

Risk Reporting

2023



Enterprise Risk Framework

A risk management framework is an essential requirement for any business. Contact's risk management framework aims to be a strategic enabler, embedded in all of our processes, functions, systems and culture. It is executed at all levels of the organisation.



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 (see extract to the right) to ensure that our risk appetite enables growth, and does not hinder our ability to achieve the objectives.

No decision and opportunity comes without risk and as a result, it is not possible to eliminate risk without compromising on our strategy and operational performance. We need to set our risk appetite at a level that allows us to take the necessary risk to grow, without putting ourselves, the operations and our people at a risk that is unacceptable to us. This is a critical trade off and will need to be revisited as we adapt our strategy, as our risk profile changes, as our financial and/or organisational capacity changes and as the market opportunity and landscape changes. As we pursue growth we need to ensure that we have the leadership, organisational capacity and capability to execute our strategy.

In general, Contact has a moderate risk appetite and a willingness to experiment and learn as we pursue our strategy. We have a higher appetite for risks related to the strategic or commercial choices required to execute on our strategy. There is a focus on long term financial growth and providing value for all of our stakeholders. Our appetite for any potential harm to our people or for compliance breaches is very low. Contact Energy operates in a dynamic environment and as such, decisions often need to be made quickly. The risk appetite statement should enable quick decision making while also providing a process where the right level of oversight and scrutiny can be applied.



Risk Appetite Statements





The following table sets out examples of two of Contact's risk appetite statements. We have 11 risk appetite statements in total, as well as five expanded strategic risk appetite statements.

The risk appetite statements are approved by the Board and periodically revisited to ensure they continue to be appropriate and reflective of our risk appetite.

Risk Category	Risk Appetite Indicator				Risk Appetite Statement
	Very Low	Low	Moderate	High	
Strategic			X		<p>We believe in the strategy that has been set. In order to achieve the strategy we will make small bets more often and then scale our successes and learn from our mistakes. This does not mean we will be reckless. We encourage taking opportunities which are aligned to the strategy and likely to help improve earnings or create value in another meaningful ways (e.g. opportunity to add capacity or capability or opportunity to learn). We are comfortable that this will mean making investment decisions with less complete information.</p> <p>In order to achieve our strategy we will build meaningful partnerships with tangata whenua for future growth and mutual value creation.</p> <p>We will lean into our decarbonisation leadership position and take opportunities to build our profile and reputation by meaningfully connecting and engaging with the media and our stakeholders.</p>
Safety	X				<p>We care deeply about the health, safety and wellbeing of our people and strive to minimise any health and safety impacts to our people and communities. Our ambition is to ensure our people remain safe and well without any permanent injury or harm.</p> <p>We will take immediate action to mitigate risks that are classified as extreme or severe.</p> <p>We are committed to eliminating risks of significant harm to people where possible, and where these cannot be eliminated, to reduce those risks so far as reasonably practicable in accordance with our guidance and standards.</p> <p>We are committed to providing a safe (both physical and mental) working environment for our people. We have a low tolerance for any activity, practice or behaviour that might lead to emotional or physical harm at work.</p>

Risk Reporting

Risk reporting regularly takes place with the Leadership Team and Audit and Risk Committee (ARC). Risk training is also provided to the full Board including risk management training and individual risk deep dives. Risk reporting to ARC includes an update on environmental changes, identification of top risks, a description of the risks, and the current status of the risk, as well as controls and mitigations that are in place and key assurance reviews (recent and planned) that relate to the risk. The following tables set out example reporting for two of Contact's risks.

Risk Theme	Description	Aug 22	Dec 23	Risk Owner	Consequence	Likelihood	Feb 23 Risk Rating
Station availability risk	Power stations do not generate electricity when required caused by mechanical failures of power station equipment or the transmission system, extreme weather events or natural disasters, cyber attacks on power station control systems, operator error or fuel supply disruptions; resulting in lower generation output, higher generation costs to supply contracted electricity sales and reduced earnings.			John Clark	Critical	Unlikely	High
Tauhara project schedule risk	Material delay to the commercial operation of the Tauhara geothermal power station caused by supply-chain issues, errors in the design, lack of availability of specialist equipment or people, unfavourable weather conditions for construction, poor interface management and failure to achieve intended specifications; resulting in lower generation output, reduced earnings and withdrawal of investor support for our development strategy.			Jack Ariel	Critical	Unlikely	High

Risk Theme	Current Rating	Controls	Actions and mitigations	Key Assurance	Target Rating
Tauhara project schedule risk	High	<ul style="list-style-type: none"> Quality Assurance processes Contractor schedule management Operational readiness plan Project acceleration office Major projects execution committee Tauhara steering committee Site management plan Liquidated damages on EPC 	<ul style="list-style-type: none"> Order parts and spares early Work with operations team to identify and plan resource needs, prioritisations and allocations for operational readiness Additional resources Generation controllers hired 	<ul style="list-style-type: none"> Ongoing Tauhara Development Project assurance – Health & Safety, Project Quality reviews 	Medium
Station availability risk	High	<ul style="list-style-type: none"> Annual Generation asset management planning Critical Spares strategy Maintenance strategy Commodity Risk Management System Sales strategy Condition Monitoring Zone 5 security model Business continuity and recovery plans 	<ul style="list-style-type: none"> Annual Plant Status Reviews Clyde-Roxburgh transformer replacement programme Te Mihi spare steam path purchase Output linked PPAs Reduce average age of generation assets through new development Risk management products Digitising assets to enable predictive maintenance. 	<ul style="list-style-type: none"> FY23 Asset Management Review FY23 Condition Monitoring Review FY23 Critical Spares review (Hydro) Site Integrated Assurance Reviews FY22 industrial control systems cyber review. 	Medium

Emerging Risks

The following slides set out example reporting for two of Contact's emerging risks. Emerging risk reporting includes identification of emerging risks, a description of the risks, assessment of the potential impact, and mitigating actions for the risk.

Emerging Risk 1	
Risk	Increasing frequency of extreme weather events relating to climate change
Description	Climate related events are becoming more frequent. Infrastructure has been designed for historical climate conditions and is more vulnerable to future weather extremes placing pressure on Contact assets and potentially security of supply.
Impact	<ul style="list-style-type: none"> • Material deviations in national hydrology patterns vs history impacts Contact's South Island hydro generation volumes: this includes both total expected rainfall and frequency and intensity of weather events • Potential for coastal power stations (e.g. Whirinaki) to be inundated with rising sea levels • Traditional electricity usage patterns change with historical demand patterns impacting the volume of energy required to purchase • Impact on the ability to insure thermal assets • Potential for societal rejection of thermal generation (impacting the ability to own / operate Contact's thermal assets) • Extreme weather events impacting transmission and distribution potentially leading to blackouts
Mitigating actions	<ul style="list-style-type: none"> • Long-term impact assessment of climate change on assets with NIWA and other governmental agencies • Supporting governmental climate change efforts • Flexible / diverse (fuel type and geographic) generation portfolio • Decarbonisation strategy which includes: <ul style="list-style-type: none"> - The build of a new geothermal power station Tauhara - Reviewing thermal assets in our portfolio - Investigating renewables and storage (battery) options - Pipeline of renewable development options

Emerging Risks

Emerging Risk 2	
Risk	Electricity security of supply issues as intermittent renewables such as wind and solar displace thermal generation.
Description	Electricity security of supply (includes adequacy of electricity supply, operational security, and resilience to shocks) is the electricity system's capability to ensure uninterrupted availability of electricity. This becomes more crucial as the market decarbonises, as the electricity system becomes a larger and more integral component of the energy system, and as new renewables are predominantly intermittent. This is exacerbated by limited investment in flexible gas supply chain and storage and no appetite to invest in flexible thermal assets.
Impact	<ul style="list-style-type: none"> • Variable and intermittent supply in the form of wind and solar does not contribute to grid reliability with higher potential for blackouts. • Greater connection between electricity security and gas delivery putting more risk on the delivery of gas • Over and under supply risks may lead to reduced earnings or adverse government intervention. With a reduction in the reliance of coal, NZ will need to use natural gas to provide flexibility. But this is creating “a more intimate link” between security of electricity supply and natural gas deliverability. • Connected devices and smart grid technologies, can unlock larger demand response resources, improve energy efficiency, and facilitate the integration of higher shares of variable renewables in a cost-effective and secure manner. However, the growth in connected devices and distributed energy resources is also expanding the potential cyberattack surface of electricity systems. If Contact's information technology infrastructure was interrupted, compromised or damaged, Contact could suffer loss of control of assets, inability to dispatch electricity or gas into the market or adjust to pricing variations, resulting in revenue loss, material harm to its reputation and/or significant expenditure to restore functionality
Mitigating actions	<ul style="list-style-type: none"> • For added resilience against physical supply disruptions and fuel-price fluctuations, diversifying power supplies (but leaning toward low-carbon sources), ramping up flexibility in supply and demand response. • Distributed generators can be more resilient than centralized systems • Battery and deep storage investments • Mature approaches to cyber resilience and investments to keep pace with evolving cyber threats