain	A value chain is a concept describing the full chain of a business's activities in creating a product or service -- from initial receipt of materials through its delivery to market
Vulnerability	Refers to the propensity of predisposition (likelihood) to be adversely affected by a climate hazard. It encompasses sensitivity to harm, and a lack of capacity to adapt (or adaptive capacity) • Sensitivity relates to how the element will fare when exposed to a hazard, which is a function of its properties or characteristics. • Adaptive capacity relates to how easily/efficiently an element at risk can adapt (autonomously) or be adapted (planned) when exposed to a climate hazard It is a function of the elements properties or characteristics

Figure 6

Examples of Physical Risk Types

Physical climate change risk can be defined as risks arising from changes to the climate or extreme weather events and is usually divided into two categories		
Physical Risks Risks arising from changes to the climate or extreme weather events		Examples of potential physical risks for Contact Energy
Acute physical risk	Risk from worsening short-lived extreme weather events such as severe storms and flooding	An increase in the frequency and severity of extreme acute weather events could lead to increased damage to and reduced access to key Contact Energy assets, e.g. power stations resulting in an inability to maintain service delivery, significant repair, costs, reduced revenue etc
Chronic Physical Risk	Risks from impacts due to insidious, long term changes it the climate such as increasing temperatures and rising sea levels	Increased load on the energy system/inability for the energy system to manage peak load as a result of increasing temperatures increasing the demand for cooling from end-consumers.

Figure 7

Risks arising from the process of adjusting to a low carbon economy and are usually divided into four categories:		
Transition Risks Risks arising from the process of adjusting to a low carbon economy		Examples of potential transition risks for Contact Energy
Policy & Legal Risks	Resumed from emerging regulation aimed at addressing climate change or from litigation.	**Policy**: Tightening environmental regulation could lead to significant direct and indirect compliance and operating costs for contact Energy and external suppliers, resulting in increased operational costs
Market & Economic Risk	Risk from shifting supply and demand curves as economies react to climate change	**Markets**: Changing investor preferences to reduce exposure to both the physical and transitional impacts of climate change, and increased sustainability linked investor regulatory requirements may lead to an inability to affordably and easily access capital and other financial products resulting in reduced ability to fund further adaption/mitigation, increased reliance on revenue streams over debt etc.
Technology Risk	Risks from emerging technologies aimed at supporting the low carbon transition or adapting to climate impacts	**Technology**: Increased global competition and limited access to low carbon alternative technologies may lead to Contact Energy being unable to affordably obtain access/key decarbonisation technologies to aid its transition, resulting in climate related litigation, loss of

Risks arising from the process of adjusting to a low carbon economy and are usually divided into four categories:		
Transition Risks Risks arising from the process of adjusting to a low carbon economy		Examples of potential transition risks for Contact Energy
		competitive advantage, reputation damage etc.
Social/reputation risk	Risk of damage to brand value and loss of customer base from shifting public sentiment on climate change	**Social**: Increased scrutiny of environmental claims, including a shift in perception of using carbon offsets and other decarbonisation strategies, could lead to increased perception and accusation of greenwashing relating to Contact Energy and its services, resulting in reputation damage with customers, constrained access debt/capital markets and increased legal exposure

Figure 8