

The Treasury

Climate-related financial disclosure

Consultation paper

Aurecon Submission

July 2023

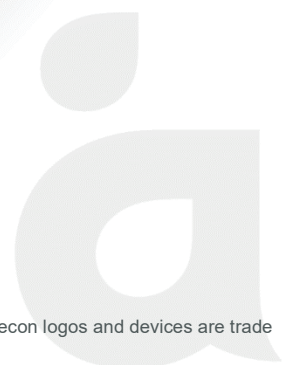


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RESPONSES – REPORTING CONTENT: CONSIDERATIONS FOR AUSTRALIA’S SUPERANNUATION INDUSTRY

The presence of relevant, reliable, comparable, and understandable climate-related information is critical to ensure market valuations of investments appropriately reflect climate-related risks and opportunities and provides a broader opportunity to improve the efficiency of capital allocation throughout Australia’s economy. Further, improved transparency will unlock increased adoption of better practices surrounding climate management (described in the attached report) and lead to improved outcomes across Australia’s superannuation industry, including enabling effective decision making for Australians with respect to their investments for retirement and contributing toward Australia’s achievement of its emissions reduction commitments.

Aurecon’s assessment found that while nearly all of Australia’s largest superannuation funds state alignment with the goals of the Paris Agreement, it is difficult to substantiate these claims using currently available information. It is critical to provide guidance surrounding industry best practice in order to assess whether an entity is aligned with the temperature outcomes of the Paris Agreement and impacts on market valuations as a result of the transition.

Further, focusing on best practice within Australia’s superannuation industry enables key stakeholders, including regulators, to determine

1. Whether transition plans are robust and practicable
2. Whether transition plans are aligned to temperature outcomes, thereby contributing to Australia’s emissions reduction targets
3. The impact of climate-related risks and opportunities on the valuations of investments.

MATERIALITY

Proposal: Principles of financial materiality would apply.

In the context of reporting double materiality considers whether something is material through examining the materiality of either the effect of the activity on the entity’s financial value and/or the impact of the entity activity on the wider environment (including society and the environmental). Considering the interconnection between societal views, environmental impact and market value over the short, medium and long term applying the definition of materiality as it stands within the ISSB may, if applied in an informed way, end with a similar result to the intention of double materiality. There does need however to be a clear interpretation of social and environmental risk as a pre-cursor to financial materiality. There is therefore a need to include these within best practice reporting.

Examining the statement within the Proposal above “Principles of financial materiality would apply”. Specifically limiting the definition of materiality to financial aspects thereby failing to consider wider environmental and social impacts potentially places limitations on transparency where an entity fails to adequately understand emerging risk issues. Financial materiality relies on an impact to be fully understood and valued, which, it can be argued, to date, key parties within our financial system have not been able to adequately achieve.

It is critical that this aspect of reporting is fully considered, and an entity supported in its accurate execution as failure in this area has the potential to undermine the benefits of transparent reporting and climate management actions (as they may be built on an inaccurate foundation). It should also be acknowledged that time horizons play a key role in determining the financial impact that may occur to the individual entity as well as the economy as a whole.

It is suggested that the government develop guidance to assist companies to understand the environmental and social factors that will potentially lead to material financial impacts to market value, potentially through the regulators.

An example of the unintended consequence of limiting what is considered to be material to short term financial impact can be seen currently in the superannuation industry. The current benchmarking process established under the MySuper reform examines performance against short term financial metrics without consideration of risks (including climate related) to investments over the longer term. Several parties have identified the potential impact on fund investment choices of this process potentially constraining ability to act on member preferences and climate risk. Further details are provided in the **attached technical report**.

GOVERNANCE

Proposal: From commencement, companies would be required to disclose information about governance processes, controls and procedures used to monitor and manage climate-related financial risks and opportunities.

We support the importance of including disclosure on governance requirements from commencement and including the governance requirements released within the ISSB standards.

Following our review of disclosures from the Australian superannuation industry we make the following observation of areas for focused guidance to assist the sector to better practices.

As a baseline, climate-related governance should include:

1. **Effective governance processes and bodies** that explicitly address climate-related issues including clear and transparent definition of the responsibilities of the board and management. This will enable clear accountability with regard to climate-related issues.
2. **Incentivisation of management aligned with long-term prosperity**. Climate change is, by definition, a long-term issue, and the decisions of management today will impact the value of Australians' investments as well as the quality of their retirement. Without alignment of management incentives to include longer term time horizons, some of the impacts of climate change may not be considered by present management.
3. **Policy ensuring appropriate skills are present across governance bodies** (including knowledge transitional and physical climate change knowledge). Climate change risks cannot be accurately understood by examining past challenges or events. They are complex, interconnected and occur across multiple dimensions. Ensuring governing bodies have the required knowledge of climate change is essential to adequately understand and manage risks and opportunities. Examining the largest superannuation funds there was little evidence that individuals with specific climate change knowledge were included in governance bodies.

The World Economic Forum published guidance in 2019 detailing set-up of effective climate governance for corporations. The gaps identified as part of the attached report are largely addressed using this guidance as a baseline. This guidance issued by the World Economic Forum includes:

1. **Climate accountability** – accountability for long-term resilience for navigating changes in the business landscape resulting from climate change
2. **Climate command** – ensuring appropriate skills are present across governance bodies
3. **Board structure** – effective integration of climate-related issues across structure
4. **Material risk and opportunity assessment** – assessment of short-, medium- and long-term materiality of climate-related risks and opportunities
5. **Strategic and organisational integration** – strategic investment planning and decision-making processes are systemically informed by climate and embedded within the management of risks and opportunities
6. **Incentivisation** – incentives of executives are aligned to promote long-term prosperity, including consideration of incorporating climate-related targets

7. **Reporting and disclosure** – transparent and consistent disclosure of material climate-related risks, opportunities and strategic decisions for relevant stakeholders
8. **Exchange** – regular dialogue with investors, policymakers, peers, and other relevant stakeholders to stay informed on movements with climate-related risks and regulatory requirements, as well as sharing methodologies (World Economic Forum, 2019)

STRATEGY

Aurecon recognises that it is important that readers of financial reports are able to understand an entity's strategy detailing risks and opportunities across short-, medium- and long-term time horizons. It is also important that the method used to assess these risks and opportunities is provided and it is aligned to an entity's targets and proposed transition plan.

Scenario analysis

Proposal: From commencement, reporting entities would be required to use qualitative scenario analysis to inform their disclosures, moving to quantitative scenario analysis by end state.

We support the importance of including well-constructed scenarios in a reporting entities analysis which would be used in both understanding risks and the development of strategy. Scenario analysis has been used to understand the financial risks of potential futures. Given the level of disruption that will potentially occur from the physical and transitional impacts of climate change, scenario analysis provides a tool to examine the potential disruption and financial impacts. We support including the scenario development and analysis requirements released within the ISSB standards within Australia's reporting framework.

Examining the use of scenarios by Australia's ten largest superannuation funds we found that although several funds advised that they were undertaking scenario analysis, they provided little detail into the nature, construction, and use of the scenarios. Taking a phased approach to scenario analysis is appropriate given challenges with accessing established methodologies for quantitative scenarios. Although physical climate change data exists for several IPCC scenarios at a granular level the same level of clarity is not available for transitional climate change information (although there is data at a global and regional level), there is also a lack of publicly available methodologies to detail a process to provide guidance to companies in this process.

Note there are different methodologies both in practice and published within academic literature and it is important that these are critically assessed with best practice guidance produced.

It is highly recommended that such guidance contains greater specificity with respect to the **scenarios, methodologies and their application** used for scenario analysis within each industry. This should be **standardised, Australia-specific and provided by regulators**, including quantitative data sets. This will ensure information reported by companies is relevant, reliable, comparable, and understandable for the purposes of key stakeholders' decision making. Without standardised scenarios, it may not be possible for investors to discern the relative exposure to climate-related risks and opportunities between potential investees.

Proposal: From commencement, reporting entities would be required to disclose climate resilience assessments against at least two possible future states, one of which must be consistent with the global temperature goal set out in the Climate Change Act 2022.

We support the requirement from commencement that reporting entities develop scenarios and associated resilience assessments against a minimum of two possible future states noting that better practice would be to develop scenarios against three potential futures to enable a greater level of stress testing by the reporting entity. We also support that one of these future states needs to be constructed to achieve a Paris-aligned outcome to enable entity operations to be stress tested against expected transition requirements.

Based on research presented in the attached technical report and our past experience we make the following best practice recommendation:

Climate risk management should include the use of scenarios that are aligned with metrics and targets (including targeted temperature outcomes) reflected in the choice of scenario characteristics including a Representative Concentration Pathway (RCP) as well as the characteristics of a consistent IPCC Shared Socioeconomic Pathway (SSP) (or developed through an established alternative scenario development methodology). These scenarios would identify vulnerability to climate transition and physical risk at both the entity, and product offering level, to enable a superannuation fund member to understand their level of exposure including amount and percentage of assets vulnerable to climate risk.

Recently the New Zealand External Reporting Board (External Reporting Board, 2022) included guidance on scenario use to assess climate impact. They advised a minimum of three scenarios should be considered to integrate elements of transition and physical risk:

1. The first scenario should use a 1.5°C Paris-aligned scenario
2. The second scenario should consider a 3°C or greater climate-related scenario
3. The third scenario should be selected as considered most relevant

Further, as previously mentioned it is highly recommended that best practice guidance contains greater specificity with respect to the scenarios, methodologies and their application used for scenario analysis within each industry. This should be standardised, Australia-specific and provided by regulators. This will ensure information reported by companies is relevant, reliable, comparable, and understandable for the purposes of key stakeholders' decision making. Without standardised scenarios, it may not be possible for investors to discern the relative exposure to climate-related risks and opportunities between potential investees.

Transition planning and climate-related targets

Proposal: From commencement, transition plans would need to be disclosed, including information about offsets, target setting and mitigation strategies.

We support the importance of including transition plans as a requirement from commencement for reporting entities in alignment with the requirements released within the ISSB standards. A transition plan is integral to understanding how an entity intends to meet its decarbonisation objectives, allowing superannuation fund members and the entities themselves to consider the plan's feasibility, how achievable climate commitments may be, as well as risks and opportunities present in the transition plan including the resulting impacts upon market valuation.

Companies and funds need to develop a viable transition strategy and roadmap, integrated within business operations and linked with metrics and targets, risk management processes, and governance structures and policies. In 2021, the TCFD published clear guidance on elements to consider as part of an appropriate Transition Plan. These elements are categorised across governance, strategy, risk management and metrics and targets, ensuring the transition plan is appropriately embedded within the superannuation fund (TCFD, 2021).

Proposal: From commencement, all entities would be required to disclose information about any climate-related targets (if they have them) and progress towards these targets.

We support the importance of requiring that reporting entities disclose information about climate related targets and the progress towards these targets. It is also important that entities report on any changes made to targets between reporting years providing the rationale for required changes. Targets based on analysis, sound methodologies and linked to strategic plans provide stakeholders guidance on an investment's climate related plans. When considered in a superannuation context these targets provide guidance on changing investment behaviour and the management of climate related risk.

Without assessing the progress against targets, a target is merely aspirational. In 2017, the TCFD already included “key performance indicators used to assess progress against targets” as part of their disclosure requirements (TCFD, 2017). In fact, assessing climate performance requires a comparison to science-based and Paris-aligned benchmarks.

We note that when developing climate disclosures two key principles should be used to guide the underlying climate management activities of reporting entities:

- Principle 1: Alignment with the temperature goal set out in the Paris Agreement of well below 2°C above pre-industrial levels with efforts to limit the temperature increase to 1.5°C above pre-industrial levels.
- Principle 2: Net zero by 2050 is not enough - Cumulative carbon emissions are what matter. Whilst the commonly used goal of “net-zero by 2050” is an element of some 1.5°C scenarios, it alone is certainly not sufficient to claim alignment with the goals of the Paris Agreement.

The temperature goal set out in the Climate Change Act 2022 includes ‘holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels’. While this definition is consistent with the Paris Agreement, there is currently insufficient guidance available for entities to understand whether they are aligned to the outcomes of the Paris Agreement.

The attached report highlights that not all net zero 2050 pathways are equal, and not all are aligned to the temperature outcomes pursued by the Paris Agreement.

While nearly all of Australia’s largest superannuation funds state alignment with the goals of the Paris Agreement, it is difficult to substantiate these claims based on currently available information. It is critical to provide guidance surrounding industry best practice in order to assess whether an entity is aligned with the temperature outcomes of the Paris Agreement. This is described further in the attached report.

A target, in itself, is not an indication of the alignment of a superannuation fund with the goals of the Paris Agreement. To align with the goals of the Paris Agreement, it was clear that cumulative, i.e. year-on-year, emissions determine global temperature, and thus it is crucial that cumulative emissions are tracked and compared to an underlying Paris-compliant pathway. Tracking cumulative emissions solves two key challenges. First, it ensures that any lack in emissions reduction is identified early. Second, it can allow for recalculation of the emissions reduction so that any misalignment to date is compensated for. This is reflected in the following guidelines:

- The Portfolio Alignment Team (PAT) clearly points to the importance of cumulative emissions alignment in order to assess compliance with the goals of the Paris agreement and “[...] suggests financial institutions calculate alignment or warming scores on a cumulative-emissions basis, in order to appropriately accommodate the physical relationship between cumulative emissions and warming outcomes.” (p.10). The PAT provides information on what portfolio alignment tools are, why they exist, and how they can be used, as well as what makes a good portfolio alignment tool and what is needed to build an enabling environment for the portfolio alignment tools (Portfolio Alignment Team, 2021). Assuming companies use a good portfolio alignment tool, following the suggestions by the PAT, their portfolio alignment (transition to warming score) to the Paris Agreement can be calculated. This provides a direct comparison on how close the entity is to aligning with the at least well-below 2°C temperature limit.
- The EU benchmarking regulation has strict rules on what it means to claim and continue to claim alignment with the Paris agreement. The regulation requires that for each year in which the targets are not achieved, the targets must be adjusted upward to compensate for this misalignment in the following year. If this compensation does not occur the following year, or the target is missed on 3 occasions in a 10-year period, alignment can no longer be claimed (European Commission, 2020).
- The UN Integrity report advocates that to be recognised as being net-zero aligned, an entity must report its progress on achieving or exceeding its interim targets, and be verified by a credible, independent third-party based on publicly available data (United Nations, 2022).

- The SBTi provides methodologies to set targets and requires annual tracking and reporting of progress against approved targets (Science Based Target Initiative, 2022).

RISKS AND OPPORTUNITIES

Proposal: From commencement, entities would be required to disclose information about material climate-related risks and opportunities to their business, as well as how the entity identifies, assesses and manages risk and opportunities.

We support the inclusion of disclosure on material climate-related risks and opportunities, as well as how the entity identifies, assesses and manages risk and opportunities from commencement and including the risk requirements released within the ISSB standards.

Following our review of disclosures from the Australian superannuation industry we make the following observation on areas of focus to assist the superannuation industry to better practices.

As a baseline, climate-related risk management should include:

1. **Comprehensive assessment** of climate-related risks
2. Use of scenarios aligned with **temperature outcomes**
3. **Prioritisation** of climate-related risks and opportunities

Comprehensive assessment of climate-related risks

In 2020, the TCFD provided guidance in regard to types of climate transition and physical risk assessment approaches and possible metrics (TCFD, 2020). Superannuation funds should consider each of these risks as part of their risk management processes to inform prioritisation. Key risks are included in table 2.

Table 1 – Climate transition and physical risks – adapted from (TCFD, 2020).

| <i>Transition risk</i> | <i>Physical risk</i> |
|---|---|
| Policy and legal – including variations in local, regional and global incentives, and requirements, uncertain effects of policy and legal actions across jurisdictions, and complex relationships across regulatory developments. | Acute – including varying effects based on events, varying magnitude and impacts associated with events, and complex interconnections and relationships between variables that influence weather events. |
| Technology – including novel technologies, capabilities and applications, complex relationships across markets, economics and policy environments, and uncertainty surrounding various solutions and technologies over time for various users. | Chronic - including longer time horizons, changing magnitude and consideration of tipping points and thresholds, and varying effects based on geography and events. |
| Market – including complex relationships across policy, consumers and societal context, impact on demand and cost arising from nonlinear relationships, and novel dynamics and market signals impacting raw inputs. | |
| Reputation – including the novel nature of responses as societal expectations shift, and the significance of severity and scope of impact rapidly changing. | |

Prioritisation of climate-related risks and opportunities

As a precursor to undertaking scenario planning, a vulnerability assessment should be undertaken. This establishes a baseline understanding of business value drivers, including asset classes and value chains of significant investments and market segments. This assessment should identify material exposure for consideration in climate scenarios. The UN Environment Programme Finance Initiative provides guidance to assess vulnerability across four key impact channels: macro-environment, supply chain, operations and assets, and market (UNEP, 2021).

This assessment should incorporate prioritisation criteria and lead to disclosure of prioritised climate-related risks and opportunities, including the amount and percentage of assets vulnerable to climate-related risks, allowing investors including superannuation funds to make better informed investment decisions. The TCFD provides guidance surrounding prioritisation criteria to include speed of onset and vulnerability in addition to traditional considerations of impact and likelihood (TCFD, 2020).

METRICS & TARGETS

Greenhouse gas emissions

Proposal: From commencement, scope 1 and 2 emissions for the reporting period would be required to be disclosed.

We support the importance of including scope 1 and 2 emissions for the reporting period from commencement for reporting entities in alignment with the requirements released within the ISSB standards. We also note that in cases such as the superannuation industry these scopes of emissions do not adequately provide information on the level of climate risk exposure which is primarily linked to financed emissions. To understand the extent of exposure of financed emissions, superannuation funds require information from investee companies to be available with respect to their scope 1 and 2 emissions.

Proposal: Disclosure of material scope 3 emissions would be required for all reporting entities from their second reporting year onwards. Scope 3 emissions disclosures made could be in relation to any one-year period that ended up to 12 months prior to the current reporting period.

We support the importance of including scope 3 emissions. For companies whose emissions are primarily derived through financed emissions (and not their scope 1 and 2 emissions) we believe the reporting period should start from commencement or as early as possible (no later than the second year). In cases such as the superannuation industry reporting on scope 1 and 2 emissions does not adequately provide information on the level of climate risk exposure. We note considerable guidance has been provided by ISSB on the topic of scope 3 emissions which will be useful to assist entities in preparing their disclosure when adopted.

Industry-based metrics

Proposal: By end state, reporting entities would be required to have regard to disclosing industry-based metrics, where there are well-established and understood metrics available for the reporting entity.

We support the use of industry-based metrics and believe this level of industry specific guidance is necessary to promote the development of fit for purpose disclosures which cover areas and use metrics suitable for the activities of the reporting entity. Note we support the early inclusion of industry-based metrics (before end state).

Using the superannuation industry as an example we note that as the climate exposure of funds is largely linked to their financed emissions, thus industry-based metrics are of particular importance for substantive climate reporting. It is vital that these funds and similar entities be developing and disclosing information relating to their assets under management, their scope 3 emissions, investment decisions and management including details of their proxy voting approach and their escalation strategy for unsuccessful engagement.

In addition to adopting industry-based metrics we would like to support the government to develop further guidance on best practices in the management and measurement of these key metric areas.

An example of additional guidance linked to the industry-based metrics for the Asset Management & Custody Activities (Volume 15) with reference to FN-AC-410a.3, 'Description of proxy voting and investee engagement policies and procedures' is provided below.

Develop and publish an effective approach to proxy voting

Superannuation funds should develop and publish a clear approach to proxy voting for climate-related proposals. This will allow a stakeholder to understand how the fund engages with investees on climate-related issues and consider whether this is acceptable. The ISSB refers to approaches indicated in the PRI Reporting Framework for Direct – Listed Equity Active Ownership (PRI, 2018) which include:

1. *The scope of the entity's voting activities*
2. *The objectives of the entity's voting activities*
3. *How, if at all, the entity's voting approach differs among markets*
4. *Whether the entity has a default position of voting in favour of management in particular markets or on particular issues*
5. *Whether, and how, local regulatory or other requirements influence the entity's approach to voting*
6. *Whether the entity votes by proxy or in person by attending annual general meetings (or a combination of both)*

Establish an effective, viable and transparent escalation strategy for unsuccessful engagement

Without an effective escalation strategy, it is not possible to determine how a superannuation fund will address instances of unsuccessful engagement with investees in order to maintain its climate commitments. Superannuation funds should develop an effective and viable escalation strategy to navigate instances where engagement activities with investees are unsuccessful. For components of an effective escalation strategy, the ISSB refers to approaches indicated in the International Corporate Governance Network (ICGN) Global Stewardship Principles (ICGN, 2020) which include:

1. *Expressing concerns to corporate representatives or non-executive directors, either directly or in a shareholder meeting*
2. *Expressing the entity's concern collectively with other investors*
3. *Making a public statement*
4. *Submitting shareholder resolutions*
5. *Speaking at general meetings*
6. *Submitting one or more nominations for election to the board as appropriate and convening a shareholder meeting*
7. *Seeking governance improvements and/or damages through legal remedies or arbitration*
8. *Exit or threat to exit from the investment*

A viable escalation strategy for unsuccessful engagement based on financial sector guidance from the Science Based Targets initiative is outlined in Figure 1.

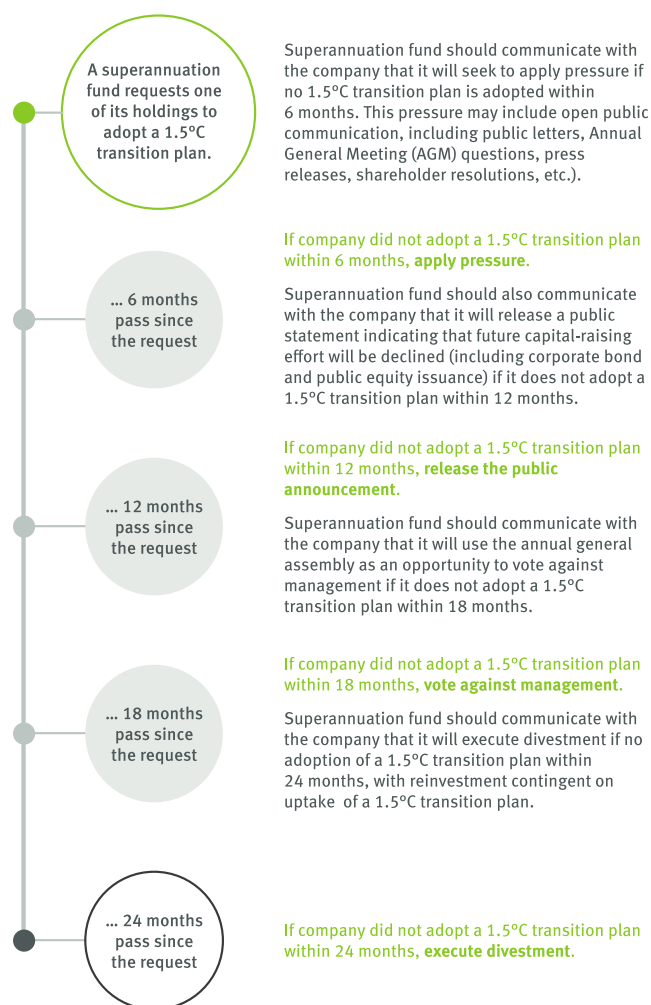


Figure 1 - A proposed escalation strategy adapted from (Science Based Target Initiative, 2022).

Supporting information

We are pleased to provide a copy of Aurecon's Technical Report titled:

Australian Superannuation Funds Climate Management and Disclosure – Technical report

Australian Superannuation Funds

Climate management and disclosure:
Technical report

June 2023



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Executive Summary

Businesses are amid a collective climate commitment surge. Over 44% of listed companies worldwide have published a climate target with 30% of targets aiming to reach net-zero. Institutional investors, including many superannuation funds, have also set **net zero commitments**. Climate target setting, however, varies in terms of ambition and comprehensiveness. Further, in many cases there is a dearth of transparent climate disclosures which would allow stakeholders, including investors, to understand the proposed decarbonising actions associated with these commitments as well as the risks and opportunities presented to corporates through the transition.

As Australians are becoming increasingly aware of the potential impacts of climate change and the need for active climate management it is timely to consider the superannuation sector, its exposure to climate risk, and the climate management of its largest funds which make investments on behalf of and for the future benefit of many Australians.

Disruption is already occurring in response to the **climate mitigation challenge** evidenced by the doubling of renewable electricity generation in Australia reaching a record high of 29% of total electricity generated from renewable sources in 2021 presenting risk and opportunity to companies involved (Department of Climate Change, Energy, the Environment and Water, 2023). In the absence of substantive disclosures, it is **not possible for the markets to accurately establish company value**.

Where a true commitment - action gap is present within a company, risks exist to investors, markets and to achieving Australia's climate commitments with jobs, economic performance, incomes, and societal cohesion all impacted through an unplanned transition.

Fundamentally **alignment with climate realities makes good financial sense for our future**. Without transparent climate disclosures, we put people's futures at risk (in retirement).

The aim of this report is to advance the understanding of the state of climate performance of Australian superannuation funds with sufficient detail to answer:

- What is the state of the superannuation industry in Australia regarding climate issues?
- How are key players acting on climate and transparently disclosing their performance?

- What steps need to be taken to drive transparency and Paris aligned progress on climate change within superannuation funds?
- What recommendations across key stakeholders will support improved management of climate-related risks and opportunities, as well as their disclosure?

The **ISSB release** of requirements for climate disclosures is likely to be the critical intervention which creates a **tipping point in climate transparency** redefining investor ability to accurately value the impact of climate change on companies. Aurecon's analysis of the public reporting for **Australia's 10 largest superfunds** against a subset of the draft ISSB standards indicate that the superannuation sector as a whole requires a significant uplift to materially improve the detail and transparency of their climate-related information through disclosure. Without sufficient information it is not possible to enable effective decision-making by key stakeholders, including superannuation holders, where climate-related risks and opportunities are concerned.

Within the report we present key climate management concepts that funds can adopt as they develop their responses within the core areas of the ISSB: Metrics and Targets; Risk Management; Strategy and Governance. These were developed through reviewing international guidance and are in alignment with two clear overarching principles to guide fund climate management:

Principle 1:

Alignment with the temperature goal set out in the Paris Agreement of well below 2°C above pre-industrial levels with efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

Principle 2:

Net zero by 2050 is not enough - Cumulative carbon emissions are what matter. Whilst the commonly used goal of "net-zero by 2050" is an element of some 1.5°C scenarios, it alone is certainly not sufficient to claim alignment with the goals of the Paris Agreement.

Only with a clear understanding of the implications of climate change on superannuation investments can **Australians make meaningful decisions regarding one of their most valuable assets.** When it comes to enabling progress towards transparent reporting and progressive climate management responsibility falls on several parties from government, to regulators, to industry, to the superannuation funds and their members.

Designed to address clear bottlenecks identified within this research the actions listed below provide a clear starting point to accelerate active climate risk and opportunity management and transparent reporting within the superannuation industry.



Government

Action 1: Clear and consistent policy guidance is required by all levels of government to support a planned transition.

Action 2: Prioritise the delivery of a national roadmap to debottleneck logistical and investment challenges associated with the transition.

Action 3: Incentivise engagement and investment from the private sector in technologies with material emissions reduction potential.



Regulators

Action 1: Address the unintended consequences of the performance test to eliminate impacts on investments engaged in climate mitigation and adaptation.

Action 2: Support the development of an efficient mechanism for aggregation of clear and transparent climate related data from companies.

Action 3: Deliver decisive action on ISSB adoption.



Industry

Action 1: Prioritise the development and disclosure of a viable corporate transition plan.

Action 2: Establish the appropriate corporate structures and mechanisms to achieve transparent climate related disclosure.

Action 3: Industry should adopt a systems-approach to collaborate with upstream, midstream and downstream proponents to deliver an organised and efficient transition to a low carbon economy.



Superannuation Funds

Action 1: Prioritise adoption of best practice climate guidance, ensuring temperature outcomes aligned with the objectives of the Paris Agreement.

Action 2: Engage in transparent substantive climate disclosure as a priority in preparation of Australia's adoption of the ISSB's standards.

Action 3: Funds should develop and disclose an escalation strategy to achieve alignment with the temperature objectives of the Paris Agreement.



Superannuation Funds Members

Action 1: Members who are not satisfied that their superannuation funds are managing their climate risk can make a change.

Action 2: Members can examine the climate management of companies their fund is investing their money in and act if not satisfied.

Action 3: Members should contact funds where they are not satisfied with the level of transparency of climate risk and performance.

1

Aligning investments with
climate realities makes
good financial sense
for our future



1. Aligning investments with climate realities makes good financial sense for our future

1.1 The path to understanding climate risks to our retirement

So what? A direct link can be drawn between the superannuation investments made by an Australian individual and the climate risk of listed companies. With greater transparency in corporate reporting, there is potential to better protect the value of Australians' long-term investments from the impacts of climate-related risk.

As of 31 December 2022, Australian superannuation assets totalled ~\$3.4 trillion (APRA, 2023). This globally significant figure has grown substantially over the last two decades (Thinking Ahead Institute, 2023).

As Australians are becoming increasingly aware of the potential impacts of climate change it is timely to consider the superannuation sector, its exposure to climate risk, and the climate management of its largest funds. To date limited detailed disclosure of climate-related risks from companies has restricted the ability of investors (both institutional and individual) to appropriately consider the impact of climate related issues on the future value of their investments. Depending on the investments made by superannuation funds on behalf of their members, portfolios may be exposed to varying levels of climate risk that if known, an investor, in this case the fund member, may not be comfortable with. Figure 1 illustrates this potential exposure of members investments to climate issues through the choices made by the superannuation funds in Australia, which are of critical importance in the lives of everyday Australians upon retirement.

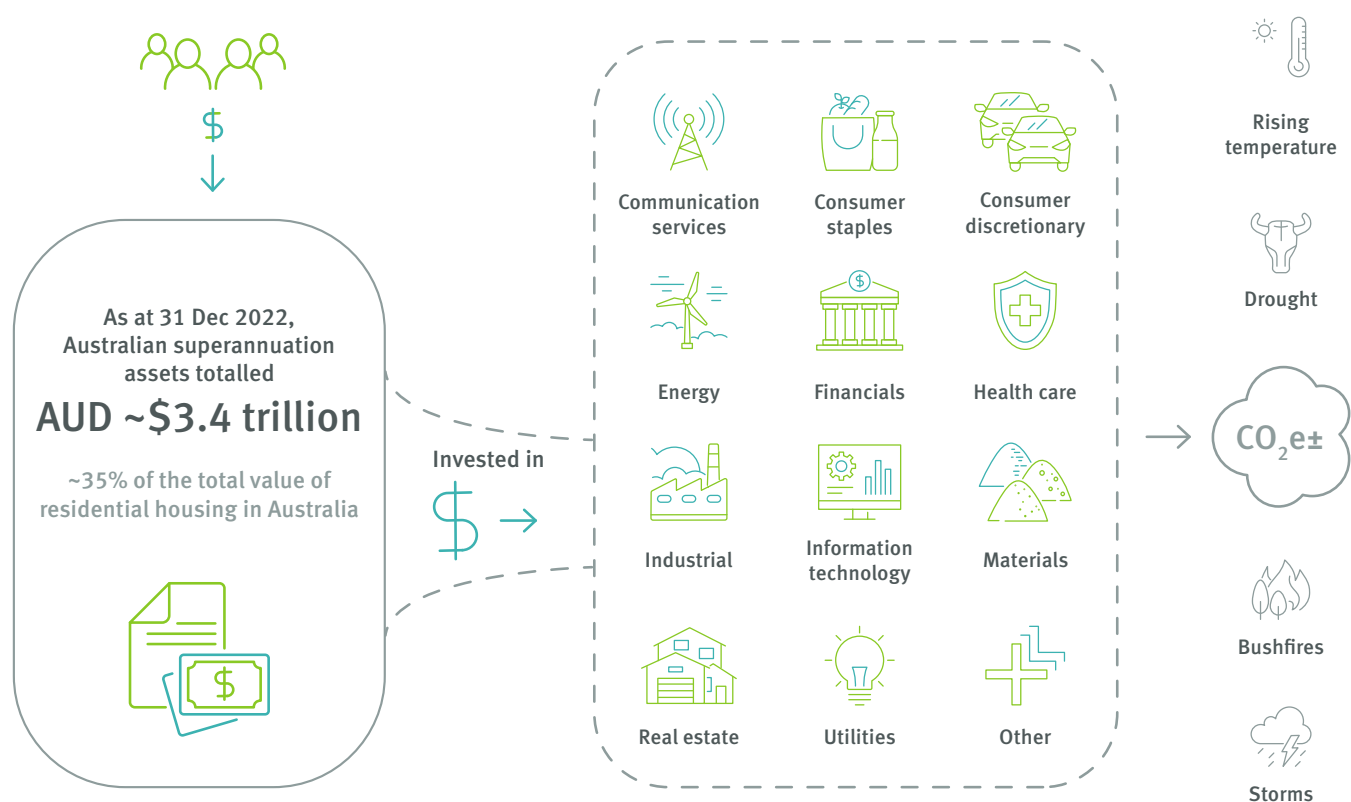


Figure 1 – From superannuation investment to climate impacts

The superannuation sector can be segmented into industry, retail, public sector, corporate and self-managed superannuation funds. The Australian Prudential Regulation Authority (APRA) lists 128 regulated superannuation entities; however much of the value is captured in the 10 largest funds that represent 57 per cent of assets under management, and 65 per cent of active member accounts as of June 2022 (APRA, 2022). Recent mergers, for instance QSuper and SunSuper to form the Australian Retirement Trust, have further underscored this market concentration.

Superannuation investments exist to provide an income stream to Australians once they reach retirement. These critical investments often represent one of the most significant financial choices of an everyday Australian; yet investments are heavily influenced by government actions. An example of this is 2021's reform package, *Your Future, Your Super*, that introduced an annual performance test of MySuper products to hold superannuation funds accountable for underperformance (The Treasury, 2023). These reforms may have unintended consequences for fund investment decisions including accounting for climate-related risks and opportunities (explained further in Section 1.3.1).

The past five years have seen a sharp increase in the demand for transparency surrounding a company's climate-related risk as shareholders look to understand the implications of climate risk on the value of their investments. In 2019, BP's shareholders overwhelmingly voted in favour of disclosure of climate-related risk, and similar proposals have been accepted by the shareholders of PPL Corporation, Occidental Petroleum and Exxon Mobil. (Flammer, Toffel, & Viswanathan, 2021). This report will look further at the evolving physical, economic and social environment before considering the disclosure transparency and climate management within superannuation funds.

The environment is rapidly changing.

So what? "Climate change is a threat to human well-being and planetary health. Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all." (IPCC, 2022)

International goals to limit global warming to well below 2°C (above pre-industrial levels) have led, and will continue to lead, to significant change as societies are challenged to respond around the world. These responses will take the form of legal action and regulatory requirements; technological changes as sectors decarbonise; evolving societal expectations; and altered market dynamics, all of which may represent transition risk to an investment.

The physical impacts of climate change also represent risk to an investment. Alarming, the recent Synthesis Report by the Intergovernmental Panel on Climate Change (IPCC) reported that global warming reached 1.1°C above 1850-1900 in 2011-2020, caused by human activities' anthropogenic emissions which led to an increase in the earth's surface temperature. The period of 2010 to 2019 saw the highest average annual greenhouse gas emissions on record, with global net anthropogenic emissions up 12 per cent in 2019 compared with 2010 levels. This has caused rapid and broad changes to be observed across the biosphere, cryosphere, ocean, and atmosphere within every region on Earth, particularly affecting vulnerable communities (IPCC, 2023). Observed impacts are shown in Figures 2 and 3.

To avoid the worst physical impacts of climate change, societies must transition away from carbon-intensive production and consumption, including the use of fossil fuels. The ratification of the Paris Agreement brought

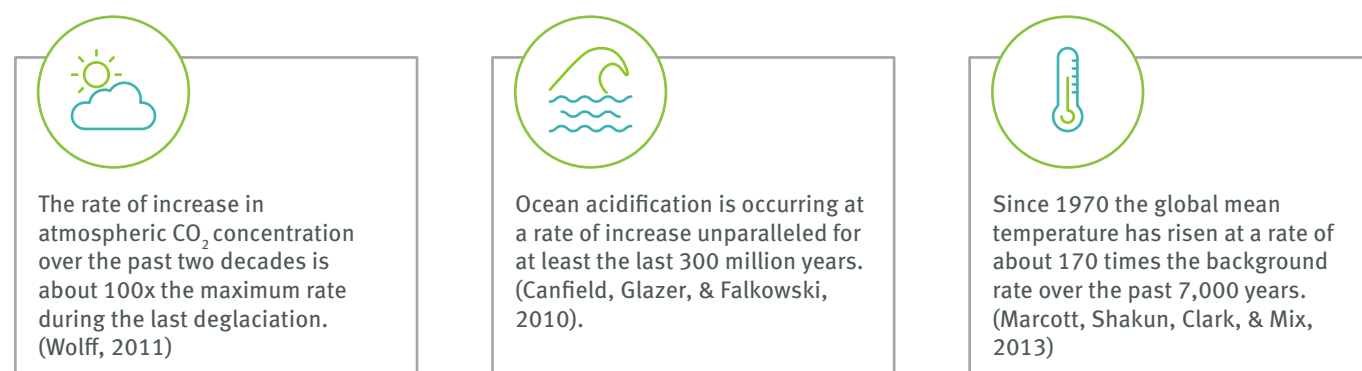


Figure 2 – Unprecedented rates of change

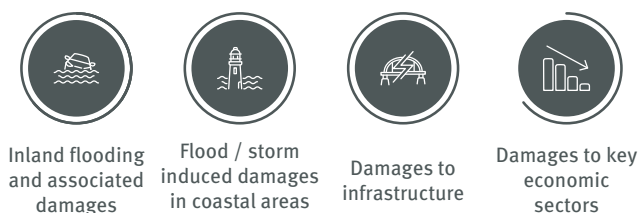
Water availability and food production



Health and well-being



Cities, settlements and infrastructure



Biodiversity and ecosystems



Includes changes in ecosystem structure, species ranges and seasonal timing

KEY

Observed increase in climate impacts to human systems and ecosystems assessed at **global level**

- Adverse impacts
- Adverse and positive impacts
- Climate-driven changes observed, no global assessment of impact direction

Confidence in attribution to climate change

- High or very high confidence
- Medium confidence
- Low confidence

Figure 3 – Observed impacts of climate change – adapted from (IPCC, 2022, p. 7)

into focus the potential risks faced by companies as countries across the world seek to meet the well-below 2°C warming ambition. Many companies have begun considering physical climate risks, which have, and will continue, to arise through the failure to mitigate warming, using established data sets. Yet, the need to understand and rapidly act on transition risks also requires focused attention to manage the disruption of a transition to a low carbon future. This potential disruption should not be underestimated with transition risks including technology, market, policy and legal, and reputation risks - as presented by the Task Force on Climate-related Financial Disclosures (TCFD, 2017).

Disruption is already occurring through this mitigation challenge in several sectors of the Australian economy. Over the last decade, Australia has experienced market proliferation of renewable energy growth with generation from renewable sources more than doubling, reaching a record high of 29 per cent of total energy generated in 2021 (Department of Climate Change, Energy, the Environment and Water, 2023). In the same time period, the prevalence

of challenges surrounding access to insurance coverage has increased, as well as funding linked to existing emission-intensive activities, and the active retirement of coal-fired power stations, such as the Liddell Power Station, Australia's oldest coal-fired power plant, which was shut down by AGL in April of this year (Packham, 2023). The influx of renewable energy in Australia to decarbonise the country's energy market, in addition to increasing demand for electricity through the electrification of large loads (as industry across Australia seeks to decarbonise) is creating further pressure on the transmission networks. The ripples of disruption will travel throughout all sectors and the broad Australian economy to varying degrees.

Australia has had an inconsistent relationship with climate mitigation in the past with policies and regulations proposed and opposed by both sides of parliament. In August 2022, the lower house of Australia's parliament passed a new emissions reduction target of 43 per cent by 2030, increasing from the previously agreed 26 to 28 per cent. To support progress towards this more ambitious target, Australia's Federal Government passed

the Safeguard Mechanism (Crediting) Amendment Bill 2023 on 31 March 2023, with implications for Australia's largest emitting facilities beyond the reporting threshold of 100,000 tCO_{2e} (Clean Energy Regulator, 2023). Some of these changes have included a ceiling on absolute emissions beyond current levels (emissions cannot exceed 140 MT/annum) and justification required for the use of offsets beyond 30 per cent of a facility's baseline (Australian Government, 2023). Facilities' emissions baselines are expected to decline notably year on year, thereby progressing toward the 43 per cent emissions reduction target.

In the midst of this policy reform, a generational shift in wealth from Baby Boomers to Millennials is on the way, impacting the superannuation industry. The Australian 2021 National Census indicates that both these categories account for more than 5.4 million people, with only 5,662 more Baby Boomers than Millennials counted on 10 August 2021 (Australian Bureau of Statistics, 2022). As older Australians transition to retirement and draw income streams from superannuation, younger generations will become the largest cohort contributing to superannuation savings. Given that younger generations are more likely to be impacted by the consequences of climate change (IPCC, 2023), their values and priorities ascribed to climate change are expected to be relatively stronger, which in turn will influence their decision making on superannuation including their choice of product or fund. Indeed, an analysis by the Responsible Investment Association Australasia indicates that consumers are clear about which financial products should be invested responsibly, with 70 per cent of Australians surveyed indicating superannuation being their top priority. Additionally, three in five Australians surveyed would be motivated to invest more money if their investment made a positive difference in the world (Banhalimi-Zakar & Parker, 2022).

Growing expectations in corporate transparency from stakeholders have been accompanied by increases in climate-related litigation linked to the Corporations Act 2001, the Superannuation Guarantee (Administration) Act 1992 and the Superannuation Industry (Supervision) Act 1993 (Cth) (the SIS Act). The superannuation sector has seen several instances of litigation linked to accountability and greenwashing including the Retail Employees Superannuation Trust (REST) case instigated by Mark McVeigh's related to REST's management and disclosure of climate change risks settled in 2020 (Khadem, 2020); the recent case taken by ASIC against Mercer for greenwashing by misleading members on sustainability of investments (Wootton, 2023); and ASIC fining Future Super in May 2023 for overstating the fund's positive environmental impact (Melzer, 2023). Further threats of litigation are looming

for Unisuper linked to its Santos investment (Maddock, 2022) and for HESTA, accused of greenwashing by the Environmental Defenders Office on behalf of concerned members linked to its net zero investment claims and failing to properly manage financial risk in continuing to invest in Woodside and Santos (Environmental Defenders Office, 2022).

With the rapid changes in climate impacts, policies and regulations, technological changes and new market dynamics, as well as generational shifts and evolving societal expectations, an orderly transition with meaningful planning and action needs to occur now. Risks need to be assessed and opportunities scoped to replace revenue exposed to climate risks. These risks and plans need to be transparently disclosed to the public to enable investors to make informed decision-making. Further, the transition to a low-carbon future must be supported by an alignment of government, industry, capital markets and society to ensure Australian industries are not economically stranded.

1.3 Superannuation funds can support the transition to achieve a decarbonised future

So what? Superannuation funds need to act in the best interest of their members over the short- and long-term, manage climate-related risks and opportunities, and clearly disclose their plans, actions and investments to their stakeholders. Funds can help to shape the climate resilience of the companies and products they invest in. With climate mitigation a key, if not the defining force shaping current and future economies, superannuation funds must support the change towards decarbonisation to protect the future value of Australians' investments.

Mandatory superannuation was introduced by the Australian government to ensure that every working Australian was saving for their retirement and would receive a stable retirement income (Parliament of Australia, 2014). Therefore, superannuation funds need to act in their members' best interest to ensure returns over the short- and long-term, and manage the risks of their investments, including those relating to climate. Investments made by superannuation funds typically fall into categories of cash, fixed income, equity, property, and infrastructure, with more than 50 per cent of funds invested in international and Australian equity markets (APRA, 2022).

Currently, 23 per cent of all Australian superannuation funds' assets are invested in Australian listed equities (ASFA, 2023) which, given the high fossil fuel exposure

of the 50 largest listed Australian companies in the S&P/ASX All Australian 50 index (S&P Global, 2018), exposes Australian superannuation funds to significant climate-related transition risks. It is therefore imperative for superannuation funds to carefully assess their investments in asset classes and economic sectors, and drive change in the companies they're investing in that are subject to climate risks.

Superannuation funds can play an important role in supporting corporate accountability on climate issues (further details provided in sections below), thereby helping to facilitate an orderly transition to a decarbonised future. In the IPCC's most recent AR6 Synthesis Report it was stated that, *"there is sufficient global capital to close global investment gaps but there are barriers to redirect capital towards climate action"*.

Climate finance needs to be directed towards mitigation and adaptation, such as investments into low-emissions technology innovations to accelerate widespread adoption (IPCC, 2023). A recent analysis by the Institute for Sustainable Futures (ISF) found that the investment needed to support a transition to 100 per cent renewable electricity in Australia by 2030 equates to only 7.7 per cent of total superannuation holdings (Corbell, Kim, Dwyer, Teske, & Kelley, 2018). Although it is not suggested that superannuation holdings be diverted to directly fund the transition, this percentage provides an illustration of the scale of investment required relative to the holdings in superannuation and the degree of risk and opportunities available through the transition to the sector.

Superannuation funds can minimise transition risk and contribute to the climate transition by being selective about their investments and actively influencing the companies they invest in. As a first option, superannuation funds can request disclosure of climate-related risk from investee companies. This will not only enable super funds to better assess the exposure of the company to climate related transition and physical risks, but transparent risk disclosure may also drive companies to adopt decarbonisation strategies to limit risk exposure. This association is supported by the work of the IPCC which identifies transparency as key to creating an enabling environment accurately pricing climate-related risks and opportunities (IPCC, 2023). For instance, when engaging with companies, superannuation funds can request companies to disclose their climate-related financial risk and opportunities according to the Taskforce for Climate related Financial Disclosures (TCFD) framework – which provides a set of 11 recommended disclosures aiming to foster consistent disclosure (TCFD, 2017).

Superannuation funds can also make requests of companies linked to their climate management for example the disclosure of a transition plan. An escalation strategy can be implemented to guide requests from the superannuation funds to influence the investee. If engagement has been unsuccessful, divestment may be considered after a set period of time.

Corporate climate target setting is on the rise with 44 per cent of listed companies worldwide publishing a climate target, and 30 per cent of targets aiming to reach net-zero. However, climate target setting varies in terms of ambition and comprehensiveness. Only 17 per cent of these companies' decarbonisation targets are aligned with the Science Based Targets Initiative (SBTi). These are targets that include net-zero by 2050 ambitions as well as shorter term reduction targets in alignment with a 1.5°C pathway and the Paris Agreement (MSCI, 2023). Superannuation funds should therefore not only be aiming to encourage climate target setting overall but carefully consider the ambition and comprehensiveness of the climate commitments of companies they're investing in.



1.3.1 Your Future, Your Super? Unintended consequences of current benchmarking practices

So what? MySuper was established with sound intentions to protect the financial performance of Australia's superannuation, however several parties have identified potential unintended consequences of this approach, including constraining a funds' ability to invest in line with investment preferences of some Australians.

The MySuper reforms, enacted in 2012, require funds to offer a default option called 'MySuper' to be eligible to receive default contributions from new employees. Then from July 2017, all member accounts in this default option needed to be invested in MySuper products. The concept behind the MySuper changes, as described by The Treasury, 2023, "were to provide a simple, cost-effective, balanced product for the vast majority of Australian workers who are invested in the default option of their current fund".

Over the years, MySuper has come under criticism for many reasons including the lack of competitive pressure for the funds to do better with many individuals disengaged and unlikely to question their fund's financial underperformance (Herborn, 2019).

To address the concerns raised by industry and the public, the Australian government introduced the *Your Future, Your Super* Act, which came into effect on 1 July 2021. The Act aims to hold superfunds accountable for financial underperformance via greater transparency and consequences for underperformance. An annual performance test, together with a consumer-focused YourSuper comparison tool, was adopted on 1 July 2021 to assess the performance of MySuper products. The Australian Prudential Regulation Authority (APRA) conducts the performance test by calculating a performance measure which includes comparing the product's net investment return over the last 8 years (amended to 10 years as of 1 July 2023 (The Treasury, 2023)) to a benchmark return as well as judging the product's past financial year's fees and expenses (RAFE) compared to benchmark RAFE¹. If a product's performance measure is lower than -0.5 per cent, the product does not pass test, requiring the fund to notify all affected members of the fact. If products do not pass the test in 2 consecutive years, the product is no longer allowed to accept any new members until it passes a future test (The Treasury, 2023). In 2022, 93 per cent of superannuation products passed the test, with one first-time fail and four second-time fails (APRA, 2023).

An official consultation reviewing the *Your Future, Your Super* measures in 2022 showed that while stakeholders generally support the policy's intent and acknowledge that testing motivated superannuation funds to address underperformance, several negative unintended consequences remained. Given the performance test's simplicity in terms a single performance measure, the test was found to be impacting investment decisions of not only underperformers but all funds, thereby creating incentive for benchmark hugging to reduce risk – such as via short-term decision making and avoidance of certain investments which are underrepresented by benchmarks. Given that benchmark hugging can conflict with members' best interest of maximising long-term results via reduced choice and diversification, stakeholders especially critiqued the test's ability to measure performance of trustee-directed products which are due to become part of the assessment as of 1 July 2023 (The Treasury, 2023). Trustee-directed products are non-MySuper products with strategic asset allocations to more than one asset class where trustees have control over the investment strategy and at least one member is in the accumulation phase (The Treasury, 2023). Simply put, products which formerly provided more investment freedom in line with consumer choice will now be subject to the same benchmarking test as the MySuper products.

The current performance test is seen as unsuitable for assessing 'choice' products, including Environmental, Social, and Governance (ESG) products with investment activities related to ESG, carbon transition and sustainability, because the test may not reflect the products' diversity and objectives. If the investment strategies of those products deviate too far from the benchmark indices, this may unintentionally cause performance test failure and product closure, reducing consumer choice and inhibiting the ability of superannuation funds to drive climate-related investments (The Treasury, 2023). In recent research by the Conexus Institute, it states, "*super funds will not be able to create portfolios which align with carbon transition consistent with the Paris Agreement goals [...], without creating an untenable level of Your Future, Your Super performance test risk*". Superannuation funds consequently face a dilemma between:

1. Risking a heightened likelihood of performance test failure if ESG investments are implemented with potentially severe reputational consequences in case of failure
2. Limiting investment strategies that account for ESG, sustainability and carbon transition, thereby risking contradicting members' long-term financial best interests and sustainability preferences (Bell & Rose, 2022)

¹ Performance measure = (Actual return – Benchmark return) + (Benchmark RAFE – Actual RAFE)



To ensure suitability of the performance test for choice products, and avoid constraining a fund's response to climate risk, regulators should consider amendments to the performance test. With changes already proposed to resolve the deficiencies of the performance test in the 2022 consultation processes – including alternative benchmarking for ESG products – supplementary testing with self-identified benchmarks or a holistic design change of the testing process (The Treasury, 2023) is required. This barrier should be dealt with by regulators to allow funds to better respond to members that want to consider other factors beyond year-on-year return percentages in their investment decisions. It is noted that to the extent that the ASX benchmark comprises companies whose valuations appropriately reflect levels of risk including climate, no significant issue should exist. However, under current market conditions it can be questioned whether this is the case.

1.4 The time is now to protect Australians' futures through alignment with climate realities

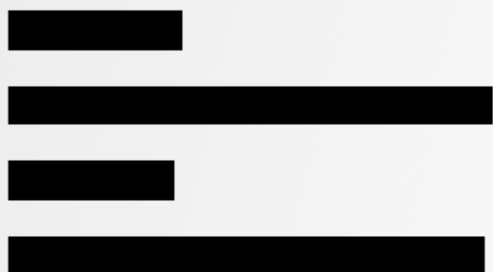
So what? Action is required to align with the temperature outcomes of the Paris Agreement and proceed with transitioning Australia toward a decarbonised future. With increased regulatory scrutiny on greenwashing, and the finalised International Sustainability Standards Board (ISSB)'s standards released on 26 June 2023, the time is now for superannuation funds to seriously progress climate engagement and disclosure.

According to the IPCC's most recent AR6 Synthesis Report, rapid, deep, and immediate emissions reductions are needed across all sectors to limit global warming to

1.5°C. If action is further delayed, this will lock-in high-emission infrastructure, increase the risk of stranded assets and reduce feasibility of effective adaptation and mitigation actions. Given the long implementation times of adaptation options and delayed mitigation action pushing human and natural systems towards their adaptation limits, accelerated implementation is key. To enable these adaptation and mitigation actions, large-scale climate finance is needed. The IPCC estimates that average annual mitigation investments would need to increase by a factor of three to six from current levels to limit warming to 2°C or 1.5°C, and that developing countries alone expected to need US\$127 billion per year by 2030 to adapt to climate (IPCC, 2023). With Australian superannuation assets totalling ~\$3.4 trillion in December 2022 (APRA, 2023), superannuation funds can support transitioning Australia to a decarbonised future through active investment.

The implementation of new ISSB standards for climate-related disclosures and a heightened awareness of greenwashing, are underpinning the immediate need for superannuation funds to set targets, actively manage their climate risk and opportunities and transparently report on climate issues. Superannuation funds must make significant progress on climate-related disclosures as well as climate action to qualify as a future-ready fund that has its' members best interest in mind when investing. Consumers are becoming increasingly critical of organisational climate performance and according to the 2021 legal opinion on Climate Change and Directors Duties by Noel Hutley and Sebastian Hartford-Davis, companies are likely to see increased challenges due to greenwashing linked to net-zero commitments (Hutley SC & Davis, 2021). To ensure compliance with new climate-related standards and sustain an attractive product offering, pressure is mounting on superannuation funds to make meaningful carbon emissions reductions to progress decarbonisation and adaptation.

What shapes the management
of climate related risk and
opportunities within Australia's
superannuation industry?



2. What shapes the management of climate related risk and opportunities within Australia's superannuation industry?

To determine appropriate consideration of climate-related risk amongst superannuation funds, it is necessary to assess the extent of disclosure transparency, as well as the extent of climate response consistent with best practice. Meaningful transparent climate related disclosure provides the basis through which decision-makers can assess the level of exposure to climate risk as well as consider the appropriateness of the company's response to climate issues. The analysis contained in Section 3 - Australia's largest superannuation funds – how do they stack up? considers both these elements. First, fund disclosure is considered using the ISSB's draft standards as a baseline. Second, appropriateness of response to climate risk is examined against global guidance. In this section, the context driving disclosure of climate-related risks and opportunities both internationally and in Australia is discussed.

2.1 What is currently guiding climate disclosure in Australia?

So what? The current climate disclosure regime in Australia can be viewed as a patchwork of overarching mandatory reporting requirements that, in-part, relate to sustainability, along with a range of voluntary reporting standards. There is now inconsistent climate and sustainability disclosure practices across some of Australia's largest companies. This inconsistency could adversely impact investment decision-making and disclosure across Australia's superannuation funds.

Within the financial sector, prominent organisations such as Australian Securities and Investments Commission (ASIC), Australian Prudential Regulatory Authority (APRA), Australian Securities Exchange (ASX) and Australian Accounting Standards Board (AASB) have all produced guidance and reports on climate (sustainability) related disclosures (refer to figure 4 for an overview containing some of the relevant bodies). These organisations, together with the Reserve Bank of Australia, have been supportive of investors' calls for standardised climate-related risk disclosure (AFR, 2021). For instance, the ASX Corporate Governance Council's Principles and Recommendations,

in particular Recommendation 7.4, encourages entities to consider whether they have exposure to material climate change risk (ASX, 2019).

From a voluntary disclosure perspective, the Task Force on Climate-Related Financial Disclosures (TCFD) is a well-known climate disclosure regime. Since the issuance of the ASIC Report 593 in 2018 (ASIC, 2018), ASIC notes that, *"voluntary adoption of TCFD reporting by some larger listed companies has materially improved the standards of climate-related governance and disclosure in our market, however there remains a way to go"* (ASIC, 2021). Globally, developed economies such as New Zealand and the United Kingdom have implemented mandatory TCFD style reporting that applies to various companies and industries. Other major developed economies have also signalled considerations to implement climate-related disclosure reporting regulation.

Climate disclosure standards are constantly evolving (see Figure 5), increasing pressure on superannuation funds and their investees to be transparent with regard to climate-related risk and potential impact on the future value of investments.

So what? What is currently an acceptable minimum level of transparency is unlikely to be so in the future as evolutions occur in reporting frameworks, attribution science and increased societal expectations and scrutiny on greenwashing.

At the forefront of developments in sustainability, and climate reporting, are the following two draft standards developed by the ISSB:

1. Exposure Draft IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information (General Requirements Exposure Draft)
2. IFRS S2 Climate-related Disclosures (Climate-related Exposure Draft)

These are expected to become the global baseline for sustainability and climate disclosure. These standards from the International Financial Reporting Standards (IFRS) Foundation set out the requirements for disclosure of sustainability-related financial information as well as requirements for identifying, measuring and disclosing

International



The International Financial Reporting Standards (IFRS) Foundation issues Sustainability and Accounting Standards

IASB

STANDARD-SETTING BOARDS

ISSB

The International Accounting Standards Board (IASB) is an independent body responsible for developing IFRS Accounting Standards

The International Sustainability Standards Board (ISSB) develops standards to establish a global baseline for sustainability disclosures.

In March 2022, the IFRS Foundation published the following draft disclosure standards developed by the ISSB:

- Exposure Draft IFRS S1 – General Requirements for Disclosure of Sustainability-related Financial Information
- Exposure Draft IFRS S2 – Climate-related Disclosures

The AASB intends to use the work of the ISSB as a baseline.

Australia



STANDARDS DEVELOPMENT

FRC

The Financial Reporting Council (FRC) provides high-level oversight and strategic direction to AUASB and AASB

REGULATORS



ASIC
Australian Securities & Investments Commission

APRA

The Australian Securities and Investments Commission (ASIC) administers and enforces a range of legislation, including the Corporations Act 2001.

The Australian Prudential Regulation Authority (APRA) regulates financial institutions such as banks, superannuation funds and insurers, and considers compliance with AASB accounting standards.

AUASB

AUASB and AASB operate under Australian Securities and Investments Commission Act 2001

AASB

The Auditing and Assurance Standards Board (AUASB) develops Auditing Standards that apply under the Corporations Act 2001.

The Australian Accounting Standards Board (AASB) develops financial reporting standards that apply under the Corporations Act 2001.

Enforcement



Superannuation funds

Figure 4 – Overview of key bodies guiding climate disclosure

climate-related risks and opportunities that an entity is exposed to, thereby supporting the reporting of more consistent, complete, comparable and verifiable information for decision-makers.

Information will enable investors, lenders and other creditors to make more informed decisions with regard to resource allocation. It will increase the pressure on companies to disclose material risks. (ISSB, 2022; ISSB, 2022). The standards consider the Financial Stability Board (FSB)'s TCFD recommendations and include components of frameworks and standards from other international standardisation entities.

The final versions of the IFRS S1 and S2 standards were released on 26 June 2023 and are expected to be followed by adoption into Australian standards by the AASB (which has flagged its intention to use the work of the ISSB standards as a baseline) for the financial year ended 30 June 2025. Following adoption, Australia's largest companies would need to disclose material sustainability and climate-related risks in alignment with these standards.

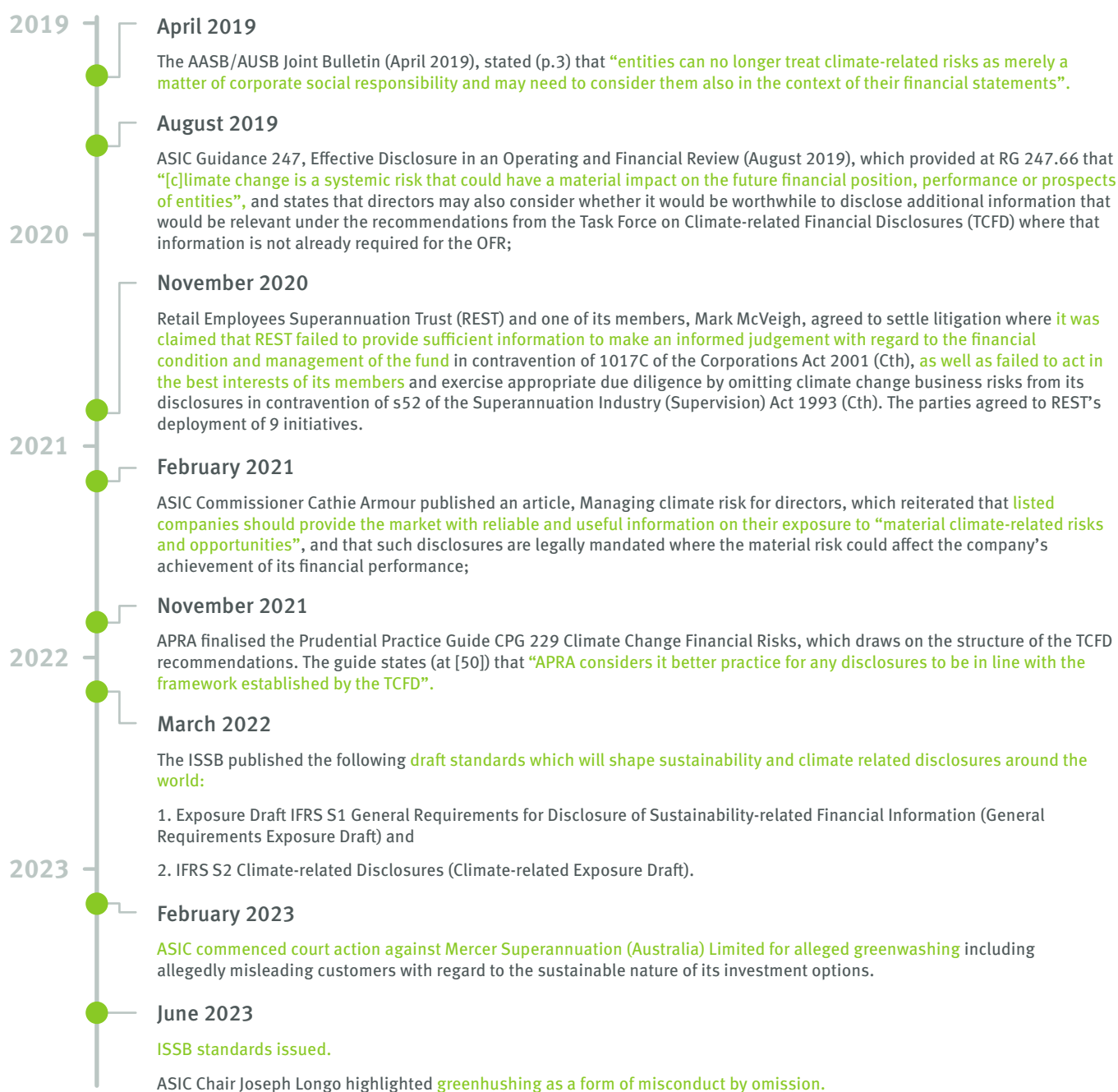


Figure 5 – A timeline of key milestones in climate related disclosure²

² Based on (AASB & AUASB, 2019; ASIC, 2019; Rest, 2020; Armour, 2021; APRA, 2021; ISSB, 2022; ISSB, 2022; Wootton, 2023)

3

Australia's largest
superannuation funds –
how do they stack up?



3. Australia's largest superannuation funds – how do they stack up?

Aurecon's two-phase assessment identified how Australia's superannuation funds performed based on:

1. **First phase: Transparency** – aiding in internalising negative climate externalities and provide relevant, reliable, comparable, and understandable information for investment decision-making with regard to long-term time horizons
2. **Second phase: Best practice** – facilitating genuine and progressive mitigation of, and adaptation to, climate impacts through effective and meaningful targets and metrics, risk management, strategy, and governance

The examination has focused on the 10 largest Australian superannuation funds, categorised by total assets. Focusing on the largest funds provides an indication of the degree to which those within the sector with the greatest resources can achieve disclosure transparency and climate management. Examining challenges or areas for further work within this group provides indications of where smaller funds may also be challenged.

3.1 Aurecon's approach to assess transparency

So what? Aurecon has used the ISSB's IFRS S2 Climate-related Disclosures Exposure Draft as a foundation to assess the relative transparency between Australia's largest super funds as denoted by funds under management.

To identify which of Australia's top 10 superannuation funds (Table 1) are further progressed with respect to climate-related disclosures, Aurecon conducted a high-level review testing alignment with the IFRS S2 Climate-related Disclosures Exposure Draft³ (ISSB, 2022) and the relevant industry-based disclosure requirements⁴ (ISSB, 2022). Refer to **Appendix C** for a comprehensive list of the 58 disclosures tested.

The assessment tested whether a set of disclosures selected for the purposes of the review were contained within the superannuation fund's most recent published reports, providing an indicative measure of relative transparency between superannuation funds. Selected sample disclosures were assessed as either:



1. **Substantively discussed**, indicating that while not all specific subcomponents of the ISSB's disclosures standards have been addressed, some extent of information has been provided
2. **Not substantively discussed**, indicating that the disclosures made by the fund do not materially or reasonably provide the extent of information required. This includes the absence of relevant information

It is noted that this assessment has not had regard for the accuracy of the disclosures (this is not an assurance exercise), only the presence of the information. The transparency scores indicate the accessibility of relevant information and do not necessarily reflect the fund's impact on climate. The disclosures span four key areas:

1. **Metrics and targets** used to monitor and manage an entity's performance surrounding climate-related risks and opportunities
2. **Risk management** approach to identifying, assessing, managing, and mitigating climate-related risks and opportunities
3. **Strategy** including how an entity's strategy may be threatened, enhanced, or changed as a result of climate-related risks and opportunities over the short-, medium- and long-term
4. **Governance** approach to manage and monitor climate-related risks and opportunities, including processes, controls and procedures

³ While the assessment was primarily based on IFRS S2 Climate-related Disclosures Exposure Draft published in March 2022, some elements of IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information have also been considered

⁴ contained in Appendix B Industry- Volume B15—Asset Management & Custody Activities

| Fund name | Fund type | Total Assets (\$AUD billion) |
|---|---------------|------------------------------|
| AustralianSuper | Industry | 271.7 |
| Australian Retirement Trust | Industry | 247.3 |
| Aware Super | Public Sector | 150.7 |
| Unisuper | Industry | 103.4 |
| Public Sector Superannuation Scheme | Public Sector | 100.3 |
| Colonial First State FirstChoice Superannuation Trust | Retail | 82.9 |
| HOSTPLUS Superannuation Fund | Industry | 82.5 |
| BT Retirement Wrap (merged with Mercer April 2023) | Retail | 81.9 |
| MLC Super Fund | Retail | 77.7 |
| Military Superannuation & Benefits Fund No 1 | Public Sector | 76.4 |

Table 1 - Australia's ten largest superannuation funds, categorised by total assets as of June 2022 (APRA, 2022)

To ensure the assessment reflects information available to key decision-makers such as superannuation fund members, the scope was limited to reviewing only publicly available information accessible as of May 2023. It is noted that in the instance of AustralianSuper, publications, including its 2021 Climate Change Report and Net Zero 2050 report, had been withdrawn from its website at the time this review was undertaken. Similarly, the BT Retirement Wrap Sustainable Investment Policy and Proxy Voting Policy had also been withdrawn and were not considered as part of this assessment (see **Appendix B** for details).

3.1.1 Findings of transparency analysis

So what? The superannuation sector has the opportunity to materially improve the transparency of climate-related (financial) information through disclosure. Limited information is currently available to enable effective decision-making for key stakeholders where climate-related risks and opportunities are concerned. Funds names have been included for transparency purposes, to enable funds to learn from each other and for stakeholder reference.

As an overarching observation, the assessment found locating both the relevant reports as well as the relevant information within the publications to be often challenging. Among the most difficult of those assessed included the Public Sector Superannuation Scheme and Military Superannuation & Benefits Fund No. 1 were amongst the most difficult to find, both of which are managed by

Commonwealth Superannuation Corporation⁵. Information pertaining to these funds is available through the 'Transparency Portal' which cannot be easily exported or downloaded. On its website, the Commonwealth Superannuation Corporation states, "CSC's investment approach is aligned with the Paris Agreement which seeks to limit the increase in the global temperature to 'well below 2 °C above pre-industrial levels'", however limited emissions reduction targets were able to be identified, with the exception of property portfolio.

Aurecon's analysis (figures 6 and 7, and **Appendix D** for a list of the number of disclosures substantively discussed for each superannuation fund assessed) indicate that the Australian superannuation sector is not ready for Australia's adoption of the ISSB's disclosure standards released on 26 June 2023. The greatest opportunity for improvement in disclosure rests with BT Retirement Wrap, MLC Super Fund, Military Superannuation & Benefits Fund No. 1, Public Sector Superannuation Scheme, and Colonial First State FirstChoice Superannuation Trust which all scored below 10 per cent overall.

More granular results show the extent of the opportunity for improvement, with the **median percentage of substantive disclosure being 10 per cent for climate metrics and targets** (median substantive disclosure of 2 of 21 sampled disclosure items), **17 per cent for climate strategy** (4 of 24 sampled disclosure items), **0 per cent for climate governance** (0 of 6 sampled disclosure items) and **0 per cent for climate risk management** (0 of 7 sampled disclosure items). Refer to **Appendix C** for a comprehensive list of the 58 disclosure items tested.

⁵ Commonwealth Superannuation Corporation also manages Commonwealth Superannuation Scheme, Public Sector Superannuation accumulation plan, and Australian Defence Force Superannuation

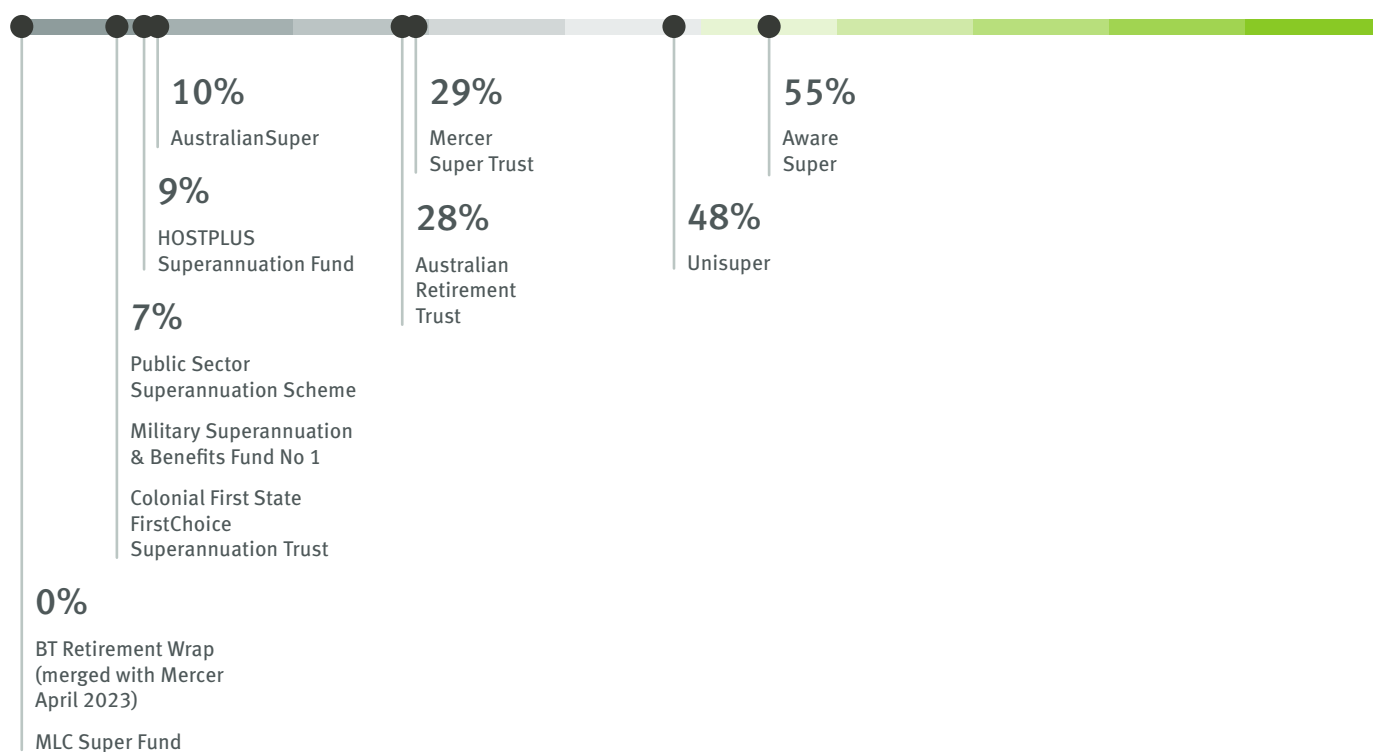


Figure 6 – Overall results of disclosure assessment. Lower scores reflect greater effort needed for uptake of the ISSB's draft disclosure standard

| | Climate metrics & targets | Climate strategy | Climate governance | Climate risk management |
|---|---------------------------|------------------|--------------------|-------------------------|
| AustralianSuper | 10% | 0% | 50% | 14% |
| Australian Retirement Trust | 33% | 17% | 33% | 43% |
| Aware Super | 67% | 46% | 67% | 43% |
| Unisuper | 48% | 46% | 67% | 43% |
| Public Sector Superannuation Scheme | 0% | 17% | 0% | 0% |
| Colonial First State FirstChoice Superannuation Trust | 10% | 8% | 0% | 0% |
| HOSTPLUS Superannuation Fund | 10% | 13% | 0% | 0% |
| BT Retirement Wrap (merged with Mercer April 2023) | 0% | 0% | 0% | 0% |
| Mercer Super Trust | 38% | 21% | 50% | 14% |
| MLC Super Fund | 0% | 0% | 0% | 0% |
| Military Superannuation & Benefits Fund No 1 | 0% | 17% | 0% | 0% |

Figure 7 – Percentage of disclosures substantively discussed per focus area



It is useful to compare our findings with the latest climate risk self-assessment surveys conducted by APRA. In the APRA research 75 per cent of superannuation funds surveyed indicated they have a regular formal process for assessing climate risks. Results also indicate the majority of responders, at 82 per cent, apply both qualitative and quantitative metrics in their assessments. It should be noted that the majority of superannuation responders, at 71 per cent, indicated they assessed Scope 1 and 2 emissions; with a further 18 per cent indicating Scope 3 was considered in their investment process. (APRA, 2022). There are stated limitations on data availability for underlying investment emissions and complexity of Scope 3 accounting which pose challenges across the superannuation industry.

The findings of Aurecon's assessment, compared with those of APRA, indicate that while superannuation funds may have appropriate processes in place for assessing climate-related financial impacts (based on the responses provided to APRA), their information is generally not accessible to key decision-makers to consider the impact of climate-related risks on the value of their investments.

Principles to guide best practices in climate management for super funds



4. Principles to guide best practices in climate management for super funds

So what? Understanding the principles to guide best practices in climate management requires consideration of international agreements surrounding climate change and the key science that underpins it. The most notable agreement is the Paris Agreement, made in 2015. Here, two key principles are outlined which must be adhered to in order to achieve alignment with the Paris Agreement.

Alignment with temperature goal. The first principle is the alignment with the temperature goal. The Paris Agreement states that to avoid the worst impact of climate change, emissions need to peak as soon as possible, while holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels (United Nations, 2015).

Seven global guidelines were evaluated (standards, regulations and academic publications) for measuring alignment of companies and funds with climate goals:

1. TCFD Supplemental Guidance for the Financial Sector (2021)
2. Portfolio Alignment Team guidance (2021)
3. European Union (EU) Climate Transition and Paris-Aligned Benchmarks (2020)
4. Science Based Targets initiative (SBTi) guidance on the Financial Sector (2022)
5. United Nations Integrity Matters Report (2022)
6. Rekker et al. (2022) in *Nature Communications*
7. Aotearoa New Zealand Climate Standard (2023)

These guidelines suggest well-below 2°C alignment (1, 2, 4, 6)⁶, 1.5 °C alignment (7) or 1.5 °C alignment with no or low overshoot (3,5) (see **Appendix A**). The Paris Agreement states “*well-below 2°C*” as a minimum, aligning with decarbonisation pathways that are consistent with this should be a minimum requirement of what “*good*” practice looks like for alignment with climate goals.

To assess the alignment against a Paris-aligned benchmark, it is important to understand the specifics of what a 1.5°C or well-below 2°C benchmark means from a scientific perspective. Whilst the commonly used goal of “net-zero by 2050” is an element of some 1.5°C scenarios, it alone is certainly not sufficient to claim alignment with the goals of the Paris Agreement. Thus, it is important to establish the attributes of what net-zero by 2050 needs to be accompanied by to ensure it is aligned with the Paris Agreement.

Net zero by 2050 is not enough: Cumulative carbon emissions are what matter

Cumulative emissions over time, not emissions at one point in time, determine global temperature change (IPCC, 2018; IPCC, 2021; Fankhauser, et al., 2022; Rekker, Ives, Wade, Webb, & Greig, 2022).

To meet temperature limits, the world needs to stay within a global carbon budget (which cumulative emissions have to stay within). For example, starting from 2020, to have a 67 per cent chance to keep global temperature rise below 1.5°C, there was a remaining global carbon budget of 400 GtCO₂ (IPCC, 2021)⁷. With emissions of 33.3Gt CO₂ in 2020 and 34.9 Gt CO₂ in 2021 combined consuming 17.1 per cent of the remaining carbon budget, and assuming that this trend continues, the 1.5°C carbon budget will be used up in 2031 (Liu, Deng, Davis, Giron, & Ciais, 2022). Even if the world’s emissions linearly decline to net-zero in 2050 after 2031, the 1.5°C temperature goal will be vastly exceeded. Therefore, to assess a company’s or fund’s alignment with temperature and track alignment with cumulative emissions, it is crucial to have the time period and base year from which targets and performance is measured. With recent yearly emissions of approximately 35Gt CO₂, it is most urgent that emissions reductions are front-loaded to have the greatest impact in terms of slowing global warming (Fankhauser, et al., 2022) as demonstrated in figure 8.

⁶ Note that the TCFD Supplemental Guidance for the Financial Sector suggests a 2°C scenario is generally aligned with the objectives of the Paris Agreement in its original 2017 guidance and in its all-sector guidance in 2021, it suggests using well-below 2°C for financial institutions (TCFD, 2021).

⁷ This can be higher or lower depending on key uncertainties or variations

⁸ Minus 100 GtCO₂ on a centennial time scale to prevent Earth System Feedbacks from kicking in

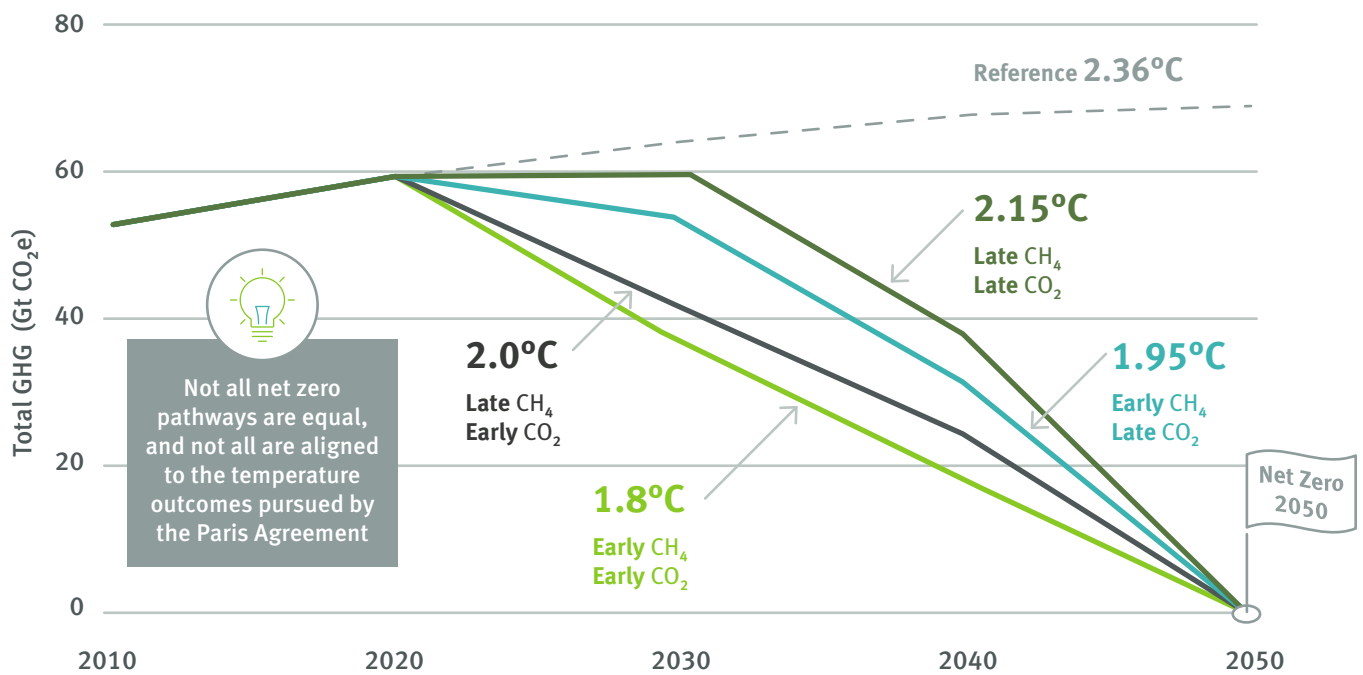


Figure 8 – While net zero emissions is achieved in all illustrated pathways, each has a different climate impact by 2050⁹ – based on (Sun, Ocko, Sturcken, & Hamburg, 2021)

4.1 Integration of best practice principles in climate management for super funds

So what? Once a superannuation fund has established principles and associated metrics and targets that align with the Paris Agreement, the metrics and targets must be integrated and supported by an entity's operational processes and governance.

Three clear best practice concepts are presented below for each category of climate metrics and targets, climate strategy, and climate risk management and governance:

Climate targets

So what? Metrics and targets aligned with the temperature outcomes identified in the Paris Agreement lay at the heart of climate performance measurement.

As a baseline, targets should include:

1. The **base year** against which emissions reduction can be measured

2. Clear **interim time horizons**, including short-term (per annum), medium-term (5-15 years), and long-term (2050)
3. Targets **aligned with the temperature outcome** directed in the Paris Agreement (efforts to limit the temperature increase to 1.5°C above pre-industrial levels)

Targets and metrics are central to assessing climate risk and measuring climate performance (see figure 9). However, not all seven guidance sources include clear metrics and targets to evaluate a fund's alignment with temperature outcomes.

For instance, the Aotearoa New Zealand Climate Standard targets require an entity to disclose its view on how its greenhouse gas emission target contributes to limiting global warming to 1.5°C; but the standard allows for flexibility and only requires the entity to disclose the basis of its view, including the reliance on the opinion or methods provided by third parties (External Reporting Board, 2023).

As targets are only one element of managing climate risk and are solely forward looking, they do not communicate what the performance of an entity has been to date, and how well it associates with a Paris-aligned carbon reduction pathway. A baseline, different time horizons, and methods, for a Paris-aligned temperature outcome must be included.

⁹ Extent of warming is impacted by the composition of greenhouse gasses. Early action on methane emissions reduction contributes most significantly to slowing warming over the coming decades while carbon dioxide. As a long-lived greenhouse gas, carbon dioxide contributes more significantly to long-term warming. By 2100 the reference case indicates warming of 3.94°C while warming from all net zero pathways continues to reduce.



Figure 9 – Metrics and targets lay at the heart of climate performance measurement

A base year should be established (a baseline) against which emissions reduction can be measured

A base year, the first year from which a target is set and progress can be measured, has been included as a key element for disclosure by the TCFD in 2017 (TCFD, 2017) and is required to be reported under the EU Climate Transition and Paris-Aligned Benchmarks, the SBTi guidance on the Financial Sector and the Aotearoa New Zealand Climate Standard (European Commission, 2020; Science Based Target Initiative, 2022; External Reporting Board, 2023). Without a clear base year, emissions reduction cannot be assessed.

Superannuation fund performance: While a basic requirement, the majority of superannuation funds did not disclose a base year against which emissions reduction progress can be measured.

Targets should be set on a short-, medium- and long-term basis

There is broad consensus that targets should be set on a short-, medium- and long-term basis. Following scientific principles for good practice, there should be a greater focus on shorter timeframes acknowledging that front-loaded emissions reduction is required to increase the likelihood of meeting the goals of the Paris Agreement and limiting climate impacts. Example best practice time horizons for targets include short-term (per annum), medium-term (5-15 years), and long-term (2050).

Superannuation fund performance: While some superannuation funds do not disclose an emissions reduction target, Aware Super is a leader by providing annual updates on a range of initiatives supporting medium- and long-term targets across the whole of portfolio. No funds have disclosed short-term emissions reduction targets.

Paris alignment: methods used to set a target should result in alignment with the temperature outcome provided in the Paris Agreement

There are various methods to set a target aligned with the Paris Agreement. Some guidelines allow a variety of methods, such as United Nations Integrity Matters Report, which requires the target to have been generated using a robust methodology consistent with limiting warming to 1.5°C with no or limited overshoot verified by a third party (for example by the SBTi, the Partnership for Carbon Accounting Financials (PCAF), The Paris Agreement Capital Transition Assessment (PACTA), The Transition Pathway Initiative (TPI), the International Organization for Standardization (ISO), among others), (United Nations, 2022).

Similarly, the ISSB and the Aotearoa New Zealand Climate Standard require disclosure of whether the target relies on any methods provided by third parties (External Reporting Board, 2023). It is important to note that some of the methodologies provided by these third parties have been criticised in the scientific community for lacking scientific rigour (Rekker, Ives, Wade, Webb, & Greig, 2022; Bjørn, Lloyd, & Matthews, 2021).

The SBTi provides methodologies for target setting for financial institutions (Science Based Target Initiative, 2022). The Portfolio Alignment Team (PAT) guidance is more focused on actual alignment of portfolios with the Paris Agreement using portfolio alignment tools, rather than defining the targets to be set (Portfolio Alignment Team, 2021). Similarly, the EU regulation outlines what a portfolio must comply with to be classified as climate transition or Paris aligned (European Commission, 2020).

The approaches for target setting in alignment with the Paris Agreement suggested by these guidelines are summarised as:

- Greenhouse gas intensity or absolute emissions reduction must be greater than 7 per cent on average per annum (intensity target for equity, intensity or absolute targets for debt, and absolute targets for sovereign debt) (European Commission, 2020)

- Sectoral Decarbonization Approach (SDA) (Science Based Target Initiative, 2022)
- SBT Portfolio Coverage Approach (Science Based Target Initiative, 2022)
- Temperature Rating Approach (Science Based Target Initiative, 2022)
- Portfolio Alignment Tool (Portfolio Alignment Team, 2021)

Superannuation fund performance: While nearly all funds state alignment with the goals of the Paris Agreement, targets are, in some cases, completely omitted and do not substantiate alignment to a temperature outcome of limiting warming to 1.5°C with no or limited overshoot. *Funds should use the best practice approaches outlined in this section when setting targets.*

Climate Metrics: Performance against targets and Paris aligned benchmarks

So what? Without assessing the progress against targets, a target is merely aspirational. In 2017, the TCFD already included “key performance indicators used to assess progress against targets” as part of their disclosure requirements (TCFD, 2017). In fact, assessing climate performance requires a comparison to science-based and Paris-aligned benchmarks.

A target, in itself, is not an indication of the alignment of a superannuation fund with the goals of the Paris Agreement. To align with the goals of the Paris Agreement, it was clear that cumulative, i.e. year-on-year, emissions determine global temperature, and thus **it is crucial that cumulative emissions are tracked and compared to an underlying Paris compliant pathway**. Tracking cumulative emissions solves two key challenges. First, it ensures that any lack in emissions reduction is identified early. Second, it can allow for recalculation of the emissions reduction so that any misalignment to date is compensated for. This is reflected in the following guidelines:

- The Portfolio Alignment Team (PAT) clearly points to the importance of cumulative emissions alignment in order to assess compliance with the goals of the Paris agreement and “[...] suggests financial institutions calculate alignment or warming scores on a cumulative-emissions basis, in order to appropriately accommodate the physical relationship between cumulative emissions and warming outcomes.” (p.10). The PAT provides information on what portfolio

alignment tools are, why they exist, and how they can be used, as well as what makes a good portfolio alignment tool and what is needed to build an enabling environment for the portfolio alignment tools (Portfolio Alignment Team, 2021). Assuming companies use a good portfolio alignment tool, following the suggestions by the PAT, their portfolio alignment (transition to warming score) to the Paris Agreement can be calculated. This provides a direct comparison on how close the company is to aligning with the at least well-below 2°C temperature limit.

- The EU benchmarking regulation has strict rules on what it means to claim and continue to claim alignment with the Paris agreement. The regulation requires that for each year in which the targets are not achieved, the targets must be adjusted upward to compensate for this misalignment in the following year. If this compensation does not occur the following year, or the target is missed on 3 occasions in a 10-year period, alignment can no longer be claimed (European Commission, 2020).
- The UN Integrity report advocates that to be recognised as being net-zero aligned, an entity must report its progress on achieving or exceeding its interim targets, and be verified by a credible, independent third-party based on publicly available data (United Nations, 2022).
- The SBTi provides methodologies to set targets and requires annual tracking and reporting of progress against approved targets (Science Based Target Initiative, 2022).

Superannuation fund performance: No superannuation funds have disclosed cumulative emissions and compared them to a Paris-aligned emission reduction pathway. Funds should use temperature alignment tools and disclose their alignment.

Climate strategy

As a baseline, climate strategy should include

1. A viable **transition strategy and roadmap**
2. A clear **approach to proxy voting**
3. Effective, viable and **transparent escalation strategy** for unsuccessful engagement

Develop a viable transition strategy and roadmap

Companies and funds need to develop a viable transition strategy and roadmap, integrated within business operations and linked with metrics and targets, risk management processes, and governance structures and policies. In 2021, the TCFD published clear guidance on elements to consider as part of an appropriate Transition Plan. These elements are categorised across governance, strategy, risk management and metrics and targets, ensuring the transition plan is appropriately embedded within the superannuation fund (TCFD, 2021).

Superannuation fund performance: Of the superannuation funds reviewed, Aware Super was the only fund to publish a substantive Transition Plan.

Develop and publish an effective approach to proxy voting

Superannuation funds should develop and publish a clear approach to proxy voting for climate-related proposals. The ISSB refers to approaches indicated in the PRI Reporting Framework for Direct – Listed Equity Active Ownership (PRI, 2018) which include:

1. *The scope of the entity's voting activities*
2. *The objectives of the entity's voting activities*
3. *How, if at all, the entity's voting approach differs among markets*
4. *Whether the entity has a default position of voting in favour of management in particular markets or on particular issues*
5. *Whether, and how, local regulatory or other requirements influence the entity's approach to voting*
6. *Whether the entity votes by proxy or in person by attending annual general meetings (or a combination of both)*

Superannuation fund performance: All superannuation funds reviewed could benefit from improved clarity regarding their approach to proxy voting to climate-related matters. While some funds discuss scope and objectives of voting activities at a high level, it was generally unclear as to whether the approach differs among key climate-related issues.

Establish an effective, viable and transparent escalation strategy for unsuccessful engagement

Superannuation funds should develop an effective and viable escalation strategy to navigate instances where engagement activities with investees are unsuccessful. For components of an effective escalation strategy, the ISSB refers to approaches indicated in the International Corporate Governance Network (ICGN) Global Stewardship Principles (ICGN, 2020) which include:

1. *Expressing concerns to corporate representatives or non-executive directors, either directly or in a shareholder meeting*
2. *Expressing the entity's concern collectively with other investors*
3. *Making a public statement*
4. *Submitting shareholder resolutions*
5. *Speaking at general meetings*
6. *Submitting one or more nominations for election to the board as appropriate and convening a shareholder meeting*
7. *Seeking governance improvements and/or damages through legal remedies or arbitration*
8. *Exit or threat to exit from the investment*

A viable escalation strategy for unsuccessful engagement based on financial sector guidance from the Science Based Targets initiative is outlined in figure 10.

Superannuation fund performance: Based on Aurecon's review, there is a need for uptake of an escalation strategy throughout Australia's superannuation sector. An escalation strategy is critical to ensuring that a fund's targets are achievable.

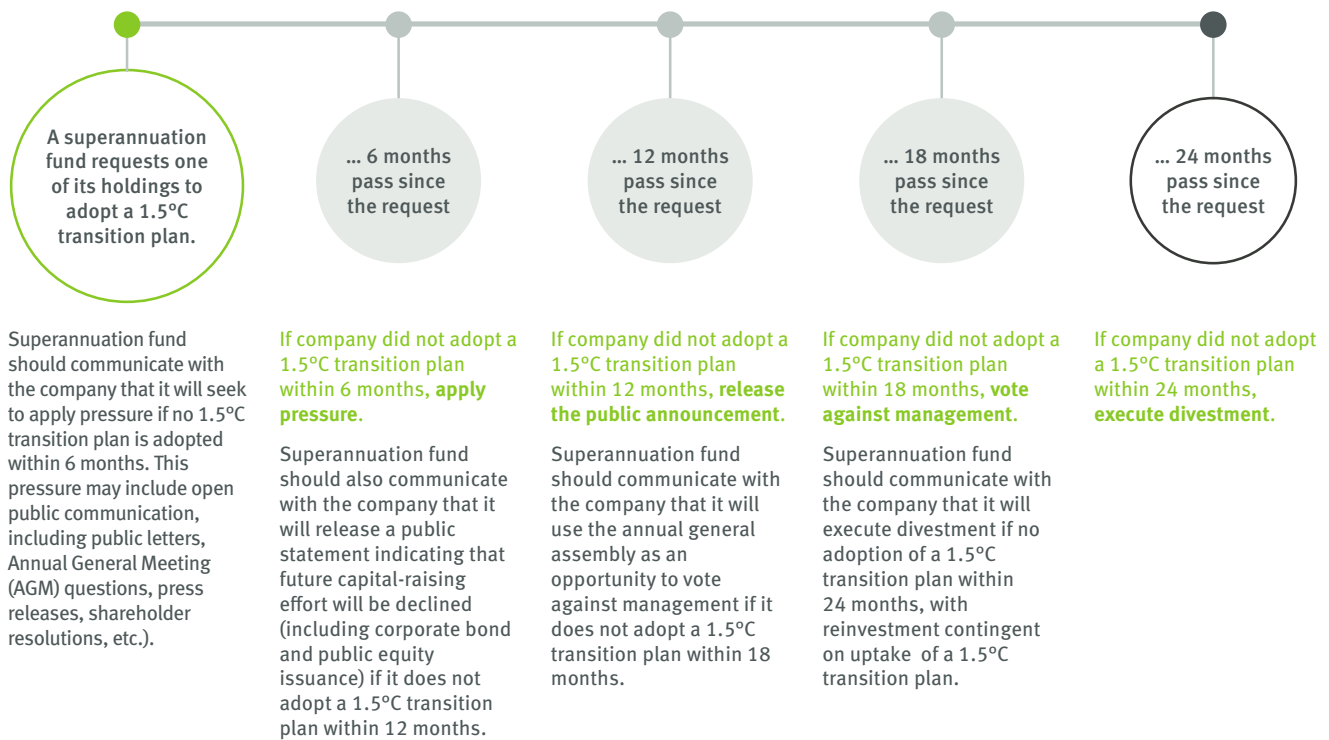


Figure 10 – A proposed escalation strategy adapted from (Science Based Target Initiative, 2022)

Climate risk management

As a baseline, climate strategy should include

1. Comprehensive **assessment of climate-related risks**
2. Use of **scenarios aligned with temperature** outcomes
3. **Prioritisation** of climate-related risks and opportunities

Comprehensive assessment of climate-related risks

In 2020, the TCFD provided guidance in regard to types of climate transition and physical risk assessment approaches and possible metrics (TCFD, 2020). Superannuation funds should consider each of these risks as part of their risk management processes to inform prioritisation. Key risks are included in table 2.

| Transition Risk | Physical Risk |
|---|---|
| Policy and legal – including variations in local, regional and global incentives, and requirements, uncertain effects of policy and legal actions across jurisdictions, and complex relationships across regulatory developments. | Acute – including varying effects based on events, varying magnitude and impacts associated with events, and complex interconnections and relationships between variables that influence weather events. |
| Technology – including novel technologies, capabilities and applications, complex relationships across markets, economics and policy environments, and uncertainty surrounding various solutions and technologies over time for various users. | Chronic – including longer time horizons, changing magnitude and consideration of tipping points and thresholds, and varying effects based on geography and events. |
| Market – including complex relationships across policy, consumers and societal context, impact on demand and cost arising from nonlinear relationships, and novel dynamics and market signals impacting raw inputs. | |
| Reputation – including the novel nature of responses as societal expectations shift, and the significance of severity and scope of impact rapidly changing | |

Table 2 – Climate transition and physical risks – adapted from (TCFD, 2020).

Superannuation fund performance: Unisuper, among others, provided a limited high-level assessment of climate-related risks. The sector can materially improve its disclosures surrounding processes to identify climate-related risks and opportunities.

Use of scenarios

Climate risk management should also include the use of scenarios that are aligned with metrics and targets (including targeted temperature outcomes) reflected in the choice of scenario characteristics including a Representative Concentration Pathway (RCP) as well as the characteristics of a consistent IPCC Shared Socioeconomic Pathway (SSP) (or developed through an established alternative scenario development methodology). These scenarios would identify vulnerability to climate transition and physical risk at both the entity, and product offering level, to enable a superannuation fund member to understand their level of exposure including amount and percentage of assets vulnerable to climate risk.

Recently the New Zealand External Reporting Board (External Reporting Board, 2022) included guidance on scenario use to assess climate impact. They advised a minimum of three scenarios should be considered to integrate elements of transition and physical risk:

1. The first scenario should use a 1.5°C Paris-aligned scenario
2. The second scenario should consider a 3°C or greater climate-related scenario
3. The third scenario should be selected as considered most relevant

Superannuation fund performance: Some superannuation funds, including Aware Super and Mercer, disclose that scenario planning aligned with various degrees of warming is undertaken. Results of these assessments were not substantively discussed and the extent of alignment to metrics and targets was unclear.

Prioritisation of climate-related risks and opportunities

As a precursor to undertaking scenario planning, a vulnerability assessment should be undertaken. This establishes a baseline understanding of business value drivers, including asset classes and value chains of significant investments and market segments. This assessment should identify material exposure for consideration in climate scenarios. The UN Environment Programme Finance Initiative provides guidance to assess vulnerability across four key impact channels: macro-environment, supply chain, operations and assets, and market (UNEP, 2021).

This assessment should incorporate prioritisation criteria and lead to disclosure of prioritised climate-related risks and opportunities, including the amount and percentage of assets vulnerable to climate-related risks. The TCFD provides guidance surrounding prioritisation criteria to include speed of onset and vulnerability in addition to traditional considerations of impact and likelihood (TCFD, 2020).

Superannuation fund performance: No superannuation fund provided a substantive description of how climate-related risks and opportunities are assessed and managed, or vulnerability to transition risk at a product level, to enable a member to understand their level of exposure.



Governance

As a baseline, climate-related governance should include:

1. Effective **governance processes** and bodies **that explicitly address climate-related issues** including clear and transparent definition of the responsibilities of the board and management
2. **Incentivisation** of management aligned with long-term prosperity
3. Policy ensuring **appropriate skills are present** across governance bodies

The World Economic Forum published guidance in 2019 detailing set-up of effective climate governance for corporations. This guidance includes:

- A. **Climate accountability** – accountability for long-term resilience for navigating changes in the business landscape resulting from climate change
- B. **Climate command** – ensuring appropriate skills are present across governance bodies
- C. **Board structure** – effective integration of climate-related issues across structure

- D. **Material risk and opportunity assessment** – assessment of short-, medium- and long-term materiality of climate-related risks and opportunities
- E. **Strategic and organisational integration** – strategic investment planning and decision-making processes are systemically informed by climate and embedded within the management of risks and opportunities
- F. **Incentivisation** – incentives of executives are aligned to promote long-term prosperity, including consideration of incorporating climate-related targets
- G. **Reporting and disclosure** – transparent and consistent disclosure of material climate-related risks, opportunities and strategic decisions for relevant stakeholders
- H. **Exchange** – regular dialogue with investors, policymakers, peers, and other relevant stakeholders to stay informed on movements with climate-related risks and regulatory requirements, as well as sharing methodologies (World Economic Forum, 2019)

Superannuation fund performance: No superannuation fund assessed provided disclosure surrounding policies or processes ensuring appropriate skills, including specific climate expertise, are present across governance bodies.



5

Your Future, Your Super? Risks from superannuation funds not acting now



5. Your Future, Your Super? Risks from superannuation funds not acting now

5.1 Key risks

So what? Superannuation funds failing to transparently disclose material climate-related issues and plan for alignment with the temperature outcomes of the Paris Agreement will risk their members' retirement possibilities. Without sufficient information, it is not possible for decision-makers to understand the impact of transition and physical climate risks and opportunities on the value of their investments.

Transparent disclosures are a necessary first step to understanding investment portfolio exposure to transition and physical risks. Risks can arise from superannuation funds failing to respond to climate-related issues including:

- 1. Climate externalities may not yet be internalised.**
Without sufficient information on material climate-related risks and opportunities, it is likely the impacts of climate change are not reflected in the market value of an investment. Climate-related disclosures are essential to understand how leaders see their business operating in various plausible future scenarios, and how to address financial implications of identified risks and opportunities. As the ISSB's standards are adopted in Australia, market valuations of investments may change to reflect this new information. It should also be considered whether there is an accurate valuation of companies who are progressive in climate transition and whether gains may be realised for funds that make these investments ahead of the market.
- 2. Legal risks associated with climate-related issues.**
The number of corporate legal cases relating to climate change is growing. These instances are linked to a lack of transparency, insufficient response to climate-related risks, and greenwashing (Setzer & Higham, 2021). The ISSB disclosures standards represent a significant uplift in climate management and reporting practices for companies who have not kept pace with TCFD disclosure recommendations. The introduction of formal reporting standards was foreseeable from the time the Paris Agreement was ratified presenting parameters around which transition risks could be assessed against decarbonisation pathways with many companies initiating processes to manage the risk. In many cases however further uplift is required.

Looking forward, continuing legal challenges in regard to company behaviour and climate-risk disclosure have the potential to significantly increase on the commencement of ISSB aligned reporting requirements, with some business leaders asking that a safe harbour for directors be considered to limit their exposure to legal cases to limit exposure (Hartford-Davis & Dyon, 2022). Recently, ASIC expanded its surveillance and enforcement activities linked to greenwashing, specifically referencing disclosure documents as one of the areas to be examined (ASIC, 2023). This is significant as regulators will act against companies and funds that misstate climate risks and mischaracterise sufficiency of climate response. It is imperative that companies and superannuation funds address these factors into corporate strategies and operating plans. Investees need to learn now, and act fast, to be ready for tighter reporting regimes.

- 3. Members turning away from funds:** The term 'Your Super, Your Future' implies a degree of personal choice in determining how an individual makes superannuation investments in line with their values and long-term plan. Preferences are changing, with superannuation funds experiencing how an individual's personal preferences filters into investment fund choices, such as aligning with companies, or portfolios, that recognise the benefits of renewable energy, or emerging technologies, or lowering emissions (Banhalimi-Zakar & Parker, From Values to Riches 2022: Charting consumer demand for responsible investing in Australia, 2022).

Many superannuation products however still include investments within emission intensive companies such as from within energy, utilities and extractive industries. Instances have been recorded recently where responsible investment products have been shown to include investments not aligned to the product description of a climate transitioned future such as in the Mercer case (Wootton, 2023). Meaningful action and transparent reporting of targets, plans and progress on climate are foundational requirements of superfunds meeting these evolving stakeholder expectations, as well as the prudent management of investment risk.



As our economy decarbonises funds that fail to plan for climate change and adequately govern for climate risk maybe exposed to financial underperformance in certain asset classes and investments. Conversely, funds that understand, disclose and manage climate risk are well positioned to turn risk into opportunity, and to outperform. Once increased transparency is established, funds that fail to adjust are at risk of short-term capital outflows by members who seek funds that can demonstrate they are more aligned to transparent reporting and climate outcomes.

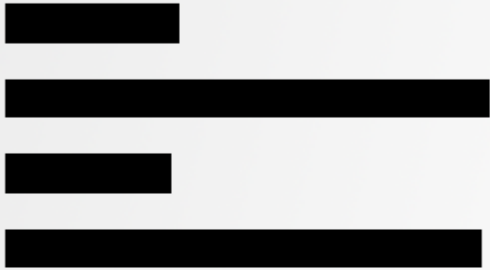
4. **Financial risks regarding long-term investment returns.** The physical impacts of climate change, combined with the financial risks of investing in companies where there is exposure to stranded assets core to an organisation's business model, present a risk to the future of superannuation holders' retirement funds. With the balance of members shifting to those currently below 42 years of age (Australian Bureau of Statistics, 2022), the potential for the physical effects of climate change to significantly impact their retirement is very real without an accelerated transition. Further, there is the potential for a considerable write down of value of

fossil fuel linked companies (such as those producing, transporting, or servicing oil, gas or coal) through stranded assets. Overall, superannuation funds must disclose and actively manage climate-related risks and opportunities within their investment portfolios thereby protecting Australians' retirement savings over the long term.

5. **Australia's climate transition.** The Australian economy has historically been highly dependent on fossil fuels for economic prosperity. As the global economy undergoes the decarbonisation transition, providing alternatives to traditional fossil fuel, Australia will need to follow suit. The transition has commenced with a multitude of investment opportunities capitalising on the global transition and its competitive advantages. Investment in the transition however needs to be front loaded (Dai, Nicolle, Kooroshy, & Clements, 2022) for the health of the planet and our ongoing prosperity. Superannuation funds risk compromising the futures of their members where climate impacts are not appropriately considered.

6

Ways to support
climate progress and
accountability by funds



6. Ways to support climate progress and accountability by funds

6.1 Key actions

So what? The time is now to progress management of climate throughout Australia's industry. Responsibility to promote progress and transparency falls on several parties from government, to regulators, to industry, to the superannuation funds and their members. Only with a clear understanding of the implications of climate change on superannuation investments can Australians make meaningful decisions regarding one of their most valuable assets.

While there are considerable risks of failing to act there are also currently processes that inhibit the climate response of funds to transition and physical risks. Actions can be directed to assist superannuation funds towards transparency and necessary climate management.

Designed to address clear bottlenecks identified within this research the 15 actions listed below provide a clear starting point to accelerate active climate risk and opportunity management and transparent reporting within the superannuation industry. Recognising that a systems perspective needs to be taken to activate and support the change required actions have been set out into those required by government, regulators, superannuation funds, industry, and superannuation holders.

By funds disclosing their own climate exposures, and by investing in companies that disclose climate-related risks, funds can enhance risk management, protect long-term financial performance, strengthen stakeholder trust, comply with regulatory requirements, and capitalise on emerging opportunities. Embracing this investment approach not only aligns with global environmental goals and standards, and government reform packages, but also positions superannuation funds as leaders in the responsible investment landscape. Ultimately, integrating climate-related risk disclosure into investment strategies can drive positive change while delivering sustainable returns for fund members, society and the planet.



Government

Action 1: Clear and consistent policy guidance is required by all levels of government to support a planned transition.

Australia's current Federal Government has materially increased the nation's climate ambition, setting an emissions reduction target of 43% below 2005 levels by 2030. Both Federal and State governments should continue to provide clarity and confidence to the private sector as Australia works toward achieving emissions reduction targets. Priorities need to be clearly defined as does Australia's anticipated role in a decarbonising global economic climate.

Historic inaction on climate change by the Australian Government contrasting with progressive action on climate internationally has created misalignment surrounding climate-related issues for Australian entities with international exposure and stakeholders.

Action 2: Prioritise the delivery of a national roadmap to debottleneck logistical and investment challenges associated with the transition.

Time is running out to limit warming to 1.5°C and many barriers exist. The Federal Government can assist the transition by developing a national roadmap to debottleneck logistical constraints (including use of ports and critical infrastructure) and other key challenges associated with the climate and energy transition, focusing first and foremost on delivery of electricity from renewable sources.

Action 3: Incentivise engagement and investment from the private sector in technologies with material emissions reduction potential.

Government investment priorities should be clear to all stakeholders. Prioritising investment in emission reduction as well as resilience and climate adaptation, will position Australia for success in the growing green global economy while mitigating climate impacts. Climate change has been observed by the world's scientific community to cause substantial damages and increasingly irreversible losses across our ecosystems, with mass mortality events recorded across land and ocean ecosystems. As a society we need to decarbonise quickly to limit further warming.



Regulators

Action 1: Address the unintended consequences of the performance test to eliminate impacts on investments engaged in climate mitigation and adaptation.

The performance test introduced through the Your Future, Your Super reforms prioritises short term financial performance without considering other metrics such as risk (including climate risk). Its introduction has given rise to a number of unintended consequences including limiting Australians' freedom of choice surrounding the climate impact of their investments. We routinely consider financial 'best in show' but importantly we need to allow investors to examine and consider 'climate best in show' in their investment choices.

Action 2: Support the development of an efficient mechanism for aggregation of clear and transparent climate related data from companies.

Work is currently underway for the development of the Net-Zero Data Public Utility (NZDPU) at a global level to provide access to climate transition related company data. Australia needs to examine how it can support greater data access so stakeholders can accurately assess the degree of climate risk through their investments.

Separately, but in an associated vein the Federal Government has announced co-funding for the Australian Sustainable Finance Institute (ASFI) to lead the development of an Australian sustainable finance taxonomy. The intention of this taxonomy is to provide a common standard for sustainable finance. This work should be prioritised to improve access to comparable information.

Action 3: Deliver decisive action on ISSB adoption.

The IPCC has stated that losses and damages from climate change will escalate with every increment of global warming. Further this change will occur in a non-linear fashion. Delays in prioritising active climate issue management and transparent reporting within companies should be prevented. The ISSB standards were released on 26 June 2023, with expected reporting from July 2024. Reporting entities need certainty on the adoption timeline and any phasing in measures so they can rapidly develop systems needed to support implementation.



Industry

Action 1: Companies should prioritise the development and disclosure of a viable transition plan.

Comprehensive transition plans are vital to ensure companies can transition in a manner consistent with the requirements of the Paris Agreement and expectations of the incoming ISSB standards and evolving investor sentiments. These plans need to provide clear detailed, and time bound steps linked to the company's assets, operation and business model which will provide a pathway to meet its climate targets.

Action 2: Companies must establish the appropriate structures and mechanisms to achieve transparent climate related disclosure.

Investors rely on transparent disclosures to understand material risks, including climate-related issues. The ISSB's disclosure standards will impact listed companies, and large unlisted entities in time. The level of detail required by the ISSB standard is such that it will take time to implement, particularly for companies which have not yet substantially addressed TCFD requirements. Given the implementation of the standards is not simple and will require active resourcing companies need to progress this process as soon as possible.

Action 3: Industry should adopt a systems-approach to collaborate with upstream, midstream and downstream proponents to deliver an organised and efficient transition to a low carbon economy

A siloed approach to the climate and energy transition will lead to inefficient outcomes. Collaboration and systems thinking across the value chain is critical to an efficient and effective climate and energy transition.



Superannuation funds

Action 1: Prioritise adoption of best practice climate guidance, ensuring temperature outcomes aligned with the objectives of the Paris Agreement.

Purposeful investment and allocation of resources will be critical to establish the appropriate structures and mechanisms to support the extent of disclosure requirements under the ISSB. The prevalence of climate change litigation is growing and is expected to continue to escalate globally (Setzer & Higham, 2022) with one potential areas of focus on entities that fail to adopt climate transition plans underpinned by long-term, medium-term, and short-term emissions reduction targets it is important for all companies to carefully establish their climate management.

Action 2: Engage in transparent substantive climate disclosure as a priority in preparation of Australia's adoption of the ISSB's standards.

Much of the Australian superannuation sector requires a significant uplift in their climate related reporting and management. With regulators and wider stakeholders examining the sector including on issues of greenwashing and greenhushing it is clear to see major investment in processes, systems, decisions, and transparent substantive disclosure is required. With the ISSB's finalised disclosure standards released on 26 June 2023 and adoption in Australia expected imminently the window of opportunity to prepare is closing.

Action 3: Funds should develop and disclose an escalation strategy to achieve alignment with the temperature objectives of the Paris Agreement.

The climate performance of superannuation funds is largely determined by their financed emissions. Superannuation funds are relying heavily on engagement to mitigate the climate impact of their investments and achieve the targets they have set. Funds should develop an effective and viable escalation strategy to navigate instances where engagement activities with investees are unsuccessful. A disclosed escalation strategy provides certainty on steps taken to all stakeholders including the investee companies themselves.



Superannuation funds members

Action 1: Members who are not satisfied that their superannuation funds are managing their climate risk can make a change.

For fund members who have examined their superannuation provider and found their transparency of climate management lacking they are able to make a change. Superannuation fund members can consider what superannuation funds and products are available, their impact on climate and whether they align with where that individual would like their money to be invested. Collectively Australian's own \$3.4 trillion of investment assets through their superannuation funds. These investments are growing Australia's industries and the views of the individual on whose behalf investments are made matters.

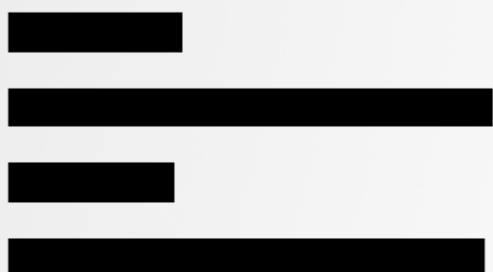
Action 2: Examine the climate management of companies their fund is investing their money in and act if not satisfied.

Climate performance of superannuation products reflect the performance of the companies invested in as part of fund. Superannuation holders can seek information on which companies' funds invest their money in through a particular product. These individuals can then examine the climate disclosures of these companies. These disclosures are expected to materially improve upon Australia's adoption of the ISSB's disclosure standards. The disclosure standards drafted by the ISSB is set to become the global baseline for sustainability and climate-related financial disclosures.

Action 3: Members should contact funds where they are not satisfied with the level of transparency of climate risk and performance.

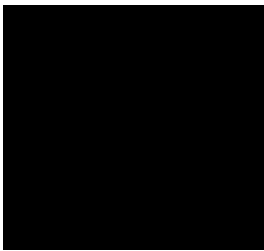
The funds are investing money on their members behalf. If a member feels that there is misalignment between fund representations and the product they are receiving, members should consider raising their concerns with the superannuation fund or the Australian Competition & Consumer Commission (ACCC).

On 2 November 2020 Retail Employees Superannuation Trust agreed to settle litigation with its 23-year-old member which claimed that REST failed to provide sufficient information to make an informed judgement about the financial condition and management of the fund, as well as failing to act in the best interests of its members and exercise appropriate due diligence by omitting climate change business risks from its disclosures.

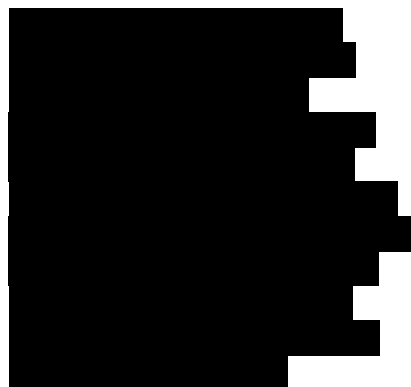


About Us

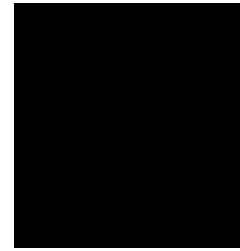
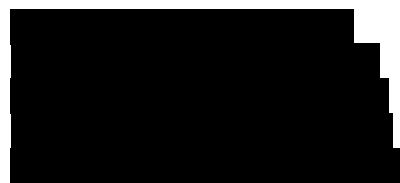
Aurecon's Sustainability and Climate Change advisory practice includes expertise in climate transition risk and reporting; decarbonisation; supply chain and circular economy; carbon markets and climate physical risk and resilience. Aurecon's Climate Transition Lead Dr Belinda Wade is an Adjunct Associate Professor at UQ and together with report co-author Dr Saphira Rekker has research on climate disclosures and management published in the leading peer-reviewed journals including, Nature Communications, Nature Climate Change and Journal of Business Ethics.



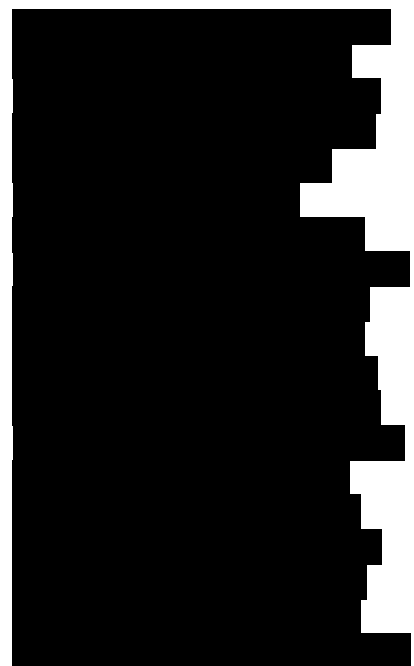
Climate Transition Leader



Senior Consultant, Energy Transition and Decarbonisation



Associate, Climate Transition





Senior Consultant, Sustainability & Climate Change

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Group Director, Sustainability
Managing Director, Energy

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Consultant, Sustainability & Climate Change

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Limitation of our Work

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References



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References

- AASB & AUASB. (2019). Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB/IASB Practice Statement 2. Australian Accounting Standards Board and Auditing and Assurance Standards Board. Retrieved from https://www.aasb.gov.au/admin/file/content102/c3/AASB_AUASB_Joint_Bulletin_Finished.pdf
- ACCR. (2021). Cutting carbon - What the rush to divest fossil fuels means for emissions reduction and engagement. ACCR. Retrieved from <https://www.accr.org.au/downloads/2021-01-31-accr-report-cutting-carbon.pdf>
- AFR. (2021). Investor groups demand climate risk disclosure overhaul. Retrieved from <https://www.afr.com/companies/financial-services/investor-groups-demand-climate-risk-disclosure-overhaul-20210628-p584zu>
- APRA. (2021). Prudential Practice Guide CPG 229 Climate Change Financial Risks. APRA. Retrieved from https://www.apra.gov.au/sites/default/files/2021-11/Final%20Prudential%20Practice%20Guide%20CPG%20229%20Climate%20Change%20Financial%20Risks_0.pdf
- APRA. (2022). APRA releases superannuation statistics for June 2022. Retrieved from <https://www.apra.gov.au/news-and-publications/apra-releases-superannuation-statistics-for-june-2022>
- APRA. (2022). Information paper - Climate risk self-assessment survey. Retrieved from <https://www.apra.gov.au/information-paper-climate-risk-self-assessment-survey>
- APRA. (2022). APRA releases superannuation statistics for December 2022. Retrieved from <https://www.apra.gov.au/news-and-publications/apra-releases-superannuation-statistics-for-december-2022>
- APRA. (2023). The Annual Superannuation Performance Test 2022. Retrieved from <https://www.apra.gov.au/annual-superannuation-performance-test-2022>
- Armour, C. (2021). Managing climate risk for directors. Retrieved from <https://asic.gov.au/about-asic/news-centre/articles/managing-climate-risk-for-directors/>
- ASFA. (2023, March). Superannuation statistics March 2023. Retrieved from https://www.superannuation.asn.au/ArticleDocuments/269/SuperStats_March23.pdf.aspx?Embed=Y
- ASIC. (2018). REPORT 593: Climate risk disclosure by Australia's listed companies. Retrieved from <https://download.asic.gov.au/media/4871341/rep593-published-20-september-2018.pdf>
- ASIC. (2019). Regulatory Guide 247 - Effective disclosure in an operating and financial review. Australian Securities & Investment Commission. Retrieved from <https://download.asic.gov.au/media/5230063/rg247-published-12-august-2019.pdf>
- ASIC. (2021). Corporate governance update: climate change risk and disclosure. Retrieved from <https://asic.gov.au/about-asic/news-centre/speeches/corporate-governance-update-climate-change-risk-and-disclosure/>
- ASIC. (2023). ASIC's recent greenwashing interventions. Australian Securities & Investments Commission. Retrieved from <https://download.asic.gov.au/media/a00lz0id/rep763-published-10-may-2023.pdf>
- ASX. (2019). Corporate Governance Principles and Recommendations 4th Edition. ASX Corporate Governance Council. Retrieved from <https://www.asx.com.au/documents/asx-compliance/cgc-principles-and-recommendations-fourth-edn.pdf>
- Australian Bureau of Statistics. (2022). 2021 Census shows Millennials overtaking Boomers. Retrieved from <https://www.abs.gov.au/media-centre/media-releases/2021-census-shows-millennials-overtaking-boomers>
- Australian Government. (2023). Safeguard Mechanism one step closer to Parliamentary passage. Retrieved from https://minister.dcccew.gov.au/bowen/media-releases/safeguard-mechanism-one-step-closer-parliamentary-passage?_gl=1*zxrgc8*_ga*MTk2MzQxOTE2OS4xNjg1NDg1MzQ3*_ga_1M2TBC9WWS*MTY4NTQ4NTM0Ni4xLjEuMTY4NTQ4NTM5MS4wLjAuMA..&_ga=2.36011680.1496845466.1685485348-1
- Australian Sustainable Finance Institute. (2022). Designing Australia's sustainable finance taxonomy. Australian Sustainable Finance Institute. Retrieved from <https://static1.squarespace.com/static/6182172c8c1fdb1d7425fd0d/t/639a4e8a7e058606f1a8c2e1/1671057111581/Final+Framing+Paper+15+Dec.pdf>
- Banhalmi-Zakar, Z., & Parker, E. (2022). From Values to Riches 2022: Charting consumer demand for responsible investing in Australia. Melbourne: Responsible Investment Association Australasia. Retrieved from https://responsibleinvestment.org/wp-content/uploads/2022/03/From-Values-to-Riches-2022_RIAA.pdf
- Banhalmi-Zakar, Z., Goodwin, M., Parker, E., Blake, J., Gacic, M., Herd, E., & Vidulich, B. (2022). Responsible Investment Benchmark Report Australia 2022. Melbourne: Responsible Investment Association Australasia. Retrieved from <https://responsibleinvestment.org/wp-content/uploads/2022/09/Responsible-Investment-Benchmark-Report-Australia-2022-1.pdf>
- Bell, D., & Rose, T. (2022). Your Future, Your Super Performance Test - Constraint on ESG, Sustainability and Carbon Transition Activities. The Conexus Institute. Retrieved from <https://theconexusinstitute.org.au/wp-content/uploads/2022/11/YFYS-Performance-Test-Constraint-on-ESG-Sustainability-and-Carbon-Transition-Activities-20221109-Final.pdf>
- Björn, A., Lloyd, S., & Matthews, D. (2021). From the Paris Agreement to corporate climate commitments: evaluation of seven methods for setting 'science-based' emission targets. *Environmental Research Letters*, 16(5). doi:10.1088/1748-9326/abe57b
- Canfield, D., Glazer, A., & Falkowski, P. (2010). The Evolution and Future of Earth's Nitrogen Cycle. *Science*, 330(6001), 192-196. doi:10.1126/science.1186120
- Clean Energy Regulator. (2023). The Safeguard Mechanism. Retrieved from National Greenhouse and Energy Reporting: <https://www.cleanenergyregulator.gov.au/NGER/The-safeguard-mechanism>
- Corbell, S., Kim, Y., Dwyer, S., Teske, S., & Kelley, S. (2018). Supercharging Australia's Clean Energy Transition. ISF. Retrieved from https://www.uts.edu.au/sites/default/files/article/downloads/Teske_et_al_2018_Supercharging_Australia%E2%80%99s_Clean_Energy_Transition_0.pdf
- Dai, L., Nicolle, W., Kooroshy, J., & Clements, L. (2022). Green equity exposure in a 1.5°C scenario. FTSE Russell. Retrieved from https://content.ftserussell.com/sites/default/files/green_equity_exposure_in_a_1.5_c_scenario_2.pdf
- Department of Climate Change, Energy, the Environment and Water. (2023). Renewables. Retrieved from <https://www.energy.gov.au/data/renewables>
- DivestInvest. (2023). About DivestInvest. Retrieved from <https://www.divestinvestaustralia.org.au/about>
- Environmental Defenders Office. (2022). HESTA's fossil fuel investments may amount to a breach of the law. Retrieved from <https://www.edo.org.au/2022/08/10/hesta-fossil-fuel-investments-may-amount-to-a-breach-of-the-law/>
- European Commission. (2020). COMMISSION DELEGATED REGULATION (EU) 2020/1818 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks. Brussels: Official Journal of the European Union. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R1818&from=EN>
- External Reporting Board. (2022). Aotearoa New Zealand Climate Standard 1. External Reporting Board. Retrieved from <https://www.xrb.govt.nz/dmsdocument/4770>
- External Reporting Board. (2023). Climate-related Disclosures Staff Guidance V1. Wellington: External Reporting Board. Retrieved from <https://www.xrb.govt.nz/dmsdocument/4844>
- Fankhauser, S., Smith, S. M., Allen, M., Axelsson, K., Hale, T., Hepburn, C., . . . Weter, T. (2022). The meaning of net zero and how to get it right. *Nature Climate Change*(12), 15-21. doi:10.1038/s41558-021-01245-w
- Flammer, C., Toffel, M. W., & Viswanathan, K. (2021, April 22). Shareholders

- Are Pressing for Climate Risk Disclosures. That's Good for Everyone. Harvard Business Review.
- Hartford-Davis, S. H., & Dyon, K. (2022). ADVICE REGARDING POTENTIAL LIABILITY OF DIRECTORS UNDER THE ISSB DRAFT STANDARDS FOR FORWARD LOOKING STATEMENTS. Sydney: Australian Council of Superannuation Investors Limited. Retrieved from <https://igcc.org.au/wp-content/uploads/2023/01/Advice-on-ISSB-Draft-Standards-Final.pdf>
- Herborn, D. (2019). Unlucky lottery: how Australia's default MySuper system costs us billions. Retrieved from <https://www.choice.com.au/money/financial-planning-and-investing/superannuation/articles/australians-still-being-defaulted-into-poor-mysuper-products#:~:text=Employees%20are%20automatically%20defaulted%20into,in%20poor%2Dperforming%20MySuper%20products.>
- Hutley SC, N., & Davis, S. H. (2021). Climate Change and Directors' Duties - Further supplementary memorandum of opinion. Centre for policy development. Retrieved from <https://cpd.org.au/wp-content/uploads/2021/04/Further-Supplementary-Opinion-2021-3.pdf>
- ICGN. (2020). ICGN Global Stewardship Principles. International Corporate Governance Network. Retrieved from https://www.icgn.org/sites/default/files/2021-06/ICGN%20Global%20Stewardship%20Principles%202020_1.pdf
- IFRS. (2023). ISSB: Frequently Asked Questions. Retrieved from <https://www.ifrs.org/groups/international-sustainability-standards-board/issb-frequently-asked-questions/>
- IPCC. (2018). Special Report: Global Warming of 1.5 °C. Cambridge: Cambridge University Press. Retrieved from <https://www.ipcc.ch/sr15/>
- IPCC. (2021). Climate Change 2021: The Physical Science Basis. Cambridge: Cambridge University Press. Retrieved from <https://www.ipcc.ch/report/ar6/wg1/>
- IPCC. (2022). Summary for Policymakers - Climate Change 2022: Impacts, Adaptation, and Vulnerability. Cambridge: Cambridge University Press. doi:10.1017/9781009325844.001
- IPCC. (2023). Synthesis Report of the IPCC Sixth Assessment Report (AR6). Intergovernmental Panel on Climate Change. Retrieved from <https://www.ipcc.ch/report/ar6/syr/>
- ISSB. (2022). [Draft] IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information. London: IFRS Foundation. Retrieved from <https://www.ifrs.org/content/dam/ifrs/project/general-sustainability-related-disclosures/exposure-draft-ifrs-s1-general-requirements-for-disclosure-of-sustainability-related-financial-information.pdf>
- ISSB. (2022). [Draft] IFRS S2 Climate-related Disclosures. London: IFRS Foundation. Retrieved from <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>
- ISSB. (2022). [Draft] IFRS S2 Climate-related Disclosures Appendix B Industry-based disclosure requirements. London: IFRS Foundation. Retrieved from <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/industry/issb-exposure-draft-2022-2-b15-asset-management-and-custody-activities.pdf>
- Khadem, N. (2020). Mark McVeigh is taking on REST super on climate change and has the world watching. Retrieved from <https://www.abc.net.au/news/2020-01-18/mark-mcveigh-is-taking-on-rest-super-and-has-the-world-watching/11876360>
- Liu, Z., Deng, Z., Davis, S. J., Giron, C., & Ciais, P. (2022). Monitoring global carbon emissions in 2021. *Nature Reviews Earth & Environment*(3), 217-219. doi:doi.org/10.1038/s43017-022-00285-w
- Lord, R., Bullock, S., & Birt, M. (2019). Understanding Climate Risk at the Asset Level: The interplay of Transition and Physical Risk. Retrieved from S&P: <https://www.spglobal.com/marketintelligence/en/documents/sp-trucost-interplay-of-transition-and-physical-risk-report-05a.pdf>
- Maddock, L. (2022). UniSuper in hot water over Santos investment. Retrieved from <https://ioandc.com/unisuper-in-hot-water-over-santos-investment/>
- Marcott, S. A., Shakun, J. D., Clark, P. U., & Mix, A. C. (2013). A reconstruction of regional and global temperature for the past 11,300 years. *Science* (American Association for the Advancement of Science), 339(6124), 1198-1201. doi:10.1126/science.1228026
- Melzer, M. (2023). ASIC fines Future Super \$13,000 as regulator's crackdown on greenwashing by superfunds continues. Retrieved from <https://www.skynews.com.au/business/asic-fines-future-super-13000-as-regulators-crackdown-on-greenwashing-by-superfunds-continues/news-story/b5a20505ef31e559d8bdcaf9866deab4>
- MSCI. (2023). The MSCI Net-Zero Tracker. Retrieved from <https://www.msci.com/documents/1296102/38217127/NetZero-Tracker-May.pdf>
- Packham, C. (2023). AGL shuts down Liddell coal power station. Retrieved from Financial Review: <https://www.afr.com/companies/energy/agl-shuts-down-liddell-coal-power-station-20230428-p5d429>
- Parliament of Australia. (2014). Major superannuation and retirement income changes in Australia: a chronolog. Retrieved from https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1314/SuperChron
- Portfolio Alignment Team. (2021). Measuring Portfolio Alignment. Portfolio Alignment Team. Retrieved from https://www.tcfhub.org/wp-content/uploads/2021/10/PAT_Measuring_Portfolio_Alignment_Technical_Considerations-9.8.pdf
- PRI. (2018). PRI Reporting Framework 2019 Direct-listed equity active ownership. Principles for Responsible Investment Association. Retrieved from https://www.unpri.org/Uploads/n/p/v/05.lea2019_831072.pdf
- Quigley, E., Bugden, E., & Odgers, A. (2020). Divestment: Advantages and Disadvantages for the University of Cambridge. University of Cambridge. Retrieved from https://www.cam.ac.uk/sites/www.cam.ac.uk/files/sm6_divestment_report.pdf
- Rekker, S., Ives, M. C., Wade, B., Webb, L., & Greig, C. (2022). Measuring corporate Paris Compliance using a strict science-based approach. *Nature Communications*, 13(1), 1-11. doi:https://doi.org/10.1038/s41467-022-31143-4
- Rest. (2020). Rest reaches settlement with Mark McVeigh. Retrieved from <https://rest.com.au/why-rest/about-rest/news/rest-reaches-settlement-with-mark-mcveigh>
- S&P Global. (2018). The Carbon Scorecard. Retrieved from <https://www.spglobal.com/spdji/en/documents/research/research-the-carbon-scorecard-may-2018.pdf>
- Science Based Target Initiative. (2022). Financial Sector Science-Based Targets Guidance V1.1. Science Based Targets initiative. Retrieved from <https://sciencebasedtargets.org/resources/files/Financial-Sector-Science-Based-Targets-Guidance.pdf>
- Setzer, J., & Higham, C. (2021). Global trends in climate change litigation: 2021 snapshot. London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science. Retrieved from https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2021/07/Global-trends-in-climate-change-litigation_2021-snapshot.pdf
- Sun, T., Ocko, I. B., Sturcken, E., & Hamburg, S. P. (2021). Path to net zero is critical to climate outcome. *Scientific Reports* 11, 22173. doi:doi.org/10.1038/s41598-021-01639-
- TCFD. (2017). Recommendations of the Task Force on Climate-related Financial Disclosures. Retrieved from <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>
- TCFD. (2020). Guidance on Risk Management Integration and Disclosure. Task Force on Climate-Related Financial Disclosures. Retrieved from https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Guidance-Risk-Management-Integration-and-Disclosure.pdf
- TCFD. (2021). Guidance on Metrics, Targets, and Transition Plans. TCFD. Retrieved from <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>
- TCFD. (2021). Implementing the Recommendations of the task Force on Climate-related Financial Disclosures. Task Force on Climate-related Financial Disclosures. Retrieved from https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf
- The Treasury. (2023). Exposure Draft Explanatory statement - Superannuation Industry Amendment Regulations 2023. Retrieved from <https://treasury.gov.au/sites/default/files/2023-04/c2023-382186-es.pdf>
- The Treasury. (2023). Exposure Draft Explanatory Statement -Superannuation Industry (Supervision) Amendment (Your Future, Your Super – Addressing Underperformance in Superannuation) Regulations 2023. Retrieved from <https://treasury.gov.au/consultation/c2023->

- The Treasury. (2023). MySuper. Retrieved from <https://treasury.gov.au/programs-and-initiatives-superannuation/mysuper>
- The Treasury. (2023). Your Future, Your Super Review. Retrieved from <https://treasury.gov.au/sites/default/files/2023-04/c2022-313936-yfys-review.pdf>
- Thinking Ahead Institute. (2023). Global Pension Assets Study 2023. Retrieved from <https://www.thinkingaheadinstitute.org/content/uploads/2023/02/GPAS-final.pdf>
- UNEP. (2021). The Climate Risk Landscape - A comprehensive overview of climate risk assessment methodologies. UN Environment Programme. Retrieved from <https://www.unepfi.org/wordpress/wp-content/uploads/2021/02/UNEP-FI-The-Climate-Risk-Landscape.pdf>
- United Nations. (2015). Paris Agreement. United Nations. Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf
- United Nations. (2022). Integrity matters: Net zero commitments by businesses, financial institutions, cities and regions. United Nations. Retrieved from https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf
- Wolff, E. W. (2011). Greenhouse gases in the Earth system; a palaeoclimate perspective. Philosophical transactions of the Royal Society of London. Series A: Mathematical, physical, and engineering sciences, 369(1943), 2133-2147.
- Wootton, H. (2023). ASIC sues Mercer Super in first greenwashing case. Retrieved from <https://www.afr.com/policy/tax-and-super/asic-sues-mercere-super-in-first-greenwashing-case-20230228-p5co41>
- World Economic Forum. (2019). How to Set Up Effective Climate Governance on Corporate Boards. World Economic Forum.

Appendix A

| Source | Benchmark |
|---|--|
| TCFD PAT (Paris-Aligned definition) | <p>Paris Aligned definition: “reducing emissions in line with a benchmark or emissions pathway associated with a well-below 2°C climate scenario”.</p> <p>Consideration #7: “select a 1.5C scenario that complies, at a minimum, with scenario selection criteria set out by the Science Based Targets initiative in their document Foundations of Science-Based Target Setting”. (TCFD PAT, p.7).</p> |
| Paris Agreement/Rekker et al. (2022) Nature Communications | “Underlying decarbonisation pathway consistent with “well-below 2C” (article 2, Paris Agreement 2015) |
| Aotearoa New Zealand Climate Standard 1 | <p>Target: “23(e)(ii) the entity’s view as to how the target contributes to limiting global warming to 1.5 degrees Celsius; the entity’s basis for the view expressed in 23(e)(ii), including any reliance on the opinion or methods provided by third parties)</p> <p>“The XRB Board considered that the ISSB’s approach was not sufficiently clear and amended the disclosure requirement in this Standard to ‘the entity’s view as to how the target contributes to limiting global warming to 1.5 degrees Celsius’. This links with the disclosure requirement in paragraph 13 and the Climate Change Response Act 2002 section 3(1)(aa)(i) which states ‘contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels’.” (page nr)</p> |
| Regulation (EU) 2016/1011 establishes EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks. | “The methodology of those benchmarks is based on the commitments laid down in the Paris Agreement. [...] it is necessary to use the 1,5 °C scenario, with no or limited overshoot, referred to in the Special Report on Global Warming of 1,5 °C from the Intergovernmental Panel on Climate Change (IPCC) . That IPCC scenario is in line with the Commission’s objective to reach net zero greenhouse gas (GHG) emissions by 2050 , set out in the European Green Deal. To be in line with the IPCC scenario, investments should be reallocated from fossil-fuels dependent activities to green or renewable activities and the climate impact of those investments should improve year after year.” (page nr) |
| Science Based Targets initiative (Financial Sector guidance) | “At a minimum, scope 1 and scope 2 targets will be consistent with the level of decarbonization required to keep global temperature increase to well-below 2°C compared to preindustrial temperatures, though financial institutions are encouraged to pursue greater efforts toward a 1.5°C trajectory . Both the target time frame ambition (base year to target year) and the forward-looking ambition (most recent year to target year) must meet this ambition criteria.” (page nr) |
| UN Integrity Matters | “reach net zero in line with IPCC or IEA net zero greenhouse gas emissions modelled pathways that limit warming to 1.5°C with no or limited overshoot, and with global emissions declining by at least 50% by 2030, reaching net zero by 2050 or sooner. net zero must be sustained thereafter ” (page nr) |

Appendix B – Sources of information reviewed

AustralianSuper (RSE R1001693)

Review of AustralianSuper's climate disclosures was limited to its 2022 Annual Report for the year ended 30 June 2022 and Share Voting Approach document published in February 2022. Publications including its 2021 Climate Change Report and Net Zero 2050 report had been withdrawn from AustralianSuper's website at the time this review was undertaken. As the review is limited to include publicly available information at the time of assessment (8 May 2023), these reports were not considered for the purposes of this assessment.

Australian Retirement Trust (RSE R1073034)

Review of Australian Retirement Trust's climate disclosures was limited to its 2022 Annual Report, 2022 Sustainable Investment Report and its Climate Change Policy.

Aware Super (RSE R1005134)

Review of Aware Super's climate disclosures was limited to its 2022 Annual Report, 2022 Governance Report, 2022 Responsible Investment Report, Directors and Executive Remuneration for the year ended 20 June 2022, Responsible Investment: Environmental, Social & Corporate Governance Policy, and its Climate Change – Portfolio Transition Plan prepared in November 2019.

Colonial First State FirstChoice Superannuation Trust (RSE R1056150)

Review of Colonial First State FirstChoice Superannuation Trust climate disclosures was limited to its Responsible Investment Policy 2020, Voting report for Australian equities managers FY2021–2022 and associated webpage <https://www.cfs.com.au/about-us/responsible-investing.html> all accessed 8 May 2023)

HOSTPLUS Superannuation Fund (RSE R1000054)

Review of HOSTPLUS Superannuation Fund's climate disclosure included its 2022 Annual Report and its Responsible Investment Policy (both accessed 8 May 2023).

BT Retirement Wrap (RSE R1001327)

Review of BT Retirement Wrap was limited to its 2022 BT Super and BT Super for Life Annual report, the 2022 BT Panorama Super and BT Super Invest Annual report and its 2022 BT Managed Portfolios Proxy Voting records. Publications including the Sustainable Investment Policy and the Proxy voting policy which were referenced within the assessed documents could not be accessed at the time of the review as the [corresponding webpage](#) was taken down. Given that the review timeframe focuses on documents from (FY) 2022 prior to the merger, BT was assessed separately from Mercer, with the review limited to publicly available information on BT's website at the time of the assessment (8 May 2023).

Mercer Super Trust (RSE R1067088)

Review of Mercer's climate disclosures was included given the merger of BT Retirement Wrap with Mercer in Apr 2023. The review included the following reports: Mercer Super Trust Annual Report 2022 Part 1, Mercer Super Trust Annual Report 2022 Part 2, 2022 Sustainable Investment Report, Mercer's Investment Approach to Climate Change, Sustainable Investment Policy (all accessed 8 May 2023). Other climate disclosures made by Mercer globally and its parent company Marsh McLennan such as the 'Investing in a time of climate change – The Sequel 2019' report which was referenced in some of the assessed documents was excluded from the analysis as this report was not accessible via the Mercer Australia website and disclosures were made on an aggregate level only.

MLC Super fund (RSE R1077223)

Review of MLC Super's climate disclosures was limited to its 2022 Annual report for the year ended 30 June 2022, the 2022 NULIS Responsible Investment Policy and the Proxy Voting Policy publicly available on MLC Super's website (accessed 8 May 2023). Other climate disclosures made by MLC Super's parent company, Insignia Financial Limited, such as their Environmental, Social and Governance report included in the 2022 Insignia Financial Annual Report are disregarded as those disclosures are made on an aggregate level for the Insignia Financial group and no specific information for MCL Super can be extracted.

**Public Sector Superannuation Scheme (RSE R1004595)
and Military Superannuation & Benefits Fund No 1
(RSE R1000306)**

Review of Public Sector Superannuation Scheme and Military Superannuation & Benefits Fund No 1 climate disclosures was limited to Commonwealth Superannuation Corporation (CSC) 2022 Annual Report to Parliament, CSC Factsheet 'Your Super and Climate Change', CSC Factsheet 'Stewardship: Sustainability Through and Investment Lens', CSC Proxy Voting and Engagement Principles, CSC Proxy Voting Report June 2022 (accessed 8 May 2023).

Unisuper (RSE R1001716)

Review of Unisuper climate disclosures was limited to Climate risk and our investments 2023, Annual Report 2021-22, Responsible investment report 1 January 2022 – 30 June 2022, Climate Change Position Statement 2020, Responsible investment and proxy voting policy 2019 and Unisuper Stewardship Statement 2018. (all accessed 12 May 2023)

Appendix C – Transparency assessment disclosures sampled

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|-------------------|-------------------------|------------------|------------------------|---|
| Metrics & targets | Appendix B - Volume B15 | | | <p>FN-AC-1. Percentage of total assets under management (AUM) included in the financed emissions calculation</p> <p>1 The entity will disclose the percentage of AUM included in the financed emissions calculation.</p> <p>1.1 AUM shall be defined broadly as the total market value, expressed in the entity's presentation currency, of the assets managed by a financial institution on behalf of clients.</p> <p>1.2 The entity shall calculate the percentage by dividing the AUM included in the financed emissions calculation by total AUM.</p> <p>1.2.1 If less than 100%, the entity will provide an explanation for exclusions including type of assets and associated amount of AUM expressed in the entity's presentation currency.</p> |
| Metrics & targets | Appendix B - Volume B15 | | | <p>FN-AC-2. (1) Absolute gross (a) Scope 1 emissions, (b) Scope 2 emissions, and (c) Scope 3 emissions, and (2) associated amount of total AUM (i.e., financed emissions)</p> <p>1 The entity shall disclose its absolute gross financed emissions, disaggregated by Scope 1, Scope 2, and Scope 3 emissions.</p> <p>1.1 Financed emissions refers to the portion of gross emissions of the investee attributed to the investments made by the entity on behalf of a third party which falls under Scope 3: category 15 (investments) in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Standard.</p> <p>1.2 Absolute gross emissions are defined as the total quantity of Scope 1 emissions, Scope 2 emissions and Scope 3 emissions expressed in metric tons of CO₂ equivalent (i.e., mt CO₂-e).</p> <p>1.3 Gross emissions are the GHGs emitted into the atmosphere before accounting for offsets and credits that have reduced or compensated for emissions.</p> <p>1.4 Scope 1, Scope 2, and Scope 3 emissions are defined and shall be calculated according to the methodology contained in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).</p> |
| Metrics & targets | Appendix B - Volume B15 | | | <p>FN-AC-3. The entity shall disclose the gross emissions intensity of financed emissions, disaggregated by Scope 1, Scope 2, and Scope 3 emissions.</p> <p>1.1 Financed emissions refers to the portion of gross GHG emissions of the investee attributed to the investments made by the entity on behalf of a third party which falls under Scope 3: category 15 (investments) in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Standard.</p> <p>1.2 Emissions intensity is defined as the amount of Scope 1 emissions, Scope 2 emissions and Scope 3 emissions per unit of economic activity (e.g., mt CO₂-e/ USD 1 million revenue or mt CO₂-e/USD 1 billion AUM).</p> <p>1.3 Gross emissions are the GHGs emitted into the atmosphere before accounting for offsets and credits that have reduced or compensated for emissions.</p> <p>1.4 Scope 1, Scope 2, and Scope 3 emissions are defined and shall be calculated according to the methodology contained in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).</p> |
| Risk management | Appendix B - Volume B15 | | | <p>FN-AC-4. Description of the methodology used to calculate financed emissions</p> <p>1 The entity shall describe the methodology used to calculate the financed emissions of total AUM.</p> <p>1.1 Financed emissions refers to the portion of gross emissions of the investee attributed to the investments made by the entity on behalf of a third party which falls under Scope 3: category 15 (investments) in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Standard.</p> <p>1.1.1 Gross emissions are the GHGs emitted into the atmosphere before accounting for offsets and credits that have reduced or compensated for emissions.</p> <p>1.2 The description shall include the allocation method used to attribute the entity's share of emissions in relation to the size of investments.</p> <p>1.3 The description shall include the approach to collecting underlying emissions data including its source.</p> <p>1.4 The entity shall disclose if the source data has been verified by a third party, where possible.</p> |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|--------------------------|----------------------------------|--|---|--|
| Risk management (cont'd) | Appendix B - Volume B15 (cont'd) | | | 1.5 The entity shall describe the use of estimations, proxies or assumptions. 1.6 If the entity is unable to include GHG emissions of an investee or counterparty, it shall state the reason for the omission such as, for example, because it is unable to establish a faithful measure |
| Metrics & targets | S2 - 21 | An entity shall disclose information relevant to the cross-industry metric categories of: | a) greenhouse gas emissions—the entity shall disclose: | i) its absolute gross greenhouse gas emissions generated during the reporting period, measured in accordance with the Greenhouse Gas Protocol Corporate Standard, expressed as metric tonnes of CO ₂ equivalent, classified as: 1. Scope 1 emissions 2. Scope 2 emissions 3. Scope 3 emissions |
| Metrics & targets | S2 - 21 | | b) transition risks—the amount and percentage of assets or business activities vulnerable to transition risks; | |
| Metrics & targets | S2 - 21 | | c) physical risks—the amount and percentage of assets or business activities vulnerable to physical risks; | |
| Metrics & targets | S2 - 21 | | d) climate-related opportunities—the amount and percentage of assets or business activities aligned with climate-related opportunities; | |
| Metrics & targets | S2 - 21 | | f) internal carbon prices: | (i) the price for each metric tonne of greenhouse gas emissions that the entity uses to assess the costs of its emissions; |
| Metrics & targets | S2 - 21 | | | (ii) an explanation of how the entity is applying the carbon price in decision-making (for example, investment decisions, transfer pricing and scenario analysis); |
| Metrics & targets | S2 - 21 | | g) remuneration: | i) the percentage of executive management remuneration recognised in the current period that is linked to climaterelated considerations; and |
| Metrics & targets | S2 - 23 | An entity shall disclose its climate-related targets. For each climate-related target, an entity shall disclose: | a) metrics used to assess progress towards reaching the target and achieving its strategic goals; | |
| Metrics & targets | S2 - 23 | | b) the specific target the entity has set for addressing climate-related risks and opportunities; | |
| Metrics & targets | S2 - 23 | | c) whether this target is an absolute target or an intensity target; | |
| Metrics & targets | S2 - 23 | | e) how the target compares with those created in the latest international agreement on climate change and whether it has been validated by a third party; | |
| Metrics & targets | S2 - 23 | | g) the period over which the target applies; | |
| Metrics & targets | S2 - 23 | | h) the base period from which progress is measured; and | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|-------------------|----------------|---|--|---|
| Metrics & targets | S2 - 23 | | i) any milestones or interim targets. | |
| Metrics & targets | S1 - 31 | When a metric has been developed by an entity, it shall disclose: | a) how the metric is defined, including whether it is an absolute measure or expressed in relation to another metric (such as revenue or floor space) and any sources that have been used to construct the metric; | |
| Metrics & targets | S1 - 31 | | b) whether measurement of the metric is validated by an external body and, if so, which body; and | |
| Metrics & targets | S1 - 31 | | c) explanations of the methods used to calculate the targets and the inputs to the calculation, including the significant assumptions made and the limitations of those methods. | |
| Metrics & targets | S1 - 33 | An entity shall disclose: | a) performance against its disclosed targets and an analysis of trends or significant changes in its performance; and | |
| Risk management | S2 - 17 | To achieve this objective, an entity shall disclose: | a) the process, or processes, it uses to identify climate-related: | (i) risks; and |
| Risk management | S2 - 17 | | | (ii) opportunities; |
| Risk management | S2 - 17 | | b) the process, or processes, it uses to identify climate-related risks for risk management purposes, including when applicable: | i) how it assesses the likelihood and effects associated with such risks (such as the qualitative factors, quantitative thresholds and other criteria used); |
| Risk management | S2 - 17 | | | ii) how it prioritises climate-related risks relative to other types of risks, including its use of risk-assessment tools (for example, science-based risk-assessment tools); |
| Risk management | S2 - 17 | | | iii) the input parameters it uses (for example, data sources, the scope of operations covered and the detail used in assumptions); and |
| Risk management | S2 - 17 | | c) the process, or processes, it uses to identify, assess and prioritise climate-related opportunities; | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|---|--|--|
| Strategy | S2 - 9 | An entity shall disclose information that enables users of general purpose financial reporting to understand the significant climate-related risks and opportunities that could reasonably be expected to affect the entity's business model, strategy and cash flows, its access to finance and its cost of capital, over the short, medium or long term. Specifically, the entity shall disclose: | a) a description of significant climate-related risks and opportunities and the time horizon over which each could reasonably be expected to affect its business model, strategy and cash flows, its access to finance and its cost of capital, over the short, medium or long term. | |
| Strategy | S2 - 10 | In identifying the significant climate-related risks and opportunities described in paragraph 9(a), an entity shall refer to the disclosure topics defined in the industry disclosure requirements (Appendix B). | | |
| Strategy | 10, Appendix B | | The entity shall describe its approach to proxy voting, including, but not limited to, its process for making proxy voting decisions, including its approach to defining materiality. | <p>1.1 The discussion shall include, but is not limited to, elements highlighted in the PRI's Reporting Framework for Direct – Listed Equity Active Ownership:</p> <p>1.1.1 The scope of the entity's voting activities</p> <p>1.1.2 The objectives of the entity's voting activities</p> <p>1.1.3 How, if at all, the entity's voting approach differs among markets</p> <p>1.1.4 Whether the entity has a default position of voting in favor of management in particular markets or on particular issues</p> <p>1.1.5 Whether and how local regulatory or other requirements influence the entity's approach to voting</p> <p>1.1.6 Whether the entity votes by proxy or in person by attending annual general meetings (AGMs) (or a combination of both)</p> <p>1.2 The entity shall describe its approach to determining support for proposals, including its approach to defining materiality.</p> <p>1.2.1 The scope of disclosure includes proposals addressing Environmental and Social (ES) issues</p> <p>1.3 The entity shall describe how it communicates its proxy voting policy to clients as well as to the public.</p> <p>1.3.1 The entity may provide the link to its formal proxy voting policy.</p> |
| Strategy | 10, Appendix B | | The entity shall describe its process of making proxy voting decisions. | <p>2.1 The discussion shall include, but not be limited to, the elements highlighted in the PRI's Reporting Framework for Direct – Listed Equity Active Ownership, which include:</p> <p>2.1.1 Use of internal research team and/or third-party service providers</p> <p>2.1.2 Review and monitoring process for service provider recommendations</p> |
| Strategy | 10, Appendix B | | The entity shall describe its approach to communicating its voting decisions to company management, including the rationale for voting for/against the management's recommendations. | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|------------------|--|---|
| Strategy | 10, Appendix B | | The entity shall describe its approach to engagement on ES issues. | <p>4.1 The discussion shall include, but is not limited to:</p> <p>4.1.1 The entity's objectives for undertaking engagement activities</p> <p>4.1.2 Whether the entity's engagements related to ES issues are primarily proactive to ensure that ES issues are well-managed in a preventive manner, or reactive to address issues that may have already occurred</p> <p>4.1.3 The outcomes the entity seeks from engaging with companies on ES issues (e.g., influencing corporate practice, improve the quality of ES disclosure)</p> <p>4.1.4 The entity's staff that carries out the engagement (e.g., specialized in-house engagement teams, fund managers or equity/credit analysts, more senior-level roles)</p> <p>4.1.5 The roles of individuals at the portfolio companies the entity seeks to engage with (e.g., board members, board chair, CEO, corporate secretary, investor relations managers)</p> <p>4.2 The entity shall describe how it communicates its engagement policy to clients as well as to the public.</p> <p>4.2.1 The entity may provide the link to its formal engagement policy.</p> <p>4.3 The scope of disclosure includes all asset classes, portfolios, and/or strategies where the entity conducts engagement on ES issues.</p> |
| Strategy | 10, Appendix B | | The entity shall describe how the outcomes of its proxy voting and engagement activities inform its investment decision-making process. | <p>5.1 The discussion shall include, but is not limited to:</p> <p>5.1.1 How the entity decides what information to pass on to investment decision-makers</p> <p>5.1.2 How the entity monitors the use of the information passed on in investment decision-making</p> |
| Strategy | 10, Appendix B | | The entity shall describe its escalation process for engagements when company dialogue is failing. | <p>6.1 The escalation process includes, but is not limited to, tactics highlighted in the International Corporate Governance Network (ICGN) Global Stewardship Principles:</p> <p>6.1.1 Expressing concerns to corporate representatives or non-executive directors, either directly or in a shareholder meeting</p> <p>6.1.2 Expressing the entity's concern collectively with other investors</p> <p>6.1.3 Making a public statement</p> <p>6.1.4 Submitting shareholder resolutions</p> <p>6.1.5 Speaking at general meetings</p> <p>6.1.6 Submitting one or more nominations for election to the board as appropriate and convening a shareholder meeting</p> <p>6.1.7 Seeking governance improvements and/or damages through legal remedies or arbitration</p> <p>6.1.8 Exit or threat to exit from the investment</p> |
| Strategy | 10, Appendix B | | The entity shall describe how its ES engagement strategy fits into the entity's overall engagement strategy. | |
| Strategy | S2 - 12 | | The entity may disclose additional quantitative measures related to its proxy voting and engagement activities, such as: 8.1 Number of engagements, percentage of those in-person 8.2 Number of staff involved in proxy voting and engagement activities | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|--|---|---|
| Strategy | S2 - 12 | An entity shall disclose information that enables users of general purpose financial reporting to understand its assessment of the current and anticipated effects of significant climate-related risks and opportunities on its business model. Specifically, an entity shall disclose: | a) a description of the current and anticipated effects of significant climate-related risks and opportunities on its value chain; and | |
| Strategy | S2 - 12 | | b) a description of where in its value chain significant climate-related risks and opportunities are concentrated (for example, geographical areas, facilities or types of assets, inputs, outputs or distribution channels). | |
| Strategy | S2 - 13 | An entity shall disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its strategy and decision-making, including its transition plans. Specifically, an entity shall disclose: | a) how it is responding to significant climate-related risks and opportunities including how it plans to achieve any climate-related targets it has set. This shall include: | i) information about current and anticipated changes to its business model, including: 1. about changes the entity is making in strategy and resource allocation to address the risks and opportunities identified in paragraph 12. Examples of these changes include resource allocations resulting from demand or supply changes, or from new business lines; resource allocations arising from business development through capital expenditures or additional expenditure on operations or research and development; and acquisitions and divestments. This information includes plans and critical assumptions for legacy assets, including strategies to manage carbon, energy- and water-intensive operations, and to decommission carbon-energy- and water-intensive assets 2. information about direct adaptation and mitigation efforts it is undertaking (for example, through changes in production processes, workforce adjustments, changes in materials used, product specifications or through introduction of efficiency measures). 3. information about indirect adaptation and mitigation efforts it is undertaking (for example, by working with customers and supply chains or use of procurement). |
| Strategy | S2 - 13 | | b) information regarding climate-related targets for these plans including: | (i) the processes in place for review of the targets; |
| Strategy | S2 - 13 | | | ii) the amount of the entity's emission target to be achieved through emission reductions within the entity's value chain; |
| Strategy | S2 - 13 | | | iii) the intended use of carbon offsets in achieving emissions targets. In explaining the intended use of carbon offsets the entity shall disclose information including: (1) the extent to which the targets rely on the use of carbon offsets; (2) whether the offsets will be subject to a third-party offset verification or certification scheme (certified carbon offset), and if so, which scheme, or schemes; |
| Strategy | S2 - 13 | | | (3) the type of carbon offset, including whether the offset will be nature-based or based on technological carbon removals and whether the amount intended to be achieved is through carbon removal or emission avoidance; and |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|--|---|--|
| Strategy | S2 - 13 | | c) quantitative and qualitative information about the progress of plans disclosed in prior reporting periods in accordance with paragraph 13(a)–(b). Related requirements are provided in paragraph 20. | |
| Strategy | S2 - 14 | An entity shall disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, and the anticipated effects over the short, medium and long term—including how climate-related risks and opportunities are included in the entity's financial planning. An entity shall disclose quantitative information unless it is unable to do so. If an entity is unable to provide quantitative information, it shall provide qualitative information. When providing quantitative information, an entity can disclose single amounts or a range. Specifically, an entity shall disclose: | a) how significant climate-related risks and opportunities have affected its most recently reported financial position, financial performance and cash flows; | |
| Strategy | S2 - 14 | | c) how it expects its financial position to change over time, given its strategy to address significant climate-related risks and opportunities, reflecting: | i) its current and committed investment plans and their anticipated effects on its financial position (for example, capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas and asset retirements); |
| | | | | ii) its planned sources of funding to implement its strategy; |
| Strategy | S2 - 14 | | d) how it expects its financial performance to change over time, given its strategy to address significant climate-related risks and opportunities (for example, increased revenue from or costs of products and services aligned with a lower-carbon economy, consistent with the latest international agreement on climate change; physical damage to assets from climate events; and the costs of climate adaptation or mitigation); and | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|--|---|---|
| Strategy | S2 - 15 | An entity shall disclose information that enables users of general purpose financial reporting to understand the resilience of the entity's strategy (including its business model) to climate-related changes, developments or uncertainties—taking into consideration an entity's identified significant climate-related risks and opportunities and related uncertainties. The entity shall use climate-related scenario analysis to assess its climate resilience unless it is unable to do so. If an entity is unable to use climate-related scenario analysis, it shall use an alternative method or technique to assess its climate resilience. When providing quantitative information, an entity can disclose single amounts or a range. Specifically, the entity shall disclose: | a) the results of the analysis of climate resilience, which shall enable users to understand: | (i) the implications, if any, of the entity's findings for its strategy, including how it would need to respond to the effects identified in paragraph 15(b)(i)(8) or 15(b)(ii)(6); |
| Strategy | S2 - 15 | | | (6) assumptions about the way the transition to a lower carbon economy will affect the entity, including policy assumptions for the jurisdictions in which the entity operates; assumptions about macroeconomic trends; energy usage and mix; and technology; and (7) an explanation of why the entity was unable to use climate-related scenario analysis to assess the climate resilience of its strategy. |
| Governance | S2 - 5 | To achieve this objective, an entity shall disclose information about the governance body or bodies (which can include a board, committee or equivalent body charged with governance) with oversight of climate-related risks and opportunities, and information about management's role in those processes. Specifically, an entity shall disclose: | a) the identity of the body or individual within a body responsible for oversight of climate-related risks and opportunities; | |
| Governance | S2 - 5 | | c) how the body ensures that the appropriate skills and competencies are available to oversee strategies designed to respond to climate-related risks and opportunities; | |
| Governance | S2 - 5 | | d) how and how often the body and its committees (audit, risk or other committees) are informed about climate-related risks and opportunities; | |
| Governance | S2 - 5 | | e) how the body and its committees consider climate-related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions, and its risk management policies, including any assessment of trade-offs and analysis of sensitivity to uncertainty that may be required; | |

| ISSB focus | ISSB reference | ISSB requirement | Requirement components | Requirement sub-components |
|------------|----------------|------------------|--|----------------------------|
| Governance | S2 - 5 | | f) how the body and its committees oversee the setting of targets related to significant climate-related risks and opportunities, and monitor progress towards them (see paragraphs 23–24), including whether and how related performance metrics are included in remuneration policies (see paragraph 21(g)); and | |
| Governance | S2 - 5 | | g) a description of management's role in assessing and managing climate related risks and opportunities, including whether that role is delegated to a specific management-level position or committee and how oversight is exercised over that position or committee. The description shall include information about whether dedicated controls and procedures are applied to management of climate-related risks and opportunities and, if so, how they are integrated with other internal functions. | |

Appendix D – Transparency assessment result

| Superannuation fund | Governance | Metrics & targets | Risk management | Strategy | Total | (%) |
|---|------------|-------------------|-----------------|----------|-------|------|
| AustralianSuper | 3 | 2 | 1 | 0 | 6 | 10% |
| Australian Retirement Trust | 2 | 7 | 3 | 4 | 16 | 28% |
| Aware Super | 4 | 14 | 3 | 11 | 32 | 55% |
| Unisuper | 4 | 10 | 3 | 11 | 28 | 48% |
| Public Sector Superannuation Scheme | 0 | 0 | 0 | 4 | 4 | 7% |
| Colonial First State FirstChoice Superannuation Trust | 0 | 2 | 0 | 2 | 4 | 7% |
| HOSTPLUS Superannuation Fund | 0 | 2 | 0 | 3 | 5 | 9% |
| BT Retirement Wrap (merged with Mercer April 2023) | 0 | 0 | 0 | 0 | 0 | 0% |
| Mercer Supter Trust | 3 | 8 | 1 | 5 | 17 | 29% |
| MLC Super Fund | 0 | 0 | 0 | 0 | 0 | 0% |
| Military Superannuation & Benefits Fund No 1 | 0 | 0 | 0 | 4 | 4 | 7% |
| Number of disclosures tested | 6 | 21 | 7 | 24 | 58 | 100% |

Table 4 – Number of tested disclosures substantively discussed per superannuation fund

Document prepared by

Aurecon Australasia Group Pty Ltd

ABN 54 005 139 873



Key Contacts



Climate Transition Leader



Group Director – Sustainability, Managing Director – Energy

