



# CLIMATE TRANSPARENCY REPORT 2019

New Zealand Superannuation Fund

# About the Climate-related Disclosure Indicators

Climate has been identified as a top priority for PRI signatories, with over 70% of asset owners reporting this as the most important long-term trend they are acting on.

The FSB Task Force's guidance on climate-related financial disclosure aim to create a single framework for disclosure on assessment and management of climate-related risk. The recommendations, supported by investors representing US\$22 trillion, identify four main disclosures, Governance, Strategy, Risk Management, Metrics and Targets, and include specific guidance for asset owners and managers.

As a result, the PRI introduced climate-related disclosure indicators that can be used to align with the TCFD recommendations in the 2019 PRI Reporting Framework.

## About this report

This report is an export of only the climate-related indicators from the 2019 Reporting Framework response. The full Public Transparency Report is available here ([https://reporting.unpri.org/surveys/PRI-reporting-framework-2019/-93F44B54-5181-48AA-AD7A-E7C1AEACE40A/00000000-0000-0000-0000-000000000000/doc/2/-%7C%7C\\*complete\\*%7C\\*public\\*/Merged/](https://reporting.unpri.org/surveys/PRI-reporting-framework-2019/-93F44B54-5181-48AA-AD7A-E7C1AEACE40A/00000000-0000-0000-0000-000000000000/doc/2/-%7C%7C*complete*%7C*public*/Merged/)). It shows the responses to all the completed climate indicators, even those you chose to keep private. It is designed for your internal review or – if you wish - to share with your stakeholders.

The PRI will not publish this report on its website if you have designated your 2019 climate reporting as “private”. Otherwise, you will be able to access the Climate Transparency Report of your organisation and that of other signatories on the [PRI website](#) and on the [Data Portal](#).

To easily locate information, there is a **Recommendation index** which summarises the indicators that signatories complete and disclose. The report presents information exactly as it was reported as per signatory preference. Where an indicator offers a response option that is multiple-choice, all options that were available to the signatory are presented in this report.

## TCFD Recommendations Index

Strategy and Governance - CC			TCFD Recommendation			
Indicator	Reported	Disclosure	Governance	Strategy	Risk Management	Metrics & Targets
SG 01.1	✓	Public				
SG 01.2	✓	Public				
SG 01.3	✓	Public				
SG 01.4	✓	Public				
SG 01.5	✓	Public				
SG 01.6 CC	✓	Public				
SG 01.7 CC	✓	Public				
SG 01.8 CC	✓	Public				
SG 01.9 CC	✓	Public				
SG 01.10 CC	✓	Public				
SG 01.11 CC	-	Public				
SG 01.12 CC	✓	Public				
SG 02.2	✓	Public				
SG 07.5 CC	✓	Public				
SG 07.6 CC	✓	Public				
SG 07.7 CC	✓	Public				
SG 07.8 CC	✓	Public				
SG 13.1	✓	Public				
SG 13.2	✓	Public				
SG 13.4 CC	✓	Public				
SG 13.5 CC	✓	Public				
SG 13.6 CC	✓	Public				
SG 13.7 CC	✓	Public				
SG 13.8 CC	✓	Public				
SG 14.1	✓	Public				
SG 14.2	✓	Public				
SG 14.3	✓	Public				
SG 14.4	✓	Public				
SG 14.5	✓	Public				
SG 14.6 CC	✓	Public				
SG 14.7 CC	✓	Public				
SG 14.8 CC	✓	Public				
SG 14.9 CC	✓	Public				
SG 15.1	✓	Public				
SG 15.2	✓	Public				
SG 15.3	✓	Public				

Symbol	Status
✓	The signatory has completed this sub-indicator
-	The signatory did not complete this sub-indicator.
	This indicator is relevant to the named TCFD recommendation
Within the first column "Indicator", indicators marked in blue are mandatory to complete. Indicators marked in grey are voluntary to complete.	

# ORGANISATIONAL OVERVIEW

This section provides an overview of your organisation. These characteristics are used to define your peer groups.

## MAIN CHARACTERISTICS

<b>Name</b>	New Zealand Superannuation Fund
<b>Signatory Category</b>	Reserve - sovereign or government controlled fund
<b>Signatory Type</b>	Asset Owner
<b>Size</b>	US\$ 10 - 29.99 billion AUM
<b>Main Asset Class</b>	>50% Listed Equity Externally Managed
<b>Signed PRI Initiative</b>	2006
<b>Region</b>	Oceania
<b>Country</b>	New Zealand
<b>Disclosure of Voluntary Indicators</b>	39% from 38 Voluntary indicators

# New Zealand Superannuation Fund

## Reported Information

### Public version

### Strategy and Governance

## PRI disclaimer

This document presents information reported directly by signatories. This information has not been audited by the PRI Secretariat or any other party acting on their behalf. While this information is believed to be reliable, no representations or warranties are made as to the accuracy of the information presented, and no responsibility or liability can be accepted for any error or omission.

## Investment policy

SG 01

Mandatory

Public

Core Assessed

General

**New selection options have been added to this indicator. Please review your prefilled responses carefully.**

SG 01.1

Indicate if you have an investment policy that covers your responsible investment approach.

Yes

SG 01.2

Indicate the components/types and coverage of your policy.

Select all that apply

Policy components/types	Coverage by AUM
<input checked="" type="checkbox"/> Policy setting out your overall approach <input checked="" type="checkbox"/> Formalised guidelines on environmental factors <input checked="" type="checkbox"/> Formalised guidelines on social factors <input checked="" type="checkbox"/> Formalised guidelines on corporate governance factors <input checked="" type="checkbox"/> Fiduciary (or equivalent) duties <input checked="" type="checkbox"/> Asset class-specific RI guidelines <input type="checkbox"/> Sector specific RI guidelines <input checked="" type="checkbox"/> Screening / exclusions policy <input checked="" type="checkbox"/> Engagement policy <input checked="" type="checkbox"/> (Proxy) voting policy <input type="checkbox"/> Other, specify (1) <input type="checkbox"/> Other, specify(2)	<input checked="" type="radio"/> Applicable policies cover all AUM <input type="radio"/> Applicable policies cover a majority of AUM <input type="radio"/> Applicable policies cover a minority of AUM

**SG 01.3**

Indicate if the investment policy covers any of the following

- Your organisation's definition of ESG and/or responsible investment and it's relation to investments
- Your investment objectives that take ESG factors/real economy influence into account
- Time horizon of your investment
- Governance structure of organisational ESG responsibilities
- ESG incorporation approaches
- Active ownership approaches
- Reporting
- Climate change
- Understanding and incorporating client / beneficiary sustainability preferences
- Other RI considerations, specify (1)
- Other RI considerations, specify (2)

**SG 01.4**

Describe your organisation's investment principles and overall investment strategy, interpretation of fiduciary (or equivalent) duties, and how they consider ESG factors and real economy impact.

Our investment beliefs are a key driver of our investment decisions. One of our investment beliefs is: "Responsible investors must have concern for environmental, social and governance factors because they are material to long-term returns." Our investment beliefs can be viewed on our website here: <https://www.nzsuperfund.co.nz/how-we-invest/beliefs>.

Our approach to investing can also be viewed on our website here: <https://www.nzsuperfund.co.nz/how-we-invest>.

Our approach to Responsible Investment (RI) is governed by our Statement of Investment Policies, Standards and Procedures (SIPSP) which can be found on our public website here: [https://www.nzsuperfund.nz/sites/default/files/documents-sys/Statement\\_of\\_Investment\\_Policies\\_\\_Standards\\_and\\_Procedures.pdf](https://www.nzsuperfund.nz/sites/default/files/documents-sys/Statement_of_Investment_Policies__Standards_and_Procedures.pdf)

The SIPSP includes a specific section on Responsible Investment, which states our policy, standards and procedures as they relate to responsible investment. It defines RI activities and embeds the RI Framework as the process for implementation. The RI Framework is also available on our website: <https://www.nzsuperfund.nz/sites/default/files/documents-sys/Responsible%20Investment%20Framework.pdf>

Our Board has overall responsibility for the SIPSP and RI Framework.

Our RI work is integrated across our investment activities. For example, understanding ESG issues is an important part of our risk assessment and due diligence on prospective individual investments.

**SG 01.5**

Provide a brief description of the key elements, any variations or exceptions to your investment policy that covers your responsible investment approach. [Optional]

As part of our RI policy, our exclusion policy applies to our investment portfolio.

We endeavour to apply exclusions to Collective Investment Vehicles (CIVs), to the extent this is feasible and commercially prudent. CIVs are evaluated on a case-by-case basis. The potential for indirect exposure to excluded securities through CIVs is factored into the selection of access points. Therefore, at minimum, there is some form of ESG incorporation across the entire portfolio.

Currently we have one pooled hedge fund where we are unable to legally impose our exclusions as it services multiple other investors. In practice, however, given the nature of the mandate, we are satisfied that likelihood of any breach of our exclusion policy is very low. The manager that runs this funds are still subject to our RI review and rating process.

No



I confirm I have read and understood the Accountability tab for SG 01

I confirm I have read and understood the Accountability tab for SG 01

SG 01 CC	Voluntary	Public	Descriptive	General
----------	-----------	--------	-------------	---------

<b>SG 01.6 CC</b>	Indicate the climate-related risks and opportunities that have been identified and factored into the investment strategies and products, within the organisation's investment time horizon.
-----------------------	---

Our Climate Change Investment Strategy (CCIS) has 4 pillars: Reduce, Analyse, Engage and Search. Broadly, the identification of climate-related risks and opportunities comes under the 'Analyse' and "Search" pillars. More information on our CCIS can be found here: <https://www.nzsuperfund.nz/how-we-invest-balancing-risk-and-return-climate-change/climate-change-strategy>.

On current NZ Treasury projections the Fund will not peak in size as a percentage of GDP, until the 2070s. The first withdrawals from the Fund are not scheduled until 2032/33. This makes us one of a very few genuine long-term investors globally. Further information can be found here: <https://www.nzsuperfund.nz/how-we-invest-endowments/long-term-investing>. Given the Fund's long-term horizon and purpose, it is important that the risks and opportunities stemming from climate change are factored into our investment strategies and ownership practices. The goal of our CCIS is to make the Fund more resilient to climate-related risk. We believe it will improve our portfolio.

In order to determine climate related risks per investment, we have developed a 'Climate Change Valuation Framework' to help us understand and assess the risks in a consistent manner across the Fund. The framework uses a lens to assist in assessing first and second order climate change risks and opportunities. Investment professionals refer to the framework when evaluating new investment opportunities as well as when reviewing existing investments. Climate related risks and opportunities are different for every investment and depend on many considerations. However we categorise the different risks and opportunities assessed under the following headings: Technology, Resource Availability, Impact of Physical Damages, Policy, Demand & Supply and Liability.

The 'Search' pillar of our CCIS introduced a focus on seeking investment opportunities that benefit from a low-carbon transition or provide solutions for action on climate change. The Guardians has a well established strategy on Alternative Energy opportunities which is part of our risk budget (asset allocation) process.

<b>SG 01.7 CC</b>	Indicate whether the organisation has assessed the likelihood and impact of these climate risks?
-----------------------	--

Yes

<b>SG 01.8 CC</b>	Indicate the associated timescales linked to these risks and opportunities.
-----------------------	---

The 'Climate Change Valuation Framework' referred to above leads investment professionals to assess the likelihood of the risk identified occurring and whether the impact is expected to be material.

If the likelihood / materiality impact is perceived to be low, then no adjustment would be made to valuation models but qualitative commentary would be included in the investment thesis.

If the likelihood / materiality impact is perceived to be strong, then the investment professional will think about potential impacts on valuation, if the impact will occur over multiple periods, if it escalates or is perhaps a one-off event. They will look at inter-relationships and ability to accurately quantify or estimate the impact.

In 2015, Mercer did some scenario work to help us understand the investment risks and opportunities to the portfolio. The timescales of the analysis was 10 years and 35 years to 2050.

In 2018, we did further work on climate change scenarios to help us understand the investment implications. We developed test scenarios using various timescales dependent on the data inputs being considered, for example: temperature rise 2050 and 2100; sea level rises 2030, 2050 and 2100; carbon price 2020, 2030 and 2040 and oil price 2025 out to 2040. This work was finalised in the first quarter of 2019.

No

**SG 01.9  
CC**

Indicate whether the organisation publicly supports the TCFD?

Yes

No

Explain the rationale

We are not currently supporting members of the TCFD. However, adding our name as a public supporter is under consideration.

We indirectly support the TCFD's by being members of the Climate Action 100+ Initiative and through our membership of the CDP.

Our CCIS and subsequent reporting covers the main facets of the TCFD recommendations.

**SG 01.10  
CC**

Indicate whether there is an organisation-wide strategy in place to identify and manage material climate-related risks and opportunities.

Yes

Describe

Our CCIS was announced in October 2016. It is designed to make the Fund more resilient to climate-related risk. Additional information is available on our website here: <https://www.nzsuperfund.nz/how-we-invest-balancing-risk-and-return/climate-change>.

No

**SG 1.12  
CC**

Indicate the documents and/or communications the organisation uses to publish TCFD disclosures.

- Public PRI Climate Transparency Report
- Annual financial filings
- Regular client reporting
- Member communications
- Other

specify

Our website and Annual Report provide detailed coverage of our CCIS, including our Carbon Portfolio Footprint (assured by KPMG) and Climate Change White Paper.

**SG 02**

**Mandatory**

**Public**

**Core Assessed**

**PRI 6**

**New selection options have been added to this indicator. Please review your prefilled responses carefully.**

**SG 02.1**

Indicate which of your investment policy documents (if any) are publicly available. Provide a URL and an attachment of the document.

- Policy setting out your overall approach

URL/Attachment

- URL

URL

{hyperlink:<https://www.nzsuperfund.co.nz/how-we-invest/responsible-investment>}

- Attachment (will be made public)
- Formalised guidelines on environmental factors
- Formalised guidelines on social factors
- Formalised guidelines on corporate governance factors

URL/Attachment

- URL

URL

{hyperlink:<https://www.nzsuperfund.co.nz/performance-esg-management/voting-reports>}

- Attachment (will be made public)
- Fiduciary (or equivalent) duties
- Asset class-specific RI guidelines
- Screening / exclusions policy

URL/Attachment

- URL

URL

{hyperlink:<https://www.nzsuperfund.co.nz/how-we-invest-responsible-investment/exclusions>}

- Attachment (will be made public)
- Engagement policy

URL/Attachment

- URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/Responsible%20Investment%20Framework.pdf}

- Attachment (will be made public)
- (Proxy) voting policy

URL/Attachment

- URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/performance-esg-management/voting-policy}

- Attachment (will be made public)
- We do not publicly disclose our investment policy documents

**SG 02.2** Indicate if any of your investment policy components are publicly available. Provide URL and an attachment of the document.

- Your organisation's definition of ESG and/or responsible investment and it's relation to investments

URL/Attachment

- URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/Statement\_of\_Investment\_Policies\_\_Standards\_and\_Procedures.pdf}

- Attachment
- Your investment objectives that take ESG factors/real economy influence into account

URL/Attachment

- URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/how-we-invest-balancing-risk-and-return-climate-change/climate-change-strategy}

- Attachment
- Time horizon of your investment

URL/Attachment

- URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/how-we-invest/endowments}

Attachment

ESG incorporation approaches

URL/Attachment

URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/Responsible%20Investment%20Framework.pdf}

Attachment

Active ownership approaches

URL/Attachment

URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/Responsible%20Investment%20Framework.pdf}

Attachment

Reporting

URL/Attachment

URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/Responsible%20Investment%20Framework.pdf}

Attachment

Climate change

URL/Attachment

URL

URL

{hyperlink:https://www.nzsuperfund.co.nz/how-we-invest-balancing-risk-and-return-climate-change/climate-change-strategy}

Attachment

We do not publicly disclose any investment policy components

**SG 02.3**

Additional information [Optional].

The Guardians' investment beliefs - which include an ESG belief, can be found here: <https://www.nzsuperfund.co.nz/how-we-invest/beliefs>

White paper on why we believe responsible investing pays off: <https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/White%20Paper%20ESG%20Beliefs.pdf>

New Zealand legislation (<http://www.legislation.govt.nz/act/public/2001/0084/latest/DLM113924.html>) says that we must administer the Fund on a prudent, commercial basis and, in doing so, must manage and administer the Fund in a manner consistent with:

- Best practice portfolio management;
- Maximising return without undue risk to the Fund as a whole;
- Avoiding prejudice to New Zealand's reputation as a responsible member of the world community

Information about our approach to RI is available on our website: <https://www.nzsuperfund.co.nz/how-we-invest/responsible-investment>.

We report on our performance at <https://www.nzsuperfund.co.nz/performance/esg-management> and in a dedicated RI report in our Annual Report for the Guardians and Fund. The Annual Report was prepared in accordance with the Global Reporting Initiative (GRI) G4 Core option. 2018 was the 7th year that we reported against the GRI. <https://www.nzsuperfund.co.nz/publications/annual-reports>.

Our Climate Change Investment Strategy, details of implementation and our carbon footprint can be found here: <https://www.nzsuperfund.co.nz/how-we-invest-balancing-risk-and-return/climate-change>.

In 2018, we received Limited Assurance on our carbon footprint calculation: <https://www.nzsuperfund.co.nz/sites/default/files/documents-sys/NZ%20Super%20limited%20assurance%20opinion%20carbon%20footprint%202018.pdf>.

**Governance and human resources**

SG 07 CC	Voluntary	Public	Descriptive	General
----------	-----------	--------	-------------	---------

<b>SG 07.5 CC</b>	Indicate the roles in the organisation that have oversight, accountability and/or management responsibilities for climate-related issues.
-----------------------	---

	Board members or trustees
--	---------------------------

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

	Chief Executive Officer (CEO), Chief Investment Officer (CIO), Chief Risk Officer (CRO), Investment Committee
--	---

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Other Chief-level staff or head of department

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Portfolio managers

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Investment analysts

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Dedicated responsible investment staff

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

External managers or service providers

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Other role, specify (1)

Other description (1)

**Climate Change Valuation Champion**

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Other role, specify (2)

Other description (2)

Other role, specify (2)

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

<b>SG 07.6 CC</b>	For board level roles for which have climate-related issues oversight/accountability or implementation responsibilities, indicate how these responsibilities are executed.
-----------------------	--

The Board has oversight and ultimate responsibility for the Fund's Climate Change Investment Strategy (CCIS). Development and implementation of the CCIS was a Strategic Objective for financial year 2017/18. Therefore, progress was reported through the Board Audit & Risk Committee as well as in the Board papers. Updates are made through the CEO Report to the Board. As of 1 July 2018, the CCIS became part of business as usual within the Guardians' Strategic Plan. Regular reporting (and education) continues to be provided to the Board - in the CEO report, Investment Committee dashboard, Responsible Investment Annual Report to the Board and education sessions as required. Progress against our Carbon Reduction Target is reported to the Board annually.

<b>SG 07.7 CC</b>	For the management-level roles that assess and manage climate-related issues, provide further information on the structure and process involved.
-----------------------	--

Management Roles - the CEO is ultimately responsible for the Fund's strategy. The Chief Investment Officer is responsible for the Climate Change Investment Strategy, and the CIO and Head of RI oversee its development, implementation and are co-sponsors of the Climate Change Investment Strategy. The Investment Committee considers papers and proposals on climate change such as valuation frameworks and new investments for recommendation or endorsement. The relevant elements of the strategy are integrated into investment team objectives with the Heads of each team responsible for ensuring delivery. Senior investment staff also lead on different pillars of the CCIS. In particular, the Analyse stream requires ongoing development, testing and collaboration and this is coordinated by a dedicated Climate Change Champion. An overview of CCIS progress is made six monthly to the Investment Committee as part of the Responsible Investment Dashboard.

Other teams within the Guardians also have objectives set as relevant - for example on communications and reporting, or operational implementation.

<b>SG 07.8 CC</b>	Explain how the organisation engages external investment managers on the TCFD recommendations and its implementation.
-----------------------	---

- Incorporation of TCFD in Annual Report
- Incorporation of TCFD in regular client reporting
- Request that investment managers complete PRI Climate indicators
- Request responses to TCFD Fund Manager questions in the PRI Asset Owner guide

## ESG issues in asset allocation

<b>SG 13</b>	<b>Mandatory</b>	<b>Public</b>	<b>Descriptive</b>	<b>PRI 1</b>
--------------	------------------	---------------	--------------------	--------------

<b>SG 13.1</b>	Indicate whether the organisation undertakes scenario analysis and/or modelling and provide a description of the scenario analysis (by asset class, sector, strategic asset allocation, etc.).
----------------	--

- Yes, to assess future ESG factors
- Yes, to assess future climate-related risks and opportunities



Describe

In 2015 we worked with Mercer across 4 different scenarios including the 2 degC scenario. The findings helped frame our portfolio wide Climate Change Investment Strategy (CCIS). In 2018, we have focused on developing our own scenarios. The project completed early 2019. Next step is utilising them in investment decisions.

No, not to assess future ESG/climate-related issues

**SG 13.2** Indicate if your organisation considers ESG issues in strategic asset allocation and/or allocation of assets between sectors or geographic markets.

We do the following

- Allocation between asset classes
- Determining fixed income duration
- Allocation of assets between geographic markets
- Sector weightings
- Other, specify  
Allocation of assets between different types of investment opportunities.
- We do not consider ESG issues in strategic asset allocation

**SG 13.3** Additional information. [OPTIONAL]

The New Zealand Superannuation Fund is a global fund with a long time horizon and known liquidity. This means there are thousands of potential investment opportunities available to us. How do we choose the best ones for us?

The Risk Allocation Process (RAP) is a portfolio construction process or tool to help with our investment decision-making. We use the RAP to rank and map our existing and potential investment opportunities by:

- attractiveness (expected return, adjusted for confidence and risk); and
- consistency with the Fund's investment style (ESG is a major component of this).

Review and integration of ESG is an integral part of opportunity assessment.

In addition, we maintain a dedicated RI section and staff education module on RI on our intranet. Video recordings also aid the induction processes.

**Other additional information:**

In 2018, we reviewed our position on the attractiveness of emerging market equities. Access to ESG information and adherence to best practice ESG standards were key parts of the conversation.

<b>SG 13 CC</b>	<b>Voluntary</b>	<b>Public</b>	<b>Descriptive</b>	<b>General</b>
-----------------	------------------	---------------	--------------------	----------------

**SG 13.4 CC** Describe how the organisation is using scenario analysis to manage climate-related risks and opportunities, including how the analysis has been interpreted, the results and any future plans.

Initial assessment

	Describe
--	----------

Our investment team began a project to develop and apply scenario analysis - completed Q1 2019. Following consultation with selected external specialists and peers, an initial draft report was produced for wider internal consultation in November 2018.

- Incorporation into investment analysis

	Describe
--	----------

Our investment team developed a Climate Change Valuation Framework (also referred to in SG 01) which was adopted during 2018. The framework assists the investment professionals in integrating climate change considerations into valuations of active equity positions. It consists of five steps as well as six lenses that may help identify and quantify climate change risks. For example, the framework helps consideration of the impact of technology, physical risks, policy, supply/demand and other factors. The scenario work undertaken in 2018 builds on Valuation Framework and acts as a supplement.

- Inform active ownership
- Other

<b>SG 13.5 CC</b>	Indicate who uses this analysis.
-----------------------	----------------------------------

- Board members, trustees, C-level roles, Investment Committee
- Portfolio managers
- Dedicated responsible investment staff
- External managers
- Investment consultants/actuaries
- Other

	specify
--	---------

Other Senior Investment Professionals within the Fund.

<b>SG 13.6 CC</b>	Indicate whether the organisation has evaluated the impacts of climate-related risk, beyond the investment time-horizon, on the organisations investment strategy.
-----------------------	--

- Yes

	Describe
--	----------

Our CCIS is built on the belief the climate change is a material long-term risk for which the Fund will not be rewarded through returns.

The Climate Change Valuation Framework referred to in SG 01 and SG 13.4 helps investment professionals to assess the long-term nature of some climate change impacts.

- No

**SG 13.7  
CC**

Indicate whether a range of climate scenarios is used.

- Yes, including analysis based on a 2°C or lower scenario
- Yes, not including analysis based on a 2°C or lower scenario
- No, a range is not used

**SG 13.8  
CC**

Indicate the climate scenarios the organisation uses.

Provider	Scenario used	
IEA	<input type="checkbox"/> Beyond 2 Degrees Scenario (B2DS)	
IEA	<input type="checkbox"/> Energy Technology Perspectives (ETP) 2 Degrees scenario	
IEA	<input checked="" type="checkbox"/> Sustainable Development Scenario (SDS)	
IEA	<input checked="" type="checkbox"/> New Policy Scenario (NPS)	
IEA	<input checked="" type="checkbox"/> Current Policy Scenario (CPS)	
IRENA	<input type="checkbox"/> RE Map	
Greenpeace	<input type="checkbox"/> Advanced Energy [R]evolution	
Institute for Sustainable Development	<input type="checkbox"/> Deep Decarbonisation Pathway Project (DDPP)	
Bloomberg	<input type="checkbox"/> BNEF reference scenario	
IPCC	<input checked="" type="checkbox"/> Representative Concentration Pathway (RCP) 8.5	
IPCC	<input checked="" type="checkbox"/> RPC 6	
IPCC	<input type="checkbox"/> RPC 4.5	
IPCC	<input checked="" type="checkbox"/> RPC 2.6	
Other	<input checked="" type="checkbox"/> Other (1)	<div style="background-color: #cccccc; padding: 2px;">Other (1) please specify:</div> IEA World Economic Forum 450ppm
Other	<input checked="" type="checkbox"/> Other (2)	<div style="background-color: #cccccc; padding: 2px;">Other (2) please specify:</div> Mercer designed scenarios
Other	<input type="checkbox"/> Other (3)	

SG 14	Mandatory to Report Voluntary to Disclose	Public	Additional Assessed	PRI 1
-------	---	--------	---------------------	-------

**SG 14.1**

Some investment risks and opportunities arise as a result of long term trends. Indicate which of the following are considered.

- Changing demographics
- Climate change
- Resource scarcity
- Technological developments
- Other, specify(1)

other description (1)

We have an alternative energy strategy which came out of our energy sector and climate change research.

- Other, specify(2)
- None of the above

**SG 14.2**

Indicate which of the following activities you have undertaken to respond to climate change risk and opportunity

- Established a climate change sensitive or climate change integrated asset allocation strategy
- Targeted low carbon or climate resilient investments

Specify the AUM invested in low carbon and climate resilient portfolios, funds, strategies or asset classes.

	trillions	billions	millions	thousands	hundreds
Total AUM		37	900	000	000
Currency	NZD				
Assets in USD		26	264	612	926

Specify the framework or taxonomy used.

Our whole portfolio has climate change integrated within it as a result of our Climate Change Investment Strategy.

Specific carbon reduction measures have been implemented in:

- Passive Equities Portfolios
- Emerging Market Equities Portfolios
- Multi Factor Equity Portfolios

We also have investments in what can be categorised as 'climate related opportunities' within our private market investments.

- Phase out your investments in your fossil fuel holdings
- Reduced portfolio exposure to emissions intensive or fossil fuel holdings
- Used emissions data or analysis to inform investment decision making
- Sought climate change integration by companies
- Sought climate supportive policy from governments
- Other, specify

other description

Over 2018, the Direct Investment Team worked to socialise and bring awareness of climate change risks to portfolio company Boards.

- None of the above

#### SG 14.3

Indicate which of the following tools the organisation uses to manage climate-related risks and opportunities.

- Scenario analysis
- Disclosures on emissions risks to clients/trustees/management/beneficiaries
- Climate-related targets
- Encouraging internal and/or external portfolio managers to monitor emissions risks
- Emissions-risk monitoring and reporting are formalised into contracts when appointing managers
- Weighted average carbon intensity
- Carbon footprint (scope 1 and 2)
- Portfolio carbon footprint
- Total carbon emissions
- Carbon intensity
- Exposure to carbon-related assets
- Other emissions metrics
- Other, specify

other description

We encourage internal and external portfolio managers to consider climate change related risks and opportunities (not just emissions risk).

- None of the above

#### SG 14.4

If you selected disclosure on emissions risks, list any specific climate related disclosure tools or frameworks that you used.

Our Climate Change Investment Strategy aims to make the Fund more resilient to climate change over the long-term. Climate change presents a material risk for investors.

Our approach to climate change is well documented on our website and in our annual report. <https://www.nzsUPERfund.co.nz/how-we-invest-balancing-risk-and-return/climate-change> .

Carbon data is crucial to our strategy. We use MSCI's carbon emissions database and CDP as a source of data to MSCI. We have also used specialist firms in the past for carbon footprinting unlisted assets. We also use MSCI's Climate Ratings in our carbon reduction methodology.

We have also published the Fund's carbon footprint (available on our website). In 2018 we received limited assurance by KPMG on our carbon footprint.

We are currently considering whether to become a formal supporter of the TCFDs.

We have joined the Climate Action 100+ initiative which requests companies to report in alignment with the TCFDs.

<b>SG 14.5</b>	Additional information [Optional]
----------------	-----------------------------------

Investment Themes are an important part of how the Fund prioritises its investment research and activities. We have defined Investment Themes as long-lasting impacts on economies and capital markets, that will normally be fairly immune to the ups and downs of the business cycle.

Thematic analysis is about identifying return streams positively and negatively exposed to the themes. Our investment thesis is that these exposures will not usually be fully-priced by markets given they are "slow burn" in nature and subject to uncertainty. Thematic investing is therefore very much aligned with the Fund's long-term investment horizon.

The Fund has three broad Investment Themes we believe will provide areas of investment opportunity in years to come:

- Resource Sustainability
- Emerging Markets Segmentation
- Evolving Demand Patterns

<b>SG 14 CC</b>	Voluntary	Public	General
-----------------	-----------	--------	---------

<b>SG 14.6 CC</b>	Please provide further details on these key metric(s) used to assess climate related risks and opportunities.
-----------------------	---

Metric Type	Coverage	Purpose	Metric Unit	Metric Methodology
<b>Climate-related targets</b>	<input checked="" type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets	Reduce carbon exposure across portfolio	Carbon Intensity and carbon fossil fuel reserves	GHG protocol
<b>Carbon footprint (scope 1 and 2)</b>	<input type="checkbox"/> All assets <input checked="" type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets	Calculating carbon footprinting of portfolio	Carbon Intensity and carbon fossil fuel reserves	GHG protocol
<b>Portfolio carbon footprint</b>	<input type="checkbox"/> All assets <input checked="" type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets	Measurement and reporting of carbon footprinting against targets set	Carbon Intensity and carbon fossil fuel reserves	GHG protocol
<b>Total carbon emissions</b>	<input type="checkbox"/> All assets <input checked="" type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets	Resilience to carbon risk across portfolio	Carbon Intensity and carbon fossil fuel reserves	GHG protocol
<b>Carbon intensity</b>	<input type="checkbox"/> All assets <input checked="" type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets	Understanding carbon risk in the portfolio	Tonnes of carbon emissions divided by \$million of company sales	GHG protocol

<b>SG 14.7 CC</b>	Describe in further detail the key targets.
-----------------------	---



Targettype	Time Frame	Description	Attachments
<input type="checkbox"/> Absolute target <input checked="" type="checkbox"/> Intensity target	By 2020	By 2020, we target a reduction in the carbon emission intensity of the Fund by at least 20%, and in fossil fuel reserves by at least 40%.	<a href="#">File 1:Carbon Footprint 2018 .pdf</a>
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target			
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target			
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target			
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target			

**SG 14.8 CC** Indicate whether climate-related risks are integrated into overall risk management and explain the risks management processes for identifying, assessing, and managing climate-related risks.

- Process for climate-related risks is integrated into overall risk management

Please describe

The key mechanism is our Climate Change Investment Strategy :

1. Long-term resilience through a shift to a low-carbon reference portfolio. Progressively we have applied a low carbon benchmark to both our passive and listed equity portfolio.
2. Climate Change analysis integrated into the valuation of real assets using the Climate Change Valuation Framework. Scenario work is in progress (completed early 2019).
3. Integration of climate change requirements for analysis and engagement into investment managers expectations.
4. Engagement programme with a focus on climate change.

- Process for climate-related risks is not integrated into our overall risk management

**SG 14.9 CC** Indicate whether the organisation undertakes active ownership activities to encourage TCFD adoption.

- Yes

Please describe

We are part of the CA100+ initiative. One of the key objectives of this initiative is to encourage target companies to adopt the TCFDs.

No, we do not engage

SG 15	Mandatory to Report Voluntary to Disclose	Public	Descriptive	PRI 1
-------	---	--------	-------------	-------

**SG 15.1** Indicate if your organisation allocates assets to, or manages, funds based on specific environmental and social themed areas.

Yes

**SG 15.2** Indicate the percentage of your total AUM invested in environmental and social themed areas.

%

8.2

**SG 15.3** Specify which thematic area(s) you invest in, indicate the percentage of your AUM in the particular asset class and provide a brief description.

Area

Energy efficiency / Clean technology

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity

% of AUM

0.7

- Property
- Infrastructure
- Hedge funds
- Forestry
- Farmland
- Other (1)

### Brief description and measures of investment

The type of investment is similar to private equity but is managed internally via our Direct Investment team. Types of investment include: Fuel cell manufacturer, for stationary power generation applications, a wind farm development company and waste to recycling facility.

- Renewable energy
- Green buildings

### Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity

### % of AUM

1.1

- Property
- Infrastructure
- Hedge funds
- Forestry
- Farmland
- Other (1)

### Brief description and measures of investment

Energy efficient glass

- Sustainable forestry

### Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Hedge funds
- Forestry

% of AUM

5.6

- Farmland
- Other (1)

Brief description and measures of investment

The large majority of our forestry investments have FSC or PEFC certification. In addition, we have invested in one REDD forest project.

- Sustainable agriculture
- Microfinance
- SME financing
- Social enterprise / community investing

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure

% of AUM

0.3

- Hedge funds
- Forestry
- Farmland
- Other (1)

Brief description and measures of investment

Social Infrastructure Fund - investing in schools, hospitals and other social infrastructure.

In 2017, the Fund made its first investment in a social bond, investing NZ\$5.45m in a bond issued as part of the Ministry of Health's social bond programme. It seeks to reduce reoffending rates amongst a cohort of youth offenders by 15% over a 6 year period. 2018 has shown some encouraging signs in terms of enrolments into the programme. However, it is too early on in the programme to report reduction figures in re-offending rates.

- Affordable housing

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property

% of AUM

0.2

- Infrastructure
- Hedge funds
- Forestry
- Farmland
- Other (1)

Brief description and measures of investment

We have one property development that targets the affordable segment of the residential market. Of the 208 units developed in the project, 70% will be priced at or below the regional median house price. Of these, 74% of the units developed will be 2 bedrooms or greater, 35% will be townhouses and the remainder will be in apartment or maisonette format. Also, around 20% of the total units developed will be retained as long-term rentals offering renters fixed tenures of 3 to 7 years.

In December 2018 - we presented to the Board of the Developers and discussed climate change and the impacts of climate change on property.

- Education
- Global health
- Water
- Other area, specify

Waste and recycling technology

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity

% of AUM

0.3

- Property
- Infrastructure
- Hedge funds
- Forestry
- Farmland
- Other (1)

#### Brief description and measures of investment

This investment was a new investment in 2018. It is a cloud-based waste and recycling technology company.

The company provides an innovative technology platform for waste and recycling. It connects customers to a network of independent waste haulers and is leading the development of smart city products in the waste and recycling space. The company's goal is to help businesses, governments and organisations confidently execute on their sustainability goals through their waste management operations.

No