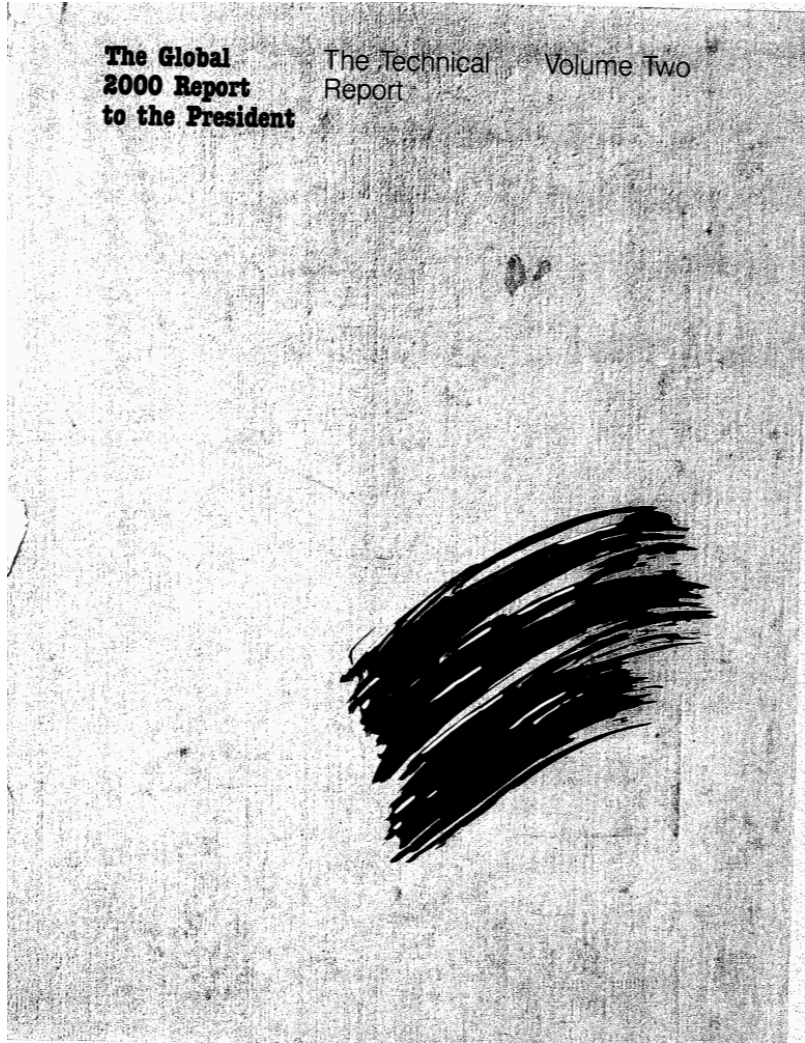


# Climate Change Reporting Emergency

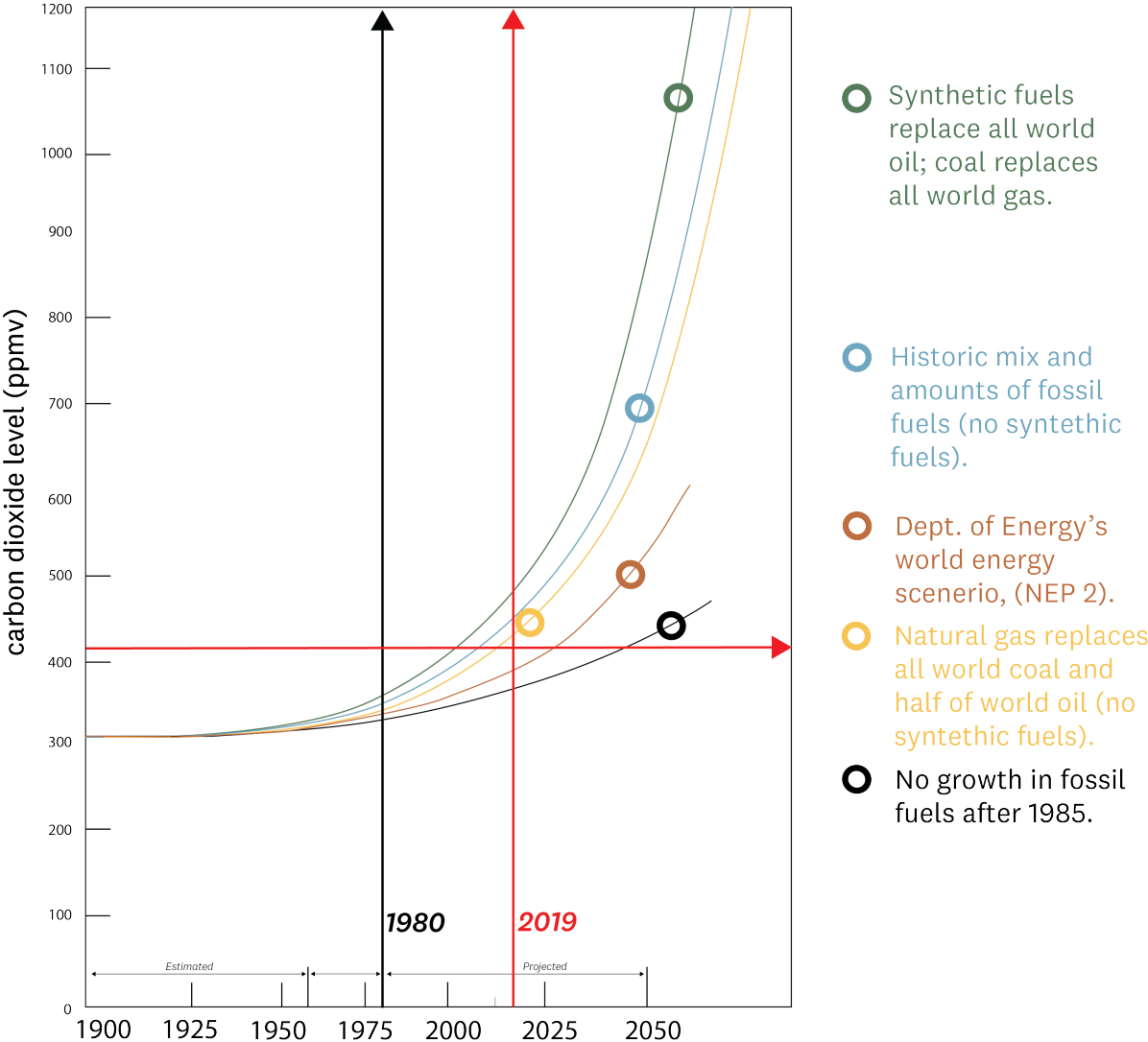
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Wendy McGuinness, 25 June 2019

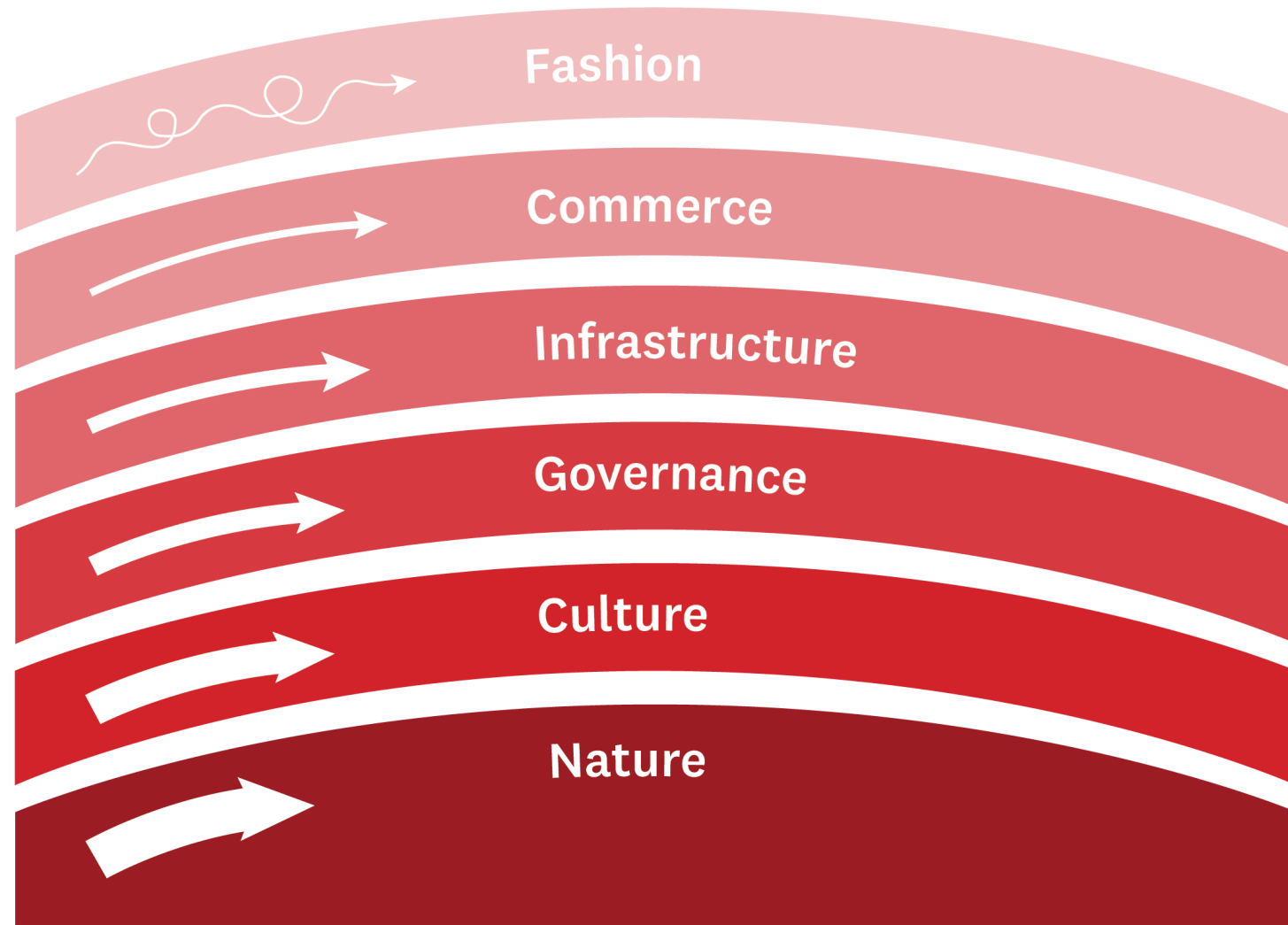
# Climate reporting is still in its infancy despite the risks of climate change being known since 1980



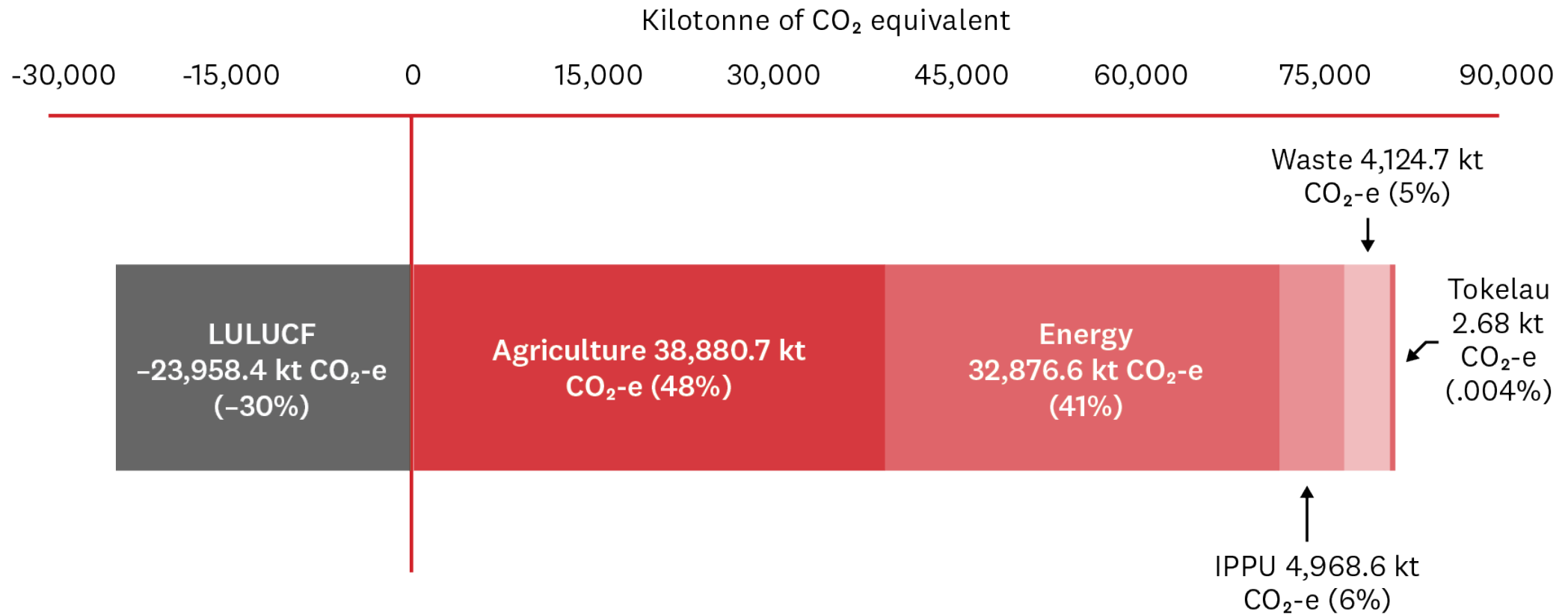
Source: *The Global 2000 Report to the President* (Barney, 1980)



# Pace Layer Thinking

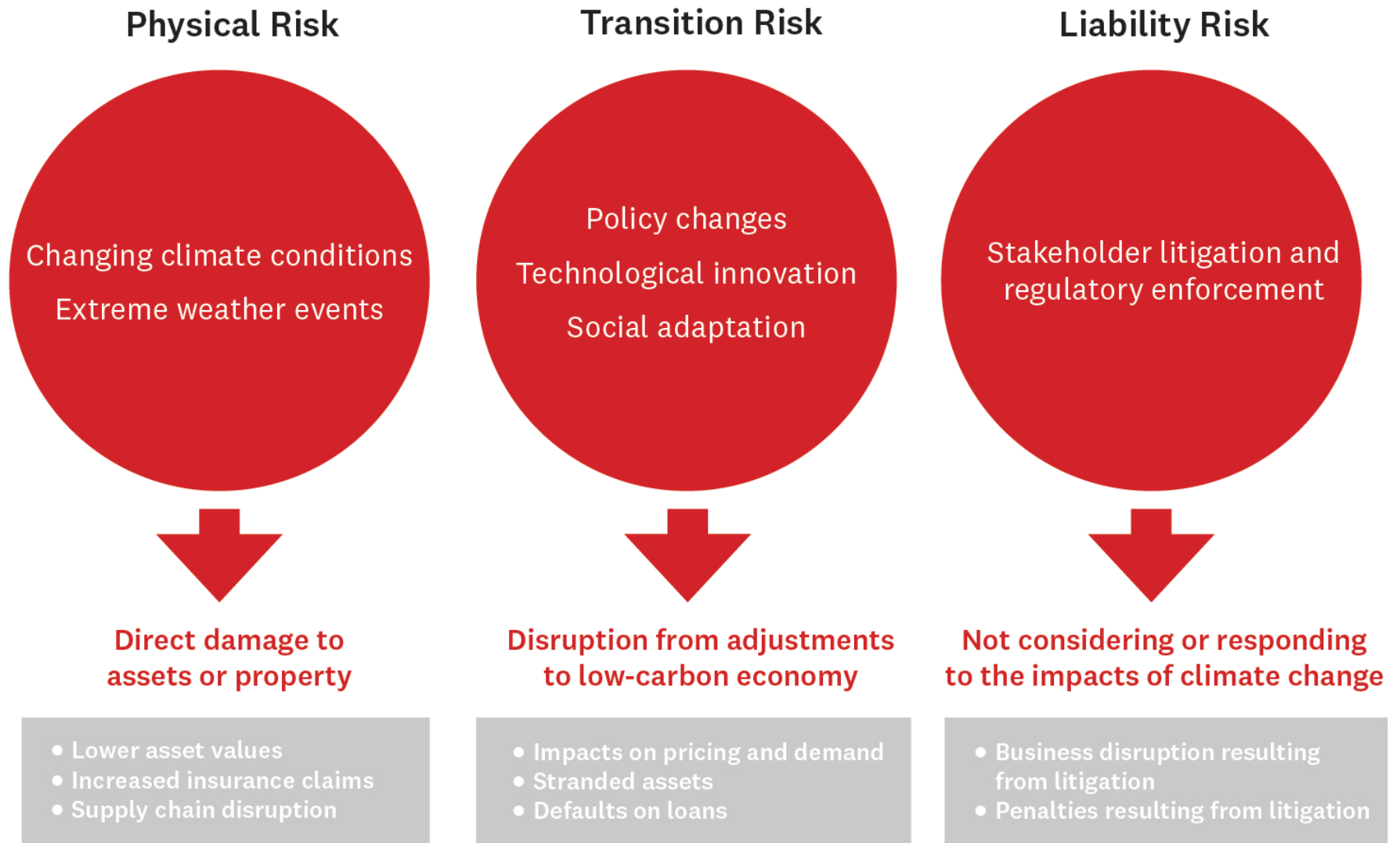


# New Zealand's 2017 emissions profile



Source: <https://www.mfe.govt.nz/climate-change/state-of-our-atmosphere-and-climate/new-zealands-greenhouse-gas-inventory>

# Types of climate change risk

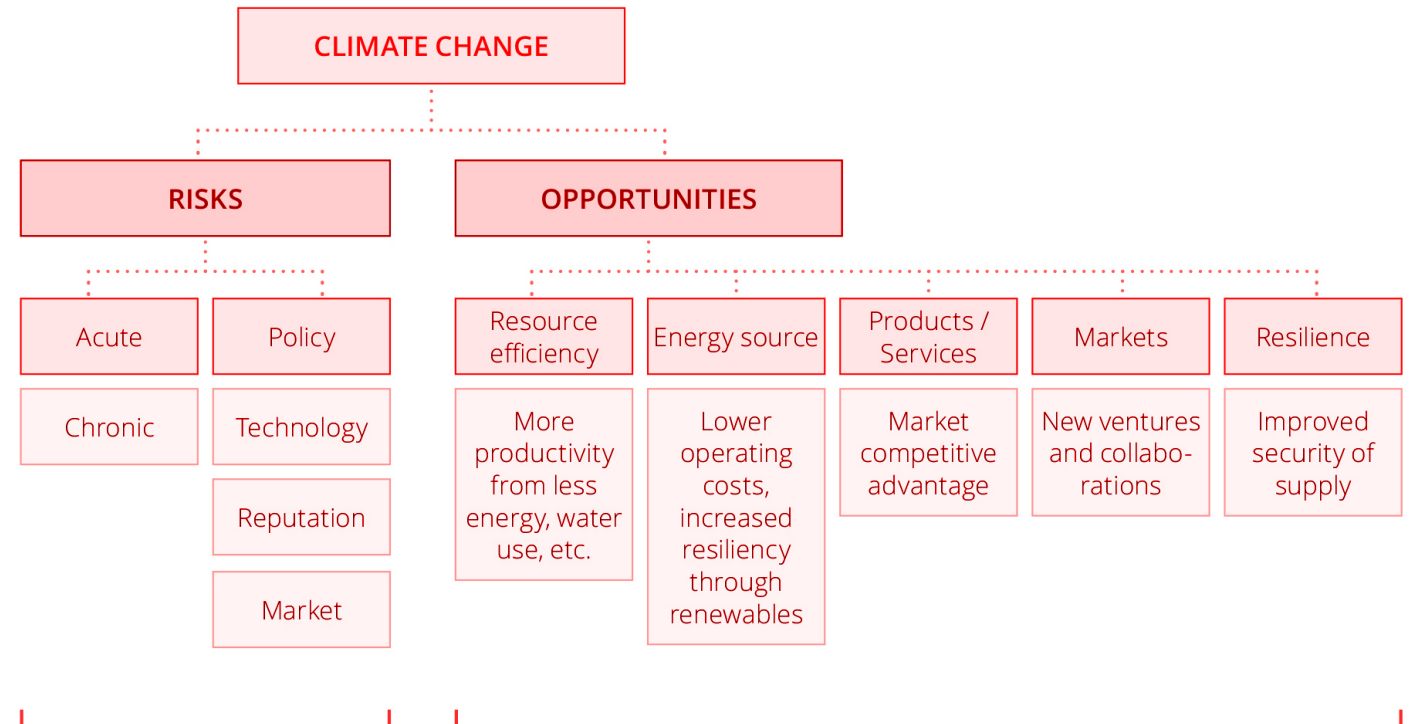


# Deloitte's Overview

## An integrated approach

STEP  
1

### IDENTIFICATION AND PRIORITIZATION OF KEY CLIMATE-RELATED RISKS AND OPPORTUNITIES



#### Prioritisation of climate-related risks:

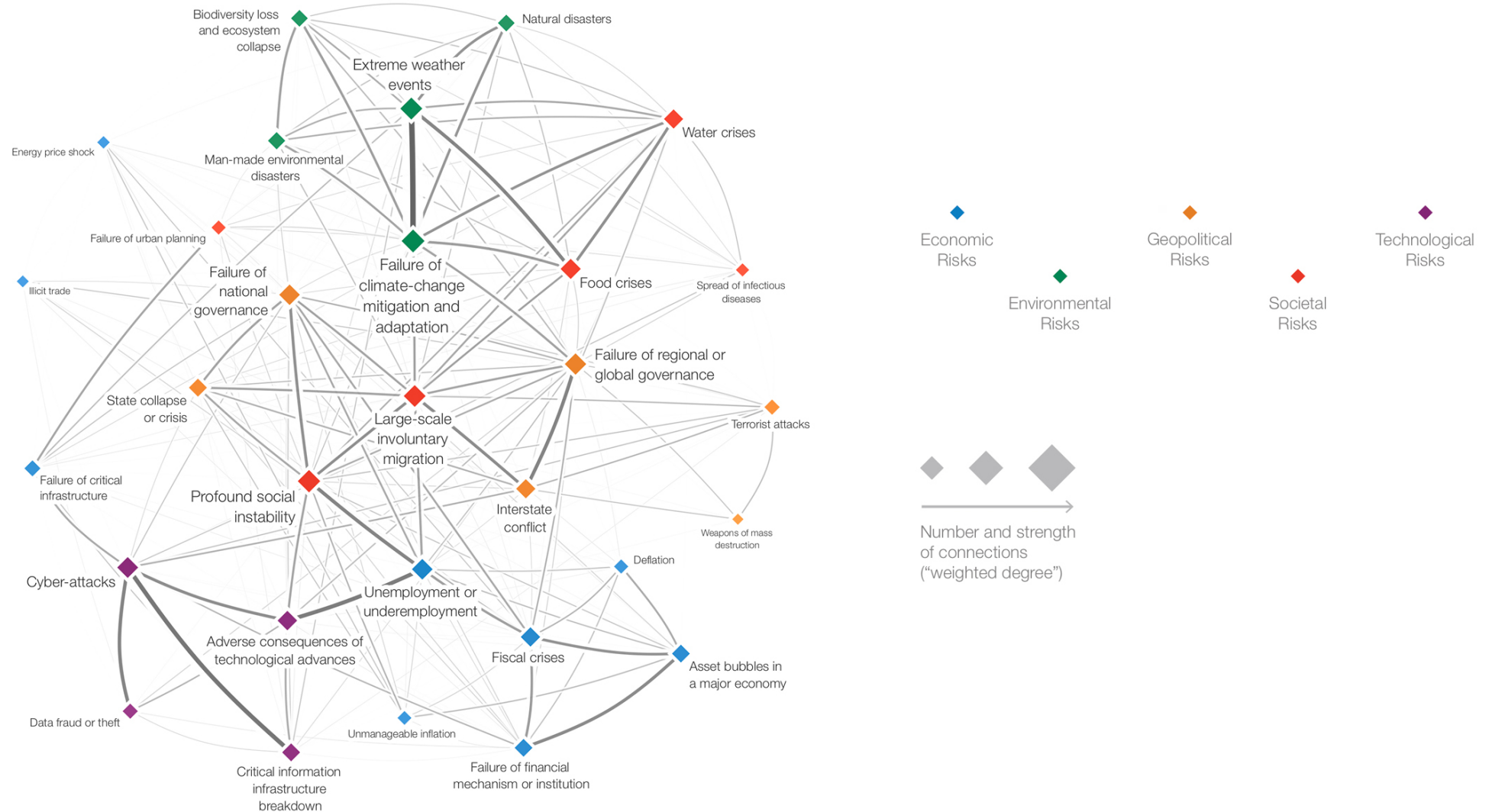
- Magnitude of risk: scope
- Likelihood of risk
- Potential impacts and consequences e.g. financial impacts include impacts on revenue statements, cash flow and balance sheet, etc.

#### Build upon promising opportunities:

- Opportunities could offset potential risks e.g. new investments, reduced operating costs, access to new markets
- Opportunities focused on climate change mitigation and adaptation solutions and a transition to a lower-carbon economy

Source: *Climate-related risk assessments and financial disclosures: Our services to answer the challenge of the TCFD recommendations* (Deloitte, 2018)

# World Economic Forum Global Risk Report



Source: *The Global Risks Report 2019: 14<sup>th</sup> Edition* (WEF, 2019)

Discussion Paper  
2019/01 – Designing  
a Climate Reporting  
Framework for  
New Zealand

Version 2 as at 25 June 2019

**MCGUINNESS INSTITUTE**  
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## 1.0 Introduction

### **Part 1: The New Zealand Context**

## 2.0 What is happening in New Zealand?

### **Part 2: The Existing Reporting Regime**

## 3.0 Legislative reporting framework

## 4.0 Mandatory reporting regime

## 5.0 Voluntary reporting regime

### **Part 3: Designing the Solution**

## 6.0 Problem definition

## 7.0 Policy knots

## 8.0 Proposed design

## Appendix 1: Proposed legislative changes

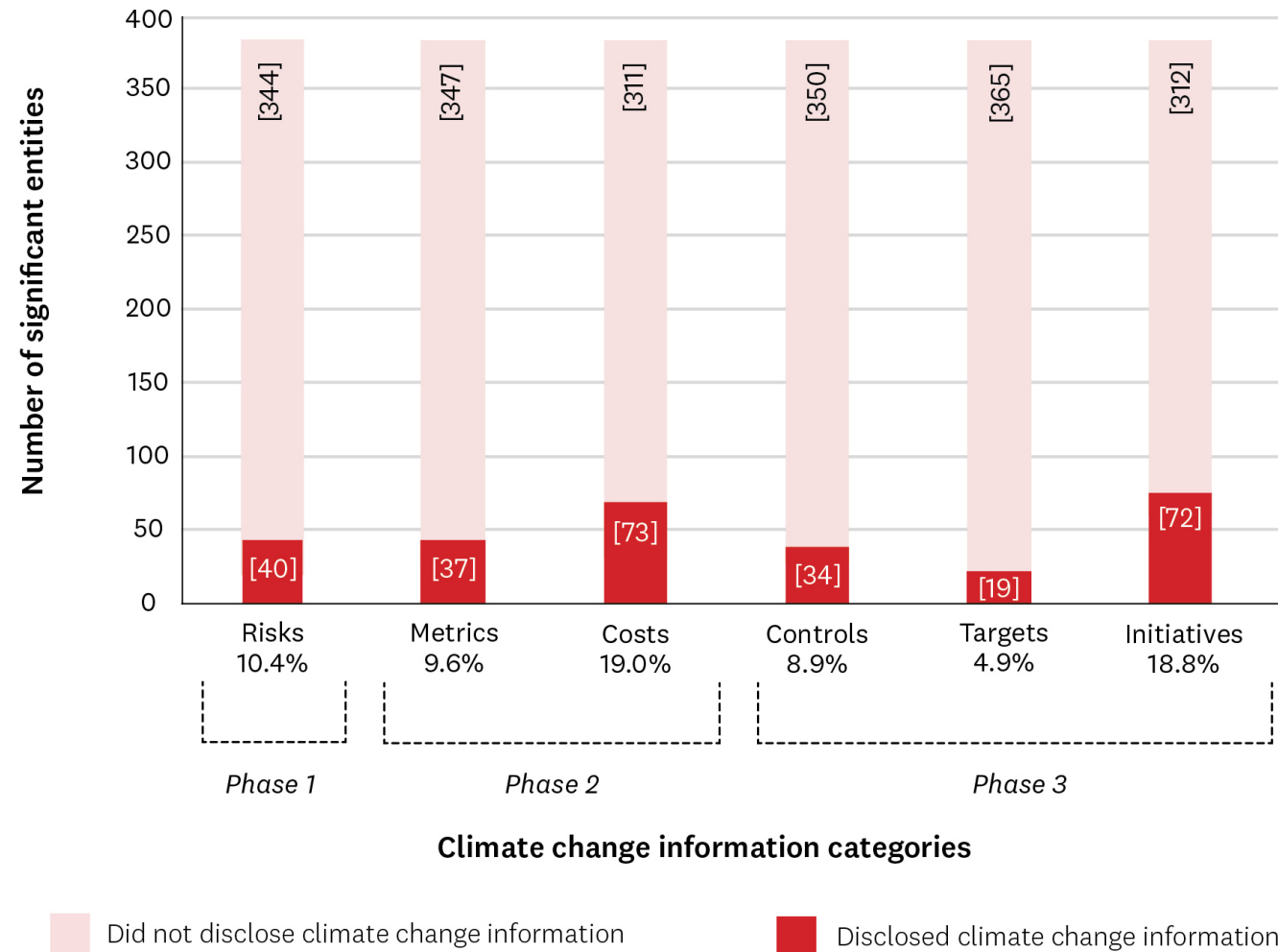
## Appendix 2: Z Energy's Statement of Climate Change Information



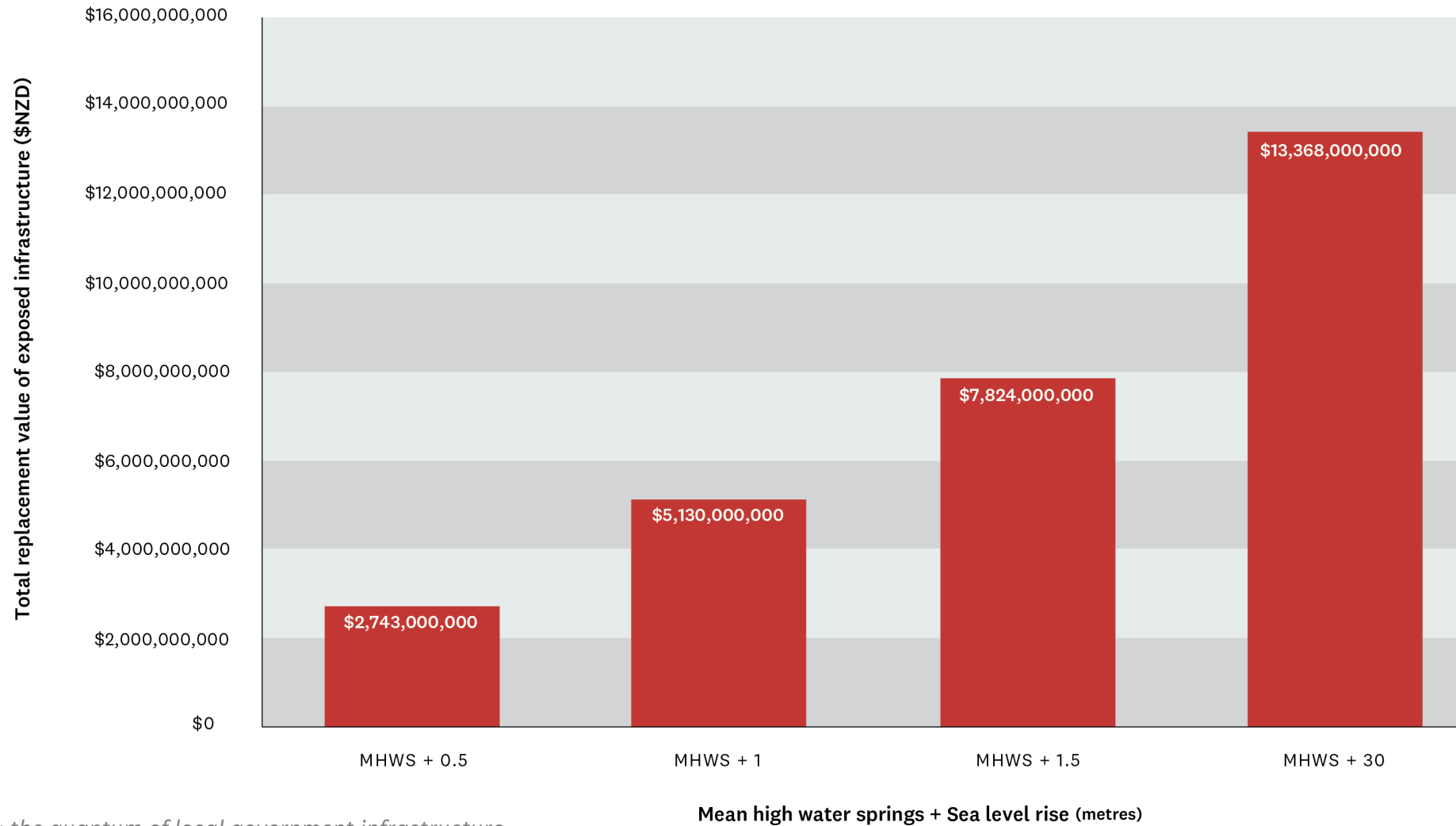
## Part 1: The New Zealand Context



# Climate change information contained in 2017 annual reports of 384 significant New Zealand organisations

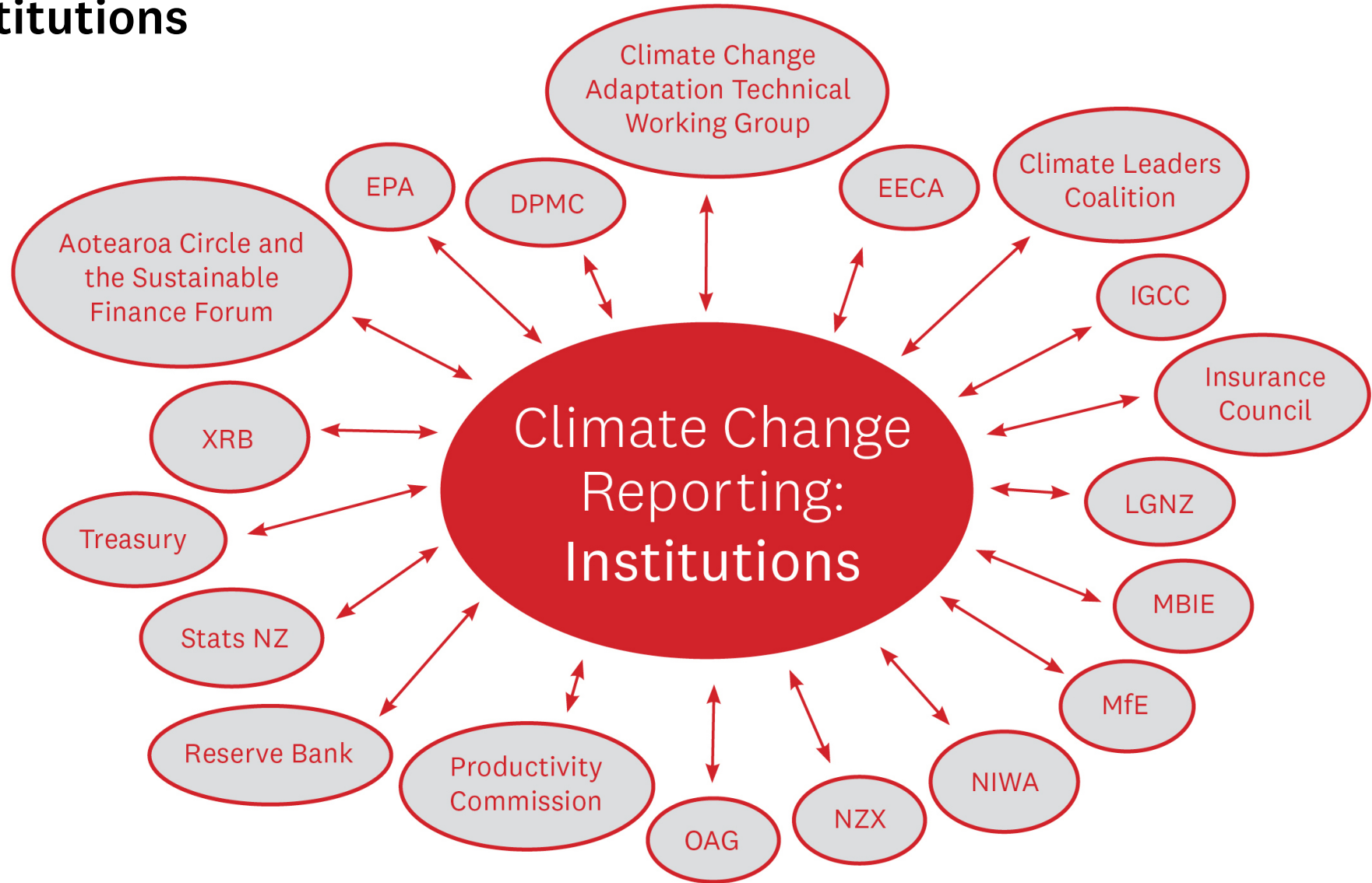


# Total replacement value of exposed infrastructure

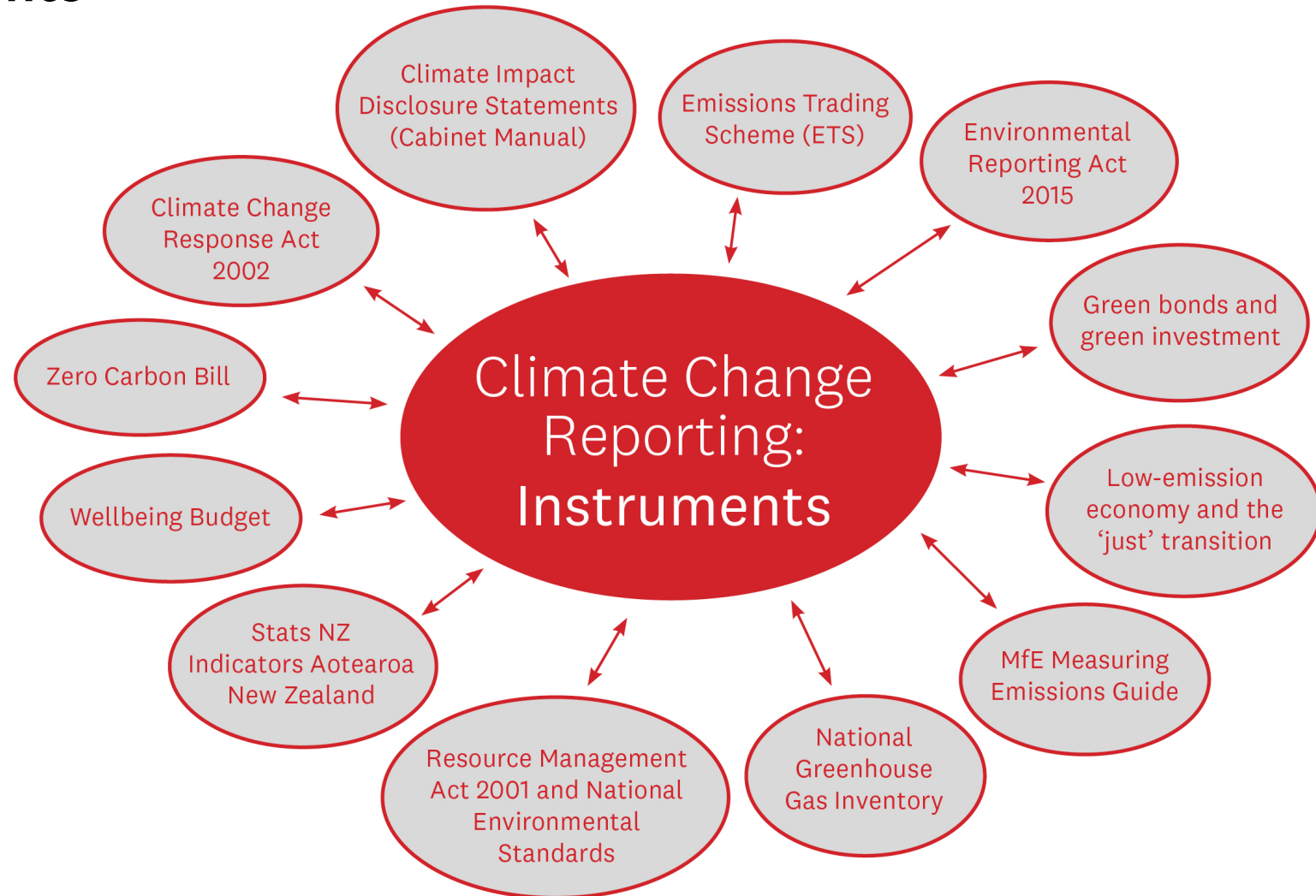


Source: *Vulnerable: the quantum of local government infrastructure exposed to sea level rise* (Simonson & Hall, 2019)

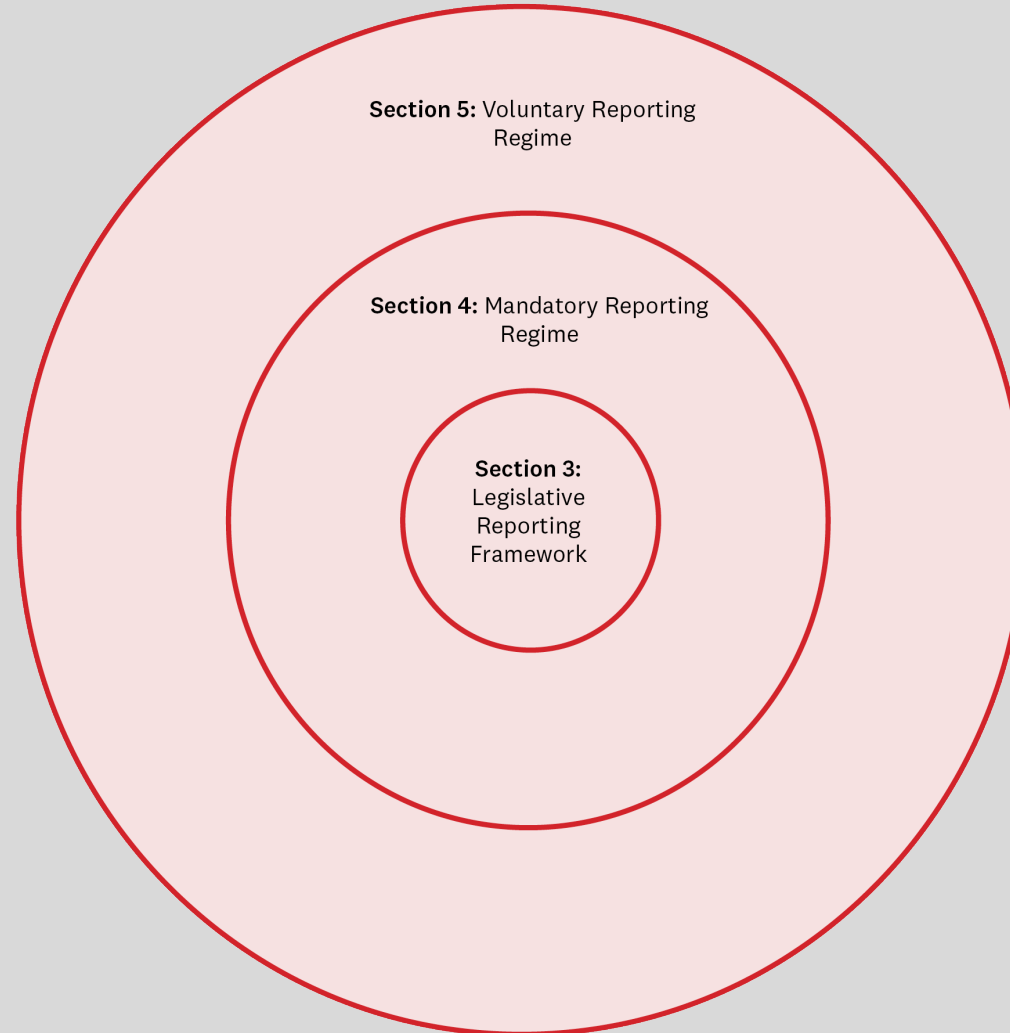
# Map of New Zealand climate reporting institutions



# Map of New Zealand climate reporting instruments



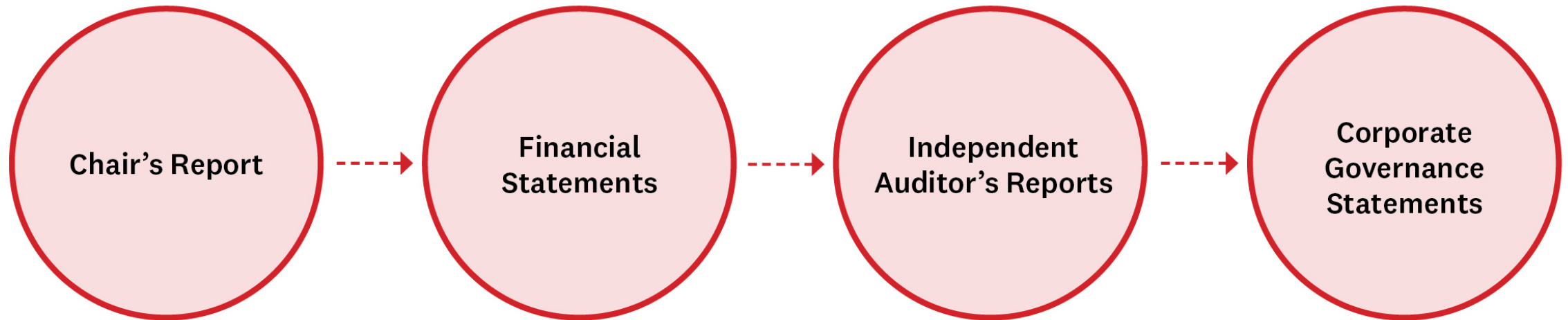
## Part 2: The Existing Reporting Regime



# Annual Reports



## Method of Analysis: Four key components of an annual report



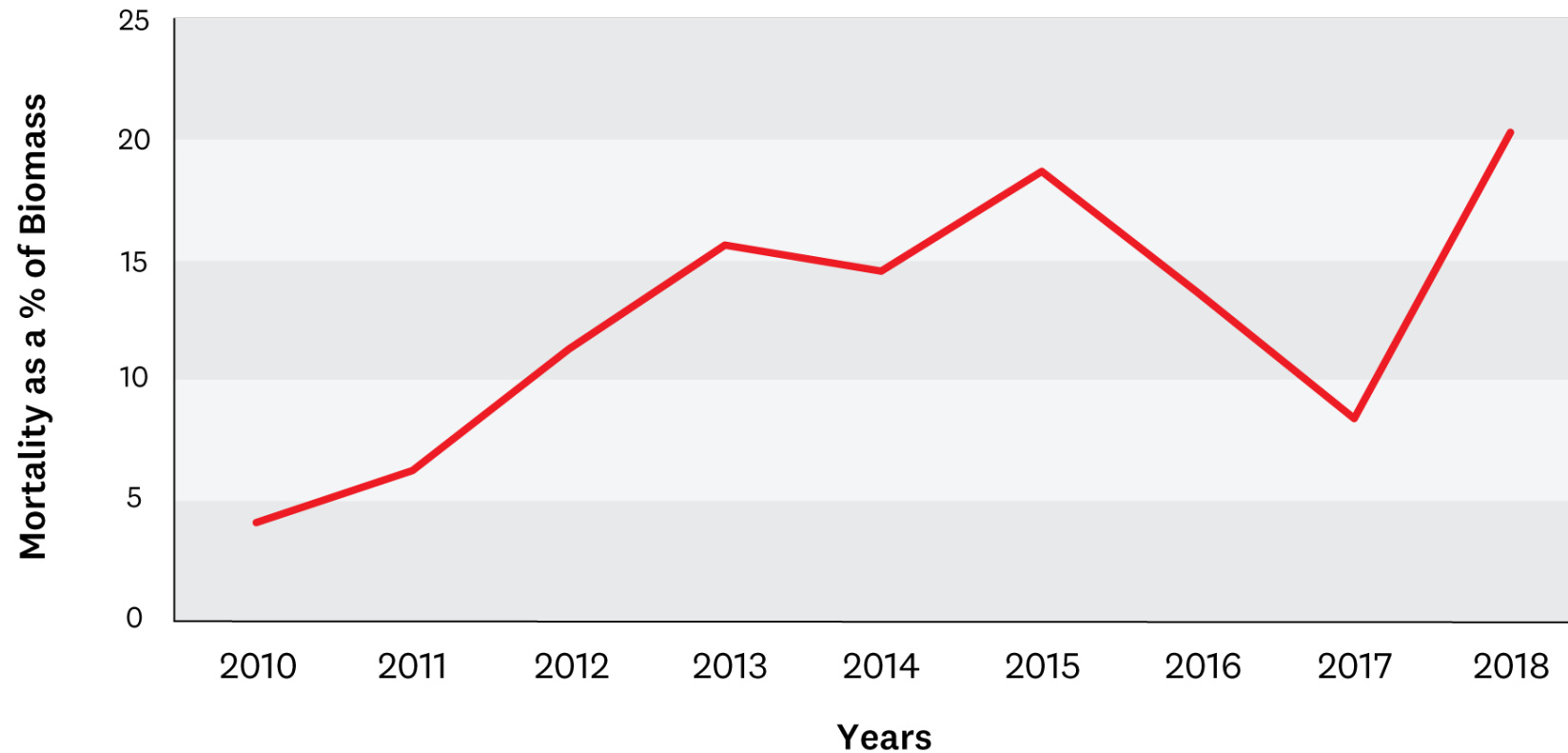


# Case Study 1: Z Energy's Greenhouse Gas Emissions

Greenhouse gas emissions	FY19	Calendar year 2017 (base year)
Scope 1 - Z offices and retail sites	3,837	3,907
Scope 2 - Z offices and retail sites	4,195	4,045
Scope 3 - Z offices and retail sites	4,495	3,339
Scope 3 - New Zealand supply chain	37,910	40,031
Scope 3 - Share of refinery	555,892	634,848
Scope 3 - Rest of supply	902,215	807,542
Scope 3 - Z product emissions from our customers	11,640,509	9,488,277
<b>Total emissions</b>	<b>13,149,051</b>	<b>10,981,989</b>

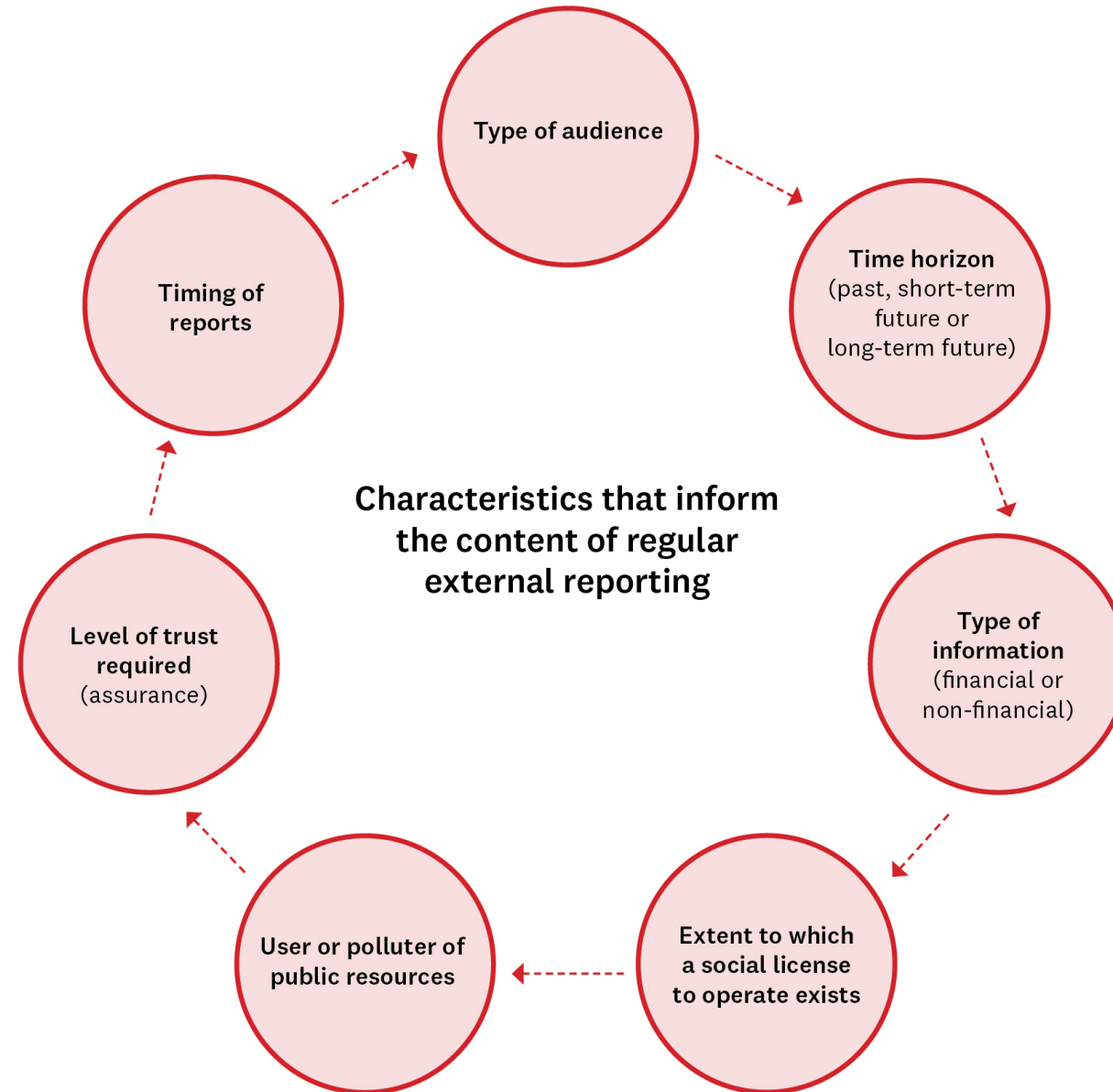
Source: See You Soon: Z Energy Annual Report 2019 (Z Energy, 2019)

## Case Study 2: NZKS's Premature Mortality as a Percentage of Biomass

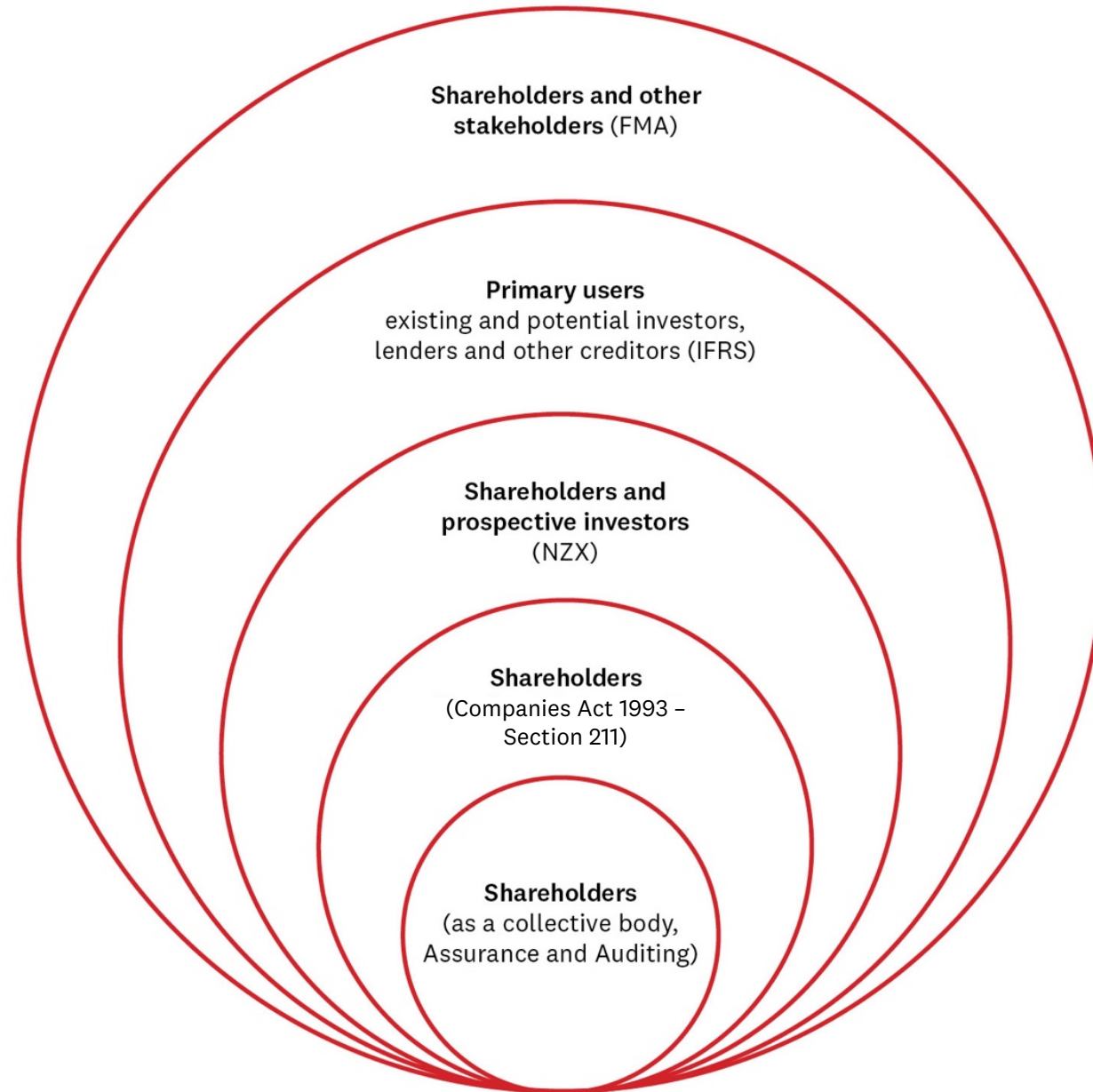


*Source: New Zealand King Salmon's Prospective Financial Information, a reconciliation of non-GAAP to GAAP information and supplementary financial information (NZKS, 2016), Enabling Growth: Annual Report FY17 (NZKS, 2017), Big Ideas Start Here: Annual Report 2018 (NZKS, 2018)*

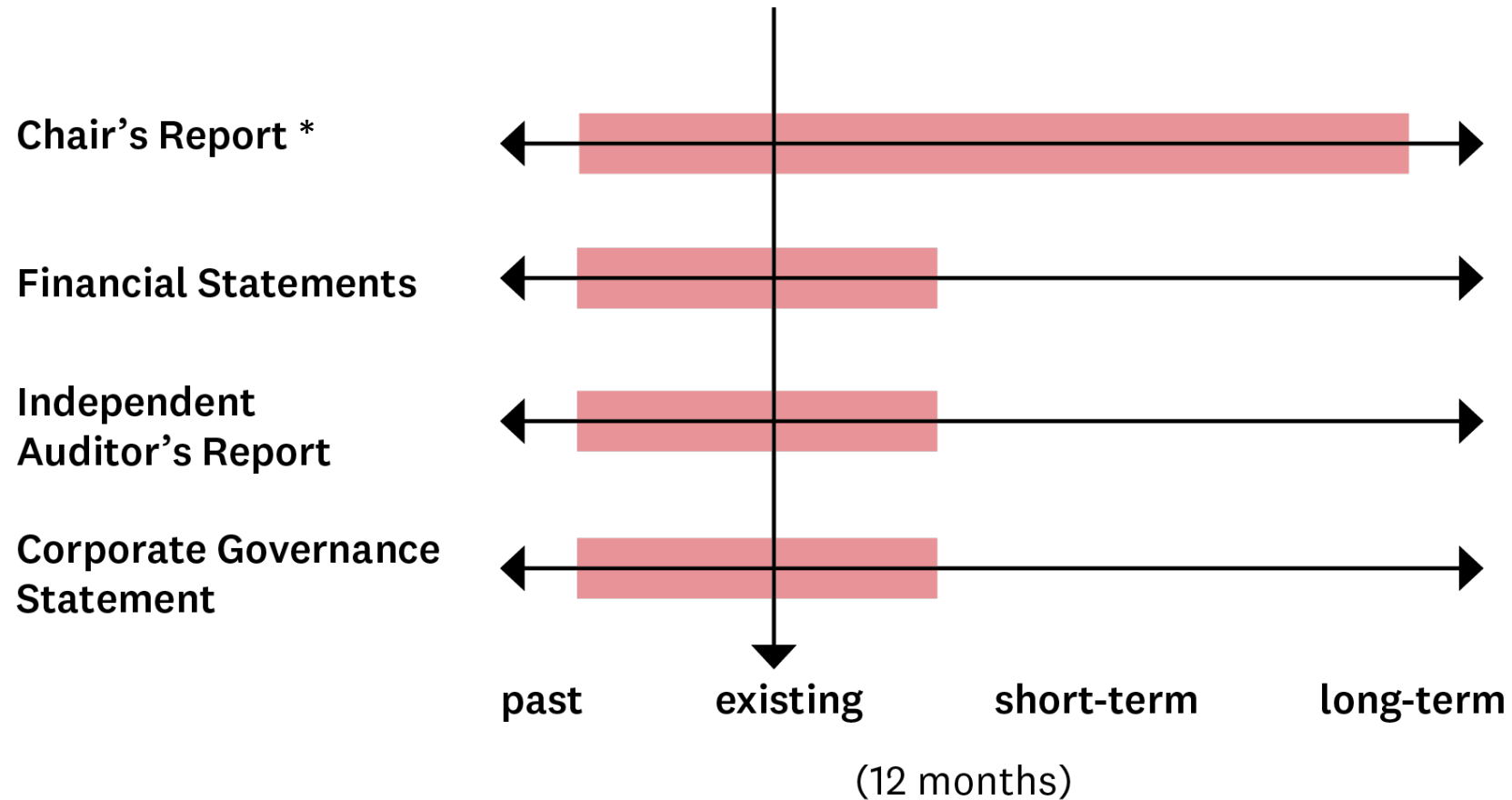
# Reporting Characteristics



# Finding 1: Many types of audiences in New Zealand's regulatory regime



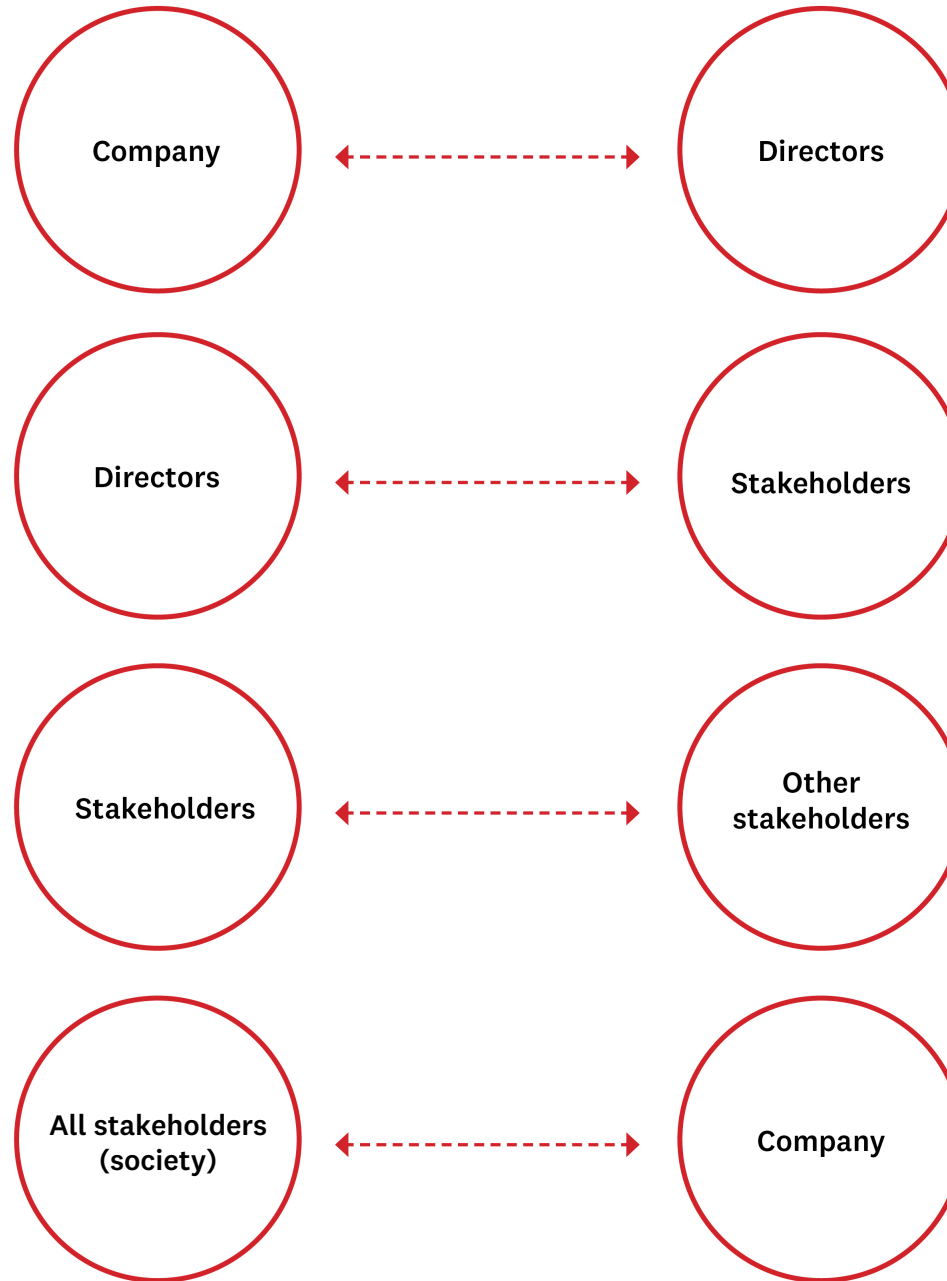
## Finding 2: Horizons tend to be short-term



\*Note: No requirement or guidance was found relating to the content of the Chair's Report.

# Finding 3: Tensions exist beyond the primary user

Adapted from 'The conflict of interest faced by board directors' (Cossin & Lu, 2017)



## Finding 4: Minimal uptake of TCFD

### Entities that mentioned TCFD in their 2017 and 2018 annual reports

Entity name	Entity type	2017 (out of 542* entities)	2018 (out of 538* entities)
Air New Zealand Limited [AIR]	NZX-listed & Top 200		✓
AMP Limited [AMP]	NZX-listed & Top 200		✓
Contact Energy Limited [CEN]#	NZX-listed & Top 200		✓
Downer EDI Group Limited [DOW]#	NZX-listed & Top 200		✓
Guardians of New Zealand Superannuation	Crown entity	✓	✓
Meridian Energy Limited [MEL]	NZX-listed & Top 200		✓
Vector Limited [VCT]	NZX-listed & Top 200		✓
Westpac Banking Corporation [WBC]#	NZX-listed	✓	✓
<b>Total</b>		<b>2</b>	<b>8</b>

#### Notes:

\* These figures include some double counting of entities that fit under more than one of the eight data sets of different entity types (e.g. companies that are listed on both NZX Main Board and the Deloitte Top 200). They also include entities for which an annual report could not be located.

# These three entities are listed as ‘TCFD supporters’ at [www.fsb-tcfid.org/tcfid-supporters](http://www.fsb-tcfid.org/tcfid-supporters).

Source: Working Paper 2019/05 – Reviewing Voluntary Reporting Frameworks Mentioned in 2017 and 2018 Annual Reports (McGuinness Institute, 2019)

# Finding 5: Z Energy's Climate Change Statement

Source: See You Soon: Z Energy Annual Report 2019 (Z Energy, 2019)



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#### About this report

This is our third integrated report as defined by the Integrated Reporting <IR> Framework. It covers the financial year 1 April 2018 to 31 March 2019 and focuses on the following <IR> capitals: people and culture, capability, environment, assets, our place in New Zealand, and finances. We also use the Global Reporting Initiative (GRI) Standards: Core option.

We continue to report on remuneration and corporate governance more broadly than required in response to shareholder requests for greater transparency around how we operate and how we reward our people. We have been guided by the New Zealand Shareholders Association CEO Remuneration Reporting Framework in this area.

Finally, in consultation with policy think tank the McGuinness Institute, we have chosen for the first time to include a Climate Change Statement that gives an overview of our approach to managing and reporting on climate change risks. The McGuinness Institute believes that all listed issuers should report on climate change in a standardised and comparable way. We support this, so we have used its recommended framework in our report.

This document, in conjunction with Z Energy's Corporate Governance Statement 2019, constitutes the 2019 Annual Report to shareholders of Z Energy Limited. It complies with the NZX Corporate Governance Code and the NZX Environmental, Social and Governance Guidance Note.



## Environmental Sustainability

### Our Climate Change Statement

Our Environmental Sustainability stand commits us to three outcomes with targets to achieve by 2020. We are making good progress against many of the targets, although some are proving more challenging than others. A summary is set out at right. Full details on our targets are available at [z.co.nz](http://z.co.nz).

**Key**

- We are on track and doing well
- We've made some good progress, but we need to do more
- We are not on track and need to do more

Outcome	Actions	Status
<b>Use less and waste less in our operations</b>		
<b>Reduce carbon emissions</b>	Operational and New Zealand supply chain emissions decreased due to lower emissions in Supply, for example in coastal shipping and ground freight of fuel to our sites. We voluntarily offset 58,000tCO2e this year to cover our operational emissions, including those from corporate travel, retail electricity, coastal shipping and hauliers.	<span style="color: green;">●</span>
<b>Reduce waste to landfill</b>	We measure and manage our waste. As a proportion of waste, landfill volumes increased this year.	<span style="color: red;">●</span>
<b>Reduce electricity use</b>	Electricity consumption is measured across our offices and retail network. This year electricity consumption decreased at our retail sites.	<span style="color: green;">●</span>
<b>Making purchasing decisions that support sustainability</b>		
<b>Supply chain</b>	Our supplier Code of Conduct is being used for procurement decisions and contracts for major suppliers, including for ground fleet distribution of fuel and refined imported products.	<span style="color: green;">●</span>
	Our minimum energy standard for shipping was implemented, increasing the use of the most energy efficient ships.	
<b>Customers reduce fossil fuel use</b>	Biodiesel production is underway (500,000+ litres B100 in FY19) and we are focusing on ramping up production and rolling out delivery to our customers.	<span style="color: orange;">●</span>
<b>Lower-carbon products and services</b>	Our investment in climate-positive car sharing company Mevo is consistent with a pathway to the future of mobility we foresee. The Mevo team have established a strong presence in the Wellington market and are well positioned to grow the unique free-floating car sharing product with both consumers and businesses, with its registered members up by more than 340% and monthly trips up by more than 270%.	<span style="color: green;">●</span>

“ We stand for an environmentally sustainable New Zealand that is an example to the rest of the world and an inspiration to Kiwis. Z will move from being a part of the climate change problem to the heart of the solution.

We will be bold and provide leadership and a range of solutions to enable our customers, stakeholders and communities to join us on the journey to a lower carbon future. ”

Key

- We are on track and doing well
- We've made some good progress, but we need to do more
- We are not on track and need to do more

Outcome	Actions	Status
<b>Enable others to reduce their impact</b>		
<b>Customers experience emerging transport technologies</b>	A social media campaign allowed customers to try EVs in Wellington. The Z network contains eight EV charging sites, providing around 12,000 charges in the past year. Our Z Vivian Street site is one of the most used EV charging points in New Zealand.	<span style="color: green;">●</span>
<b>Carbon offsets</b>	We are actively looking at ways to enable customers to purchase carbon offsets online and we continue to look actively at ways to make this service available to all customers.	<span style="color: orange;">●</span>
<b>Partnerships for low-emission economy</b>	We continued to develop our association with Trees That Count. In this year's season, Z supported 30 planters establishing more than 20,000 trees. Z also joined forces with Air New Zealand, Contact Energy and Genesis Energy to form Dryland Carbon to accelerate afforestation and planting in New Zealand for carbon sequestration. See the next page for more details on Dryland Carbon.	<span style="color: green;">●</span>
<b>Local permanent forest providers</b>	We are the largest single purchaser of voluntary carbon credits in New Zealand, partnering with Permanent Forests NZ. At an average cost of around \$25 per tonne, this comes to an annual cost of about \$1.5 million per year. The credits are created through the protection and covenanting of domestic forestry projects — these are a mixture of exotics (blackwoods, eucalypts and pine) and native trees (mānuka, kānuka and tōtara).	<span style="color: green;">●</span>
<b>Policy</b>	We were a founder and convener of the Climate Leaders Coalition, a collaboration of major businesses in New Zealand with 86 signatories representing over 50 percent of this country's emissions. The coalition was described as “globally significant” by Chris Stark, CEO, United Kingdom Committee on Climate Change. No other country has managed to do this. The initiative is in alignment with the thinking of global investors like BlackRock and is a key part of using our leadership position and those of others to influence New Zealand business overall.	<span style="color: green;">●</span>

### Measuring our emissions

We have been measuring our emissions since 2012, but reset our base year to FY17 following the acquisition of Caltex. We follow the principles of the Greenhouse Gas Protocol to measure our greenhouse gas emissions. We measure direct emissions, such as those from the vehicles we own, and indirect emissions, such as the electricity we consume, travel and waste, our Z retail sites and Caltex operations. We include emissions across the entire supply chain and from the products we sell. Emissions from Flick are not included. Information on the greenhouse gas emissions profile of Flick is available at [FlickElectric.co.nz](http://FlickElectric.co.nz).

While Z continues to focus on lowering operational emissions we are also committed to reducing indirect emissions from our customers through greater production of biodiesel and supporting the growth of EV use in New Zealand.

### Greenhouse gas emissions

	FY19	Calendar year 2017 (base year)
Scope 1 — Z offices and retail sites	3,837	3,907
Scope 2 — Z offices and retail sites	4,195	4,045
Scope 3 — Z offices and retail sites	4,495	3,339
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Scope 3 — Rest of supply	902,215	807,542
Scope 3 — Z product emissions from our customers	11,640,509	9,488,277
<b>Total emissions</b>	<b>13,149,051</b>	10,981,989

We also have a liability under Liquid Fossil Fuels in the New Zealand Emissions Trading Scheme (ETS). We surrendered five million units for obligations in the 2018 calendar year. See [note 13](#) in the financial statements.

Z invested in a long-term carbon farming and afforestation partnership to produce a stable supply of forestry-generated New Zealand Unit (NZU) carbon credits to help Z meet a portion of its ETS surrender obligation. Z will participate as a limited partner, contributing capital in an initial five-year period (subject to certain pre-agreed investment criteria/hurdles being met), but we will not be involved in the day-to-day operations of Dryland Carbon.

**Climate change risks**

Forecasting future demand for fossil fuels becomes more complex when considering technology developments that may emerge over time. We use the BusinessNZ Energy Council scenarios as outlined on page 46 of this report.

As a company selling around 45 percent of New Zealand’s total transport fuel; or put another way, primarily through the products we sell, nine percent of New Zealand’s total emissions, Z is at risk from both the transition to a low-carbon economy and the

physical impacts of climate change. However, as a downstream energy company, with no exposure to upstream drilling and extraction operations, we are well-placed to manage the change to a low-carbon economy.

There are also valuable opportunities to transition the company from fossil fuels to a low-carbon future and to do it in a way that’s good for all our stakeholders.

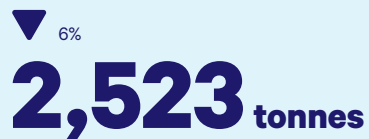
We’ve been more deliberate in linking our overall risk profile to our direct and indirect exposure to climate change risks. With climate change

being one of the material issues we focus on, we are working on the impact of, and adaptation to, climate change risks for Z. Our Sustainability team recently merged with the Strategy and Risk team in order to respond to these risks more deliberately.

Close to half the material topics we’ve reported on this year relate to management of our climate change risks. These topics are: Flick purchase, renewable energy, VUCA future, responsible consumption and production, climate action, increased regulation, supply chain resilience, ethical procurement and brand value. These topics are interrelated.

We manage risks associated with these topics to reduce the negative impacts on our capitals (our assets, our finances, our capability, our people and culture, our environment, and our place in New Zealand).

**Waste measures**



Recycling — cardboard and paper

FY18: 2,681 tonnes



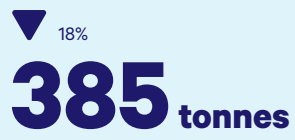
Recycling — plastics, cans and glass

FY18: 1,250 tonnes



Total waste

FY18: 6,554 tonnes



Composting and organics

FY18: 471 tonnes



Waste to landfill

FY18: 2,142 tonnes

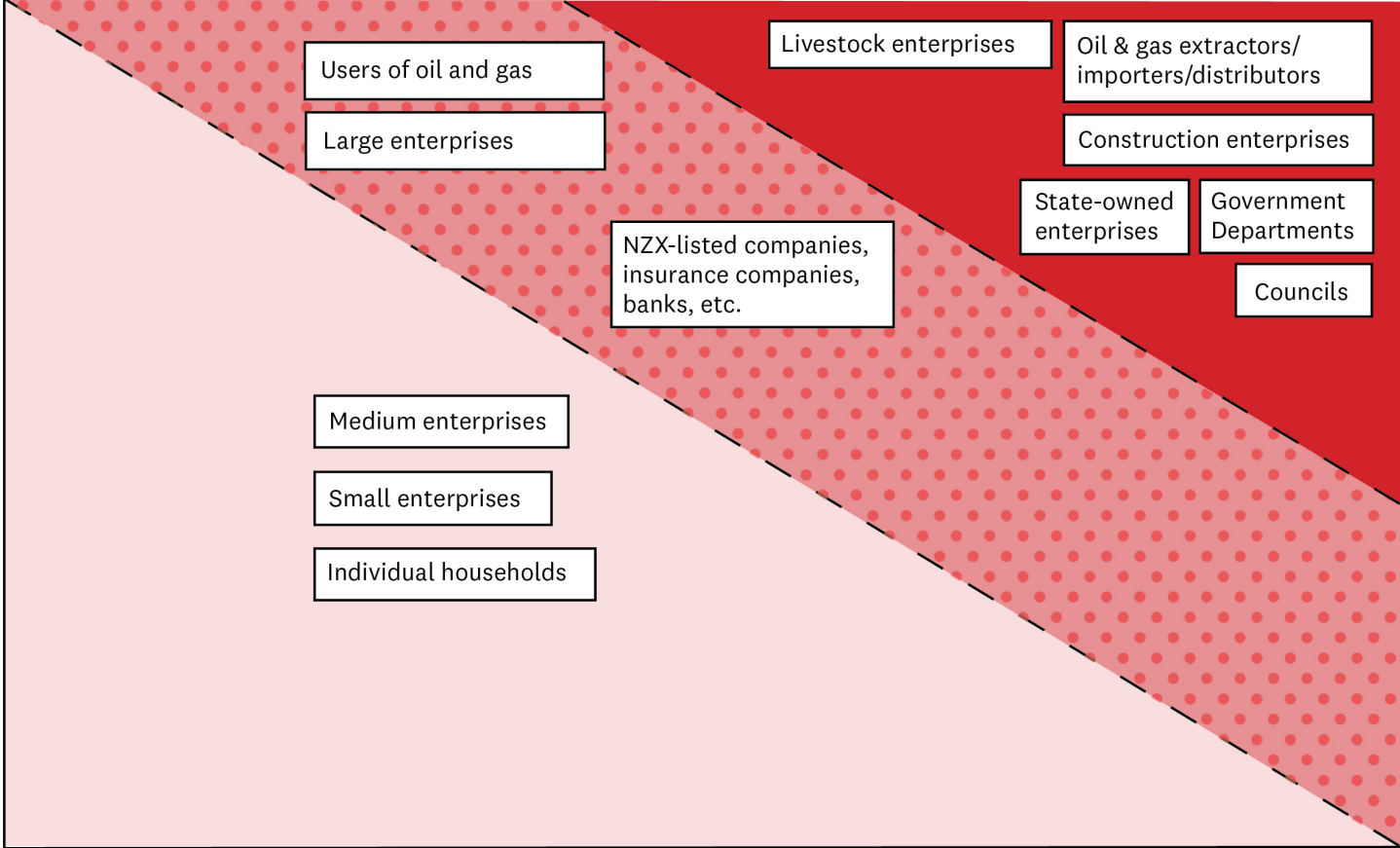
These waste figures are estimated based on actual volumes from 70% of retail sites.

# Finding 6: Climate reporting requires an overarching solution for all entities

## Who Should Report and Why?

Entities that have a **high impact** on New Zealand's transition to net-zero emissions by 2050 (mitigation)

Entities that have a **low impact** on New Zealand's transition to net-zero emissions by 2050 (mitigation)



Entities that have a **low impact** on New Zealand's adaptation to climate change (adaptation)

Entities that have a **high impact** on New Zealand's adaptation to climate change (adaptation)

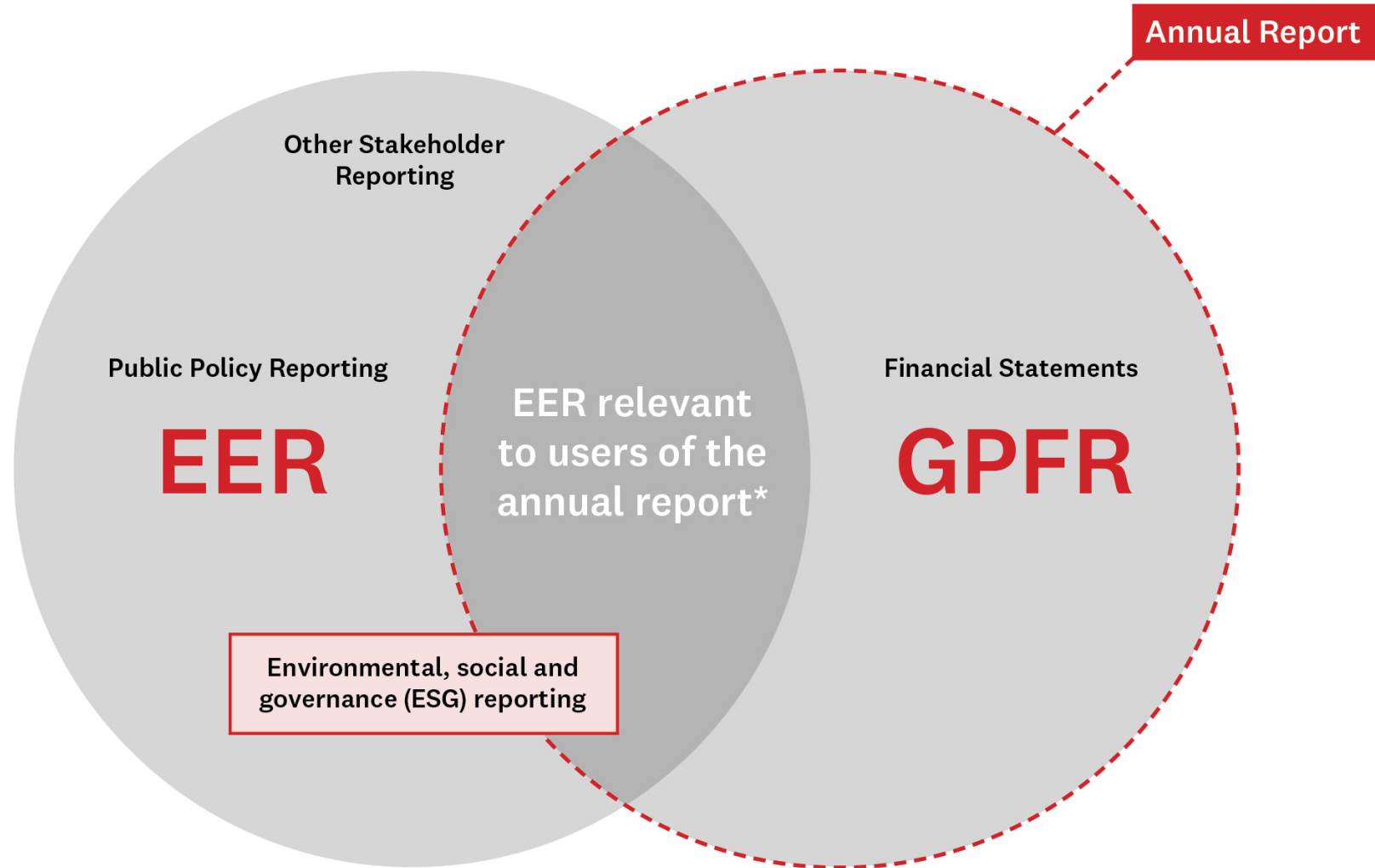
Zone 1: Voluntary

Zone 2: Comply or explain

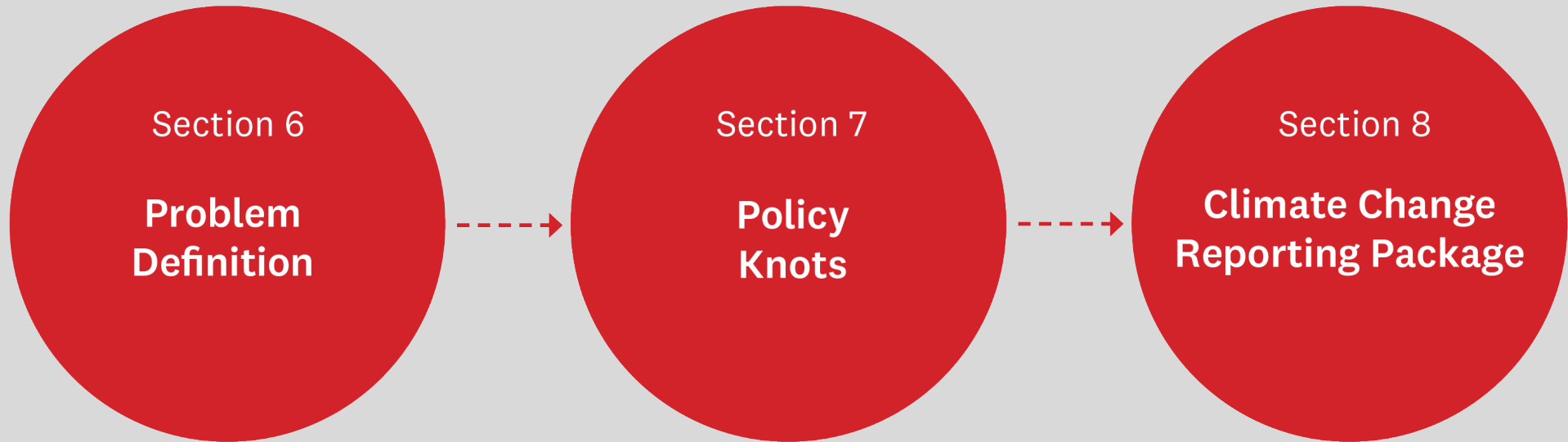
Zone 3: Mandatory

# Finding 7: EER may be part of the solution

XRB stance on where information should be reported



## Part 3: Designing the Solution



## Policy knots (Section 7)

- 7.1 How can we obtain the appropriate information to develop a climate strategy and then monitor its progress?
- 7.2 How can we break down climate risks into useful and measurable components?
- 7.3 How can we fund the transition to a low-emissions economy and ensure polluters pay (e.g. revisiting carbon tax)?
- 7.4 How can we move beyond the 'primary user' and redefine the 'user' to include broader stakeholders?
- 7.5 How can we ensure that reports are accessible, accurate, comparable and meaningful?
- 7.6 How can we direct preparers and users to apply the best voluntary reporting frameworks?



**7.7** How can we ensure consistent application of key terms such as ‘materiality’?

**7.8** How can we ensure companies feel safe in making transparent disclosures (e.g. safe harbour provisions)?

**7.9** How can we embed ESG reporting as best practice?

**7.10** How can we ensure that the burden of physical climate risk does not fall primarily on local government?

**7.11** How can we manage the tension between energy security and renewables in the transition to a low-emissions economy?

**7.12** How can we ensure that the cost of carbon is factored into national decisions?

**7.13** How can we ensure the transition remains ‘just’ for those who initiated climate action sooner?

# Policy Knot (example)

7.1 How can we obtain the appropriate information to develop a climate strategy and then monitor its progress?

See New Zealand's existing climate strategy landscape



# Proposed design

## Goal 1: Improve the quality and accessibility of climate-specific information

### Method:

- Develop an integrated reporting framework that applies to all entities as either mandatory, comply or explain, or voluntary, as appropriate (see earlier slide ‘Who should report and why?’ for a tentative outline).
- Require a *Statement of Climate Change Information* to be included in the annual report (similar to Z Energy’s *Climate Change Statement*):
  - Amend s 211 of the Companies Act 1993 to require the inclusion of a *Statement of Climate Change Information* in the annual report (other legislation to be amended, as needed, to introduce the requirement for other entity types). Ideally a maximum length of four pages to ensure conciseness.
  - Content to be divided into risk identification (i.e. by using scenarios and developing priorities), risk measurement (i.e. including *GHG Protocol* scopes) and risk management (i.e. the entity’s strategy).
  - Statement to be signed by the Chair.
  - XRB to issue a standard on *Climate Change Information* followed by an assurance standard using the provisions under s 17 of the Financial Reporting Act 2013.
- Amend s 211 of the Companies Act 1993 to require a *Corporate Governance Statement* to be included in the annual report (using the *FMA Handbook*).
- File annual reports with the Companies Office for all entities required by law to file financial statements (our research indicates over 70% of NZX companies already file annual reports when they file financial statements).
- Treasury to prepare a Consolidated Annual Report for Government, including the above statements.

# Proposed design

## Goal 2: Ensure that Boards consider stakeholders and are future focused

### Method:

- Remove the requirement in the *NZX Listing Rules* to produce half-year reports to reduce short-termism and free up management to focus on long-term thinking.
- Amend s 211 (1) of the Companies Act 1993 to require a Chair's report to:
  - Be from the Board of Directors only (i.e. not jointly signed with the CEO). This is to ensure the lines of accountability are clear and to keep governance/strategic matters distinct from operational matters.
  - Require the Board to be strategic and consider long-term risks, opportunities and impacts.
  - Require the Board to consider scenarios. For example, climate change scenarios will assist Boards in identifying, measuring and managing risks and improving their preparedness for a range of eventualities. This will capture risks that are not currently material (i.e. not currently in the financial statements) but are likely to become material in the longer term (i.e. in which case they will be included in the financial statements) (see Goal 1).
- Amend s 211 of the Companies Act 1993 to require the inclusion of a strategic report in the annual report and outline its key contents (similar to the UK Companies Act). XRB (or the FMA) to prepare and issue a standard/guidance outlining specific content requirements (NB: XRB has the widest remit).
- Amend s 137 of the Companies Act 1993 to require the Director's duty of care to be strengthened to include a duty of care to stakeholders and a duty to be future focussed.

# Proposed design

## Goal 3: Close the disclosure gap between the needs of shareholders, primary users and other stakeholders

### Method:

- The audience of the annual report to include stakeholders more broadly, rather than shareholders or primary users (investors, creditors, etc.).
  - Amend s 211 (1) of the Companies Act to replace shareholders with stakeholders. This will clarify the role of the Chair's report (our early research indicates the audience of the Chair's report is already stakeholder focused).
  - *NZX Code* to require disclosure of the impacts of the company on its broader stakeholders. This would be more in line with the current consideration of stakeholder interests required in Principle 9 of the *FMA Corporate Governance Handbook*.
  - For greater consistency, the *NZX Code* and *FMA Handbook* could be jointly revised and published in order to improve alignment.
- XRB to provide climate-related disclosure standards/guidelines based on the *IASB Practice Statement 2 Making Materiality Judgements*.
- Require a *Statement of Climate Change Information* to be included in the annual report (see Goal 1).
- Preparers to ensure that all related risks (financial and non-financial) are appropriately grouped in the notes to the financial statements (this is implied in accounting standards but could be better applied in practice).
- Extend the relevant period to at least 5 years from the date of the auditor's current report (currently 12 months). See ISA (NZ) 570, Para NZ13.2.

Thank you



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