



Climate risk and our investments

April 2023

Investing
in a bright
future





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IMPORTANT INFORMATION

Unless otherwise mentioned, all analysis refers to our combined equity and bond exposures (excluding cash and futures positions) as at 30 June 2022. This is an amended version of the report we originally published in September 2022. As approaches to benchmarking carbon emissions are still emerging, we have chosen to remove reference to our carbon footprint performance against a benchmark. This report may contain statements that are, or may be deemed to be forward looking statements, including climate related goals, targets, pathways and ambitions. Such forward looking statements are not guarantees and involve known and unknown risks, uncertainties and other factors, which are beyond the control of UniSuper. This may cause actual results to differ materially from those expressed or implied in such statements. When we refer to reported revenues these revenues may be reported on a gross or net basis. Had we chosen to carry out our assessment on a 'gross' or 'net' basis, the assessment of our exposures may have been different. As a standardised approach and guidance for the disclosure of climate related exposures evolves, UniSuper will continue to work with industry bodies and companies to advocate for a uniform approach to the disclosure of climate related risks. UniSuper will continue to review its disclosure practices which may involve republishing data as the disclosure of data evolves over time.

We engaged an external assurance organisation, EY, to provide UniSuper with limited assurance in relation to the financed emissions intensity and coverage disclosures contained in this report. See page 65 for further information.



John Pearce
Chief Investment Officer

Message from the Chief Investment Officer

Welcome to the fifth edition of *Climate risk and our investments*.

When I introduced last year's edition of this report, I was pleased to state that, despite the world continuing to be engulfed by the COVID crisis, there had been no slowing in momentum in the race to net zero 2050. The story remains intact.

COVID hasn't disappeared and, with the spectre of war in Europe and inflation running rampant, the world has new crises to deal with. Yet the pursuit of net zero still has enormous momentum, with hundreds of billions in additional capital earmarked to fund the transition. Most importantly, despite the escalation in geopolitical tensions, the US and China have recognised climate as an existential crisis and have pledged to work together to achieve 1.5°C.

Australia is also picking up its game. Just as a new President Biden in the US did, new Prime Minister Albanese effectively committed Australia to the race with more ambitious emissions reduction targets by 2030.

The war in Ukraine is first and foremost a humanitarian disaster. It has evoked mixed responses with respect to decarbonisation. Importantly, it has spurred European governments to increase the speed and size of their collective commitments to the renewable energy transition. However, there is also an acknowledgement that they can't get there at the expense of energy security and affordability in the short term. To do so runs the risk of losing the mainstream support essential for decarbonisation. More focus is rightly being placed on a 'just transition'. Environmental and social responsibilities are often inextricably linked.

Unfortunately, securing affordable energy means relying on fossil fuels (in trusted jurisdictions) for longer than we would like. However, to be clear, the death of the dirtiest sources of energy such as thermal coal is a matter of when, not if.

The decarbonisation process also requires investment in industries that may increase emissions in the short term. This is discussed in pages 13 and 14 but suffice to say that it is impossible to decarbonise without copper and steel. It therefore follows that companies with diversified businesses such as BHP should be viewed as part of the solution, not the problem.

“We have always been confident of achieving our goal of becoming a net-zero emissions fund by 2050.”

In 2020, the Board approved a position statement on climate change, ‘Our sustainable path to 2050’, available at unisuper.com.au/climate-risk-disclosure. As was the case in last year’s report, various sections of the position statement are repeated in this document.

We accept the scientific consensus that human activity is a significant contributor to the warming of the planet. Global warming represents a long-term risk to economic growth and, by extension, the retirement outcomes of our members. The Paris Agreement committed its signatories to a set of actions that would limit the rise in temperature to well below 2°C above pre-industrial levels by the second half of the century. Accordingly, we fully support the Paris Agreement and we intend to play our part in ensuring that Australia fulfills its commitments as a signatory. From this fundamental basis arise the following beliefs and principles:

- Our actions will be consistent with the ultimate goals of the Paris Agreement—in particular, targeting net-zero emissions at a whole-of-fund and portfolio level by 2050.
- Decarbonisation will be a pervasive theme for at least the next decade. It is both essential and inevitable. This will involve a much greater share of renewables as a baseload energy source and a phasing out of fossil fuels.
- Factoring the decarbonisation theme in our investment considerations is consistent with our legal responsibilities and is aligned with our Trustee’s duty to comply with the sole purpose test to provide benefits to our members when they retire.
- As a fund represents the aggregation of debt and equity held in companies, the greatest impact we have is owning stakes in companies. Ownership provides us with the opportunity to directly influence companies through engagement or exercising our voting rights. Divestment of ownership, while always an option, simply eliminates the influence we have over companies without affecting real world emission reductions.

Against this backdrop, it’s worth highlighting some of our achievements to date:

- Our look-through exposure to fossil fuels is at 2.80% (see page 30 for details). This represents an increase from 2.55% reported last year, despite the fact that we have used the rally in energy-related companies to take some profits. The increase in exposure therefore reflects the uplift in market values.
- Overall, our investment in green themes and companies providing infrastructure and materials that support decarbonisation is more than four times greater than our fossil fuel exposure, based on reported revenues.
- The Board has imposed a cap on look-through fossil fuel exposure of 7%, with 5% representing a trigger for monitoring. The practical effect of the cap is to mitigate the Fund’s exposure to stranded asset risk.
- We’ve eliminated from the Fund companies that generate greater than 10% of their reported revenue from the extraction and production of thermal coal.¹
- 44 of our 50 largest Australian investments have set Paris-aligned net-zero 2050 targets, up from 40 last year (see pages 16 to 19).
- We’ve achieved net-zero emissions for our wholly-owned direct property portfolio (see page 8). This is an example of our commitment to achieving net zero as fast as we can where practically possible.
- We’ve achieved carbon neutral status across our corporate operations (as distinct from our investment portfolio).
- We’ve incorporated a shadow carbon price into our analysis of our top 50 Australian investments (which will ultimately be extended to include major global investments) to enhance our understanding of the pressure points in our portfolio (see page 8).

¹ We may retain an interest in companies that have more than 10% of their reported revenues associated with thermal coal exploration and production but are well progressed in the sale or wind-down of those mines as we consider them to comply with the restriction. As at 30 June 2022, we did not hold any interests in companies that had more than 10% of their reported revenues from the extraction and production of thermal coal.

The overarching aim of this report is to provide our members with a level of comfort that we are on top of the risks and opportunities in a world that is decarbonising. To this end, the document includes:

- our targets and metrics for success
- the strategies we employ that align us with the Paris Agreement
- an assessment of the major physical and transition risks in our portfolios.

This edition of *Climate risk and our investments* demonstrates our efforts to continually improve our climate risk assessments and reporting. An important development is the expansion of our 'Traffic light report' which focusses on our 50 largest Australian investments. These companies constitute over 70% of our holdings in Australian equities. They are the companies that we have direct access to, engage most with, and in which we can wield the most influence—particularly when working with other like-minded Australian investors and interest groups.

In the past two editions of this report, we attributed a green light to any company that had a publicly stated commitment to net zero by 2050. While this may now seem to be a low bar, bear in mind that as recently as 2019, only 14 companies in the ASX200 had made public commitments. We've now expanded the report to also rate companies with respect to shorter-term ambitious targets and evidence of action. Suffice to say that there are more red lights in this report, providing the basis for further engagement.

Given our low level of exposure to companies directly involved in fossil fuel extraction and production, some members have turned their attention to our indirect exposure via our investment in Australian banks. We have therefore included a focus piece on page 34. Lending to the fossil fuel industry constitutes a very low proportion of the lending activity of our four major banks (about 1%). They have all committed to exit thermal coal lending by 2030 and have committed to the Net Zero Banking Alliance. As signatories to the Alliance, banks need to recognise that decarbonisation impacts will be felt unevenly and be aware that their social responsibilities are intertwined with their environmental responsibilities. We also need to bear in mind that it would be difficult for a large Australian investor to construct a sensible portfolio without banks.

The section on physical risk (pages 35 to 41) is more expansive than the corresponding section in the previous edition. This is a complicated topic and we'll continue to refine our approach.

One of the most welcome developments arising from the COP26 summit is the establishment of the International Sustainability Standards Board (ISSB).

We see the remit of the ISSB to set the baseline standards for climate and other sustainability disclosures to enable investors to make informed decisions.

We are very confident that companies in developed market jurisdictions will be quick to comply with these standards—whether they are mandated by governments, enforced by regulators, or demanded by their shareholders. We believe that adoption of these standards is a matter of when, not if, and it will represent the next step change in our reporting. It is our wish that it will not be long before all Australian companies have adopted TCFD reporting and a science-based approach to emissions reduction.

We have always been confident of achieving our goal of becoming a net-zero emissions fund by 2050. We cannot publicly commit to divestment of specific companies or sectors over the short to medium term. However, it would be safe to say that well before 2050, we will not be investing in companies that do not have a credible plan to achieve net zero.

John Pearce
Chief Investment Officer

Paris Agreement


The Paris Agreement brings together all signatory nations to combat climate change and adapt to its effect. Its goal is to limit global warming to well below 2°C compared to pre-industrial levels, and to take steps to limit the temperature increase further to 1.5°C. To keep global warming to no more than 1.5°C, global carbon emissions need to be reduced by 45% by 2030 and reach net zero by 2050.

We consider alignment with the Paris Agreement, in aggregate, across all the companies we invest in. By 2050, we expect that the global economy will be operating in a world which has achieved net-zero carbon emissions. Accordingly, committing to a net-zero portfolio will not place undue constraints on our investment universe.

Highlights

By **2030** 

contribute to a 45% reduction in Australia's emissions through advocacy, engagement and investment.

By **2050** 

be at the forefront of the superannuation sector as we transition to a low carbon world with net-zero carbon emissions in our portfolio.

At 30 June 2022



44 of our **50**
largest Australian investments have set Paris-aligned operational targets



Our exposure to green themes and decarbonisation is over 4x our fossil fuel exposure, based on reported revenues



100%
of our wholly-owned direct property portfolio is net zero

We engaged with 



266 companies on climate issues



Our corporate operations are carbon neutral

We have **\$12 billion**



in sustainable and environmental branded investment strategies



We have 3 specialist sustainable and environmental branded investment options

The journey so far

We've been focusing on managing climate risk for over two decades

2001	Became a founding member of the Australian Council of Superannuation Investors (ACSI)
2004	Began public reporting on proxy voting activity
2006	Appointed a dedicated Environmental, Social and Governance (ESG) manager
2007	Delivered first briefing to the UniSuper Board on climate change risk
2008	Completed first assessment of the carbon exposure of listed equities holdings. Portfolios were found to be more carbon efficient than the benchmark
2009	Joined the Investor Group on Climate Change (IGCC) Completed first assessment of the impact of carbon pricing mechanism on the most carbon intensive companies in the ASX100
2011	Participated in Australian Institute of Superannuation Trustees (AIST) / Trucost carbon exposure study and were found to be more carbon efficient than the benchmark
2012	Engaged with unlisted property and infrastructure managers to understand how climate change may impact assets and the implications of a carbon pricing mechanism
2014	Screened fossil fuel producers and explorers out of our sustainable branded investment options Introduced a Green Bond portfolio, cornerstoning the first AUD denominated World Bank Green Bond issue in Australia
2015	Completed first portfolio assessment to understand exposures to fossil fuels and stranded assets
2016	Completed first assessment to understand the physical resilience of our portfolio to climate impacts
2017	Engaged with all property and infrastructure investments to understand how climate risk is managed

2018

Published inaugural *Climate Risk Report*
Joined and became a lead investor for Climate Action 100+

2020

Published our Climate Change Position Statement
Introduced Paris-aligned targets for our 50 largest Australian investments
Set decarbonisation targets and integrated decarbonisation into investment processes
Set climate-related key performance indicators (KPIs) for the Chief Investment Officer
Introduced thermal coal exclusion
Joined Climate League 2030

2021

Embedded targets into our Board's Risk Appetite Statement
Achieved carbon neutral status for our operations

2022

Achieved net zero status for our wholly-owned direct property portfolio
Introduced targets for all Australian unlisted property holdings to be net zero by 2025
Increased expectations for our 50 largest Australian investments to include interim targets and action plans, in addition to existing Paris-aligned targets
Progressed work towards SBTi endorsement of our targets
Surpassed \$12 billion in sustainably-themed funds under management

Our targets

In September 2020, we committed to:

- achieving net-zero carbon emissions at a whole-of-fund and portfolio level by 2050
- contributing to a 45% reduction in Australia's emissions by 2030 through company engagement, advocacy, and by investing capital in companies that are instrumental in achieving a net-zero future.

The table below shows our progress to date.

OBJECTIVE	TARGET	STATUS
Thermal coal exclusion	Exclude companies generating over 10% of their reported revenue from the extraction and production of thermal coal.	Achieved. Process in place to identify and screen for excluded companies. ¹
Company engagement	Engage with all 50 largest Australian investments at least annually. Engage with all Australian companies.	Met all 50 largest Australian investments during the financial year. Our ESG team discussed climate issues in 266 company engagements.
Paris-aligned portfolio	50 largest Australian investments to have: <ul style="list-style-type: none"> ▪ Paris-aligned operational targets ▪ interim targets ▪ action plans to support targets. 	On track. See the 'Traffic light report' on page 16 to 19 for our assessment of progress at 30 June 2022.
Net-zero emissions for specific portfolios before 2050	Wholly-owned direct property portfolio to be net zero by 2025. All other Australian unlisted property holdings to be net zero by 2025. Unlisted Australian infrastructure holdings to be net zero by 2030.	Wholly-owned direct property portfolio net zero for 1H 2022 emissions. Will maintain moving forward. Ongoing engagement with unlisted property and infrastructure managers and AREITs to work towards target.
Incorporate shadow carbon price	Applied to major holdings. ²	Achieved for major holdings. Ongoing monitoring of carbon prices and regulation changes to understand material changes to portfolio exposure.
Our corporate operational emissions	Carbon neutrality.	Achieved. See case study on page 21.

¹ We may retain an interest in companies that have more than 10% of their reported revenues associated with thermal coal exploration and production but are well progressed in the sale or wind-down of those mines as we consider them to comply with the restriction. As at 30 June 2022, we did not hold any interests in companies that had more than 10% of their reported revenues from the extraction and production of thermal coal.

² 'Major holdings' refers to ASX top 50 companies or unlisted assets where we consider that carbon pricing could be a significant risk.

Governance

Our Board determines the degree of risk that we're prepared to accept having regard to the best interests of our members. This includes our approach to climate risk, which is an explicit risk that we consider across our investments. The key performance indicators (KPIs) of the Chief Investment Officer (CIO) and Investment Leadership Team make specific reference to ESG leadership, which includes alignment with the goals of the Paris Agreement.

Since our last report, we've further integrated climate risk management into our investment process. As we committed in our 2021 report, the Board's Risk Appetite Statement now incorporates a 7% fund-wide cap on look-through fossil fuel exposure (with 5% representing a trigger for monitoring). The practical effect of these measures is to mitigate our exposure to stranded asset risk. We continue to develop our understanding of risks, and to implement and improve risk processes. We engage and work closely with companies and industry bodies.

ENTITY	RESPONSIBILITIES
The Board	<ul style="list-style-type: none"> Ensuring that we discharge our duties as a trustee. Endorsing a position statement on climate change committing that we'll target total net-zero emissions by 2050. Approving a fund-wide cap on fossil fuel exposure (monitoring above 5%; 7% hard cap).
Investment Committee	<ul style="list-style-type: none"> Sub-committee of the Board chaired by an independent director. Reviewing climate targets for investment portfolios. Reviewing climate risk exposures for portfolios, incorporating financial risks arising from climate change (including physical, transition and liability risks). Monitoring key fund holdings and actions to assess whether they are aligned with climate targets.
Investment team	<ul style="list-style-type: none"> Led by the CIO. Accountable for implementation of all investment strategies approved by the Board and overseen by the Investment Committee. Recommending climate targets for review by the Investment Committee. Ensuring that our investment activities are aligned to our climate targets. Ensuring all analysts and portfolio managers are responsible for understanding the decarbonisation approach of the companies within their coverage. Developing qualitative and quantitative metrics to monitor exposures to climate risks. Reviewing and considering scenario analysis to inform understanding of long-term risks and opportunities at a Fund and company level. Developing plans to mitigate risks at a portfolio and company level. Producing an annual climate risk report that details climate risk exposures, actions, and progress against Fund and company targets.
ESG team	<ul style="list-style-type: none"> Dedicated professionals within the Investment team, focused on ESG considerations to drive positive portfolio outcomes. Leading company engagements on ESG, including climate approach and sustainability disclosures. Engaging with investment analysts to collaborate on ESG engagement and proxy voting advice. Leading internal education on climate risk in our investments across the Fund.

Global investor best practice

Our commitment

Since our last report, we've continued to progress our climate scenario modelling, our practices, and our disclosures. We monitor and benchmark our approach against various quantitative and qualitative measures.

We've been shortlisted for several awards—including the Principles for Responsible Investment (PRI) Real-world Impact initiative—and achieved above our peers in the [International Climate Reporting Awards](#).

TASKFORCE FOR CLIMATE-RELATED FINANCIAL DISCLOSURES

The Taskforce for Climate-related Financial Disclosures (TCFD) framework helps companies provide better information to support informed capital allocation. The framework recommendations cover four areas:

- governance
- strategy
- risk management
- metrics and targets.

We manage and report on climate-related risks in line with the TCFD's recommendations (including supplementary guidance for asset owners). This is our fifth TCFD-aligned report.

We strongly encourage mandatory adoption of TCFD reporting and methodology standards for climate-relevant metrics—such as emissions reporting—as this helps drive consistency across companies. We also encourage the adoption of TCFD reporting through our engagement with the International Sustainability Standards Board's (ISSB) work on developing mandatory sustainability standards for companies.

PARIS ALIGNED INVESTMENT INITIATIVE

The Paris Aligned Investment Initiative (PAII) is a global collaborative forum supported by four regional investor climate networks. There are three key areas of focus:

- driving net-zero investing commitments
- supporting investors to implement commitments—using the PAII's Net Zero Investment Framework—as defined by the Investor Climate Action Plan (ICAP) framework
- collaborating globally to develop and support further practical approaches to enable Paris-aligned investing.

The [ICAP Framework](#) articulates the pathway towards making high-ambition, robust net-zero commitments, and helps investors implement their climate action plans. In our 2022 assessment, we improved in scenario analysis, collaborative engagement and advocacy, placing us in Tier 1 in many categories. We continue to monitor our progress against the ICAP framework.

SCIENCE BASED TARGETS INITIATIVE

The Science Based Targets initiative (SBTi) is a collaboration between the Carbon Disclosure Project, the United Nations Global Compact, the World Resources Institute and the World Wide Fund for Nature. The SBTi asks companies to align their business models to limit global warming to 1.5°C, and to set science-based targets. It also provides guidelines on setting these targets.

We believe that comprehensive reporting of science-based targets constitutes the next step change in climate risk disclosure for a fund. As we rely on company disclosure, there are still many data gaps we're working to fill. Over the past year, we've reviewed the guidance for asset owners and engaged with SBTi-endorsed companies to discuss what we've learnt. We're now assessing how we'll proceed towards the endorsement of our targets.

Example - Schroders SBTi

We regularly engage with our external managers to ensure they're aligned with our approach to climate risk management and ESG more generally, and to learn from their experiences.

Schroders is one of our external investment managers. In early 2022, Schroders was among the first financial institutions to have its greenhouse gas emission reduction targets formally validated by the SBTi. Given our commitment to having SBTi-endorsed targets for our portfolio, we are using the lessons from Schroders' experience to broaden our knowledge of industry best practice.

HOW WE STAY INFORMED ON CLIMATE-RELATED MATTERS	
Academic research	We monitor and review climate and investment-related research. We seek guidance from experts, such as the CSIRO and university research institutes.
Sector-specific analysis and engagement	We engage with organisations that interpret the latest climate science to assist in understanding sector-specific decarbonisation pathways. This enables us to identify challenges and opportunities to achieving net-zero targets.
Membership organisations	We participate in working groups and regular briefing sessions with the Australian Council of Superannuation Investors (ACSI) and the Investor Group on Climate Change (IGCC) to better understand new research, inform future research, and learn from peers.
Data service providers	We subscribe to a variety of data services that provide sustainability analytics (e.g. MSCI, S&P Trucost, Bloomberg). We use this data to analyse specific companies, benchmark our portfolios, and monitor climate-related metrics.
NGOs and institutes	We maintain a watching brief on a wide range of NGOs and institutes, including the IEA, IPCC, WWF, Urgewald, Carbon Tracker, Transition Pathway Initiative (TPI), ClimateWorks, SBTi, and others. Company TCFD and sustainability reports provide insights into how they and their customers are adapting.
Investment bank research papers	Investment banks regularly publish research on climate change, decarbonisation, and the impacts of climate risks on the broader economy. Our ESG specialists review this research and engage with our wider investment team on key findings. Investment specialists stay across industry-specific impacts from climate change and opportunities from decarbonisation.
Media	We subscribe to news outlets to stay up to date on new research and changing climate policies in Australia and globally.

Aligning with the Paris Agreement

We're committed to achieving net-zero carbon emissions across our operations and investments by 2050, in line with the Paris Agreement.

Our Climate Change Position Statement outlines the scope of our commitments. It guides how we align with the Paris Agreement in our investment portfolio and is centred around the following actions:

- portfolio construction and investment
- company engagement
- shareholder action
- collaboration and advocacy.

Portfolio construction and investment

As a long-term investor, earnings sustainability is critical to our investment approach. The risk to company earnings from climate change is one of many factors we consider when assessing earnings sustainability.

DECARBONISATION IS A CORE INVESTMENT THEME

We see decarbonisation as a core investment theme for at least the next decade. We expect all our investee companies to:

- accept that decarbonisation is essential and inevitable
- proactively mitigate and manage climate change risks in their business and supply chains
- set emissions reduction targets
- disclose Paris-aligned emissions targets, emissions footprints, and other factors, in line with the TCFD framework.

INVESTING IN GREEN THEMES

Achieving the goals of the Paris Agreement and decarbonising our planet requires trillions of dollars of investment. The green theme continues to attract significant capital. Inevitably, there will be risks involved, and not all investments will be profitable, so discipline is required. We continue to look for opportunities to invest in companies that support decarbonisation while providing attractive returns for our members.

The UniSuper investment option with the most direct exposure to green themes is Global Environmental Opportunities (GEO). GEO invests in companies that derive at least 40% of their reported revenue from environmentally beneficial products and services. These include alternative energy, clean technology, sustainable water, green buildings, pollution prevention and sustainable agriculture.

“We continue to look for opportunities to invest in companies that support decarbonisation while providing attractive returns for our members.”

Supporting infrastructure and materials

There's a natural tendency to associate green investments with direct investments in companies participating in the trend, such as solar and wind farms, but we take a more expansive view. There are many companies that are transitioning their businesses to survive and thrive in a low carbon world, and provide supporting infrastructure to facilitate the transition. While these companies are far less obvious than an investment in renewable energy companies, we see them as critical contributors to decarbonisation. For example, our two largest international utility holdings, National Grid and Dominion Energy, are rapidly transitioning their business mix towards renewables.

The resources sector provides vast quantities of raw materials for the energy transition, including steel, copper, nickel, and other commodities. These will be needed as we move from fossil fuels to renewable power generation, and battery and fuel cell-based electric vehicles. Some of our largest investments, such as BHP, Rio Tinto and South 32, produce many of these metals and minerals.

These products currently rely on high emissions processes to make them suitable for use. We engage closely with resources companies to encourage them to reduce the carbon intensity of their products and to have robust environmental and social risk management.

Overall, our investment in green themes—and in companies that provide materials to support decarbonisation—is more than four times greater than our fossil fuel exposure.

MATERIALS CRITICAL FOR TRANSITION TO A LOW CARBON ECONOMY, BY TECHNOLOGY TYPE



Includes energy storage.

Source: Critical raw materials for strategic technologies and sectors in the EU, a foresight study, European commission, March 9, 2020; The role of critical minerals in clean energy transitions, IEA, May 2021; McKinsey analysis



Company engagement and progress

The greatest impact we have is by owning companies. Ownership gives us the opportunity to directly influence companies through engagement or by exercising our voting rights. Divestment, while always an option, eliminates the influence we have over companies. Hence, engaging with our investee companies is our main way of achieving our net-zero emissions target.

DIRECT ENGAGEMENT

In-house investment team

We manage over 70% of our funds in-house. Our Investment team has expertise across all major Australian and global asset classes. We also have internal expertise across investment operations, legal and compliance, and a dedicated ESG team working closely with our portfolio managers.

Given our presence in the Australian market, our influence is strongest when dealing with companies in our Australian portfolios. We engage directly and regularly with company management and boards to support a Paris-aligned decarbonisation transition. Our engagement efforts are supported by our voting on company resolutions at shareholder meetings.

We have identified and set targets for the 50 largest Australian investments across our fund (listed and unlisted, debt and equity). These companies represent 73% of our total Australian holdings.

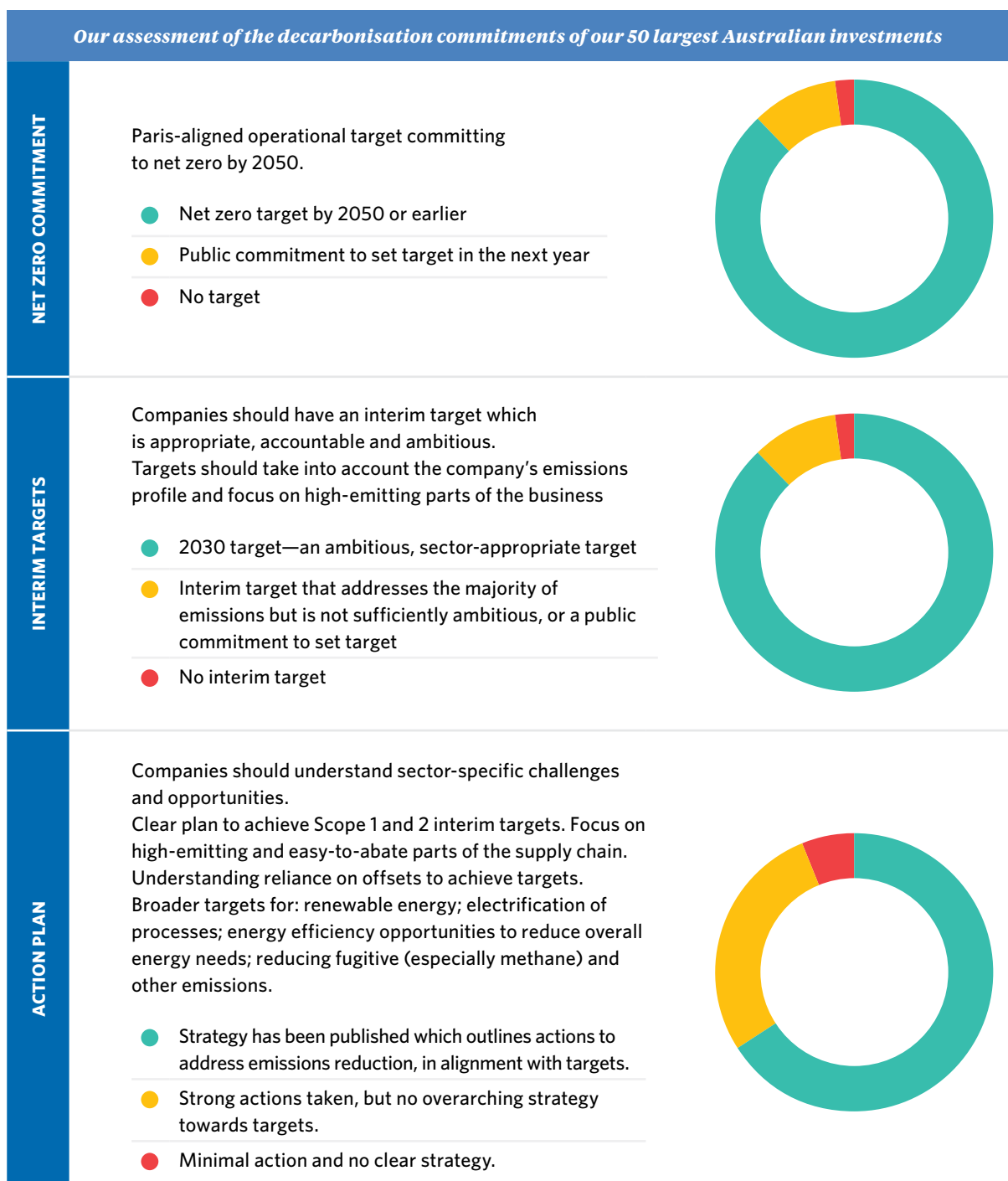
Our expectations of our 50 largest Australian investments include:

- a proactive approach to reducing emissions in line with the Paris Agreement
- an understanding of the climate risks embedded in their assets and businesses
- transparent disclosure explaining their activities and actions to manage climate risks and opportunities.

As climate ambition develops, so do our expectations of companies. In this year’s report, we outline the increased expectations we believe companies should be achieving to demonstrate their progress.

We expect companies to go beyond setting a Paris-aligned 2050 commitment. Our expectations include setting interim targets, and having climate management action plans to support them.

We use our influence to encourage companies to reduce their carbon emissions. We believe this will help us achieve our 2030 target of contributing to a 45% reduction in Australia’s emissions, and our 2050 target of a net-zero portfolio.



ALIGNING WITH THE PARIS AGREEMENT

On pages 18 and 19, we set out our 'Traffic light report'. This report shows our assessment of the decarbonisation commitments of our 50 largest Australian investments.

In this year's Traffic light report:

- **Paris-aligned 2050 target:** 44 of our 50 largest Australian investments receive a green light, up from 40 last year.
- **Interim target:** 44 of 50 receive a green light. Our property, infrastructure, financial, IT and telecommunications holdings feature strongly in this criteria, as do most of our resources holdings. Five receive an amber light for having an interim target that falls short of our expectation that it be sufficiently ambitious. One company receives a red light for having no interim target.
- **Action plans:** 33 of 50 receive a green light. 14 are amber, and we assessed three as having inadequate plans.

While it's disappointing that the laggards in this year's list are consistent with last year's (CSL, Cleanaway, Qube, James Hardie and Aristocrat), we are encouraged to see that they have all made some progress on their decarbonisation efforts this year. For example, after extensive engagement, in August 2022 CSL announced emissions reduction targets and we look forward to seeing a detailed plan as to how it will achieve them. We note that all these companies acknowledge decarbonisation as an important issue to address.

If we're dissatisfied with a company's decarbonisation approach, we'll continue to engage and escalate as appropriate. Our options for escalation include:

- supporting shareholder resolutions to encourage greater climate action
- voting against 'Say on Climate' resolutions, company directors or remuneration reports
- divestment—especially where a lack of action is of concern to us and there is no viable decarbonisation pathway.

“We use our influence to encourage companies to reduce their carbon emissions.”

Traffic light report

COMPANY	NET-ZERO COMMITMENT	INTERIM TARGETS	ACTION PLAN
<i>Communication services and IT</i>			
Telstra	●	●	●
NextDC	●	●	●
<i>Consumer</i>			
Wesfarmers	●	●	●
Aristocrat	●	●	●
Woolworths	●	●	●
Coles	●	●	●
<i>Financials</i>			
NAB	●	●	●
ASX Ltd	●	●	●
Westpac	●	●	●
Macquarie	●	●	●
Bank of Queensland	●	●	●
Bendigo and Adelaide Bank	●	●	●
Suncorp	●	●	●
IAG	●	●	●
Commonwealth Bank	●	●	●
ANZ	●	●	●
<i>Health care</i>			
Resmed	●	●	●
CSL	●	●	●
<i>Industrials</i>			
Cleanaway	●	●	●
Qube	●	●	●
Hancock Plantations	●	●	●
Transurban	●	●	●
Prospect Water	●	●	●

COMPANY	NET-ZERO COMMITMENT	INTERIM TARGETS	ACTION PLAN
Infrastructure			
Brisbane Airport	●	●	●
Airport Motorway Limited (toll road, NSW)	●	●	●
Adelaide Airport	●	●	●
Sydney Airport	●	●	●
Materials and utilities			
South 32	●	●	●
James Hardie	●	●	●
Rio Tinto	●	●	●
Amtcor	●	●	●
BHP	●	●	●
APA	●	●	●
Real estate			
Scentre Group	●	●	●
Vicinity Centres	●	●	●
Karrinyup Shopping Centre	●	●	●
GPT Group	●	●	●
AMP Capital Retail Trust	●	●	●
ISPT Core Fund	●	●	●
Brookfield Place	●	●	●
Goodman Group	●	●	●
GPT Wholesale Office Fund	●	●	●
AMP Capital Wholesale Office Fund	●	●	●
Marrickville Metro Shopping Centre	●	●	●
Goodman Australian Industrial Fund	●	●	●
ISPT 50 Lonsdale St Property Trust	●	●	●
7 Macquarie Place NSW	●	●	●
GPT Wholesale Shopping Centre Fund	●	●	●
APPF Industrial Fund	●	●	●
Malvern Central Shopping Centre	●	●	●

Using carbon offsets

Reducing greenhouse gas (GHG) emissions is easier for some companies than others. Increasing renewable energy generation means that some sectors can decarbonise now, while others are investing in research and development to progress future decarbonisation.

Many companies use carbon offsets to mitigate their emissions, and some sectors, like property and financials, are already achieving carbon neutrality with offsets.

The practice of offsetting involves reducing or removing GHGs in one place to compensate for emissions elsewhere. Carbon markets enable projects that reduce carbon in the atmosphere (e.g. timber plantations) to generate carbon credits for sale to emitters who wish to reduce the negative effects of their emissions. Carbon markets can either be for voluntary participation (for companies who have made net-zero commitments) or for compliance with legal frameworks. By putting a price on carbon, the market is informed of the negative externalities of carbon emissions.

During 2022, we conducted detailed research into carbon offsets and carbon markets to better understand the risks and opportunities posed by using carbon credits to achieve emissions reduction targets. When engaging with our 50 largest Australian investments, we use this research to assess their use of carbon offsets to achieve emissions reduction targets.

LIMITATIONS OF CARBON OFFSETS

We accept the use of offsets in hard to abate sectors where technology isn't yet available to eliminate emissions. However, offsets should not be core to, or used as a substitute for, a comprehensive decarbonisation strategy. We expect that companies will reduce their reliance on carbon offsets over time.

The quality of offsets can vary depending on whether—and how—they achieve the actual emissions they claim to. We encourage the ongoing development and refinement of standards to provide consistency and confidence in carbon offset measurement and verification. We also note that there are physical limitations on the quantity of carbon offsets that can be generated, which will be less than the demand for them, until alternative emissions reduction technologies develop.





Case Study: How we use carbon offsets in our operations at UniSuper

Since 2020, we have used carbon offsets to become Climate Active certified as carbon neutral for our corporate operations. We have a portfolio of carbon credits across a mix of projects. Our offset portfolio focuses on renewable energy projects and we have committed 25% of our offsets to come from indigenous programs in line with our Reconciliation Action Plan.

In the financial year ended 30 June 2021, our emissions halved—largely because of refurbishments and IT upgrades made in the previous financial year. 40% came from electricity generation at our offices. To further offset our emissions, we started using GreenPower (a government accredited renewable energy product) at all our offices on 1 July 2022.

You can find details of our fund-wide emissions in our 2022 annual report—*UniSuper in review 2021-22*—and on the [Climate Active website](#).



Image: Porepunkah Plantations, managed by Hancock Victorian Plantations—one of Australia's largest private timber plantation companies.

SHAREHOLDER ACTION AND VOTING

We engage with companies on a wide range of ESG issues. These include the management of physical and transition risks associated with climate change. Our activities include meetings with senior management and company boards, voting on company resolutions like Say on Climate, director appointments, executive remuneration, and climate-related shareholder proposals.

Increasingly, shareholder action has been used to escalate climate concerns in companies that are seen to take an inadequate approach to climate risk and transition. During the financial year, across our Australian and international holdings, there were 57 environmental-related shareholder proposals at company AGMs—up from 21 in the previous year. We assess these resolutions on merit, on a case-by-case basis. We often support shareholder resolutions asking for TCFD reporting or targets where companies are not reporting or acting to decarbonise their business.

For information on how we've used our proxy voting rights to vote on shareholder resolutions, and how we put our responsible investment policy into action, read our *Responsible investment report* on [our website](#).



Say on Climate

Over the past year, we've seen the emergence of company boards putting forward a Say on Climate resolution at AGMs. This is a non-binding resolution allowing shareholders to express their view on the company's approach to climate change risk. Say on Climate resolutions have attracted support from most shareholders. As with any AGM resolution, we consider each vote on a case-by-case basis and consider company progress, reporting, targets, and relevant sectoral decarbonisation pathways. We want to see how a company's plans tie into the company strategy, and how the company supports emerging technologies. Importantly, where companies are expanding fossil fuel reserves, we want to understand how these fit into global energy and climate modelling scenarios.

Case Study: Santos and Woodside—2022 Say on Climate votes

These have been the most contentious votes to assess to date, given both companies' planned expansion projects. We voted against Woodside based on its lower level of contracted sales and offset strategy. Ultimately, we supported the Santos vote as we felt it was further progressed on carbon capture and storage (CCS) technology than Woodside is with hydrogen. In addition, Santos had de-risked its expansion with a higher proportion of contracted volumes, rather than relying on spot market sales.

For full details of our voting, read our *Responsible investment report* on [our website](#).

SANTOS - WHY WE VOTED 'FOR'	WOODSIDE - WHY WE VOTED 'AGAINST'
<p>Decarbonisation approach</p> <p>Santos considered some scenario analysis, reasonable operational emissions targets, and good TCFD reporting, e.g.:</p> <ul style="list-style-type: none"> 30% operational emissions reduction target by 2030. Net zero scope 1 and 2 by 2040. Scope 3 target to reduce customer emissions by 1.5 million tonnes of CO₂-e per annum. Long-term trials of CCS as chosen decarbonisation technology. <p>Emission reduction strategy: CCS with technology yet to be proven in the field at scale.</p>	<p>Decarbonisation approach</p> <p>Woodside considered some scenario analysis, reasonable operational emissions targets, and good TCFD reporting, e.g.:</p> <ul style="list-style-type: none"> 30% operational emission reduction target by 2030. Net zero scope 1 and 2 by 2050. Investing in hydrogen, renewables and CCS. <p>Emission reduction strategy: Carbon offsets with insufficient detail on offset purchase strategy.</p>
<p>Expansion project</p> <p>Barossa - USD \$4.7B; Dorado - USD \$2.7B.</p> <p>CO₂ content: Higher than other fields.</p> <p>Volume contracted: 80% of Barossa/Darwin.</p>	<p>Expansion project</p> <p>Scarborough - USD \$16.5B.</p> <p>CO₂ content: Low vs. Barossa/Dorado.</p> <p>Volume contracted: Only 15% of reserves.</p>

Image: Numurkah Solar Farm, providing green power which contributes to our net-zero wholly-owned direct property portfolio

Collaboration and advocacy

While we engage with companies directly, we also collaborate with other like-minded investors and groups to further influence companies and policymakers.

We continue to grow our public advocacy on climate-related issues, and report on the events and media we participate in. These include executive interviews, comments on topical news announcements, and participation on panels at conferences.



INVESTOR GROUPS

We work with the Australian Council of Superannuation Investors (ACSI) and the Investor Group on Climate Change (IGCC) to extend our understanding of and reporting on climate risks, and to encourage greater ambition.

Global networks such as the Asian Corporate Governance Network (ACGA) and the Principles of Responsible Investment (PRI) allow us to learn from and influence practice in other regions.



CLIMATE ADVOCACY INITIATIVES

We engage with climate advocacy initiatives to progress ambition for decarbonisation, particularly in hard to abate sectors.

We're an active member of [Climate Action 100+](#), which brings together 575 global investors representing USD \$54 trillion in assets, to engage with the world's 100+ largest listed carbon emitters.



DEVELOPING INDUSTRY GUIDANCE

Organisations like [Climate Works](#), [SBTi](#) and [TPI](#) aim to bridge the gap between climate research and action. They use the latest climate science to guide companies on how to develop and implement science-based emissions reduction targets.

We participate in working groups providing feedback to advocate for pragmatic and ambitious industry decarbonisation pathways. We also reference this information when engaging with companies to support them on their journey and assess their progress.

Understanding our risks

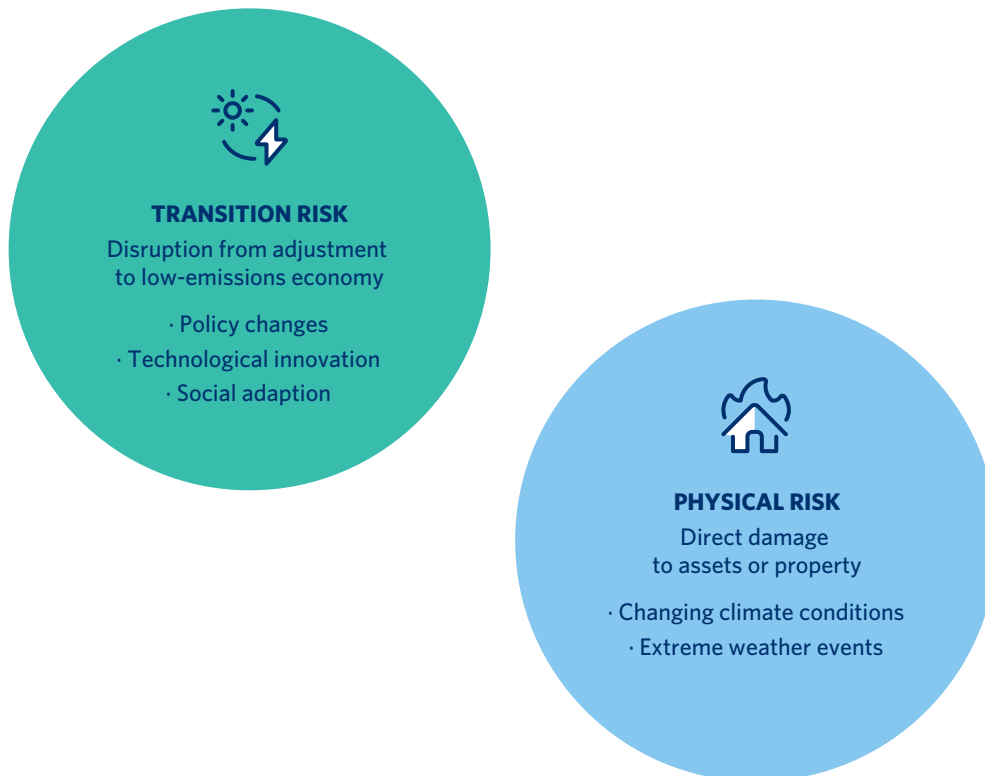
Climate risks can manifest in different ways—the main ones being the transition risks of moving to a lower carbon economy, and physical risks like the effects of extreme weather events. These risks also create investment opportunities.

Image: Numurkah Solar Farm, providing green power which contributes to our net-zero wholly-owned direct property portfolio



We have in place a comprehensive risk management framework across our fund, and climate risk is identified as a specific risk in our risk register. Across our investments, we identify, monitor, and take appropriate action to manage climate risks as shown below.

TYPES OF CLIMATE RISKS



HOW WE USE SCENARIO ANALYSIS TO UNDERSTAND CLIMATE RISKS

To understand climate risks, we consider a variety of possible global scenarios. We use these to test our assumptions about our investments and the associated risks and opportunities. We monitor changes and developments in policy and technology to inform our investment decisions.

We refer to a range of climate and economic models to assess how different assumptions influence how the world may look on the path to net zero 2050. These outcomes can vary, depending on which enablers are given more or less consideration, for example:

- different technological changes
- the speed of transition
- the technology development required
- the commercialisation and costs of the required technology
- implementation of policy frameworks to encourage development
- associated social and behavioural changes.

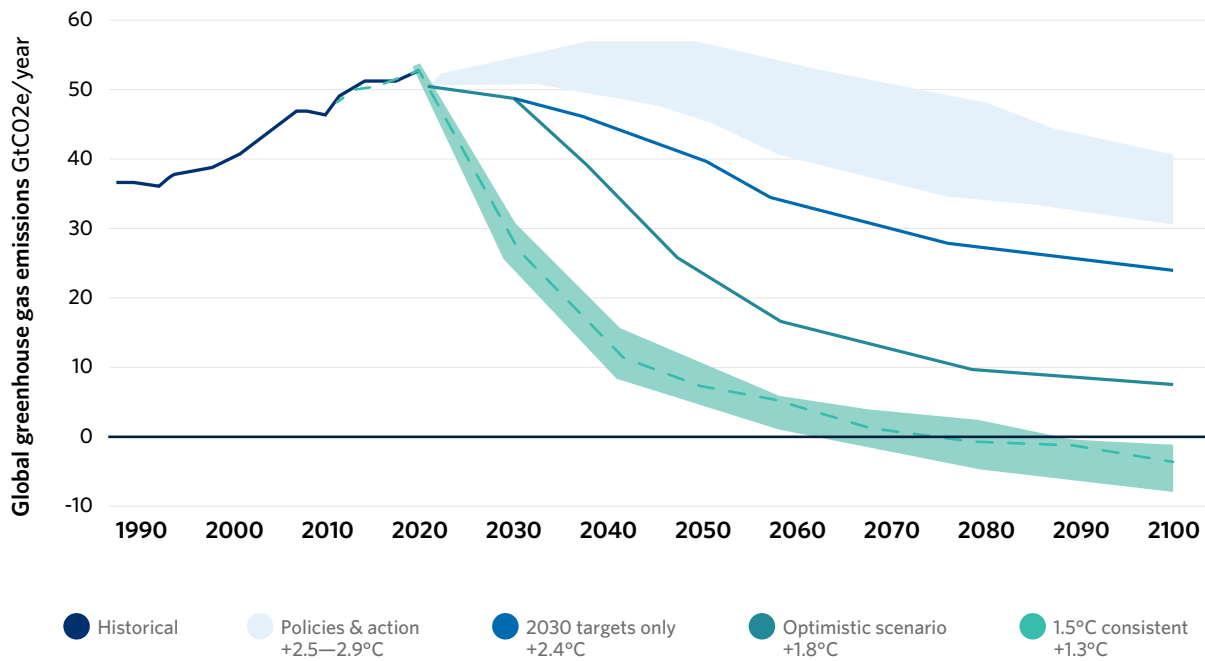
When assessing transition risk, we look at rapid decarbonisation scenarios. Low emission scenarios result in a lower projected future global temperature but require a much faster change to the economy and industry. While lower projected temperatures are desirable and our ultimate aim, it creates greater disruption to the economy—including stranded asset risk for some of our investments.

When assessing physical risk, we look at high emission scenarios as these are most likely to exacerbate extreme weather events which can cause physical damage to cities and infrastructure.

Inevitably, the actual outcome over the longer term will range between the different scenarios. We continue to monitor climate research and practice and evolve our approach to scenario analysis.

2100 WARMING PROJECTIONS

Emissions and expected warming based on pledges and current policies



Source: Climate Action Tracker, November 2021

Higher emission scenarios result in a higher projected future global temperature. We look at high emissions scenarios for physical risks.

Low emissions scenarios result in a lower projected future global temperature but require a much faster change to economy and industry. We look at rapid decarbonisation (tracking towards net zero 2050) for transition risks.

Transition risk

Paris-aligned targets in our portfolio

We monitor the decarbonisation strategies of companies to better understand our exposure to transition risk. Companies with decarbonisation targets supported by clear action plans provide us with confidence that they are managing the risk and are ready to take advantage of the opportunities that transition presents.

Over the past five years, we've seen an overall increase in decarbonisation targets. Most targets focus on reducing operational emissions, but we're starting to see a greater focus on reducing emissions along the supply chain (scope 3).

Around 80% of our fund has net-zero or science-based targets—up from 66% in 2021, 51% in 2020, and 26% in 2019. We've seen an acceleration in near-term carbon neutral or net-zero commitments, with 76% of the fund committed to achieving this target by 2030—up from 36% in 2021. 11% of companies in our fund have not set targets around emissions, compared to 55% when we first started reporting in 2018.

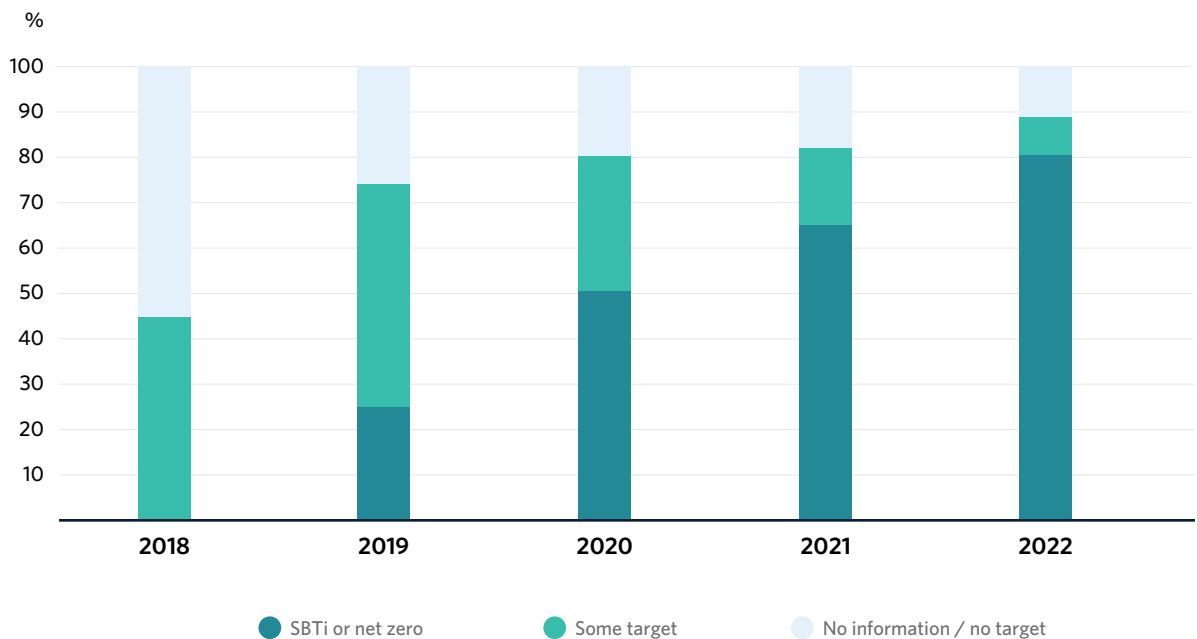
Across our portfolio (by look-through value):

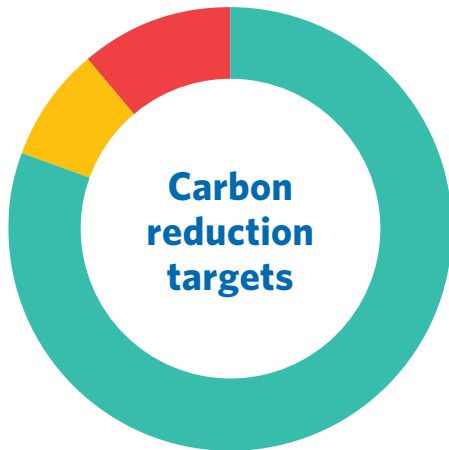
- 45% of the fund is already, or has committed to being, carbon neutral or net zero by 2025
- a further 35% is committed to being carbon neutral or net zero by 2030
- 22% is seeking, or has received, SBTi endorsement, meaning targets include emissions across supply chains (scope 1, 2 and 3)

As access to renewable energy improves, we are increasingly seeing companies set renewable energy targets. 21% of our fund has achieved their target of using renewable energy, while a further 57% has set a target or is working towards using renewables.

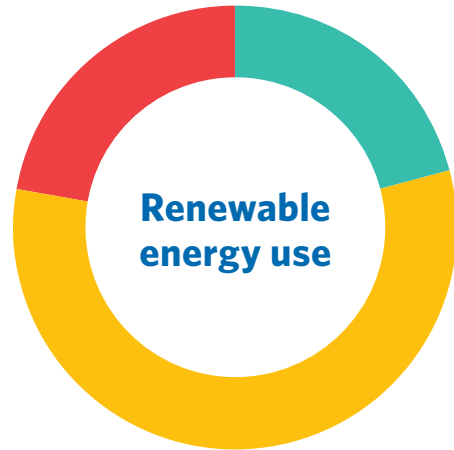
We're assessing different methodologies to better analyse how companies are progressing towards their targets. This analysis will provide further insight into how aligned our portfolio is with the Paris targets.

CLIMATE TARGET PROGRESS ACROSS THE FUND





OPERATION TRANSITION EFFORTS	WHOLE-OF-FUND
● Net-zero or science-based targets	80%
● Sets targets / some efforts	8%
● No efforts / evidence	11%



OPERATION TRANSITION EFFORTS	WHOLE-OF-FUND
● Renewable energy commitments	21%
● Some efforts	57%
● No efforts	22%

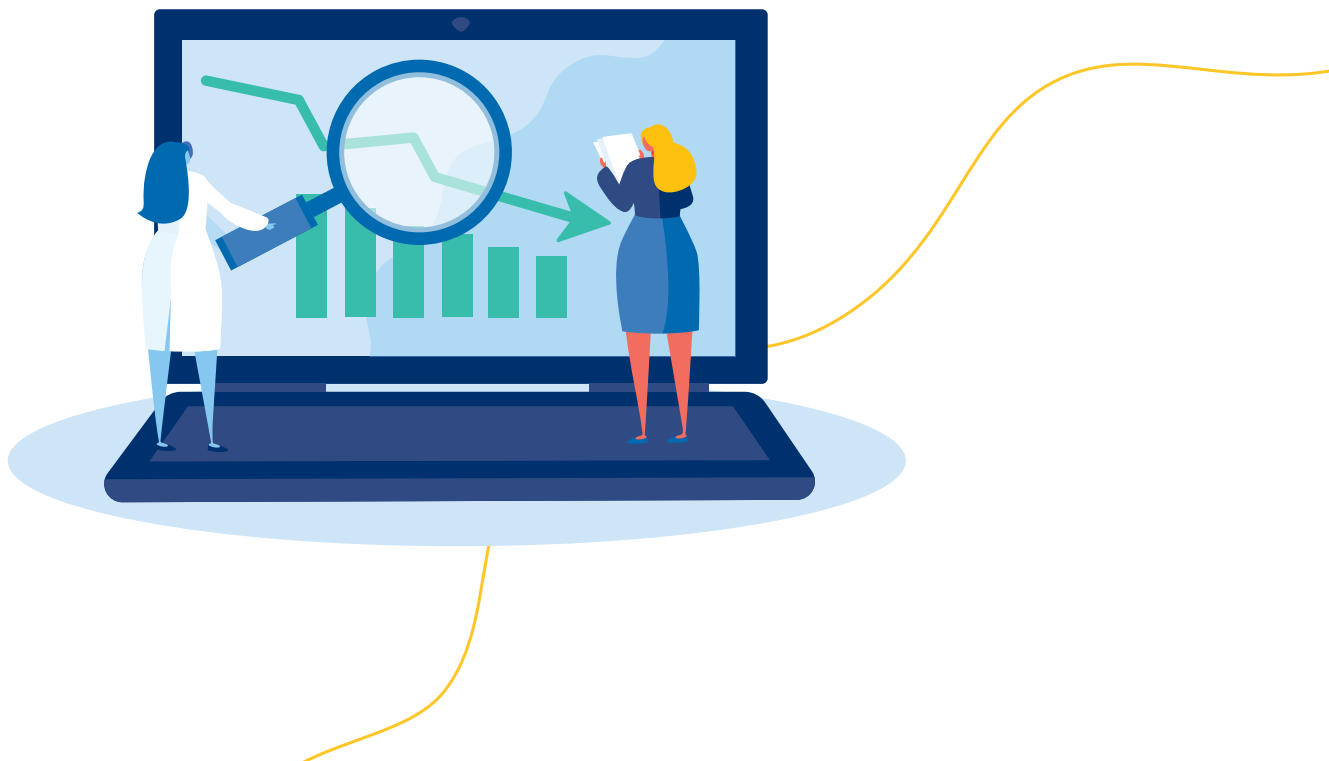




Image: Bandjingarra Solar Farm, courtesy APA, which is adding renewables to its business mix

Stranded asset risk

Decarbonisation will lead to a change in the energy mix, which will challenge some businesses and put them at the risk of being stranded assets. The greatest impact will be in sectors exposed to fossil fuels. As part of our portfolio risk management, we monitor these exposures.

FOSSIL FUEL LOOK-THROUGH EXPOSURE

We analyse our portfolio contribution to climate change, focusing on companies producing fossil fuels as well as companies that report revenue from fossil fuels—for example, utilities, pipelines, transportation, and refining.

We report this way because it gives a more thorough representation of our exposure to fossil fuels and our overall contribution to climate change risks. It also enables a better understanding of our exposure to transition risk.

Most companies we invest in are diversified, with multiple sources of revenue. For example, approximately 5% of BHP's revenue is associated with fossil fuels, 65% with iron ore (including metallurgical coal for steelmaking) and 30% with base metals (copper, silver, lead, etc.). On a look-through basis, for every \$100 invested in BHP, \$5 is exposed to fossil fuels. The rest is exposed to materials required to decarbonise and electrify the economy.


We calculate the fossil fuel look-through exposure of our portfolio by:

- identifying the holdings in companies deriving revenue from fossil fuel extraction, production, generation, transmission, transportation, and refining
- determining the percentage of revenue of each company from fossil fuels
- applying that percentage to each holding to determine its look-through exposure
- summing each holding to determine the dollar value of fossil fuel look-through exposure across the fund
- expressing that exposure as a percentage of the total fund.

The following tables set out our fossil fuel look-through exposure by fuel type, activity, and largest holdings.

TOTAL FUND EXPOSURE BY FUEL	EXPOSURE (%)*
<i>Fossil fuel exposure</i>	2.80
<i>Thermal coal</i>	0.12
<i>Oil and gas total</i>	2.07
<i>Breakdown - by fuel type</i>	
Gas	1.10
Oil	0.98
<i>Breakdown - by activity</i>	
Oil and gas pipelines	1.25
Oil and gas extraction	0.33
Refining/transformation	0.49
<i>Fossil fuel electricity generation</i>	0.60

* Numbers may not sum due to rounding.



“Overall, since we started our climate reporting, our fossil fuel exposure is trending downwards.”

Fossil fuel exposure

NAME	EXPOSURE (%)	INDUSTRY
APA Group	1.23	Gas pipelines
Dominion Energy Inc	0.20	Electric utility
National Grid PLC	0.16	Electric utility
Santos Ltd	0.15	Oil and gas extraction and production
BHP Group Ltd	0.11	Diversified mining
Woodside Petroleum Ltd	0.07	Oil and gas extraction and production
Ampol Ltd	0.07	Refining/sales
Enbridge Inc	0.06	Gas pipelines
Pembina Pipeline Corp	0.06	Gas pipelines
ONEOK Inc	0.04	Gas pipelines
Other (Each <0.04% exposure)	0.64	-
Total	2.80	

At 30 June 2022, 2.80% of our investments (on a look-through basis) were in fossil fuels, up from 2.55% in 2021. From year to year, our exposure will change due to a combination of changes in share prices, changes in company activities, and portfolio decisions. Strong energy markets drove up share prices during the 2022 financial year, for example, our total return from APA was 33%. BHP's contribution to our exposure reduced due to the demerger of its energy business in May 2022. Our Santos exposure is equivalent to last year once the Oil Search acquisition is included. We have used the rally in energy related companies to take some profits. The increase in exposure this year therefore reflects the uplift in market values.

The nature of our fossil fuel exposures is consistent with last year. Gas pipelines continue to represent almost half of our total exposure, while our exposure to oil and gas production is lower, offset by refining/transformation and generation.

Overall, since we started our climate reporting our fossil fuel exposure is trending downwards. We will maintain flexibility in our portfolios to continue supporting the most promising strategies and technologies in line with our best financial interest duty and climate commitments.



Case study: APA – Adding renewables to the business mix

Most of our exposure to fossil fuels is through APA. APA is an energy infrastructure business that delivers about half of Australia's gas usage. It also owns and operates renewable power generation assets in Australia. While its pipelines are providing gas supply to Australia's east coast during a time of energy insecurity, APA is actively preparing for the future by diversifying its asset base. One of its business values is based on innovation and adaptation. Renewable energy assets like solar and wind farms, and connecting renewable energy to the grid, are aligned with its core business. In 2021, APA was the underbidder for pure play renewable energy firm Tilt Renewables. APA is currently building a solar farm in Mount Isa in Queensland, which will displace about 13% of the city's gas energy with renewable energy over a year.

Over the past year we have engaged directly with APA at all levels of the business, from the Sustainability Manager through to the Chair and CEO. We've discussed our expectations and continue to work with APA to progress its targets. Despite the energy challenges during the year, we've seen proactive engagement from APA to progress its climate management plans.

The bulk of our APA investment is held in our Defined Benefit Division (DBD). With its strong cash flows and high yield, APA represents an excellent fit to match liabilities.

APA's strong performance has contributed significantly to the very healthy surplus position of the DBD. In assessing the funding position, the actuary employs a capital markets model that incorporates many risk factors, including climate risk under various scenarios.



FOSSIL FUEL-RELIANT INDUSTRIES

We consider companies that rely on fossil fuels for their core business model to have a moderate-to-high-exposure to transition risks. While these companies rely on fossil fuels for their business, they do not derive revenue from fossil fuels.

18.2% of our investments are in industrial companies that rely on or support high emissions activity, the largest being Transurban Group (5.9%) and Sydney Airport (3.6%). Other companies that fall into this category include manufacturers such as James Hardie, Bluescope Steel, and airlines.

Our Investment team regularly monitors risks and opportunities for these businesses. This could cover innovations like product substitution (e.g. electric vs. internal combustion engines, or sustainable aviation fuels at airports).

94% of these companies have set emissions reductions targets.

Financial institutions

We regularly engage with banks and other financial institutions to understand how they are managing climate risk in their portfolios, including lending portfolios, equities, hybrid securities, bonds, and cash.

Overall, the risk from the transition to a low carbon economy for this sector is relatively low, given the diversified nature of its businesses.

The physical risks from climate change are relevant for this sector, particularly for insurers which represent less than 1% of our funds under management.

We're pleased to see the progress that companies in the financial sector are making in reporting how they're managing risks, and how they're encouraging their customers to reduce their emissions. These companies have been actively engaging with their stakeholders to support them in the challenges that come from climate change and opportunities to support decarbonisation.

Case study: Banks

We continue to engage with Australian banks and monitor their commitments to achieving net zero. Over the past year, we've seen a further reduction in the financing of fossil fuel projects (well below 1% in aggregate), and increased commitment to initiatives such as the Net-Zero Banking Alliance (NZBA), the UN Environment Programme Finance Initiative (UNEP FI), and the Principles for Responsible Investments.

One of the specific commitments of the NZBA requires signatory banks to "navigate a just transition"—recognising that decarbonisation impacts will be felt unevenly, and that affected communities will need assistance. In other words, banks need to be aware that their social responsibilities are intertwined with their environmental responsibilities.

We've provided feedback to the banks on how they can support their customers to reduce emissions through green and sustainability bonds, green home loans, customer engagement, and sector-specific emissions reduction targets.

	ANZ	CBA	NAB	WESTPAC
Fossil fuel funding exposure [~]	1.2%	0.5%	0.7%	0.4%
Net Zero 2050 Commitment	✓	✓	✓	✓
Net Zero Banking Alliance (NZBA)	✓	✓	✓	✓
Commitment to phase out thermal coal	✓ (by 2030)	✓ (by 2030)	✓ (by 2030)	✓ (by 2030)

[~] Calculated as lending to fossil fuel exploration, production, transport, refining, retail and utilities as a % of total loan book. Based on information available in published disclosure documents.

Image: Brookfield Place Sydney, courtesy AMP Capital, newly constructed with a 6 Star Green Star office design rating

Physical risk

We're seeing the impact of warmer temperatures in weather patterns and an increase in the frequency of extreme weather events. In February 2022, the IPCC released its Sixth Assessment Report (AR6). The report concluded that climate risks are appearing faster, and will get more severe, sooner than anticipated.

Physical risks from climate change can be:

- 'acute' or event-driven (like heatwaves, bushfires or floods)
- 'chronic' longer-term shifts (like sea level rise or a decrease in seasonal rainfall).

The financial implications of these risks include direct damage to assets, business disruption, and indirect impacts from supply chain disruption.

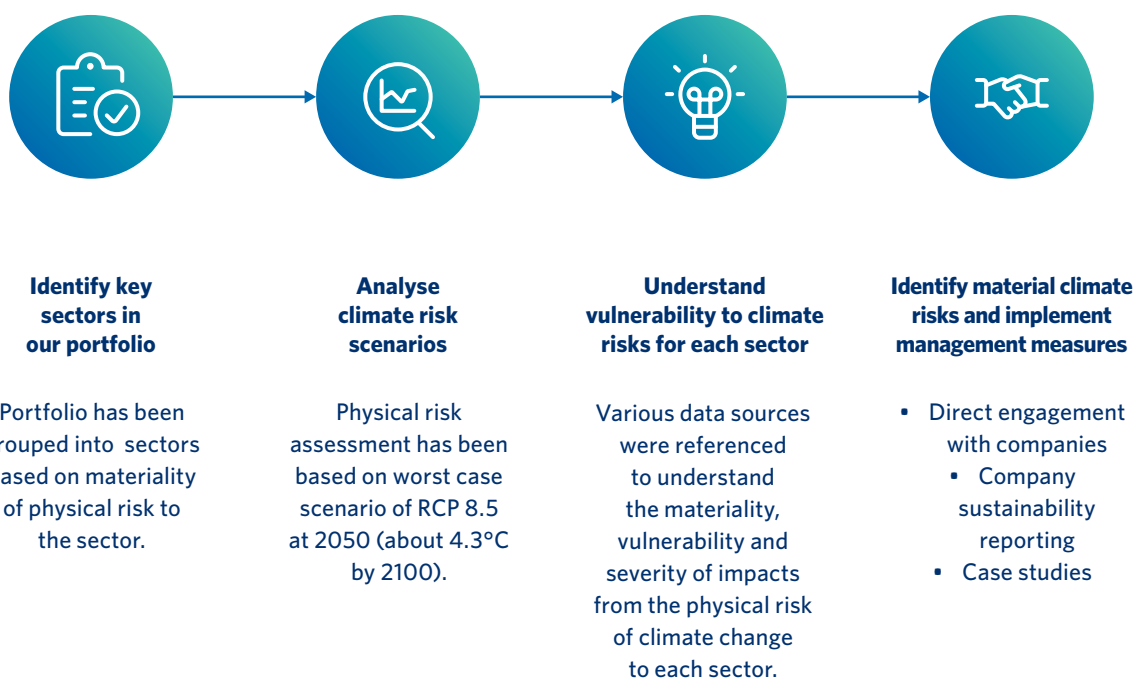
Investors with risk exposures will need to review their insurance cover and uninsured loss implications more frequently. They may also need to assess additional capital expenditure requirements.

Portfolio assessment by sector

To understand the risk to our portfolio, our Investment team has assessed the vulnerability of different industry sectors to climate risks. This includes understanding vulnerability to:

- extreme weather events
- climate-related supply chain changes or disruption
- climate-related disruption of business activities.

The diagram below provides an overview of our process.



We've used a worst-case scenario for our physical risk assessment of RCP 8.5 at 2050 (about 4.3°C increase in global temperatures by 2100). A temperature rise of this magnitude would result in catastrophic climate events which we note is above current predicted temperature scenarios.

We've referred to a variety of sources to understand the risks to different sectors in different geographical locations including:

- GRESB physical assessment analysis
- XDI Site Specific Analysis
- MERCER Report (2019)
- CSIRO Climate Change in Australia Analysis.

The results of our analysis show that some sectors are more vulnerable to physical risks. However, we believe that the overall risk to our portfolio is acceptable and that our current risk management practices enable us to identify and monitor physical risk in our portfolio.

This work also helps us target our engagement with companies in vulnerable sectors to ensure they are managing the potential impacts from physical risks. Company-specific engagement allows us to deep-dive into site-specific scenarios. It also helps us to plan mitigations based on more likely outcomes and lessons from lived experience (such as from extreme weather events).

We review our risk exposure at least annually, to reflect material changes in our portfolio or where there are material changes in climate science—for example, in the event of new IPCC scenarios.



Image: 7 Macquarie Place, Sydney, courtesy AMP Capital. Now managed by GPT Group, 7 Macquarie Place is part of our carbon neutral wholly-owned direct property portfolio.

PHYSICAL RISK EXPOSURE OF UNISUPER FUND BY SECTOR

SECTOR	WEIGHTING IN ASSESSED PORTFOLIO ^o	PHYSICAL SECTOR RISK (RCP 8.5 @ 2050)
Financials	15%	Low
Infrastructure & Real Estate	15%	Medium
Communication Services & Information Technology	12%	Low
Industrials	12%	Low
Consumer	7%	Medium
Materials	7%	Medium
Health Care	5%	Low
Utilities	4%	Medium
Energy	0.3%	High

^o Largest 150 companies represent 88% of our funds under management, and we consider this to be a representative cross-section of our portfolio.

● High ● Medium ● Low



“Our wholly-owned direct property portfolio is net zero”

Infrastructure and real estate

The infrastructure and real estate sectors represent 15% of our funds under management and have a risk rating of medium. The value of these investments is tied to the continued use and operation of physical assets in a fixed location. As such, resilience of the physical assets is critical.

We’ve reviewed our infrastructure and real estate portfolio to understand the risk management process for these assets. We do this in two ways:

- portfolio level—we map our assets and use third party tools to understand the risks
- asset level—we review each manager’s assessment of physical risks and adaptations to understand how risks are managed at a site and company level.

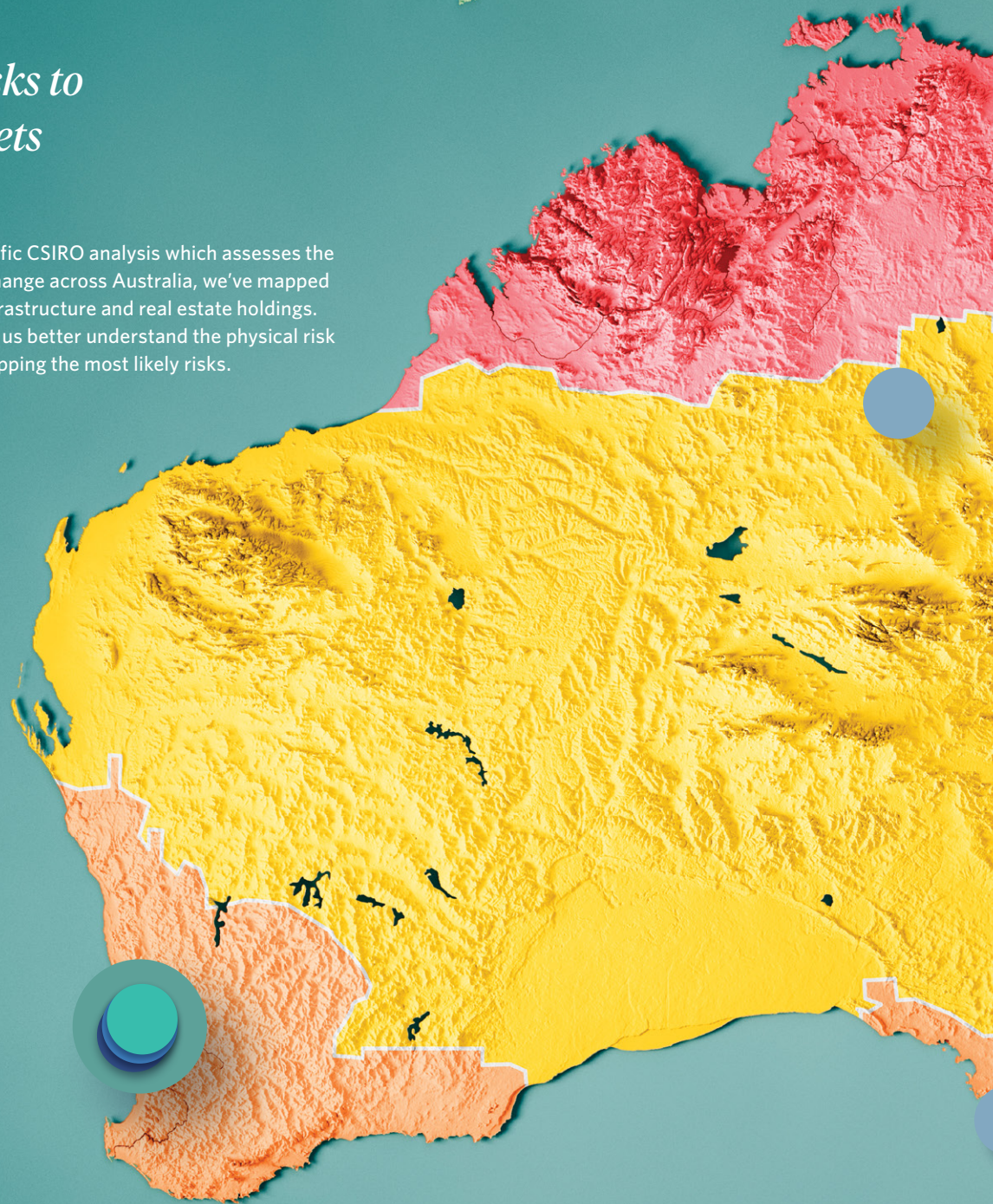
Based on the level of risk at each location, we expect property and infrastructure managers to:

- have a detailed understanding of existing risks
- perform scenario analysis to understand the most likely impacts of climate change at each asset
- have a management plan to mitigate the physical risks of each asset, both now and in future.

On pages 40 and 41 we provide a case study of Pacific Fair shopping centre’s approach to managing climate change risks, and the scenario analysis it uses.

Physical risks to our key assets

Using Australian-specific CSIRO analysis which assesses the likelihood of climate change across Australia, we've mapped the locations of our infrastructure and real estate holdings. This information helps us better understand the physical risk at each location by mapping the most likely risks.



	Increasing number of very hot days	Less rainfall	More extreme rainfall events	Harsher fire-weather climate	Mean sea-level rise and height of extreme sea-level events will increase
Melbourne (Southern Slopes Victoria West)	Very high confidence	High confidence	High confidence	High confidence	Very high confidence
Sydney (East coast South)	Very high confidence	Medium confidence	High confidence	High confidence	Very high confidence
Brisbane (East Coast North)	Very high confidence	Unclear	High confidence	High confidence	Very high confidence
Adelaide (Southern and South Western Flatlands East)	Very high confidence	High confidence	High confidence	High confidence	Very high confidence
Perth (Southern and South Western Flatlands West)	Very high confidence	High confidence	High confidence	High confidence	Very high confidence



KEY ASSETS

- AMP Capital Retail Trust
- Adelaide Airport
- APA Group
- Brisbane Airport
- GPT Group
- Karrinyup Shopping Centre, WA
- Scentre Group
- Sydney Airport
- Transurban
- Vicinity Centres

REGIONAL CLIMATE CLUSTERS

- Wet Tropics
- East Coast
- Southern Slopes
- Monsoonal North
- Rangelands
- Central Slopes
- Southern and South-Western Flatlands
- Murray Basin

Case study: Management of physical risks at Pacific Fair

In October 2021, we invested in an AMP fund that holds Macquarie Shopping Centre in Sydney and Pacific Fair shopping centre on the Gold Coast. Our analysis identified the Gold Coast as an area of particular risk, which was reinforced with the devastating recent floods in New South Wales and Queensland. We met with AMP Capital Real Estate (AMP CRE) to discuss its approach to managing the risks for its assets.

AMP CRE has put significant effort into understanding the risks that a changing climate poses to its real estate assets—and wherever possible, to quantify and mitigate these risks. Pacific Fair was one of the first assets to be comprehensively assessed for impacts from the physical risks of climate change through its Climate Value at Risk (CVaR) study.

The initial output from the CVaR was presented to investors to communicate key risks. These include:

- capital expenditure on repairs
- equipment replacement costs
- loss of rent
- operational costs related to energy consumption
- higher maintenance costs
- insurance costs.

OUTCOMES OF THE STUDY

The key climate hazard with the biggest financial consequences was extreme rainfall and associated flooding. When combined with sea level rise and a king tide, this could periodically inundate the shopping centre from as early as 2030 onwards. Even with current mitigations in place (the floor level is 60cm above what is required for an expected one in 100 year flood event) the analysis shows that increased flood levels and sea level rises could result in financial costs.

Some of the consequences could include:

- rising insurance premiums
- costs associated with cleaning up after floods
- stock damage
- temporary disruption of trade
- costs to any electrical or mechanical equipment damaged by flood waters such as escalators, lifts or travellers connected to low-lying parts of the shopping centre.

This scenario analysis helps inform what can be done to mitigate the biggest financial risks—in particular, to improve the flood defences to make the building more resilient at a higher water level.



REVISITING THE MODEL AFTER THE 2022 FLOODS

After the Queensland floods in February 2022, the AMP sustainability team and climate change consultants visited affected properties to speak with property management teams. The focus was on what happened, what parts of the asset were impacted, and potential resilience measures that could reduce risk in case of a similar future event. These discussions were used to inform the climate change adaptation plans for the affected assets.

NEXT STEPS

AMP CRE will apply the CVaR study to inform its long-term strategic approach to key mitigation measures like flood defences, and planning for heat waves, high wind speeds, and rainfall during intense storms.

It's preparing a detailed climate change adaptation plan based on the insights from the study. This will inform budgets for capital works projects that can reduce the worst impacts of the key risks identified in the study.

Pacific Fair was a pilot project, and the lessons from this study will help further refine the CVaR model. Future iterations will include mitigation measures to understand how this improves the level of financial risk. The model will also be updated to reflect the ever-increasing sophistication of climate models and predictions about future weather patterns that underpin the assumptions used.

Carbon footprinting

Carbon footprinting is a commonly-used tool to assess and compare carbon emissions from different activities. There are three types of carbon emissions:

- Scope 1: direct emissions—for example, emissions produced on site.
- Scope 2: indirect emissions, such as emissions associated with electricity purchased by the company.
- Scope 3: all other emissions associated with the company's supply chain (upstream) or in the use of its products (downstream).

In a low-carbon world, companies that have a higher carbon footprint will see higher costs and greater regulation. The impact of this on the profitability of a business will depend on its ability to reduce its emissions and pass on any increased costs.

ENGAGING WITH COMPANIES ON EMISSIONS REPORTING

Over the past year, accurate and standardised reporting of carbon emissions has been in the spotlight. Groups like the International Sustainability Standards Board (ISSB) and the Securities and Exchange Commission (SEC) in the USA are developing carbon emissions reporting frameworks.

We're monitoring trends towards standardised and mandatory reporting frameworks and are engaging with our 50 largest Australian investments to assist them through this process.

Accurate reporting and disclosure of emissions is a key area of our engagement. In particular, we focus on:

- accurate, complete and standardised emissions reporting
- understanding the tools, assumptions and limitations in calculating emissions
- understanding and reporting on lifecycle emissions based on the type of product or service the company provides. For example, companies making solar panels have a high carbon footprint but the products they produce reduce emissions in the long term. By comparison, iron ore mining, a relatively low carbon activity, requires high-emitting processes to turn the ore into steel.

Scope 3 emissions

Since our last report, we've increased our engagement with companies on their scope 3 emissions. Companies generally report scope 1 and 2 emissions. Estimating scope 3 is more challenging as these come from sources outside a company's direct operations.



- Target
- Monitor/report
- No disclosure

By understanding scope 3 emissions, we're better able to account for a company's full contribution to climate risk.

We encourage companies to disclose scope 3 emissions. At a minimum, we expect our 50 largest Australian investments to understand their emissions profile, and how these emissions contribute to their total emissions. We've started monitoring this and regularly engage with companies on their disclosures. We plan to report on our progress in the next edition of this report.

Best practice for companies includes setting targets that encourage their suppliers to reduce their emissions. Where scope 3 emissions are within a company's influence, we expect to see some action being taken to reduce these, or to see companies encouraging innovation across their supply chains. For example, BHP is pursuing a long-term goal of net-zero Scope 3 emissions by 2050. This is supported by a 2030 goal of emissions intensity reduction in steelmaking and the shipping of its products.

At this stage, activities we look for include:

- reducing lifecycle emissions by building energy efficient design into products
- focusing on the circular economy through use of reusable, recycled and recyclable materials
- supporting research in emerging technologies that support decarbonisation
- trialling alternative fuels and technologies
- offering offset programs (as we are currently seeing with airlines and data centres)
- providing long-term contracts to help suppliers access finance to invest in new plant and equipment.

Image: Tesla, the largest holding within our Global Environmental Opportunities investment option.



Data summary of investment options

In this section we provide an overview of each of our investment options. This includes the climate risk exposure, carbon intensity, emissions data coverage and companies that have set emissions reduction targets.

About the carbon footprint of our investment options

Below we outline the approach that we've taken to calculate the carbon intensity of our investment options.

SCOPE

The asset classes currently included in our carbon footprinting calculations are the listed equity and corporate bonds components of our investment options¹. We have focused on these asset classes because we have access to data and a methodology to calculate financed emissions. Where possible, we will seek to expand the coverage to include other asset classes, as and when data and methodologies become more reliable.

METHODOLOGY

The equation below shows how we determined the financed emissions for the listed equities and corporate debt. Our approach to financed emissions is guided by The Partnership for Carbon Accounting Financials (PCAF)². An option's estimated carbon footprint is reported in units of tonnes of CO₂ equivalent per \$100,000 invested. Financial data is sourced from a variety of sources³.

CARBON DATA

Scope 1 and 2 company level emissions data was provided by S&P Trucost. This data includes a mix of reported and estimated data.

Reporting of carbon data is generally delayed by 12 to 18 months but wherever possible we've used the most recent data available as at 30 June 2022.

One of the key limitations in calculating a carbon footprint is the completeness of available emissions data. Measuring and estimating emissions accurately can be challenging.

S&P Trucost applies an estimation methodology to selected companies within our portfolios where this data is not reported publicly. This methodology uses a number of estimation models. The exact estimation model applied depends on the type of company and the extent of that company's historical carbon reporting. A company's carbon emission data can and does vary between different data providers.

We strongly encourage mandatory adoption of TCFD reporting and methodology standards for climate relevant metrics—such as emissions reporting— as this helps drive consistency across companies.

Not all companies have carbon data available. For this reason, we report emissions intensity for a "Selected Portfolio" within each Option and disclose the level of coverage as a proportion of market value. This Selected Portfolio is comprised of listed equities and corporate bonds with carbon and financial data available as at 30 June 2022.

$$\text{CARBON FOOTPRINT} = \Sigma \text{ UNISUPER OWNERSHIP SHARE} \times \text{COMPANY EMISSIONS}$$

$$\text{WHERE UNISUPER OWNERSHIP SHARE} = \frac{\text{OUR OWNERSHIP OF A COMPANY}}{\text{COMPANY EQUITY + DEBT}}$$

Reference: PCAF, 2022, The Global GHG Accounting and Reporting Standard for the Financial Industry. Second edition, pg 40.

¹ Other asset classes such as cash, private equity, green bonds, sovereign debt, and derivative financial products (e.g., futures, options, swaps) are not in scope.

² PCAF, The Global GHG Accounting and Reporting Standard for the Financial Industry, <<https://carbonaccountingfinancials.com/standard>>

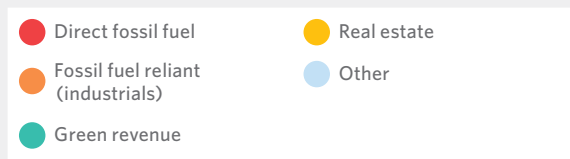
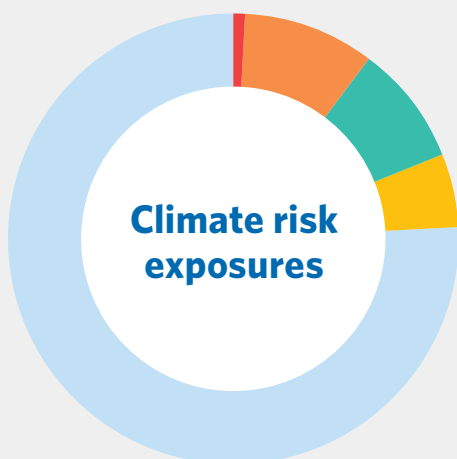
³ The financial input data used in our calculations is obtained from the following sources:

- Market value data is sourced from our reported holdings data
- Market capitalisation and enterprise debt data are sourced from multiple third party providers (such as MSCI and Factset) in order to increase data coverage



Conservative

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	4.8%	High
Australia	79.3%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

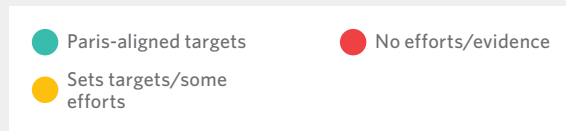
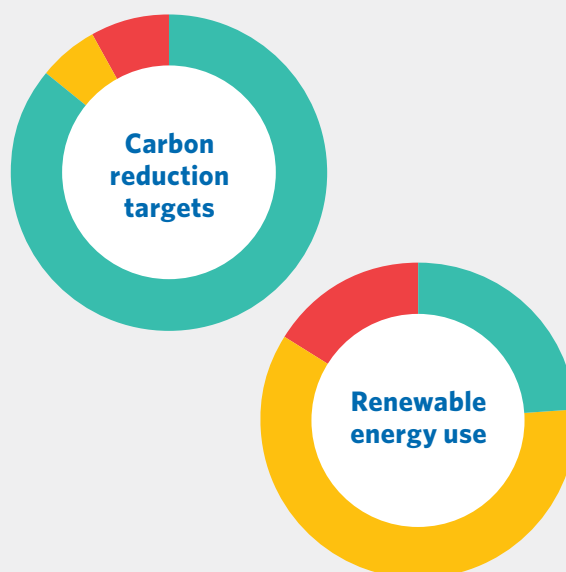
COMPANY NAME	% OF PORTFOLIO
Transurban Group	3.0%
Adelaide Airport Ltd	2.0%
Brisbane Airport	1.4%
Aquasure Pty Ltd	1.2%
Taumata Plantations Ltd	0.9%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **1.92t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 40% of the option. Page 44 explains the methodology.

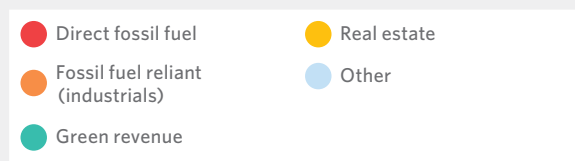
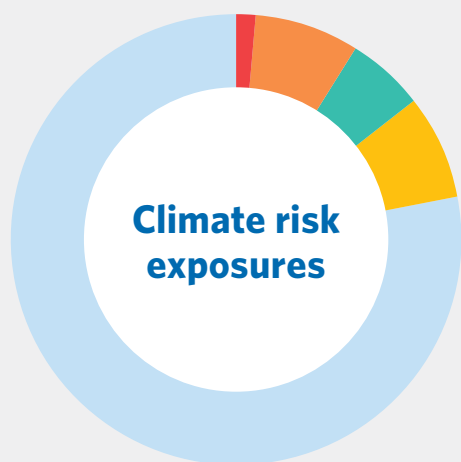
Company ambitions



LOOK-THROUGH FOSSIL FUEL EXPOSURE	
Total option fossil fuel exposure	1.1%
The largest fossil fuel holding is Dominion Energy Inc, which contributes 0.13% to the above exposure.	

Conservative Balanced

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	4.9%	High
Australia	72.5%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

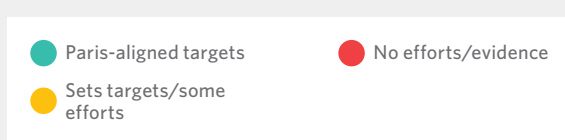
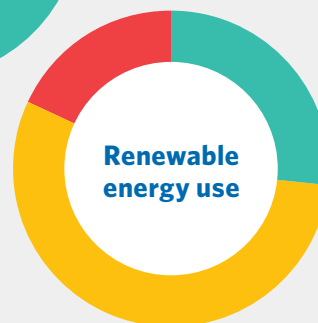
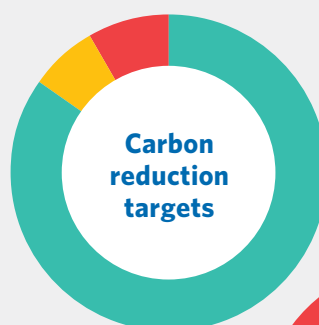
COMPANY NAME	% OF PORTFOLIO
Transurban Group	3.9%
Adelaide Airport Ltd	1.9%
BHP Group Ltd	1.7%
Brisbane Airport	1.3%
Aquasure Pty Ltd	1.1%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **2.57t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 56% of the option. Page 44 explains the methodology.

Company ambitions



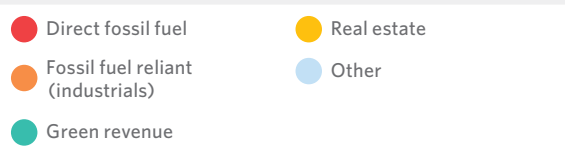
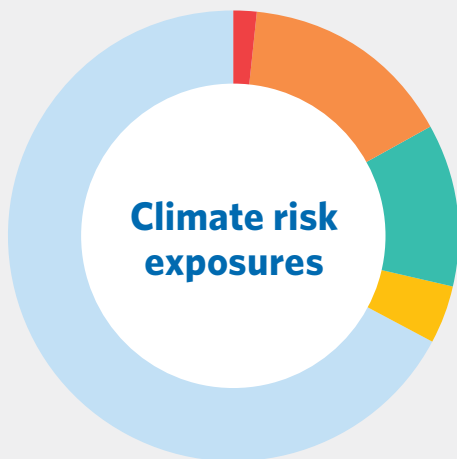
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 1.7%

The largest fossil fuel holding is Dominion Energy Inc, which contributes 0.42% to the above exposure.

Balanced

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	7.8%	High
Australia	67%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

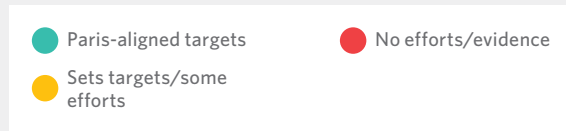
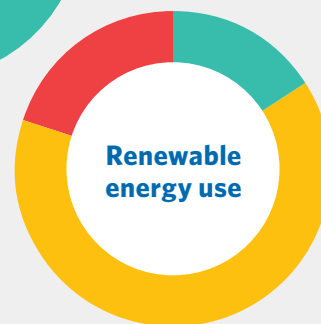
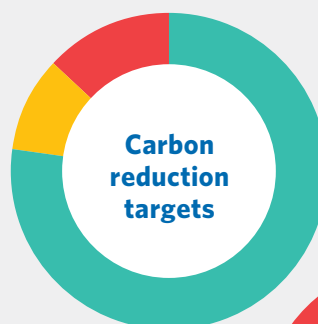
COMPANY NAME	% OF PORTFOLIO
Transurban Group	6.1%
Sydney Airport	4.4%
BHP Group Ltd	3.7%
Adelaide Airport	0.9%
Rio Tinto Ltd	0.8%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **4.29t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 64% of the option. Page 44 explains the methodology.

Company ambitions



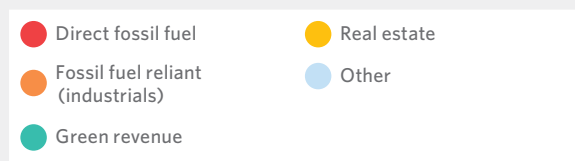
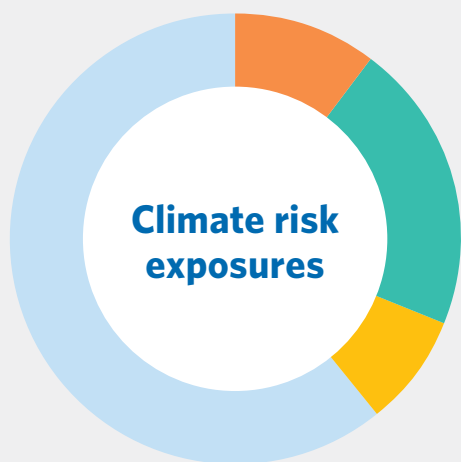
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 1.7%

The largest fossil fuel holding is BHP Group Ltd, which contributes 0.20% to the above exposure.

Sustainable Balanced

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	4.2%	High
Australia	52.9%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

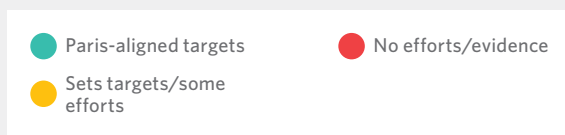
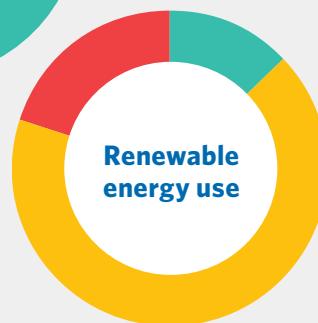
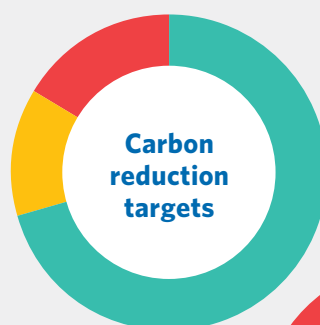
COMPANY NAME	% OF PORTFOLIO
Transurban Group	7.1%
Cleanaway Waste Management Ltd	1.1%
PepsiCo Inc	1.1%
Wesfarmers Ltd	0.9%
Sydney Airport	0.7%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **1.38t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 70% of the option. Page 44 explains the methodology.

Company ambitions



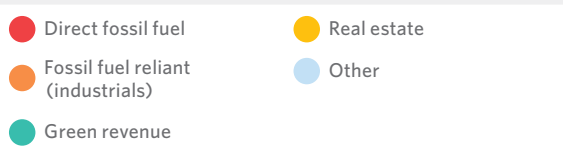
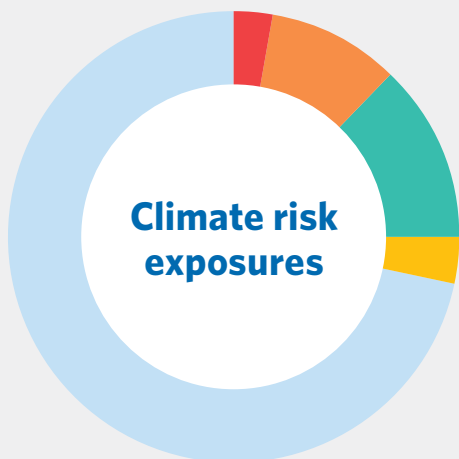
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 0.1%

The largest fossil fuel holding is NextEra Energy Inc, which contributes 0.05% to the above exposure.

Growth

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	10.5%	High
Australia	53.6%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

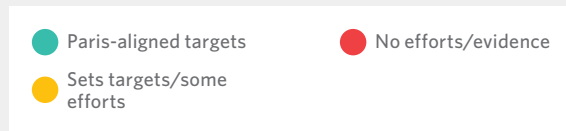
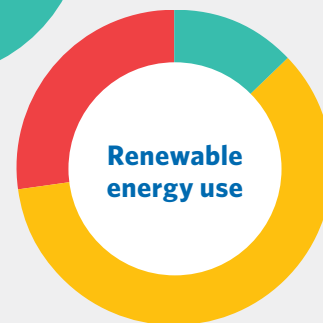
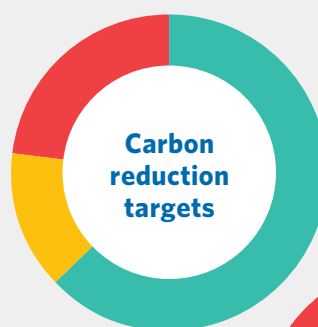
COMPANY NAME	% OF PORTFOLIO
BHP Group Ltd	3.2%
Transurban Group	2.2%
Adelaide Airport	1.1%
Brisbane Airport	0.8%
Rio Tinto Ltd	0.7%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **4.70t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 70% of the option. Page 44 explains the methodology.

Company ambitions

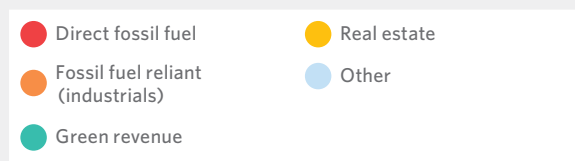
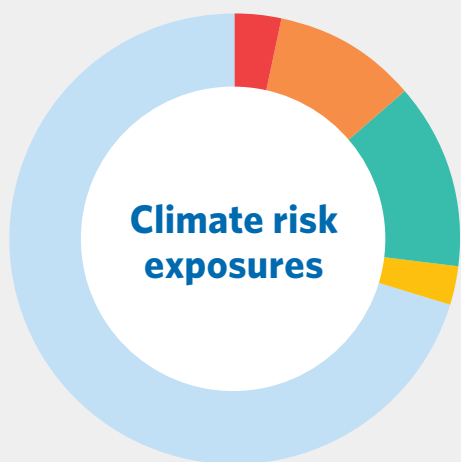


LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure	2.9%
The largest fossil fuel holding is Enbridge Inc, which contributes 0.14% to the above exposure.	

High Growth

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	11.6%	High
Australia	48.1%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

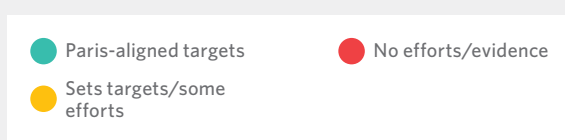
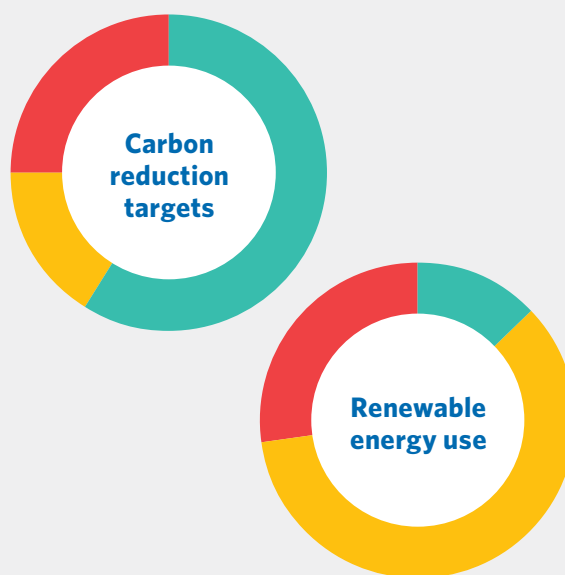
COMPANY NAME	% OF PORTFOLIO
BHP Group Ltd	3.7%
Transurban Group	3.0%
Adelaide Airport	0.9%
Rio Tinto Ltd	0.8%
Wesfarmers Ltd	0.7%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **4.81t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 79% of the option. Page 44 explains the methodology.

Company ambitions



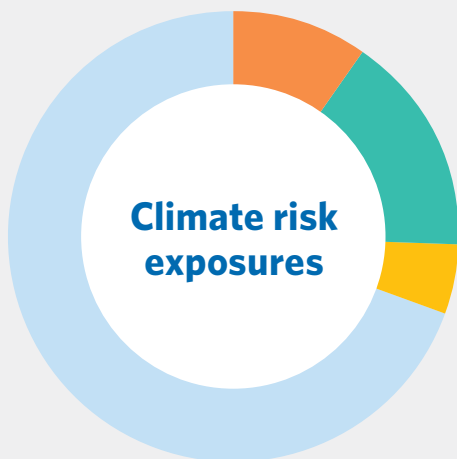
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 3.4%

The largest fossil fuel holding is Enbridge Inc, which contributes 0.18% to the above exposure.

Sustainable High Growth

Climate risk exposures



- Direct fossil fuel
- Fossil fuel reliant (industrials)
- Green revenue
- Real estate
- Other

REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	4.5%	High
Australia	41.3%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

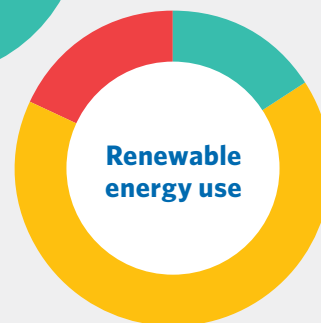
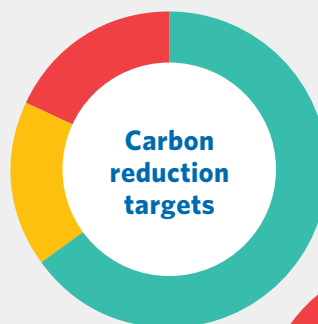
COMPANY NAME	% OF PORTFOLIO
Transurban Group	5.0%
Cleanaway Waste Management Ltd	1.9%
Wesfarmers Ltd	1.5%
PepsiCo Inc	1.3%
Rio Tinto Ltd	1.2%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **1.64t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 94% of the option. Page 44 explains the methodology.

Company ambitions



- Paris-aligned targets
- Sets targets/some efforts
- No efforts/evidence

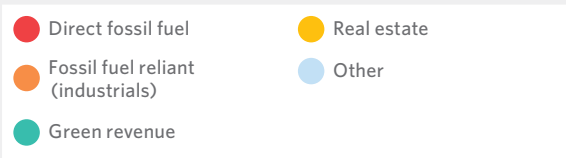
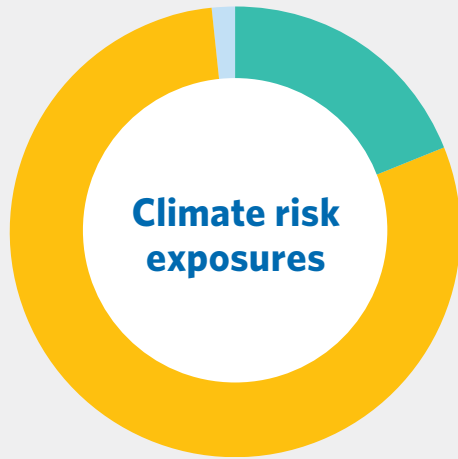
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 0.1%

The largest fossil fuel holding is Sempra Energy, which contributes 0.06% to the above exposure.

Listed Property

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

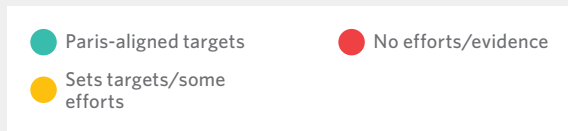
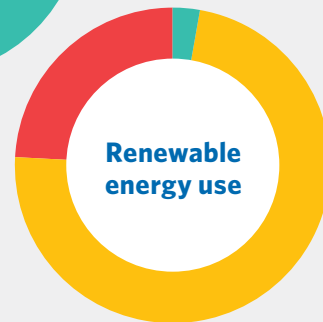
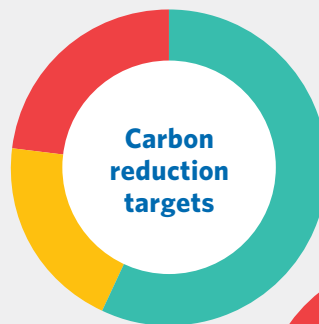
REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	6.6%	High
Australia	49.2%	Low

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **0.53t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 97% of the option. Page 44 explains the methodology.

Company ambitions

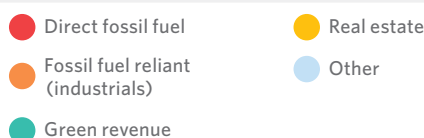
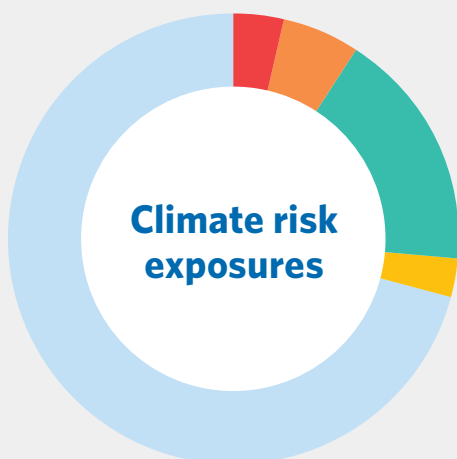


LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure Nil

Australian Shares

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	0.0%	High
Australia	96.4%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

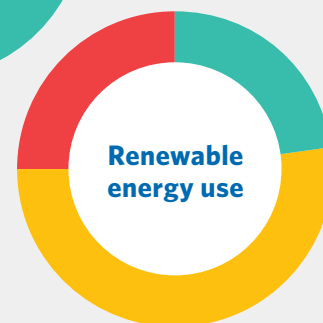
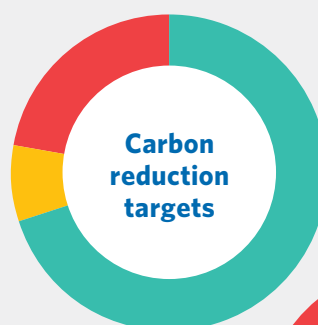
COMPANY NAME	% OF PORTFOLIO
BHP Group Ltd	9.8%
Transurban Group	2.1%
Rio Tinto Ltd	2.1%
Wesfarmers Ltd	2.1%
Woolworths Group Ltd	1.9%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **6.41t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 83% of the option. Page 44 explains the methodology.

Company ambitions



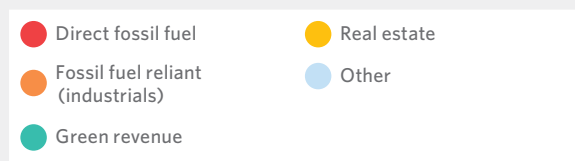
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 3.7%

The largest fossil fuel holding is Santos Ltd, which contributes 1.35% to the above exposure.

International Shares

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	25.6%	High
Australia	0.0%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

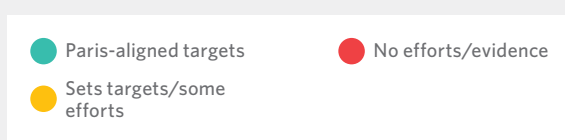
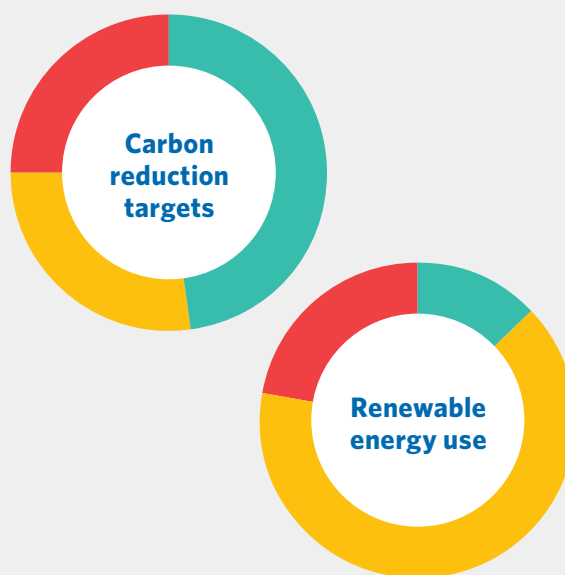
COMPANY NAME	% OF PORTFOLIO
Amazon.com Inc	1.3%
Airbus SE	0.6%
Alibaba Group Holding Ltd	0.6%
McDonald's Corp	0.4%
Huazhu Hotels Group	0.4%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **2.92t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 96% of the option. Page 44 explains the methodology.

Company ambitions



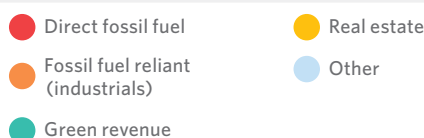
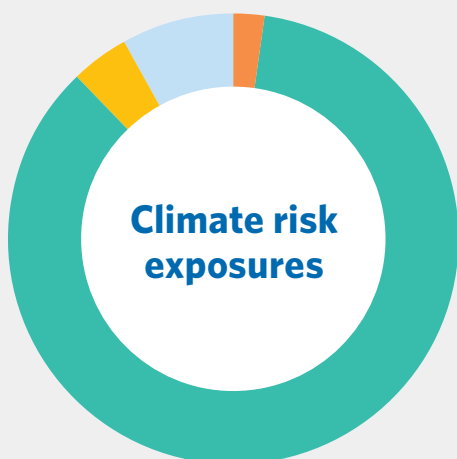
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 2.6%

The largest fossil fuel holding is Murphy USA Inc, which contributes 0.19% to the above exposure.

Global Environmental Opportunities

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	26.6%	High
Australia	1.8%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

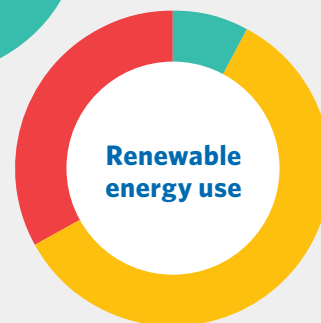
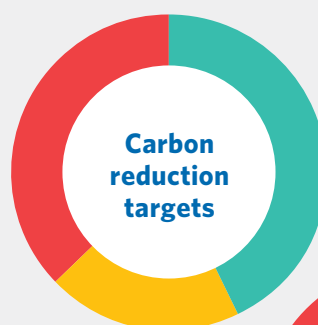
COMPANY NAME	% OF PORTFOLIO
Tesla Inc	7.6%
Contemporary Amperex Techn-A	3.8%
Vestas Wind Systems A/S	2.7%
Cleanaway Waste Management Ltd	1.6%
Yadea Group Holdings Ltd	1.5%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **2.82t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 95% of the option. Page 44 explains the methodology.

Company ambitions



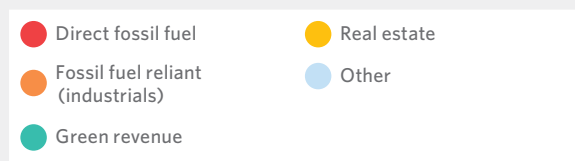
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 0.003%

The largest fossil fuel holding is Verbund AG, which contributes 0.002% to the above exposure.

Australian Equity Income

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	0.0%	High
Australia	94.8%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

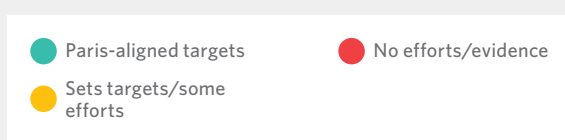
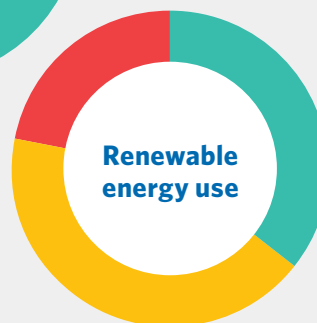
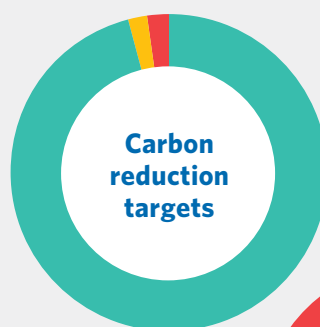
COMPANY NAME	% OF PORTFOLIO
BHP Group Ltd	9.5%
Transurban Group	8.8%
Wesfarmers Ltd	5.8%
Woolworths Group Ltd	5.1%
APA Group	4.4%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **2.98t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 97% of the option. Page 44 explains the methodology.

Company ambitions



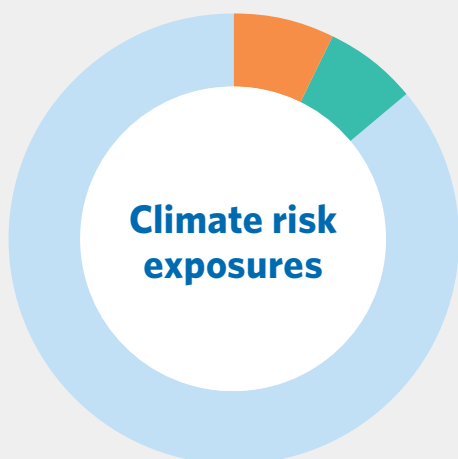
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 3.8%

The largest fossil fuel holding is APA Group, which contributes 3.21% to the above exposure.

Global Companies in Asia

Climate risk exposures



- Direct fossil fuel
- Fossil fuel reliant (industrials)
- Green revenue
- Real estate
- Other

REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	7.0%	High
Australia	1.9%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

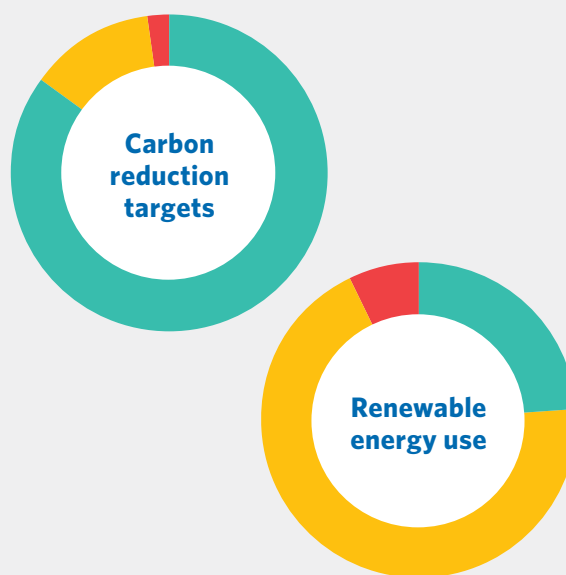
COMPANY NAME	% OF PORTFOLIO
McDonald's Corp	2.7%
Amazon.com Inc	2.6%
LVMH Moët Hennessy Louis Vuitton	2.5%
Raytheon Technologies Corp	2.1%
Procter & Gamble Co/The	1.8%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **0.56t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 96% of the option. Page 44 explains the methodology.

Company ambitions



- Paris-aligned targets
- Sets targets/some efforts
- No efforts/evidence

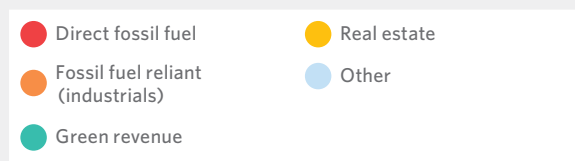
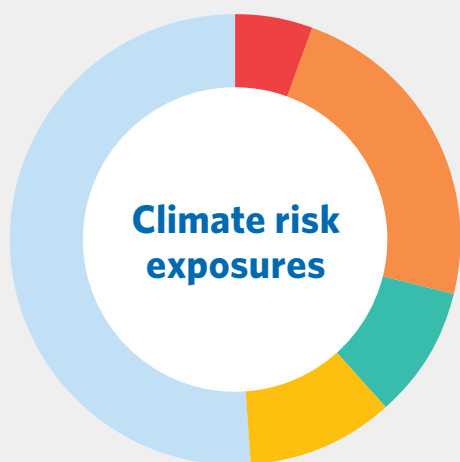
LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 0.01%

The largest fossil fuel holding is Walmart Inc, which contributes 0.01% to the above exposure.

Defined Benefit

Climate risk exposures



REGIONAL EXPOSURES - SEVERE WEATHER

Asia is the most at risk of natural disasters due to frequency of events, population concentration and time to recover.

REGION	% OF PORTFOLIO	LEVEL OF RISK
Asia (including Japan)	1.0%	High
Australia	84.0%	Low

DISRUPTION EXPOSURES

The five largest investments in this option most exposed to a decarbonising economy:

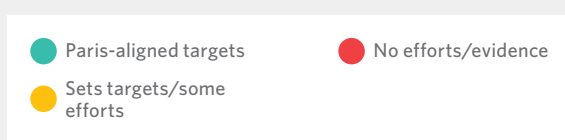
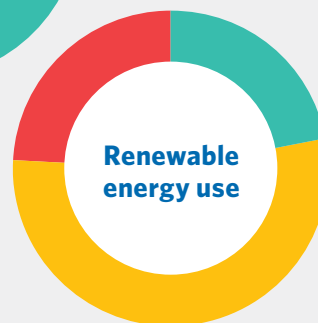
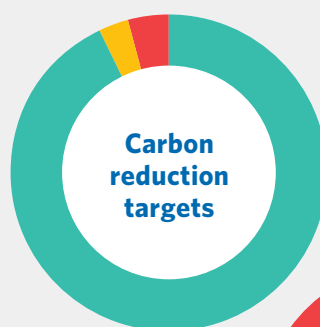
COMPANY NAME	% OF PORTFOLIO
Transurban Group	9.5%
Sydney Airport	7.1%
APA Group	5.2%
Woolworths Group Ltd	3.0%
Adelaide Airport	1.5%

Carbon intensity of the Selected Portfolio

CARBON EMISSIONS PER \$100,000 INVESTED **2.55t** P.A. CO₂E

This only includes the reported and estimated scope 1 and 2 emissions. The Selected Portfolio represents 61% of the option. Page 44 explains the methodology.

Company ambitions



LOOK-THROUGH FOSSIL FUEL EXPOSURE

Total option fossil fuel exposure 5.6%

The largest fossil fuel holding is APA Group, which contributes 3.75% to the above exposure.

Appendix

Limitations

Unless otherwise mentioned, all analysis refers to our combined equity and bond exposures (excluding cash and futures positions) as at 30 June 2022.¹

This report doesn't suggest that any particular view of the future will hold true, and readers may disagree with our view or assessment of risk. Climate risk is one of many risks that any company faces, and companies facing significant climate risks may still be good investments due to other factors such as price, management, mitigation strategies, and transformation strategies.

DATA AVAILABILITY AND ACCURACY

Reporting on underlying business units can be inconsistent, even for those companies that do report. While we aim to be as transparent as possible and undertake due diligence on data provided by external data providers, information gaps, timing differences or price volatility mean sometimes data availability is not as precise as we would like.

While we continually refine our processes, some of the known limitations of our data coverage are:

- the currency of data provided by external data providers
- the accuracy and frequency of information reporting companies (potentially leading to estimations of revenue)
- the coverage of the companies assessed by external data providers

LOOK-THROUGH REVENUE ANALYSIS

When assessing our portfolio exposures (and for the purposes of portfolio compliance for our thermal coal exclusion), we supplement internal analysis with third party data to cover the whole portfolio. While we believe at a high level our exposures are portrayed accurately, we recognise that the information is incomplete and uses varying methodologies and assumptions in assessing revenues. Examples of data limitations include:

- Out of date information—we rely on company-reported business unit data, which may be updated infrequently and is collated by third party data tools at least annually. On occasion, this may mean revenue breakdowns are over a year old.
- Revenue breakdowns—where companies don't provide specific revenues associated with reported sectors (for example, the split between thermal and metallurgical coal), we use other information to estimate revenues such as fuel reserve split. Where there is little alternative information, we may ascribe equal weights to business units.
- Small or unlisted companies—reporting and coverage by third party data providers is not comprehensive. While we review our larger holdings (which comprise around 90% of our total exposures), we rely on data providers for the majority of our smaller holdings.

Thermal coal exclusion

In addition to the above limitations, we may retain an interest in companies that have more than 10% of their reported revenues associated with thermal coal exploration and production but are well progressed in the sale or wind-down of those mines as we consider them to comply with the restriction. As at 30 June 2022, we did not hold any interests in companies that had more than 10% of their reported revenues from the extraction and production of thermal coal.

¹ This is an amended version of the report we originally published in September 2022. As approaches to benchmarking carbon emissions are still emerging, we have chosen to remove reference to our performance against a benchmark. This report may contain statements that are, or may be deemed to be forward looking statement, including climate related goals, targets, pathways and ambitions. Such forward looking statements are not guarantees and involve known and unknown risks, uncertainties and other factors, which are beyond the control of UniSuper. This may cause actual results to differ materially from those expressed or implied in such statements. When we refer to reported revenues these revenues may be reported on a gross or net basis. Had we chosen to carry out our assessment on a 'gross' or 'net' basis, the assessment of our exposures may have been different. As a standardised approach and guidance for the disclosure of climate related exposures evolves, UniSuper will continue to work with industry bodies and companies to advocate for a uniform approach to the disclosure of climate related risks. UniSuper will continue to review its disclosure practices which may involve republishing data as the disclosure of data evolves over time.

Glossary

TERM	DESCRIPTION
Asset manager	Asset managers manage our investment strategies across all asset classes. Whenever we can, we manage investments in-house. We also use selected external investment managers with specialist skills and strong performance records.
Asset class	An asset class is a grouping of investments that exhibit similar characteristics. Key asset classes in our investment options include cash and fixed instruments, shares, property, infrastructure, and private equity.
Carbon Capture and Storage (CCS)	The process of capturing carbon dioxide (CO ₂) at emission sources, transporting and then storing or burying it in a suitable deep, underground location.
Carbon dioxide (CO₂)	A naturally occurring gas that is found in Earth's atmosphere. CO ₂ produced by burning carbon in organic materials, including fossil fuels, is the main greenhouse gas driving human-induced climate change.
Carbon neutral	<p>This means achieving a balance between the CO₂ that an organisation emits through its operations over a specified period, and the CO₂ that is removed or avoided through carbon offsets.</p> <p>Carbon neutrality is often achieved by a combination of reducing CO₂ emissions (through energy switching and energy efficiency measures) and purchasing carbon offsets equal to an organisation's residual emissions. This can also be referred to as 'net-zero carbon'.</p>
Carbon offsets	<p>Certified credits, generated per tonne of CO₂-e, that can be purchased to balance an organisation's operational emissions.</p> <p>Offsets may be derived from nature-based (e.g. reforestation) or technological (e.g. carbon capture and storage) removals. They may also be generated by 'avoided emissions' such as forest conservation and new renewable energy projects.</p>
Carbon footprint	The carbon footprint is the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation, or community.
Climate Value at Risk (CVaR)	CVaR is a calculation method which aims to provide a forward-looking and return-based valuation assessment to measure climate related risks and opportunities in an investment portfolio.
CO₂ equivalent (CO₂-e)	A means of comparing the global warming potential of greenhouse gases. CO ₂ is the reference gas that other greenhouse gas emissions are measured against when calculating their global warming potential.
Decarbonisation	Decarbonisation is the reduction of carbon dioxide emissions through the use of low carbon power sources, achieving a lower output of greenhouse gasses into the atmosphere. This can include lowering the amount of greenhouse gas emissions produced by the burning of fossil fuels or decreasing CO ₂ output per unit of electricity generated.
Exploration and production	Companies involved in the extraction (by mining or otherwise) of minerals and fuels from the earth, and their refining or processing for use.

TERM	DESCRIPTION
Fossil fuels	<p>A fuel such as oil, gas or coal that is formed in the earth from natural remains. For the purposes of this report, when referring to fossil fuels, we mean oil, gas and thermal coal.</p> <p>When referring to our fossil fuel exposures, we mean companies which have revenues associated with the exploration, refining, processing, extraction, transportation of, or electricity generation from, oil, gas and thermal coal.</p>
Greenhouse gas effect	The increased presence of heat-trapping gases in the atmosphere that warm the planet and disrupts Earth's stable climate system.
Greenhouse gas emissions ('GHG emissions')	Atmospheric gases and aerosols, both natural and produced through industrial activities, that contribute to the greenhouse gas effect. This includes CO ₂ , nitrous oxide (N ₂ O), methane (CH ₄) and hydrofluorocarbons (HFCs).
Green bond	A green bond is a fixed interest investment that aims to contribute to positive environmental and social outcomes—for example, green bonds issued by institutions such as the World Bank and a range of other institutions. The term 'green bond' is sometimes used interchangeably with climate bonds or sustainable bonds.
Look-through analysis	Reporting on the relevant underlying reported revenues of our investments to understand our economic exposure. For example, 5% of BHP's revenue is associated with fossil fuels, 65% with iron ore (including met coal) and 30% with base metals (copper, silver, lead, etc.). On a look-through basis, for every \$100 invested in BHP, \$5 is exposed to fossil fuels. The rest is exposed to materials required to decarbonise and electrify the economy.
Lifecycle emissions	Product lifecycle emissions are all the emissions associated with the production and use of a specific product, from cradle to grave, including emissions from raw materials, manufacture, transport, storage, sale, use and disposal.
Net-zero emissions	At a societal level, net-zero emissions are achieved when human emissions of greenhouse gases into the atmosphere are balanced by human-managed removals over a specified period.
Operational emissions	The greenhouse gas emissions associated with the operations of a company. This includes the emissions generated by the company (scope 1), as well as the emissions associated with purchased electricity (scope 2). See page 42 for more information.
Paris Agreement	In December 2015, 196 countries, including Australia, signed The Paris Agreement, which brings together all signatory nations to combat climate change and adapt to its effects. Signatory nations commit to the goal of limiting global warming to well below 2°C (preferably to 1.5°C), compared to pre-industrial levels.
Paris-aligned operational target	<p>We consider a Paris-aligned operational target to be one of the following:</p> <ul style="list-style-type: none"> ▪ net-zero operational emissions before 2050 ▪ endorsed science-based targets ▪ at least a 45% emissions reduction by 2030.

TERM	DESCRIPTION
Proxy voting	The term 'proxy vote' refers to a ballot cast by a single person or firm on behalf of a shareholder. Rather than physically attending the shareholder meeting, investors may elect someone else, such as a member of the company's management team, to vote in their place. This person is designated as a proxy and will cast a proxy vote in line with the shareholder's directions.
Reported revenue	Revenue percentage based on companies' reported revenue and business activities. Where the revenue for a covered business activity is not disclosed by a company and is not available through other publicly available sources, an estimate of the maximum possible revenue is calculated based on the company's known business lines.
Representative Concentration Pathway (RCP)	A greenhouse gas concentration pathway used for climate modelling and research. The pathways describe different climate futures, all of which are considered possible depending on the volume of GHGs emitted in the years to come.
Shadow price on carbon	A price on carbon allocates a cost to greenhouse gas emissions. In the absence of a legislated price on carbon, an organisation may adopt a shadow price on carbon to implicitly price the risk of carbon intensity into their financial investment decisions.
Scope 1, 2 and 3 emissions	To assist with calculations, greenhouse gas reporting guidance divides emissions into 3 Scopes: <ul style="list-style-type: none"> ▪ Scope 1: direct emissions, for example, emissions produced on site ▪ Scope 2: indirect emissions, such as emissions associated with electricity purchased by the company ▪ Scope 3: all other emissions associated with the company's supply chain (upstream) or in the use of its products (downstream).
Thermal coal	Coal burned, primarily in boilers, to generate steam for the production of electricity or for process heating purposes, or used as a direct source of process heat. Steam coal, also known as thermal coal, refers to all coal not classified as coking (or metallurgical) coal.
Thermal coal miner	A company that generates greater than 10% of its reported revenues from thermal coal exploration and production.
Task Force on Climate-related Financial Disclosures (TCFD)	A task force created by the Financial Stability Board to improve and increase reporting of climate-related financial information (including on greenhouse gas emissions, carbon intensity and climate-related risks). The TCFD recommendations for climate-related disclosures promote informed investment, credit, and insurance underwriting decisions.

Sources

Asian Corporate Governance Network:
<https://www.acga-asia.org/>

Australian Council of Superannuation Investors (ACSI):
<https://acsi.org.au/>

Australian Institute of Superannuation Trustees (AIST):
<https://www.aist.asn.au/>

Climate Action 100+:
<https://www.climateaction100.org/>

Climate Action Tracker:
<https://climateactiontracker.org/>

Climate Change in Australia:
<https://www.climatechangeinaustralia.gov.au/en/projections-tools/regional-climate-change-explorer/clusters/>

Climate League 2030:
<https://climateleague.org.au/>

CSIRO Climate Change in Australia Analysis:
<https://www.csiro.au/en/research/environmental-impacts/climate-change/climate-change-information>

GRESB:
<https://www.gresb.com/nl-en/>

International Climate Reporting Awards:
<https://climatereportingawards.squarespace.com/>

International Energy Agency. Net Zero by 2050:
<https://www.iea.org/reports/net-zero-by-2050>

International Sustainability Standards Board (ISSB):
<https://www.ifrs.org/groups/international-sustainability-standards-board/>

Investor Climate Action Plans (ICAP) Framework:
<https://theinvestoragenda.org/icaps/>

Investor Group on Climate Change (IGCC):
<https://igcc.org.au/>

IPCC - Sixth Assessment Report (AR6):
<https://www.ipcc.ch/assessment-report/ar6/>

Mercer - Investing in a time of climate change - The Sequel:
<https://www.mercer.com/our-thinking/wealth/climate-change-the-sequel.html>

MSCI ESG Investing (Subscription):
<https://www.msci.com/our-solutions/esg-investing/>

PAIL's Net Zero Investment Framework:
https://www.parisalignedinvestment.org/media/2021/03/PAIL-Net-Zero-Investment-Framework_Implementation-Guide.pdf

Principles for Responsible Investment (PRI):
<https://www.unpri.org/>

Principles for Responsible Investment (PRI) Real-world Impact initiative:
https://www.unpri.org/showcasing-leadership/winners-of-the-pri-awards-2021/8621.article#Realworld_impact_initiative_of_the_year

S&P Global Trucost:
<https://www.spglobal.com/esg/trucost>

Say on Climate:
<https://www.sayonclimate.org/>

The Science Based Targets initiative (SBTi):
<https://sciencebasedtargets.org/>

The Taskforce for Climate-related Financial Disclosures (TCFD) recommendations:
<https://www.fsb-tcdf.org/recommendations/>

UN Environment Programme Finance Initiative (UNEP FI) Net Zero Banking Alliance:
<https://www.unepfi.org/net-zero-banking/>

UniSuper - Climate Active Certification:
<https://www.climateactive.org.au/buy-climate-active/certified-members/unisuper>

UniSuper - Climate change position statement:
<https://www.unisuper.com.au/news-and-insights/our-climate-change-position-statement>

UniSuper - Climate risk and our investments:
<https://www.unisuper.com.au/investments/how-we-invest/responsible-and-sustainable-investing/climate-risk-and-our-investments>

UniSuper - Responsible investment report:
<https://www.unisuper.com.au/investments/how-we-invest/responsible-and-sustainable-investing/responsible-investment-policies-statements-and-reports>

United Nations. The Paris Agreement:
<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

XDI Climate Analysis - EasyXDI online platform:
<https://xdi.systems/xdi-platform/easy-xdi-single-asset-analysis/>

Independent Limited Assurance Statement to the Management and Directors of UniSuper Limited

Our Conclusion

Based on our limited assurance procedures, hereafter referred to as a 'review', undertaken in accordance with Australian Auditing Standards, nothing came to our attention that caused us to believe that the financed emissions disclosures ("the Subject Matter" included in the UniSuper Climate Report ("the Report")) are not prepared and presented fairly, in all material aspects, in accordance with the Criteria, as defined below.

What our review covered

Ernst & Young ('EY') was engaged by UniSuper Limited ('UniSuper') to perform a review over its financed emissions disclosures contained in its Climate Report for the year ended 30 June 2022.

Subject Matter

Specifically, the Subject Matter for the review included:

- ▶ UniSuper's financed emissions intensity (tCO₂e/\$100,000) and coverage (% of AUM) data for the following fund options:
 - ▶ Conservative
 - ▶ Conservative Balanced
 - ▶ Balanced
 - ▶ Sustainable Balanced
 - ▶ Growth
 - ▶ High Growth
 - ▶ Sustainable High Growth
 - ▶ Listed Property
 - ▶ Australian Shares
 - ▶ International Shares
 - ▶ Global Environmental Opportunities
 - ▶ Australian Equity Income
 - ▶ Global Companies in Asia
 - ▶ Defined Benefit
- ▶ UniSuper's description of its calculation methodology as set out on page 44 of the Report.

Other than as described in the preceding paragraphs, which set out the scope of our engagement, we did not perform assurance procedures on any other information included in the Report, and accordingly, we do not express a conclusion on this information.

Criteria applied by UniSuper

In preparing the Subject Matter, Management determined the reporting criteria as:

- ▶ The Greenhouse Gas Protocol
- ▶ The Partnership for Carbon Accounting Financials (PCAF) Global GHG Accounting and Reporting Standard
- ▶ UniSuper's self-declared criteria as set out in the Report and internal management documentation

Key responsibilities

EY's responsibility and independence

EY's responsibility is to express a conclusion on the Subject Matter, based on our review. We are also responsible for maintaining our independence and confirm that we have met the requirements of the *APES 110 Code of Ethics for Professional Accountants*, and that we have the required competencies and experience to conduct this assurance engagement.

UniSuper's responsibility

The management of UniSuper is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

Our approach to conducting the review

EY conducted this review in accordance with the Australian Auditing and Assurance Standards Board's *Australian Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* ('ASAE 3000'), and *Assurance Engagements on Greenhouse Gas Statements* ('ASAE 3410'), as well as the terms of reference for this engagement as agreed with UniSuper.

Summary of review procedures performed

A review consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and associated disclosures, and applying analytical and other review procedures.

Our procedures included, but were not limited to, the following:

- ▶ Interviewing UniSuper staff to gain an understanding of UniSuper's reporting definitions and processes, including reporting boundaries, data sourcing, and internal data integrity checking processes.
- ▶ Performing analytical procedures in relation to material quantitative information and where relevant, reviewing source documentation
- ▶ Checking the accuracy of calculations performed
- ▶ Reviewing the presentation of the Subject Matter within the Report
- ▶ Obtaining representation from management on key assertions pertaining to the above.



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We also performed such other procedures as we considered necessary in the circumstances.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Limited Assurance

Procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent, than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Further, our procedures did not include testing controls or performing procedures relating to checking the aggregation or calculation of data within IT systems.

A separate Assurance Statement will be issued for the Internal Report, setting out our specific conclusions in relation to the benchmark subject matter.

Use of our Assurance Statement

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than management and the Directors of UniSuper, or for any purpose other than that for which it was prepared.

Our review included web-based information that was available via web links as of the date of this statement. We provide no assurance over changes to the content of this web-based information after the date of this assurance statement.

A handwritten signature in black ink, appearing to read 'Emma Herd', is written over a thin horizontal line.

Emma Herd
Ernst & Young
Partner
Sydney, Australia
6th April 2023

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February 2023

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