Climate Disclosure Governance Group TCFD Workshop

Presented by Wendy McGuinness Friday, 10 December 2021



Agenda

Part 1: Why – Climate intelligence

Part 2: What – What is happening nationally and globally?

Part 3: How – Climate-related Disclosures

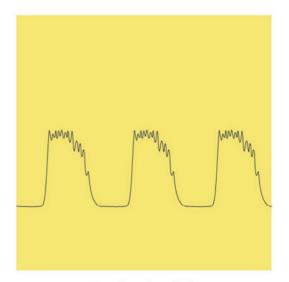
Questions

Part 1: Why

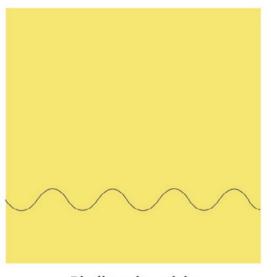
Climate intelligence

Three crises – three different types of noise

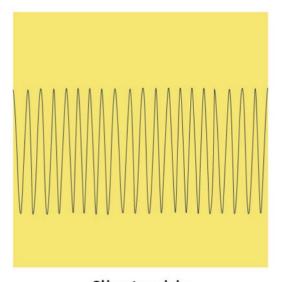
Discussion Paper 2021/03 – A COVID-19 Situational Report: Beyond Aotearoa New Zealand's Fortress, September 2021



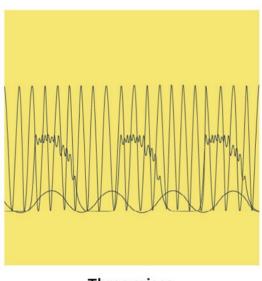
Pandemic crisis
Intermittent noise



Biodiversity crisis
Low-frequency noise



Climate crisis
Continuous noise

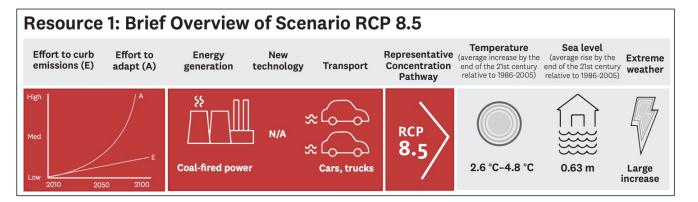


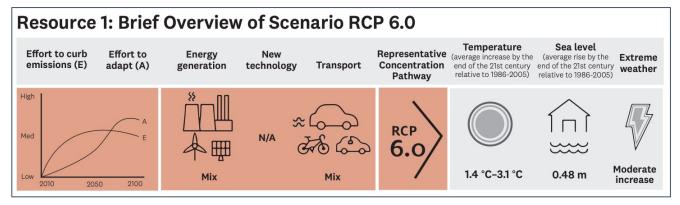
Three crises A noisy world

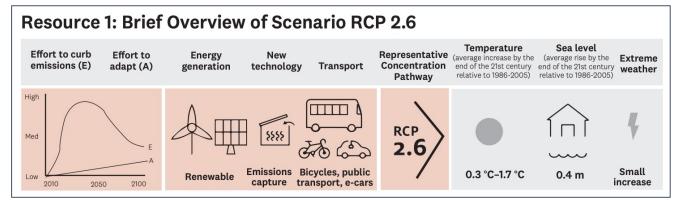


TCFD 'Strategy' Exercise

McGuinness Institute, October 2019









Part 2: What

What is happening nationally and globally?

What is happening nationally and globally?

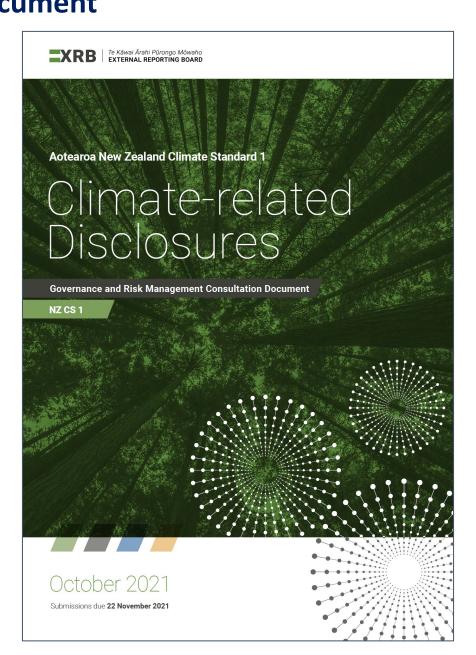
Nationally	Globally
1. XRB	International Sustainability Standards Board (ISSB)
2. NZX (ESG)	2. The Glasgow Financial Alliance for Net Zero (GFANZ)
3. Financial Markets Authority (FMA)	3. UN Climate Change Conference (COP26)
4. Companies Office (MBIE)	
5. Reserve Bank	
6. Emissions Reduction Plan (MfE)	



NATIONAL

1. NZ CS 1 – Climate-related Disclosures: Governance & Risk Management Consultation Document

XRB, October 2021





2. NZX Corporate Governance Code Review 2021

6. Should the ESG Guidance Note or Code be updated to reflect the New Zealand legislative requirements for TCFD reporting?

New Zealand context

Reporting practices

NZX and Wright Communications have published the ESG Report 2020¹², which provides a snapshot of NZX issuers' ESG reporting practices and includes case studies to assist issuers in understanding and developing their ESG frameworks.

The report noted that in 2020 there was an increased uptake in ESG reporting amongst the issuer population, with a noticeable increase in climate change reporting. In particular, Integrated Reporting was completed by 13 issuers that were sampled (up from 5 in the prior year) and 14 S&P NZX 50 companies had made a start on climate disclosure by adopting the Taskforce on Climate Financial Disclosures (**TCFD**) reporting framework. Half of all issuers had adopted some form of ESG reporting framework in 2020 (up from one-third in the prior period). Issuers with smaller market capitalisations reported on fewer ESG metrics.

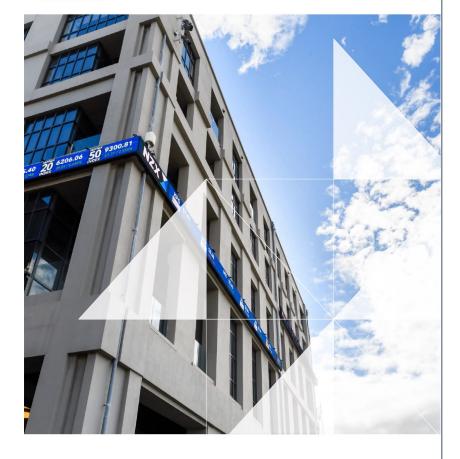
In addition, the McGuinness Institute has conducted a review of NZX issuers' TCFD disclosures from 2018 to 2020. The report shows that there is an increase in the number of companies that include a dedicated TCFD section in their annual report has increased. In 2018, only one company out of 123 had a dedicated TCFD section in their annual report, whereas in 2020, 5% (seven out of 130 companies) provided a dedicated TCFD section in their annual reports. In their 2020 annual reports, 43% of NZX Main Board issuers (57 out of 130 companies) reported on climate-related risks, 43% (57 out of 130 companies) on climate-related initiatives, and 42% (55 out of 130 companies) reported on controls to help reduce emissions.



NZX Corporate Governance Code Review 2021

Initial Discussion Document

November 2021



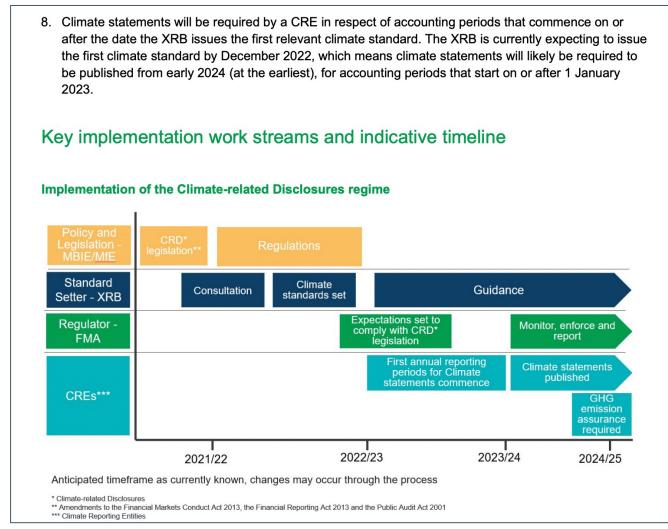


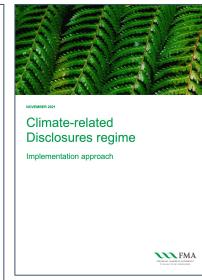
3. Climate-related Disclosures regime: Implementation approach

Financial Markets Authority (FMA), November 2021

The FMA will be responsible for monitoring and enforcing the new regime.

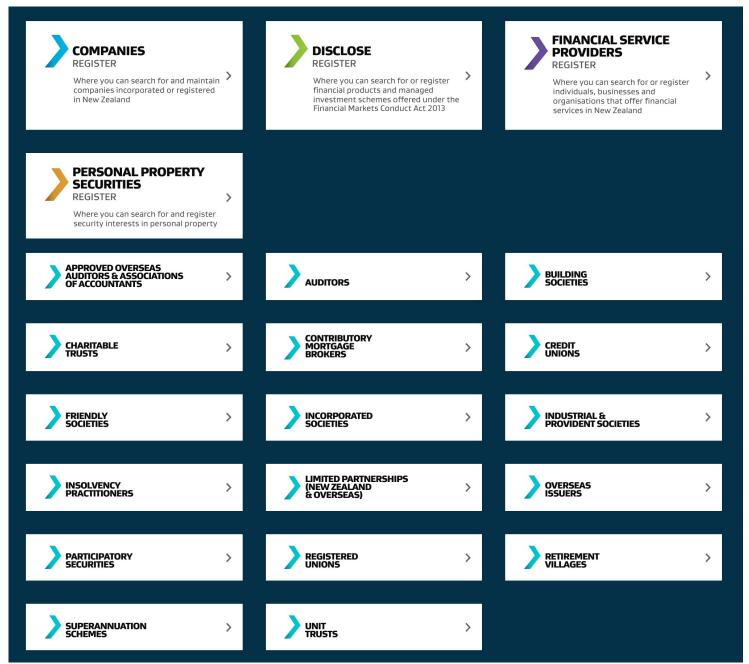
This document briefly explains the CRD legislation and outlines the FMA's implementation approach for the CRD regime over a period of approximately 4 years, through to 2025/26. It sets out the roles and responsibilities of the various government agencies, to help industry understand 'who is doing what' with regard to CRD.







4. NZ Companies Office Register (prefer separate TCFD register)



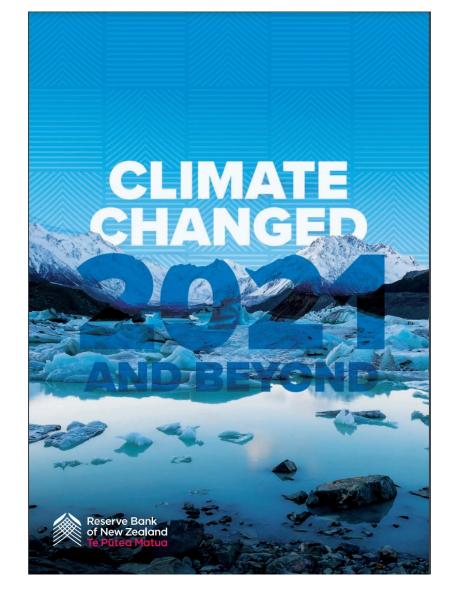
Note: McGuinness Institute would prefer MBIE to create a separate TCFD register.



5. Climate Changed 2021 & Beyond

Reserve Bank, October 2021

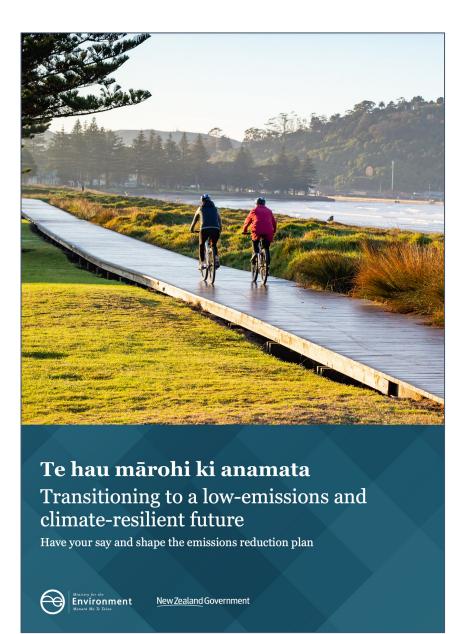
Strategic focus	Progress	Future plans
Get our house in order: Operational emissions	Calculated/independently verified using Greenhouse Gas Protocol	Set/implement reduction pathway
Get our house in order: Investment emissions	Engaged S&P Global Market Intelligence to estimate carbon intensity of sovereign bond portfolio Invested US\$100 million in Bank for International Settlements' Green Bond Investment Pool	Assess carbon-related portfolio risks Consider how we can incorporate sustainability objectives into our balance sheet, while maintaining our ability to effectively execute our policy objectives
Get the settings in place: Policy Functions	Submissions on other agencies' policies Developing guidance note on climate change risk management	Contribute to the climate risk mandatory disclosures regime by working with lead agencies
Get the settings in place: Financial System Analysis	Financial Stability Reports highlight risks Began climate-related stress tests	Stress testing further incorporates climate change Further work to identify gaps for in-depth analysis
Get the settings in place: Supervision	Incorporated climate change into scheduled supervisor engagements with management and boards of regulated entities to assess governance, strategy and risk management frameworks Building climate expertise through training and development to deepen understanding of risks	Further embed climate risk into our supervisory frameworks, data collection and internal training Bilateral engagements with regulated entities' management/boards Repeat Task Force on Climate-Related Financial Disclosures (TCFD) survey in 2022
Get the settings in place: Monetary Policy	Analysing the latest set of NGFS scenarios to highlight economic impacts of climate change	Assess how our approach to monetary policy should account for climate change
Show the way: Leading through collaboration	Leading Council of Financial Regulators' climate workstream to increase coordination/capacity Engaging widely – scientists, researchers, public sector agencies, industry and international collaboration	Continue external engagement Lead by example: develop the building blocks for our own TCFD report





6. Emissions Reduction Plan Consultation Document

Ministry for the Environment, October 2021





1. International Sustainability Standards Board

International Financial Reporting Standards Foundation (IFRS), November 2021

'The intention is for the ISSB to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies' sustainability-related risks and opportunities to help them make informed decisions.' - IFRS



IN1 [Draft] IFRS Sustainability Disclosure Standard SX Climate-related Disclosures (IFRS SX) sets out the requirements for the identification, measurement and disclosure of climate related financial information.

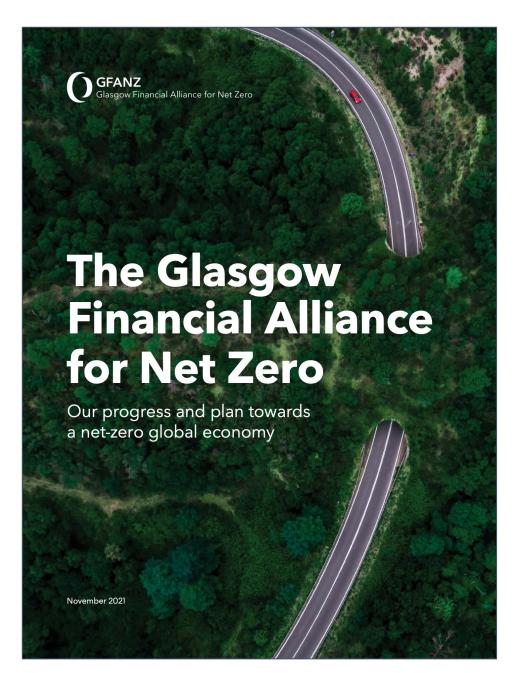
IN2 The objective of [Draft] IFRS SX is to require entities to provide information about their exposure to climate-related risks and opportunities. This information, along with other information provided as part of an entity's general purpose financial reporting, assists users of the information provided in assessing the entity's future cash flows, their amounts, timing and certainty, over the short, medium and long term. This information, together with the value attributed by users to those cash flows, supports their assessment of the entity's enterprise value.



GLOBAL

2. The Glasgow Financial Alliance for Net Zero

November 2021





3. UN Climate Change Conference (COP26)

November 2021

What was agreed:

Private finance

Private financial institutions and central banks announced moves to realign trillions of dollars towards achieving global net zero emissions. Among them is the Glasgow Financial Alliance for Net Zero, with over 450 firms across 45 countries that control \$130 trillion in assets, requiring its member to set robust, sciencebased near-term targets.

New deals and announcements

There were many other significant deals and announcements – outside of the Glasgow Climate Pact – which can have major positive impacts if they are indeed implemented. These include:

Forests

137 countries took a landmark step forward by committing to halt and reverse forest loss and land degradation by 2030. The pledge is backed by \$12bn in public and \$7.2bn in private funding. In addition, CEOs from more than 30 financial institutions with over \$8.7 trillion of global assets committed to eliminate investment in activities linked to deforestation.

Methane

103 countries, including 15 major emitters, signed up to the Global Methane Pledge, which aims to limit methane emissions by 30 per cent by 2030, compared to 2020 levels. Methane, one of the most potent greenhouse gases, is responsible for a third of current warming from human activities.

Cars

Over 30 countries, six major vehicle manufacturers and other actors, like cities, set out their determination for all new car and van sales to be zero-emission vehicles by 2040 globally and 2035 in leading markets, accelerating the decarbonization of road transport, which currently accounts for about 10 per cent of global greenhouse gas emissions.

Coal

Leaders from South Africa, the United Kingdom, the United States, France, Germany, and the European Union announced a ground-breaking partnership to support South Africa – the world's most carbon-intensive electricity producer—with \$8.5 billion over the next 3-5 years to make a just transition away from coal, to a low-carbon economy.

Private finance

Private financial institutions and central banks announced moves to realign trillions of dollars towards achieving global net zero emissions. Among them is the Glasgow Financial Alliance for Net Zero, with over 450 firms across 45 countries that control \$130 trillion in assets, requiring its member to set robust, science-based near-term targets.



Part 3: How

Climate-related Disclosures



Who is required to report?

XRB

'Climate-related disclosures will be mandatory for large listed companies (large meaning with a market capitalisation of more than \$60 million); large registered banks, licensed insurers, credit unions, building societies, and managers of investment schemes (large meaning with more than \$1 billion in assets); and, some Crown financial institutions (via letters of expectation).'

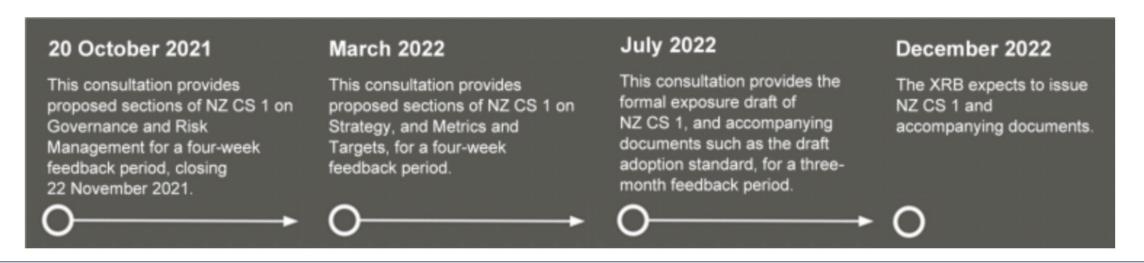
Auckland Council must report because it has issued over \$1 billion of bonds on the NZX.

What are they required to report?

XRB Standards

Timeline

The standards will be developed and delivered through the following three iterations.



What will the standards look and feel like?

Recommendations of the Task Force on Climate-related Financial Disclosures June 2017





Recommendations and Supporting Recommended Disclosures

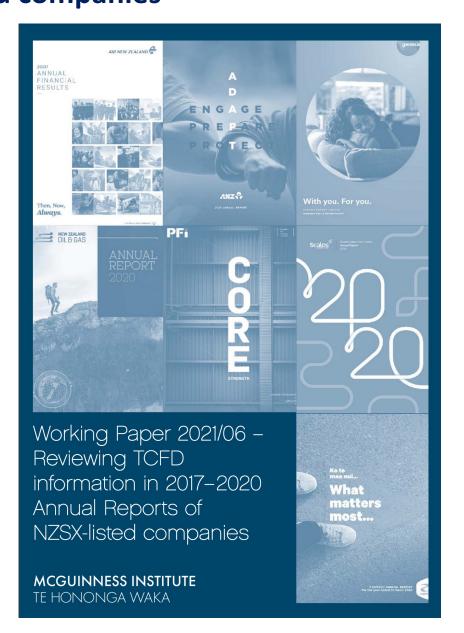
TCFD, 2017 (p.14)

Governance	Strategy	Risk Management	Metrics and Targets		
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.		
Recommended Disclosures	Recommended Disclosures	Recommended Disclosures	Recommended Disclosures		
a) Describe the board's oversight of climate-related risks and opportunities.	 a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. 	 a) Describe the organization's processes for identifying and assessing climate-related risks. 	 a) Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process. 		
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate- related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.		
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.		



Working Paper 2021/06 – Reviewing TCFD information in 2017–2020 Annual Reports of NZSX-listed companies

June 2021





Air New Zealand Annual Financial Results 2020 (p. 72-3)

Taskforce on Climate-related Financial Disclosures (TCFD)

Air New Zealand committed to supporting the TCFD in 2019. For the 2020 financial year, the following disclosures summarise how Air New Zealand aligns with TCFD recommendations.

Governance of Climate-Related Risks and Opportunities

Board's oversight of climate-related risks and opportunities

The Board is ultimately responsible for the Company's response to the risks and opportunities presented by climate-related issues. Board oversight is through its Audit and Risk Committee, which oversees key risks including climate change.

This Committee meets quarterly and, amongst other things, considers updates and assurance on management of strategic risks. The Board is updated following each Committee meeting. Matters meriting Board-level consideration are highlighted or dealt with as standalone Board agenda items.

Strategic climate-related risks are also considered by the Board as part of the Company's Enterprise Risk Management Framework and its Group Risk Profile. Where applicable, climate risk also forms part of the Board's evaluation of material projects and capital investments.

Management's role in assessing and managing climaterelated risks and opportunities Management has day-to-day responsibility for identifying and managing climate-related risks and opportunities. Climate-related risks are identified through the Company's divisional risk registers.

Climate-related workstreams are the responsibility of the full Executive team, the Executive Climate Committee (ECC) and the Sustainability Team. Management focus is given to risk identification, ensuring consistency in approach, and that the climate-related activities are adequately resourced (for example, fuel monitoring/reporting, carbon reduction programme, offsetting, regulatory compliance). The ECC reports key issues to the Audit and Risk Committee.

Environmental sustainability is affirmed as a business principle within the Company's Code of Conduct and its Supplier Code of Conduct, which set expectations of employees and of those the Company does business with.

Strategy

Climate-related risks and opportunities identified over the short, medium, and long-term Air New Zealand has identified the impact of climate change as one of its top strategic risks. These risks (and opportunities) manifest as either:

- 'physical' risks which are those risks arising from changes in the regional and global climate and the consequential impacts and events. These may include acute physical damage from variations in weather patterns (for example severe storms, coastal/ tidal flooding, drought) or chronic impacts (for example sea level rise and temperature increase); or
- 'transitional' risks which are those risks related to the transition to a lower carbon economy. These include
 the impact of policy, legal, technological, reputational or market measures associated with climate change.

Physical risks

Short, medium and long-term physical risks (both acute and chronic) to the Company include:

- In the short-term, higher rainfall and storm frequency and intensity, and, in the long-term, sea level rise and tidal/coastal intrusion causing network disruptions and loss of access to airports as well as other aviation support facilities, critical infrastructure, and supply chains;
- Increase in the frequency of extreme weather events altering flight dynamics and operational planning requirements.

Ultimately, extreme weather frequency and intensity may cause sustained operational disruption and network growth limitations, which may adversely impact Air New Zealand's cost base, future revenue, customer experience and reputation.

Transitional risks

The most likely and impactful transitional effects for the Company include:

- Increased regulatory constraints associated with carbon emissions, resulting in higher operating costs.
 These in turn can impact revenue outcomes. Air New Zealand is cognisant of potential threats and opportunities arising if policy measures are not equivalent across different jurisdictions.
- Changing demand for discretionary air travel due to individuals or businesses seeking to reduce their carbon footprint. This can also create opportunities for the most carbon-efficient airlines to enhance their competitive advantage.

Strategy continued

Actual and potential impacts of climaterelated risks and opportunities on the Company's strategy and financial planning Climate-related risks and opportunities are considered as part of Air New Zealand's annual and longer-term business planning and financial planning processes, including decisions on fleet investment and aircraft weight as well as consideration of the regulatory impacts of carbon pricing. The Company's recognition of climate-related risks and opportunities helps shape the sustainability strategy, in turn guiding decisions to invest in modern and fuel-efficient fleet, development of an operational carbon reduction programme and a voluntary carbon offsetting scheme, and long-term carbon credit supply to meet compliance obligations under the New Zealand Emissions Trading Scheme.

The Covid-19 crisis has had a significant and ongoing impact on Air New Zealand and on the global aviation industry. While there has been a temporary reduction in air travel, the Company acknowledges the continued need for urgent action to reduce carbon emissions. It has commenced a strategic review of its current and future operations, and the related climate change impacts, with a goal of establishing new emissions reduction targets and defining a roadmap of decarbonisation levers and actions to achieve these targets by 2050.

Resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

Prior to the Covid-19 outbreak, Air New Zealand engaged third-party experts to undertake scenario modelling to quantify the impact of several physical and transitional climate-related risks, and to assess the resilience of the Company's strategy (including against three IEA Energy Technology Perspective (ETP) scenarios which were 1.5, 2 and 3-4 degree aligned). This engagement has been paused until such time as there is greater certainty over the Company's and the industry's post-Covid-19 context.

Risk Management

Processes for identifying and assessing climaterelated risks Climate-related risks and opportunities are primarily identified, assessed, and managed, by each business unit in accordance with Air New Zealand's Enterprise Risk Management Framework (see page 68). These processes are supplemented with specialist input from functional experts, including the Sustainability, Strateov. Corporate Finance. Legal, and Risk teams, to promote consistency and completeness.

Processes for managing climaterelated risks Risks are identified at various levels of the organisation, including a "bottom up" review involving the identification of key risks by business units, review of top Divisional risks by each Executive in respect of their portfolio of functions, a collective review by the Executive team of the top risks for the Company, and periodic workshops with the Board to seek "top down" input. Risk activity is largely driven by a Risk Operating Rhythm which sets a cadence for the review of risks. Key risks identified are entered into Risk Registers, and a formal assessment process then determines the materiality of the risk.

Processes for identifying, assessing and managing climate-related risks and integrating them into overall risk management

All risks identified through the Enterprise Risk Management Framework are assigned to a responsible manager (Risk Owner), so that mitigation or minimisation actions are developed and implemented to reduce the risks to an acceptable level. These actions are also recorded in the Risk Register, tracked for progress, and reported to senior management. Significant climate-related risks are brought to the attention of the ECC and/or the Audit and Risk Committee as part of the process of reporting to those bodies, and where appropriate are escalated to the Board.

Metrics and Targets

Metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process

Reporting greenhouse

gas emissions

Targets used by

manage climate-

related risks and opportunities and

performance

against targets

the organisation to

The minimum current targets for the Company include those established by the International Air Transport Association:

- an average annual efficiency improvement of at least 1.5% between 2009 and 2020 carbon-neutral growth post 2020 (to be achieved through CORSIA)
- and 2050 net emissions being 50% of 2005 emissions levels

Air New Zealand also supports the New Zealand Government's goal (enshrined in legislation) of net-zero emissions by 2050.

New emissions reduction targets will be finalised by management and the Board in the 2021 financial year.

Air New Zealand discloses its Scope 1 and 2 emissions on an annual basis (see **2020 Greenhouse Gas Inventory** on the Air New Zealand website for further detail), its carbon emissions efficiency –
measured in tonnes of emissions for every tonne of passenger and cargo carried (CO2 per Revenue Tonne
Kilometre) and the Company also discloses volumes of carbon offset through voluntary carbon offsetting

The impact of Covid-19 on the Company's operations has resulted in emissions for the 2020 financial year being significantly lower than normal, and inconsistent with both prior year trends and long-term expectations. The Covid-19 impacts are expected to continue at least through the 2021 financial year.

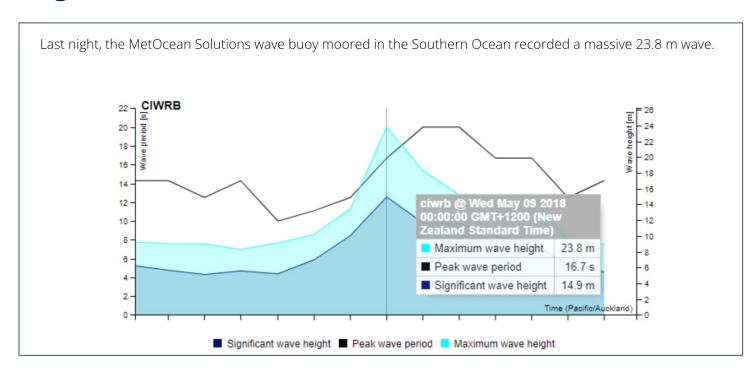


New Zealand – a 'very isolated' island nation

Air New Zealand's 2020 annual report notes:

'Ultimately, extreme weather frequency and intensity may cause sustained operational disruption and network growth limitations, which may adversely affect Air New Zealand's cost base, future revenue, customer experience and reputation'. (p. 72–3)

Rogue waves:

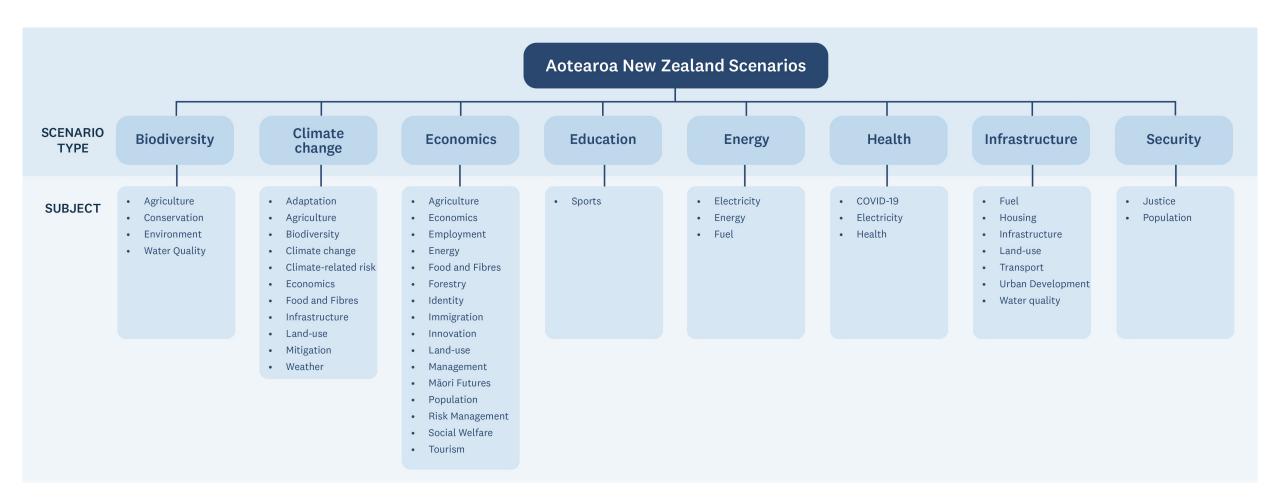


See website here.



Scenarios

Figure 1: Proposed Scenario Framework for Aotearoa New Zealand McGuinness Institute, December 2021





Scenarios

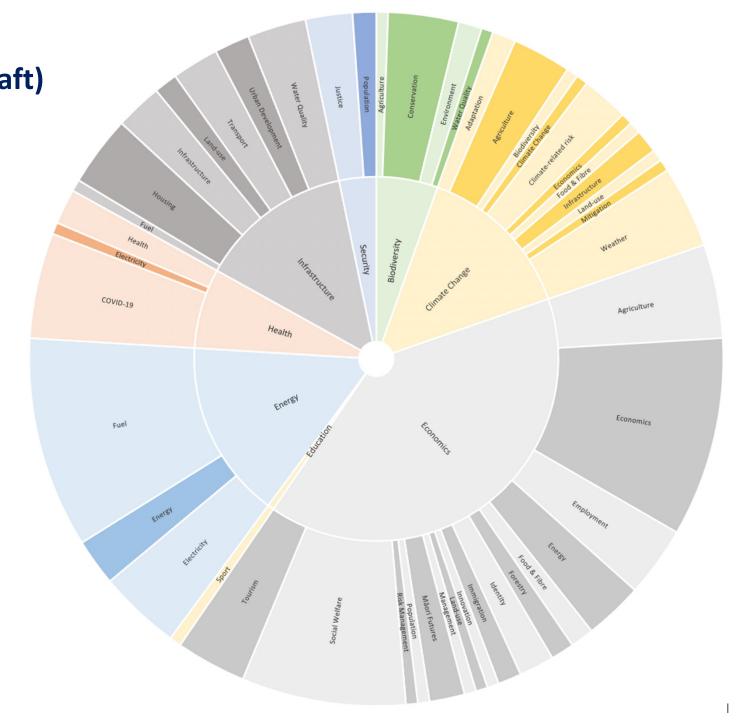
Table 1: List of Aotearoa New Zealand Scenarios (as at 4 November 2021) McGuinness Institute, December 2021

Entity type \$	‡	Entity	\$	Scenario title	\$	Scenario \$	Subject type \$	÷	Year published \$	Climate- related
Government department		Ministry of Business, Innovation and Employment (MBIE)		Electricity Demand and Generation Scenarios (EDGS)		Energy	Electricity		2019	Yes
Office of Parliament		Parliamentary Commissioner for the Environment (PCE)		Future Currents		Energy	Electricity		2005	Yes
Government department		Ministry for the Environment (MfE)		Climate Change Projections for New Zealand		Climate change	Changes in climate variables		2018	Yes
Government department		Ministry for the Environment (MfE)		Coastal Hazards and Climate Change		Climate change	Changes in climate variables/Climate-related risk		2017	Yes
Government department		Ministry of Primary Industries (MPI)		Scenarios of Storminess and Regional Wind Extremes Under Climate Change		Climate change	Changes in climate variables		2011	Yes
Regional and Local Authorities		Auckland Council		Auckland region climate change projections and impacts	5	Climate change	Changes in climate variables		2020	Yes
Regional and Local Authorities		Bay of Plenty Regional Council		Climate change projections and impacts for the Bay of Plenty Region		Climate change	Changes in climate variables		2019	Yes
Regional and Local Authorities		Environment Canterbury		Climate change projections for the Canterbury Region		Climate change	Changes in climate variables		2020	Yes
Regional and Local Authorities		Environment Southland, Gore District Council, Invercargill City Council, and Southland District Council		Southland climate change impact assessment		Climate change	Changes in climate variables		2018	Yes
Regional and Local Authorities		Greater Wellington Regional Council		Climate change and variability - Wellington Region		Climate change	Changes in climate variables		2017	Yes



Nationwide scenario types and subjects by proportion [183] (draft)

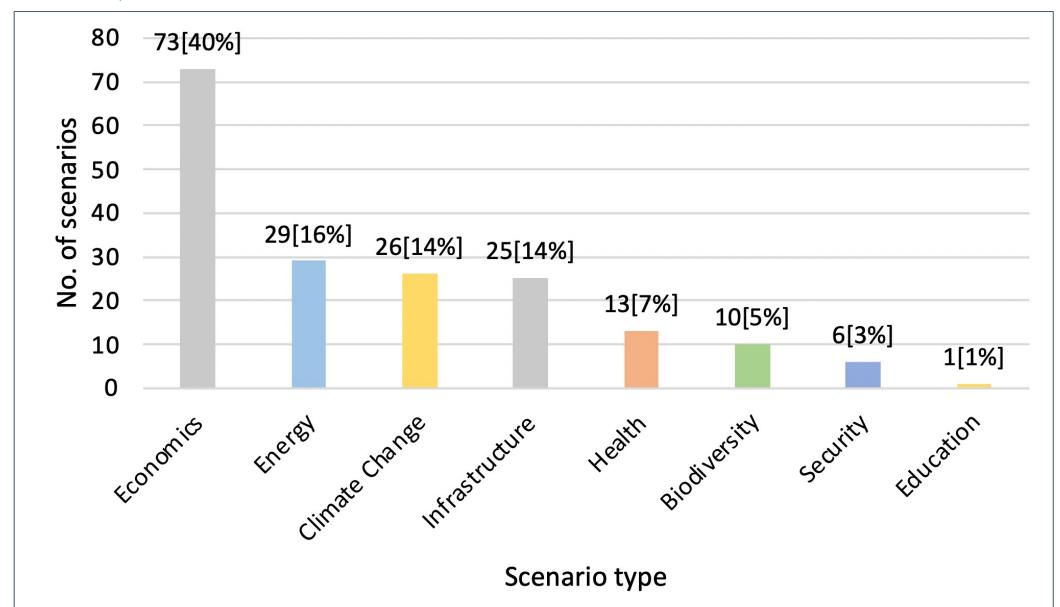
McGuinness Institute, December 2021





Nationwide scenario types by number [183] (draft)

McGuinness Institute, December 2021





Stop, reduce, increase and start worksheet (sample)

McGuinness Institute submission on the Emissions Reduction Plan consultation document, December 2021

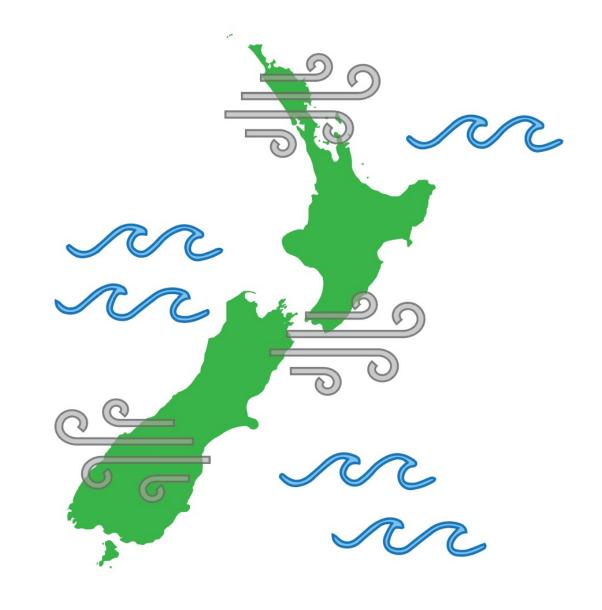
	What?	(Actions)					
Stop	Reduce	Increase	Start				
 Coal Importing livestock and fish feed 	 Waste Wine growing Milk powder Concrete Dairy, cattle, deer and horse livestock 	 Grains Native trees Rail/boat transportation Green electricity Plant feed for livestock and fish Water storage 	 Bioplastics Steel and cement substitution Mine landfills to reduce methane emissions 				
How? (Tools and initiatives)							
 Ban coal mine expansion/opening through RMA Ban all internal combustion engines 	 Implement a container deposit scheme Analyse landfill Analyse matching water with land use Assess milk powder production (given it has a low-commodity, high-carbon footprint) Tax concrete imports Tax pollution 	 Improve transmission links for renewable energy generation Incentivise decarbonisation of heavy industry Design a wildfire prevention and management system Climate change taxonomy TCFD reporting (XRB) Low carbon procurement policy for government 	 Support firms to quantify embodied emissions and work with industry to establish supply chains for low-carbon materials Allow pre-payment of Industrial Allocations under the ETS to fund emission reduction projects for major emitters 				



How to become a climate intelligent council

Create a climate change dashboard

- Feedback loops?
- What data?
- How often?
- Who gets the information?
- What information is assured and by whom?
- Benchmark and compare by months/seasons rather than by year?





Questions

Thank you Ngā mihi

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