

Climate Report

2024





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Chief Executive Officer
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Funds SA Act
[Superannuation Funds Management Corporation
of South Australia Act 1995](#)

Funds SA Regulations
[Superannuation Funds Management Corporation
of South Australia Regulations 2010](#)

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A message from our CEO



John Piteo

Since the publication of our Climate Risk Response Plan in 2022, Funds SA has remained committed to managing the long-term financial risks and opportunities associated with climate change and the transition to Net Zero. A key deliverable of this Plan is our annual Climate Report, which is aligned with the Taskforce on Climate-related Financial Disclosures (TCFD) framework. Our 5-Pillar approach is designed to integrate climate considerations into our investment strategy and aligns with the TCFD recommendations.

Funds SA is still in the early stages of transitioning its investment portfolio to Net Zero by 2050. This involves supporting a 45% reduction in global emissions by 2030 in line with the Paris Agreement. Achieving this goal requires continuous monitoring of our portfolio's emissions, enabling us to refine our investment strategy with an aim to align our Net Zero commitment.

We recognise that the path to Net Zero is not linear. Success depends on contributions from all sectors of the economy, with hard-to-abate sectors playing a pivotal role in real-economy decarbonisation. Comprehensive climate-related data is also essential for accurately assessing progress towards Net Zero. We acknowledge that data limitations remain a challenge. However, while data gaps persist, data coverage has and continues to improve across asset classes. We are pleased to share our progress and achievements against the original Climate Risk Response Plan and continue to provide transparency on our climate-related exposure to our stakeholders.

Since the release of our inaugural Climate Report for Financial Year (FY) 2023, we have welcomed new policy developments, including the South Australian Government's circular "Climate Ready Government" released in December 2024. This directive requires South Australian Government public sector agencies to assess and manage climate risks and opportunities that could impact their objectives and functions over the short, medium and long-term and reduce greenhouse gas emissions.

Building on the strong foundations of our voluntary climate-related disclosures, we are now focused on developing our next Plan for climate transition. This will ensure we continue to deliver superior investment outcomes for our clients in South Australia, while aligning with global best practices in climate risk management.



John Piteo
Chief Executive Officer

Funds SA's 5-Pillar Climate Risk Response Plan

- 1 Governance & Culture Goal**
Defining how investment decisions are made at Funds SA, including continuously improving our knowledge of the risks and opportunities of climate change. 
- 2 Investment Strategy Goal**
Investment processes, including utilising scenario analysis to monitor and build portfolios that mitigate climate-related risks, identifying how different asset classes, sectors, industries and companies will be affected, and positioning the portfolio to invest for the future. 
- 3 Manager & Company Engagement Goal**
Engagement with new and existing investment managers and highest risk companies to evaluate current practices and encourage the integration of climate change into decision making processes. 
- 4 Advocacy Goal**
Engagement with industry bodies, corporate entities and service providers to improve practices and encourage the integration of climate-related risks and opportunities. 
- 5 Disclosure Goal**
Ensuring transparency and open communication with clients and other stakeholders. 

Taskforce on Climate-related Financial Disclosures

The Taskforce on Climate-related Financial Disclosures (TCFD) was created by the Financial Stability Board to improve and standardise the reporting efforts of organisations on climate change. The recommendations are structured around four core elements and eleven recommended disclosure areas to better inform investors on climate risks and opportunities.¹

The disclosure under this report remains based on the TCFD framework. We acknowledge that following the release of the International Sustainability Standards Board (ISSB) IFRS S2 Climate-related Disclosures, the Australian Accounting Standards Board (AASB) issued the first ISSB-aligned, Australian Sustainability Reporting Standards (ASRS) in September 2024, which include AASB S2 (Climate-related Disclosures). The timing of the application of these standards to Funds SA is yet to be determined.

It should be noted this report focuses on Funds SA's investment portfolio, and not its operations beyond the extent to which they impact on climate governance, strategy and/or risk management of Funds SA's investment portfolio.



Governance

Our governance around climate-related risks and opportunities

Funds SA's approach to climate change within its investment portfolio relies on robust governance, with Board and Investment Team oversight to understand climate-related risks and opportunities.

Board

Funds SA's Board is ultimately responsible for managing climate change impacts in order to meet Funds SA's investment objectives, as well as fiduciary and regulatory obligations. The Board approves the policies that govern Funds SA's investment process, with those listed here explicitly considering climate change.

The Funds SA Board approved Funds SA's Climate Risk Response Plan (the Plan) in 2022 and is annually updated on the actions the Investment Team has taken to implement the Plan.

Investment Team

Each Asset Class team are responsible for monitoring the progress of the Plan and guiding the direction of the Funds SA's response to climate change.

For new manager appointments and direct investments, the Investment Team investigates how climate-related risks and opportunities are managed by the managers as part of manager/investment due diligence. Their approach to managing climate-risks and opportunities is monitored through our biennial manager ESG surveys.

Policies

- Responsible Investment Policy
- Proxy Voting Approach and Guidelines
- Climate Change Position Statement
- Climate Risk Response Plan



¹ Final 2017 Recommendations of the TCFD

Strategy

The actual and potential impacts of climate-related risks and opportunities for our investment strategies.

Climate risks

The global rise in mean temperatures continues, posing increasing physical and transition risks to investment portfolios. In 2024, the world recorded its warmest year, exceeding 1.5°C above pre-industrial levels. The past decade ranks among the warmest on record, highlighting the persistent nature of global warming.

This temperature rise amplifies physical risks, such as extreme weather events, which pose significant threats to businesses and economies. Companies with extensive physical assets and complex supply chains are particularly vulnerable, with sectors such as communication services and utilities facing heightened exposure. Increased frequency and severity of extreme weather events can damage physical assets and increase insurance premiums. Climate change also poses transition risks, which arise from the global shift towards decarbonisation driven by policies and regulations. Companies that fail to adapt may face deterioration to their financial prospects and/or financial losses, particularly in high-carbon industries.

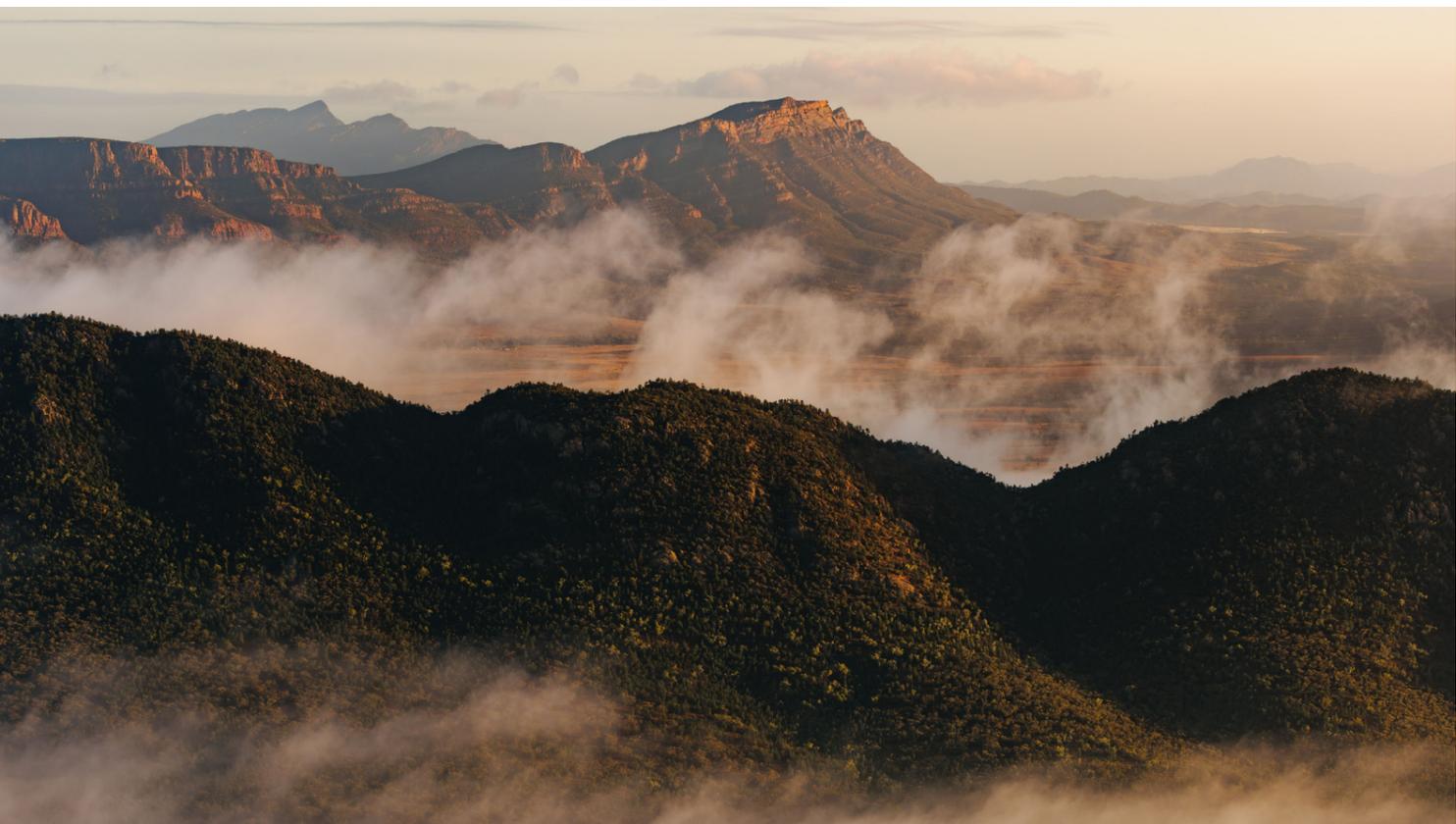
Achieving net zero financed emissions by 2050 is key to managing both transition and physical risks of climate change. However, this goal requires strategic planning.

One way to achieve portfolio decarbonisation is to shift investments towards low-emission sectors and reduce exposures to high emitting sources in the portfolio. However, a narrow focus on portfolio decarbonisation could inadvertently divert capital away from hard-to-abate sectors, such as steel manufacturing, which play a vital role in the low-carbon transition. Many climate solutions, such as electric vehicles (EVs) and renewable energy infrastructure and energy transition materials (e.g. lithium, nickel and copper) are emissions-intensive using existing production methods. Therefore, investing in businesses that are implementing credible net-zero strategies and/or offering climate solutions, can drive meaningful change, rather than simply excluding high-emitting assets.

Funds SA aims to support real-economy decarbonisation by engaging with investment managers and transitioning companies, to encourage meaningful climate action and long-term portfolio resilience.

Sources:
World Meteorological Organization (WMO) (2025). WMO confirms 2024 as warmest year on record at about 1.55°C above pre-industrial level. <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level>

World Economic Forum (2024). The Cost of Inaction. https://reports.weforum.org/docs/WEF_The_Cost_of_Inaction_2024.pdf



The following table outlines the types of climate risk that Funds SA may consider in its investment activities.

Transition risks to Funds SA's investments	Short to 2030	Medium 2030-2050	Long 2050 +
Policy Risk of evolving policy landscape which constrains actions that adversely contribute to climate change. This may include carbon pricing mechanisms, the removal of subsidies for high-emitting industries, or increased reporting requirements. This can impact investment value through additional costs for high-emitting industries.	✓	✓	✓
Litigation Risk of litigation brought by stakeholders against a company for failing to mitigate or adapt to the impacts of climate change. Climate-related litigation claims are being brought more frequently. This can impact investment value through increased legal costs and fines, as well as court-mandated action which may require additional capital or operational expenditure.	✓	✓	✓
Technology Risk of new technology displacing existing methods and systems. The timing of technology development and deployment is a key uncertainty in assessing this risk. This can impact investment value through lost market share for incumbent companies or potential obsolescence if technological advancements are not adopted in line with disruptors.	✓	✓	✓
Market Risk of shifting supply and demand for products (including commodities) and services as the transition to a low-carbon economy progresses and climate-related risks are increasingly factored in by stakeholders. This can impact investment value through decreased demand for a company's goods and/or services.	✓	✓	✓
Reputational Reputational risk may arise for companies and their shareholders, as a result of failing to align to a credible Net Zero pathway or continuing their operations in high-emitting industries. This may impact a company's social license to operate, with consumers disengaging from or publicly criticising the company. This can impact investment value through the loss of customers or a fall in share price, perpetrated by negative publicity.	✓	✓	✓
Stranded Assets Risk of company assets not being able to produce a viable economic return as their economic life is curtailed due to a combination of the above risks. This can impact investment value as assets are written down or sold at a significant discount.	✓	✓	✓
Physical risks to Funds SA's investments			
Acute Risk of more frequent severe weather events such as floods, hail, bushfires, cyclones and hurricanes. This can impact investment value through direct damage to physical assets that need to be repaired, replaced or cannot be sold. These impacts may extend to a company's supply chain and supporting infrastructure.	✓	✓	✓
Chronic Risk of longer-term shifts in climate patterns including sustained higher temperatures leading to sea-level rise and/or heat waves. This can impact investment value through increased adaptation costs such as on building attributes, and through energy use to regulate temperature. Water quality and availability may bring additional challenges.	✓	✓	✓

Funds SA's approach to assessing climate risk

Climate risk is initially assessed as part of Funds SA's investment due diligence by the Investment Team prior to new manager appointments and/or direct investments. As can be seen in the transition and physical risks table, there are many types of climate risk that Funds SA may consider. As a global investor, we use diversification to reduce the risks associated with investment returns. However, this means that we are exposed to varying levels of climate risk across different geographies, sectors and companies.

Funds SA's approach to assessing climate risk in our investment portfolio is informed by the climate approach of our global network of investment managers. Funds SA's due diligence on investment managers examines each manager's understanding of risk exposure in their investment portfolio, and their ability and strategies to manage these risks.

For direct investments made by Funds SA, climate due diligence is conducted on both the investment manager and the specific investment at a detailed level that considers sector and geographical nuances. Where climate risk is considered to pose material financial risks and deem to be unmanageable, our asset class teams may decide not to make the investment. Our Investment Committee reviews the risks associated with an investment and recommends whether to proceed, subject to Funds SA's investment delegation framework. Our approach to ongoing monitoring is covered in the Risk Management section on page 14.

Opportunities

The transition to Net Zero is a systemic challenge that presents vast opportunities for investors. Innovations in nascent sectors, disruptors to established industries and incumbent companies who are transforming their operations all present as significant prospects for investors to channel capital toward. Our existing investment managers are tapping into this opportunity set, and we maintain our awareness of new developments by meeting with managers investing in climate-related opportunities such as those outlined below.

- Electric Vehicles (EVs) and EV Charging** – battery electric vehicles (BEVs) powered solely by an electric battery and charging infrastructure.
- Critical Minerals** – production of minerals essential for constructing clean energy technologies such as wind turbines and EV batteries.
- Renewable Energy and Storage** – energy produced from wind, solar, hydro-power and battery storage.
- Energy Efficient Property** – technology enhancements in buildings to improve efficiency of energy use.
- Alternative Fuels** – low emitting alternative fuel sources like green hydrogen and biofuels.

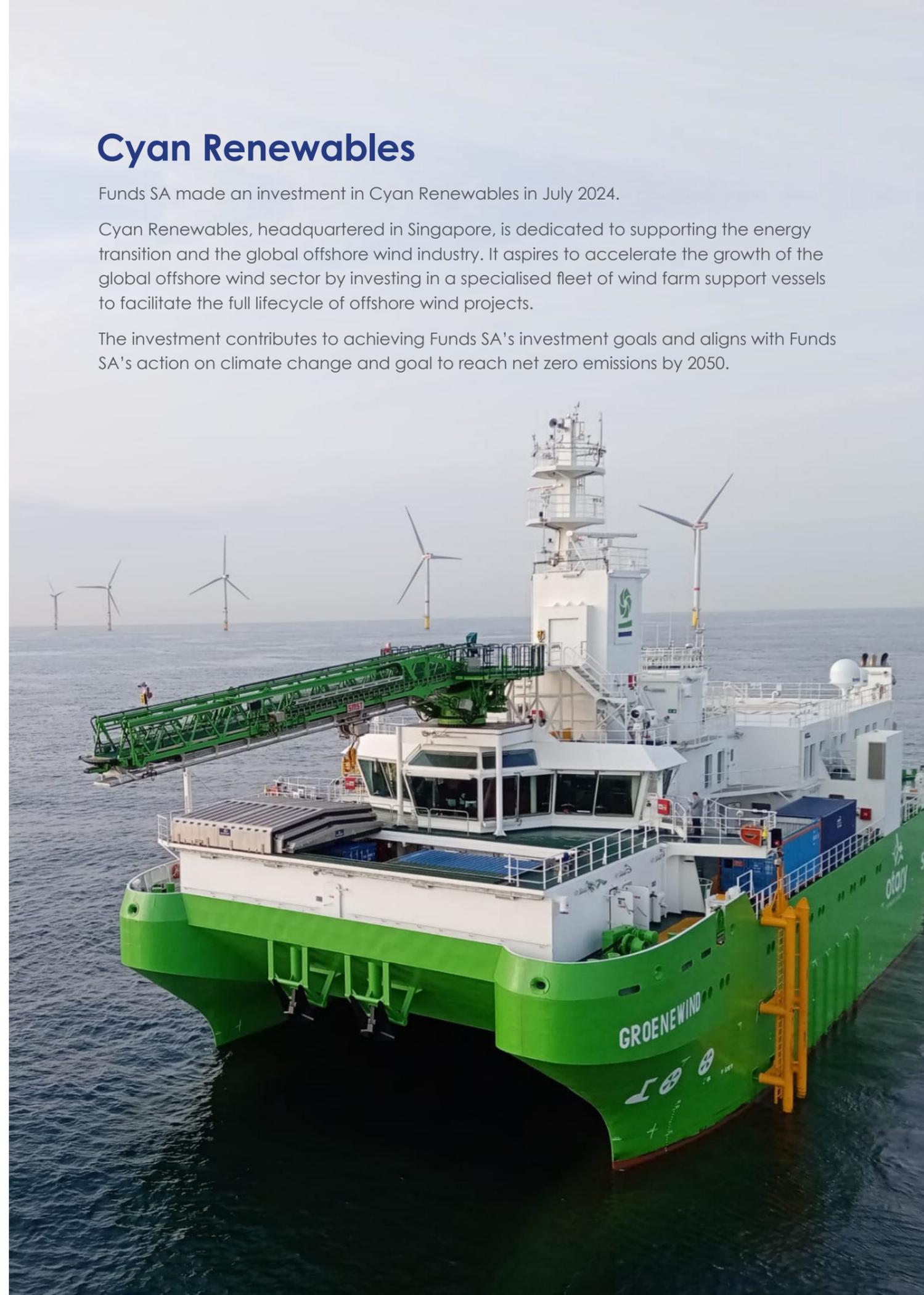
Funding for climate-related investment opportunities has risen significantly in the past decade. To get to Net Zero by 2050, it is generally accepted that investment needs to increase even further. The energy sector is perhaps the most critical area for investment, on both the supply and demand side. The deployment of additional renewable energy generation is vital to decarbonising the energy sector and the industries that depend on it.

Cyan Renewables

Funds SA made an investment in Cyan Renewables in July 2024.

Cyan Renewables, headquartered in Singapore, is dedicated to supporting the energy transition and the global offshore wind industry. It aspires to accelerate the growth of the global offshore wind sector by investing in a specialised fleet of wind farm support vessels to facilitate the full lifecycle of offshore wind projects.

The investment contributes to achieving Funds SA's investment goals and aligns with Funds SA's action on climate change and goal to reach net zero emissions by 2050.



Funds SA's resilience to future climate change scenarios

Given the complexity of climate change impacts and the significant uncertainty on how the transition path will shape economic and investment outcomes, a scenarios stress testing approach is used to assess risk and opportunity. The scenarios below are sourced from the International Energy Agency (IEA), the energy world's most authoritative source of analysis and projections. The IEA's 2022 World Energy Outlook provides objective data, analysis and insights into global energy supply and demand in different climate scenarios and the implications for energy security, climate targets and economic development.

Current Path 3°C Scenario

Adapted from IEA Stated Policies Scenario (STEPS). Reflects announced policy intentions and targets, with no material policy uplift.

Sustained Action 2°C Scenario

Adapted from IEA Announced Pledges Scenario (APS). Reflects a surge in clean energy policies and investment that puts the energy system on track to meet UN Sustainable Development Goals and global emissions on track for Net Zero by 2070.

Net Zero by 2050 1.5°C Scenario

Adapted from IEA Net Zero Emissions by 2050 Scenario (NZE). Reflects a level of action across all geographies which will put the world on track for Net Zero by 2050.

In June 2024, our asset consultant, JANA Investment Advisers, assessed the performance of our Balanced Tax-Exempt investment option (Balanced option) against these scenarios out to 2030 and 2040². The estimated impact on investment returns was based on projected impacts to Gross Domestic Product (GDP) and estimated future exposure to 'green' and 'brown' assets in each asset class.

'Green' assets are those likely to benefit from the low carbon transition such as renewable energy or sustainable agriculture solutions. 'Brown' assets are those that are likely to face decreasing demand as the transition progresses, such as fossil fuels.

²Based on data from International Energy Agency (2022), as modified by JANA Investment Advisers Pty Ltd.

Key findings for our Balanced option

Funds SA considers current global policy settings in constructing its investment strategy. As government policy evolves to ensure national climate commitments are met, we expect our investment strategy to adapt as appropriate.

Our scenario analysis, undertaken in June 2024, confirms that our current portfolio is positioned to benefit from the **Sustained Action** Scenario out to 2040. However, we recognise that under each scenario the climate transition will favour some of our investments and will be unfavourable to others.

The modelling also indicates that under the **Current Path** Scenario, the investment returns of our current portfolio may be negatively impacted. This highlights that the current level of action on climate risk does not favour investment returns.

The **Net Zero by 2050** Scenario derived from the IEA reflects rapid decarbonisation — a pathway that is not visible in the economy today. As the transition progresses, Funds SA will shape its investment strategies to align with this scenario in line with the actions outlined in our Climate Risk Response Plan.

Key actions to be taken as per our Climate Risk Response Plan

- 1** Progressively incorporate climate risks and opportunities into portfolio construction and asset allocation decisions.
- 2** Actively seek new opportunities and investments that are part of the solution to achieve a Net Zero by 2050 outcome.
- 3** Engage with our investment managers to assess their climate transition plans and commitment to Net Zero by 2050.
- 4** Prioritise engagements with high-risk companies to assess their climate transition plans and encourage them to commit to Net Zero by 2050.



Risk Management

The processes we use to identify, assess and manage climate-related risks.

Our managers

Funds SA predominantly utilises investment managers for implementation of investment activities. As part of our investment due diligence, we require investment managers to describe their approach to managing ESG risks, including climate-related risks. We do this to establish the extent to which these risks are factored into each investment manager's investment due diligence activities, integrated into their investment decision-making and monitored in portfolios. When selecting our external investment managers, we assess the robustness of their approach to climate risk management. This information is also utilised to monitor our exposure to climate risks throughout our investment portfolio.

We engage with, and monitor our investment managers on an ongoing basis, including through a biennial ESG Manager Survey. The latest survey was conducted in 2024, where we asked our investment managers to provide more detail or update their approach to managing climate-related risks and whether they had committed to reaching Net Zero by 2050.³ The results are shown below.

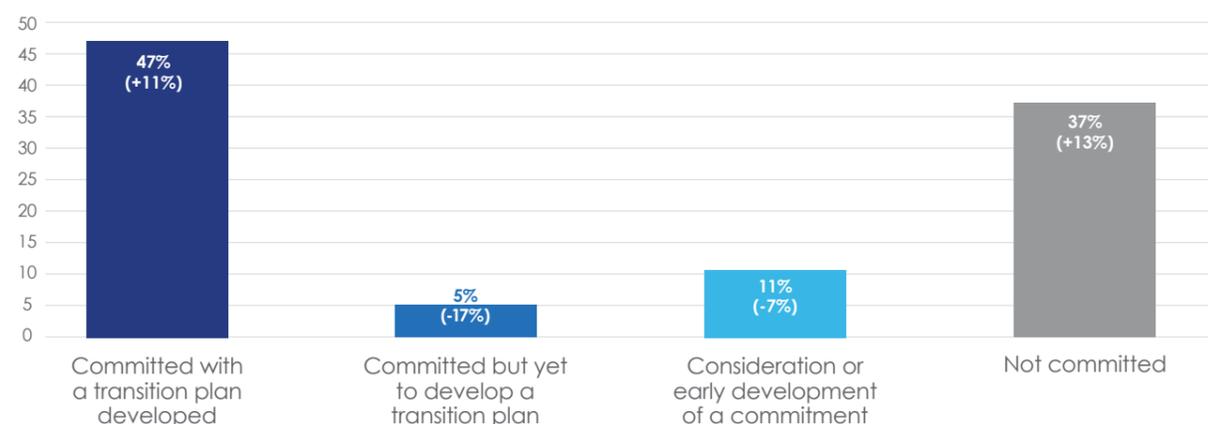
Compared to the 2022 results, the proportion of funds under management committed to net zero by 2050 with a transition plan has increased from 36% to 47%. On the other hand, the proportion of "Not committed" funds has increased from 24% to 37% largely due to the reclassification of some of the passive funds to "Not committed". Funds SA takes the view that all passive funds are not committed to

net zero by 2050 unless the funds have specific investment objectives incorporating net zero by 2050. A Global Government Bond mandate also changed from "early development of a commitment" to "not committed" due to the difficulty of controlling or influencing sovereign emissions.

We recognise that the climate approaches of our appointed investment managers are at different stages of maturity depending on the asset class. For example, Private Market managers are faced with poor data availability compared to public markets, making target setting challenging. We aim to encourage our investment managers to commit to Net Zero and plan further engagement with our managers that are 'Not committed' to understand the barriers to setting a commitment.

Where Funds SA is making a direct investment (where Funds SA has control over material decisions), further due diligence is conducted to understand the potential investment risks. Funds SA utilises industry-recognised frameworks, such as the Sustainability Accounting Standards Board (SASB) Standards, to guide the assessment of these risk factors across different industries, sectors, and asset types.

Proportion of FUM with a commitment to Net Zero by 2050



Source: Funds SA, based on information provided to it by its external investment managers in 2024. Based on the 2024 ESG Manager Survey we calculated the proportion of funds under management (FUM) with a commitment to Net Zero by 2050. The bracketed number within the chart represents the change from the 2022 ESG Manager Survey.

Phasing out investments in thermal coal

In 2022, we commenced a phased exclusion of companies involved in thermal coal mining and extraction, except where a credible transition plan exists for the company or asset. We have done this to reduce our exposure to transition risk and specifically, stranded asset risk. To date, we have achieved the following:

- ✓ Excluded from our listed equities and debt discrete mandates, companies that are primarily³ involved in the production and mining of thermal coal. As at 30 June 2024, there were 11 international and 9 Australian companies identified as meeting this criteria that have been excluded from Funds SA's listed equities asset classes⁴. This exclusion does not currently include companies that are held via pooled funds and derivatives.

Physical risk for our unlisted property and infrastructure assets

Funds SA formally assesses the actions being undertaken by all unlisted property and infrastructure investment managers through an annual climate-focused questionnaire. This requires investment managers to identify any specific assets that are potentially at "high risk" due to the physical impacts of climate change. We use this information to monitor exposure to climate risks across our investment portfolio. As an example, one of our external investment managers managed high bushfire risks to its property asset by installing ember resistant mesh to all external fresh air intakes. This has helped to reduce insurance premiums for the asset.

Socially Responsible Investment (SRI) option

Climate-based exclusions

Socially responsible considerations are core to the SRI option's investment approach.

For the SRI option, socially responsible investing means targeting investments that contribute to the betterment of society such as investment in climate change solutions. In addition, where possible the SRI option seeks to avoid investments that have the potential to cause or contribute to social harm, such as fossil fuels.

Revenue and product involvement thresholds apply in some cases so that companies with multiple business activities are not excluded for very low involvement. However, Funds SA maintains low revenue thresholds so these activities can generally be avoided.

In December 2024, an SRI-screened Sub-Investment Grade Credit asset class was added to the SRI option.

The purpose of the SRI option is to deliver investment returns while employing an investment approach consistent with the SRI criteria. More information about the investment approach of the SRI option and the SRI Criteria can be found on the Funds SA website.

³Using the Coal and Consumable Fuels sub-industry according to the Global Industry Classification Standard (GICS) methodology.
⁴In February 2025, the exclusion criteria changed from the GICS to revenue-based exclusions.

Active ownership

Funds SA has committed to being an active owner and incorporates ESG issues into its ownership policies and practices. To show our commitment, Funds SA has become a signatory to the United Nations-supported Principles for Responsible Investment (PRI).

While most of our proxy voting is delegated to our investment managers, Funds SA adopts a materiality approach that focuses on our top 50 holdings in the Australian equity market. Climate-related risk is increasingly raised as an issue to be considered at company Annual General Meetings, either as a consideration for the remuneration or election of Directors, or as a targeted shareholder proposal.

Investment managers are a key source of information for our proxy voting decisions, which we consider alongside the advice of our proxy advisor. Many investment managers work directly with the management of companies to improve the risk management of the company. This allows investment managers to form considered views on how companies are addressing risks in their business model.

Since 2023, we have established a company engagement approach with climate risk being one of our engagement priorities. Our ESG Engagement Watchlist includes selected companies that we believe pose moderate to high ESG risk, if not appropriately managed. We use different information sources to determine the materiality of ESG risk, such as MSCI ESG Research data. Currently, these companies are in the industries pictured, where emissions reduction is the most challenging.

The objective of engaging with our investment managers on these specific companies is to validate that our investment managers are aware of the risks and to highlight whether or not they are taking action to mitigate these risks in the portfolio. This may be through engagement with the company, proxy voting, altering their position over time or pursuing an alternative strategy.



Energy



Fertiliser & Chemicals



Cement



Diversified Mining



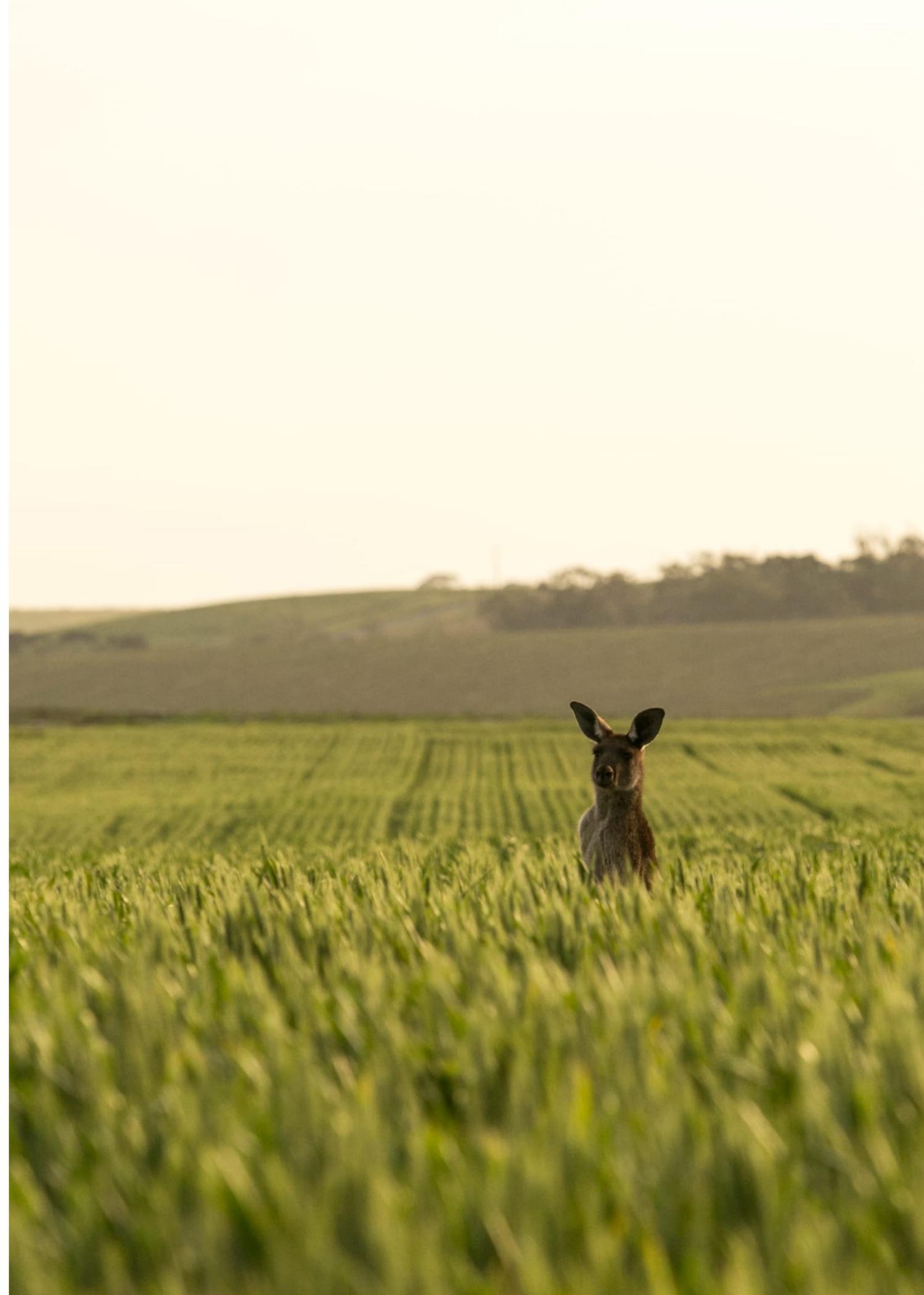
Steel

Oil and gas in the energy transition

Assessing the climate risk of our investment in companies that either produce or use oil and/or natural gas in their operations is complex. There is divided opinion on the role that these fuels will play in the transition to a low carbon economy, with multiple possible scenarios for future demand. While global demand for oil and gas is predicted to peak towards the end of the decade according to the IEA Energy Outlook 2024 Scenarios, predicting the pace of the energy transition around the world remains challenging.

We continually seek to understand our investment managers' perspectives on investing in these companies. For the companies that we have engaged our managers on, and met directly, there is a clear imperative for them to avoid market and stranded asset risk by developing a credible transition plan. For these companies, this involves a combination of reducing emissions at their operations, diversifying into new products, or capturing their emissions using Carbon Capture and Storage (CCS) or Carbon Capture, Utilisation and Storage (CCUS) and offsetting emissions. We will seek to ensure that emissions reduction through the use of offsetting is additional and verified as outlined in the IEA's Net Zero by 2050: A Roadmap for the Global Energy Sector.

We will continually revisit this thesis as the transition progresses, and sector-level pathways become clearer in order to meet our commitment to reach Net Zero by 2050.



Metrics and Targets

The metrics and targets we use to assess and manage relevant climate-related risks and opportunities.

Data Challenges: a precursor to the following section

Our data providers, investee companies and those managing real assets are continually amending or improving their approach to reporting climate-related data as capabilities and technology evolve. Although we conduct thorough evaluations on the data used in this report, we acknowledge there is a possibility that inaccuracies may exist in this reporting despite our best efforts to ensure reliability.

More companies and/or real asset managers may start disclosing climate-related data in future, which will change the shape of our emissions profile, particularly financed emissions in absolute terms. For investors like Funds SA, recommended reporting frameworks and protocols may also change over time. Therefore, we expect some degree of fluidity in what we report on.

One of our most significant challenges is that not all companies report their climate data. Our data providers use proxies for estimating emissions where they are not publicly reported. These proxies are based off industry averages, meaning the data is likely to be inexact.

Ultimately, our commitment is to reach Net Zero emissions in our investment portfolio by 2050, and we aspire to be transparent about the challenges we are facing, and the actions we are taking to overcome these.

We measure progress towards achieving our Net Zero by 2050 commitment in a number of different ways. As a core metric, we monitor performance against our 5-Pillar Climate Risk Response Plan and specifically the twenty actions in Phase 1 that are either **Ongoing** , **In Progress** , or have become **Business As Usual (BAU)** .

Most of the actions under the Climate Risk Response Plan Phase 1 have been achieved, and are now part of Funds SA's business-as-usual activities. Those actions reported in FY2023 Climate Report as "Met" are not repeated in the below table unless there are further updates on the action taken in 2024. A renewed Plan will be developed to ensure our investment portfolios support our Net Zero by 2050 commitment.

Climate Risk Response Plan Phase 1 Progress Update

Governance & Culture	Timeframe	Progress over the past year
Utilise scientific and financial analysis to oversee, assess, and manage climate change-related risks and opportunities	2022 onwards 	Achieved and BAU: Continued to investigate climate-related risks and opportunities in our investment portfolio based on reports from peak industry and scientific bodies.

Investment Strategy	Timeframe	Progress over the past year
Progressively incorporate climate risks and opportunities into portfolio construction and asset allocation decisions	2022 onwards 	Achieved and BAU: We used Capital Market Assumptions for our multi-asset modelling that incorporates climate-related risks and opportunities in order to inform asset allocation decisions. Climate risk has been embedded as a specific item for our Investment Committee to consider when assessing new investment opportunities where relevant to the proposed investment.
Phase out thermal coal exposure except where a credible transition plan exists	2022 	We reviewed the next stage of the phase out of thermal coal exposure and are moving from GICS exclusion to revenue-based exclusion in 2025.
Actively seek new opportunities and investments that are part of the solution to achieve a Net Zero by 2050 outcome	2022 onwards 	Achieved and BAU: In 2024 we invested in new climate transition opportunities. For example, Funds SA acquired an interest in Cyan Renewables, an international maritime operator that provides building and maintenance services to offshore wind farms. We continue to work with our managers to align the portfolio with Funds SA's commitment to Net Zero by 2050.

Investment Strategy	Timeframe	Progress over the past year
Build an average 5 Star NABERS Energy rating for office buildings and ensure that a credible transition plan is in place for lower rated buildings	2025 or sooner 	As at 30 June 2024, the average 5 Star NABERS Energy rating for office buildings was maintained. We note that occupancy levels may be a factor distorting NABERS Energy ratings, and this will be monitored closely.
Undertake analysis to better understand the resilience of the portfolio to the physical impacts of climate change	2022 onwards 	Achieved and BAU: We investigated different datasets on physical risks associated with climate change, provided by third-party providers. We will continue to consider ways to enhance our access to physical risk related data to evaluate the exposure of our assets, particularly within the Property and Infrastructure asset classes.

Engagement	Timeframe	Progress over the past year
Expand our manager monitoring and engagement process to achieve alignment with Net Zero by 2050	2022 	Achieved and BAU: We undertook our biennial ESG Manager Survey in 2024 to assess how investment managers are responding to climate-related risks, their Net Zero commitments and transition plans.
Encourage our investment managers to commit to Net Zero by 2050	2023 onwards 	We collate the Net Zero commitments of our investment managers and seek to engage with those we consider to be lagging behind their peers.
Encourage high-risk companies owned to commit to Net Zero by 2050	2023 onwards 	High Impact Sectors are noted in our Net Zero Alignment Pathway (NZAP) analysis, which needs further updating in the near future to reflect the recent update on the Net Zero Investment Framework (NZIF) developed by the Institutional Investor Group on Climate Change (IIGCC). Our engagement will focus on alignment with Net Zero by 2050. The impact and influence of such engagement by Funds SA will be examined closely to prioritise high-risk companies.

Advocacy	Timeframe	Progress over the past year
Increase partnerships with other investors to strengthen our collective voice and impact in engagements with companies owned	2023 onwards 	Achieved and BAU: We chaired a global meeting of Sovereign Wealth and Government Investment funds to discuss a range of responsible investment activities, including climate risk. We joined Climate Action 100+ as a contributing investor to support engagement with corporate greenhouse gas high emitters.

Disclosure	Timeframe	Progress over the past year
Publish the Climate Risk Response Plan, report on progress, and ongoing review of our Plan	2022 onwards 	Achieved and BAU: We published the Climate Risk Response Plan on our website, produced this report on progress and commenced developing an updated Plan.
Publish an annual climate risk report in alignment with the TCFD framework	2023 onwards 	Achieved and BAU: We continue to report annually on our climate-related metrics, including financed emissions and other climate-related data.

Emissions Data

Reporting the Greenhouse Gas (GHG) emissions attributable to Funds SA's investments is a vital component of understanding our climate risk exposure. While these metrics only represent a snapshot in time, understanding the trajectory of our portfolio emissions is essential if we are to meet our commitment to Net Zero by 2050.

Emissions are divided into three scopes:

Scope 1

Direct GHG emissions that occur from sources owned or controlled by the reporting company, i.e., emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2

Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company. Scope 2 emissions physically occur at the facility where the electricity, steam, heating, or cooling is generated.

Scope 3

All other indirect GHG emissions (not included in Scope 2) that occur in the value chain of the reporting company. Scope 3 can be broken down into upstream emissions and downstream emissions.⁵

The Scope 1 and Scope 2 GHG emissions of Funds SA's investee companies and assets are known as our financed emissions.⁴ We use carbon dioxide equivalent (CO₂e) data for reporting, which factors in all GHG emissions. The methodologies⁵ for reporting Funds SA's financed emissions are displayed below, differing depending on asset type.

Listed Equities, Listed Property, Credit, Short-Term Fixed Interest and Unlisted Infrastructure

$$\frac{\text{Outstanding amount}}{\text{EVIC}^6 \text{ or Total company equity+debt}} \times \text{Company emissions}$$

Sovereign Bonds

$$\frac{\text{Exposure to sovereign bond (USD)}}{\text{PPP-adjusted GDP}^7 \text{ (international USD)}^8} \times \text{Sovereign production emissions}^9$$

Unlisted Property

$$\frac{\text{Outstanding amount}}{\text{Property Value}^{11}} \times \text{Building emissions}$$

Using data sourced from our data providers and our investment managers, we are able to report on the asset classes shown on the following page. Year-end reporting dates vary between companies and assets.

The data presented is at 30 June 2024 and excludes cash and derivatives. Assured data¹² has been provided by our Unlisted Property and Infrastructure investment managers, where available.

⁵ PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition: <https://carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf>

⁶ EVIC is Enterprise Value Including Cash

⁷ PPP-adjusted GDP (international USD) is an adjustment to the Gross Domestic Product of a country by the Purchasing Power Parity (PPP) rate to improve comparability. The PPP rate is the rate at which the currency of one country would have to be converted into that of another country to buy the same amounts of goods and services.

⁸ Data from the International Monetary Fund, World Economic Outlook Database, October 2024 <https://www.imf.org/en/Publications/WEO/weo-database/2024/October>

⁹ Sovereign production emissions sourced from Emissions Database for Global Atmospheric Research (EDGAR), that provides independent estimates of emissions produced domestically, including exports. EDGAR (Emissions Database for Global Atmospheric Research) Community GHG Database (a collaboration between the European Commission, Joint Research Centre (JRC), the International Energy Agency (IEA), and comprising IEA-EDGAR CO₂, EDGAR CH₄, EDGAR N₂O, EDGAR F-GASES (2024) European Commission. EDGAR report webpage (https://edgar.jrc.ec.europa.eu/report_2024) and EDGAR_2024_GHG website (https://edgar.jrc.ec.europa.eu/dataset_ghg2024) and/or relevant reports.

¹⁰ Coverage relates to buildings under the investment manager's operational control and excludes properties under development. Investment managers have either reported location-based or market-based emissions as defined by the GHG Protocol Scope 2 Guidance.

¹¹ Property value is calculated as at 30 June 2024

¹² Assured data is data that was verified through a third-party assurance process.

¹³ Investment managers have reported equity-adjusted emissions in this asset class given the type of infrastructure assets held. Funds SA will explore options to report Partnership for Carbon Accounting Financials - aligned emissions for these investment managers in future reporting periods.

Our financed emissions are influenced by three broader factors. First, government policies across the globe play a crucial role in shaping the boundaries within which investments are made. Policies aimed at achieving net zero by 2050 can drive the economy and companies towards decarbonisation, while the absence of such policies can slow down the transition. Second, companies have operational control over their own emissions,

and their efforts and speed of decarbonisation are typically outside the direct control of investors. This means that while investors can influence companies through engagement and investment choices, the ultimate responsibility for emissions reduction lies with the companies themselves. Third, we rely on third-party data providers to measure our financed emissions. These factors need to be considered in understanding our financed emissions.

Financed emissions for Funds SA's asset classes

Asset classes	Coverage by Market Value %				Absolute financed emissions Tonnes CO ₂ e				Carbon Intensity Tonnes CO ₂ e/A\$m invested
	FY21	FY22	FY23	FY24	FY21	FY22	FY23	FY24	FY24
Australian Equities	93.1	95.2	98.4	98.8	532,933	520,230	458,917	517,650	56.1
International Equities	93.8	94.7	98.0	97.9	413,646	315,442	264,468	272,593	21.3
Socially Responsible Equities	96.1	98.5	99.1	99.5	3,315	4,317	4,787	5,022	20.3
Credit	46.4	46.9	46.9	42.3	30,884	58,707	77,571	70,453	56.6
Short-Term Fixed Interest	17.2	48.0	42.4	65.6	3,431	15,423	14,824	17,130	25.8
Sovereign Bonds	99.9	99.9	99.8	97.8	790,407	595,432	577,724	959,887	240.3
Listed Property	99.1	100	100	99	1,797	1,760	973	438	5.0
Unlisted Property ¹⁰	100	100	100	100	10,679	7,620	8,535	5,978	1.6
Unlisted Infrastructure			67.9	92.4			41,757	81,456	35.8
Socially Responsible Infrastructure ¹³			99.9	100			384	982	31.8
Total					1,787,092	1,518,931	1,449,939	1,927,620	49.7

Source: MSCI via FactSet. Portfolio data as at 30 June 2024. Coverage by Market Value is measured in respect to investments that may have emissions reporting. For example, the analysis excludes cash and derivative instruments.

Across the asset classes, FY2024 emissions generally increased compared to the previous years. There were a number of drivers of this outcome relative to previous years:

1. FUM Impact – In general, as the size of the FUM increases, so does the size of absolute financed emissions, with all things equal, although not necessarily linearly. The increase in sovereign emissions can be attributed to an increase in investment in the Government Bonds asset class between FY2023 and FY2024. FUM for this asset class grew approximately 61% in FY24. Similarly, SRI Equities saw FUM grow approximately 23% in FY2024. Conversely, Listed Property saw the opposite trend with its financed emissions having decreased. This is largely due to the allocation to this asset class being reduced by 56% in FY2024.

2. Data Coverage – Additional data coverage of Unlisted Infrastructure assets (from 67.9% to 92.4%) has resulted in increased reported financed emissions from previously uncovered holdings. Short-Term Fixed Interest also improved data coverage in FY2024 (65.6%, compared to 42.4% in FY2023), resulting in a jump in financed emissions.

3. Nature of investment strategies – A higher Australian Equities Passive allocation has increased exposure to high intensity sectors (utilities, materials,

energy) and therefore led to more financed emissions in Australian Equities compared to FY2023. One of the assets in Unlisted Infrastructure accounts for approximately 42% of financed emissions of the asset class. The company's assets span across electricity generation, transmission and distribution including natural gas infrastructure. The company has been accelerating investments in renewable energy as part of energy transition.

4. Decarbonisation efforts by underlying holdings – The Unlisted Property asset class continued to demonstrate a significant reduction in absolute financed emissions in FY2024. This significant reduction in emissions was seen across all portfolios within the asset class. A number of Property funds reduced financed emissions by over 40% from the previous year. The funds successfully reduced emissions by increasing renewable energy consumption.

Our financed emissions for Sovereign Bonds include a degree of double counting, as the emissions generated by companies and assets in other asset classes are notionally included in the sovereign estimation model. Furthermore, we note that there is unavoidable misalignment in the data inputs - the emissions and GDP data are as at the end of the previous calendar year whereas our exposure to Sovereign Bonds is at the end of the financial year.

Carbon Intensity

In contrast to the absolute metrics above, the Weighted Average Carbon Intensity (WACI) is a relative carbon intensity metric, which is expressed in tonnes of CO₂e/\$m revenue. This metric helps us understand exposure to the emission intensity of asset classes and securities.

The FY2024 results show that Funds SA's equities portfolios remain below benchmark levels of carbon intensity. Compared to the last financial year, Australian and International Equities results are stable, while Socially Responsible Equities results have decreased from just below 100 tonnes CO₂/\$m invested to around 75 tonnes CO₂/\$m invested.

Compared to FY2023, the WACI for our equities portfolios experienced the following changes:

- 1) Australian Equities: The WACI increased for the asset class from below, to above 150 tCO₂/\$m, and is therefore closer to the benchmark which remained relatively unchanged. Similarly to the total financed emissions, the increased allocation to passive Australian equities has increased exposure to high emitting sectors such as utilities, energy and materials.
- 2) International Equities: Portfolio WACI remained relatively unchanged, while benchmark WACI reduced by circa 20 tCO₂/\$m. This was as a result of decreasing allocations to high impact sectors (utilities, materials, energy) and decreasing carbon intensity within these sectors. The reduced allocation to high impact sectors was compensated for in the

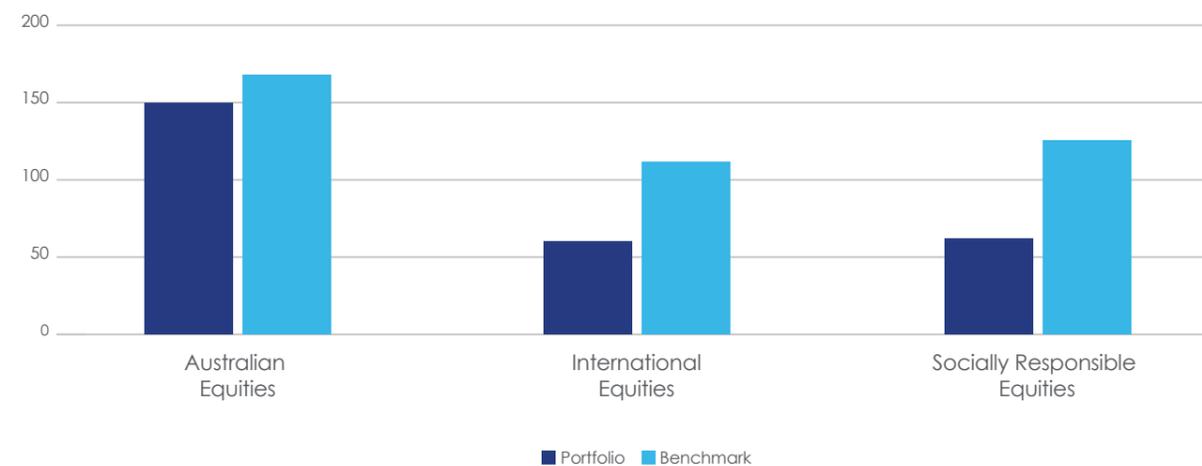
benchmark by an increased allocation to Information Technology, which is a low intensity sector.

3) Socially Responsible Equities portfolio has reduced in carbon intensity mostly due to a reduction in allocation to materials (from 14% to 9%), and reduction in intensity within the materials sector holdings of the Socially Responsible Equities portfolio. This is due to high intensity securities being sold out of the portfolio and replaced with holdings from other, lower impact sectors, notably Information Technology. The benchmark has reduced in emission intensity due to the reduction within the International Equities benchmark mentioned above. Socially Responsible Equities benchmark WACI is greater than that of International Equities as the Socially Responsible Equities benchmark used here is 53% International Equities benchmark and 47% Australian Equities benchmark, and as the graph shows, the Australian Equities benchmark has a greater WACI.

It should be noted that WACI is not a perfect metric. Market valuation can be volatile, which can affect the WACI indicator. For instance, a rally in share prices can reduce a company's WACI while absolute emissions remain the same.

Data Coverage is 99% for Australian Equities, 98% for International Equities and 99% for Socially Responsible Equities.

Weighted Average Carbon Intensity (tCO₂/\$m) (WACI) as at 30 June 2024



Source: Funds SA portfolio data as at 30 June 2024. Benchmarks used are: Australian Equities: 100% S&P/ASX 300 Accumulation Index. International Equities: 100% MSCI World ex-Australia Index net dividends reinvested (unhedged). Socially Responsible Equities: 53% MSCI World ex-Australia + 47% S&P/ASX 300 Accumulation Index.

Net Zero Alignment Pathway

To assess the progress of our underlying investments in transitioning to Net Zero by 2050, we have adopted a tailored approach based on the methodology sourced from the Net Zero Investment Framework, developed by the Paris Aligned Investment Initiative and the Institutional Investor Group on Climate Change (IIGCC).

The assessment combines a number of criteria related to climate commitments and action. Satisfaction of these criteria determines the proportion of our investment portfolio in the five stages displayed below.

Our initial assessment of the Net Zero alignment of our investments is shown in the following table. Climate-related data quality for listed securities is constantly improving and our data providers cross-verify these data points where possible.

However, we accept there is some degree of inaccuracy when trying to cover a large universe of global investments. Our initial assessment shows that more data is available in listed equity markets than for listed debt (Credit and Short-Term Fixed Interest), as observed in the 'No Data' column.



'Not aligned': Refers to assets without a commitment to decarbonise in a manner consistent with achieving global net zero.

'Committed to aligning': Refers to assets with a long-term decarbonisation goal consistent with achieving global net zero by 2050.

'Aligning': Refers to assets with emissions performance not equal to a contextually relevant net zero pathway. However, importantly they have science-based targets and a decarbonisation plan, and are thus ready to transition.

'Aligned': Refers to assets which have science based targets, a decarbonisation plan, and current absolute or emissions intensity at least equal to a relevant net zero pathway. This category broadly signifies that transition risk is being managed at an asset level.

'Net Zero': Typically, refers to when assets meet all relevant criteria and have an emissions performance at net zero which can be expected to continue.

Funds SA's Net Zero Alignment Pathway

	No Data	Low Data Coverage, Low Emitting	Not Aligned	Committed to Aligning	Aligning	Aligned	Net Zero
Australian Equities	3% (+1%)	9% (-2%)	24% (0%)	7% (-5%)	56% (+6%)	2% (+1%)	0% (0%)
International Equities	5% (-4%)	9% (+2%)	19% (-1%)	7% (-9%)	58% (+13%)	2% (-1%)	0% (0%)
Socially Responsible Equities	1% (+1%)	6% (-1%)	15% (-6%)	6% (-8%)	69% (+14%)	3% (-1%)	1% (0%)
Credit*	46% (-11%)	7% (+1%)	23% (+3%)	5% (0%)	18% (+7%)	0% (-1%)	0% (0%)
Short-Term Fixed Interest	21% (-16%)	2% (-3%)	22% (+11%)	2% (-6%)	52% (+17%)	0% (-4%)	0% (0%)
Listed Property	4% (+4%)	0% (-2%)	14% (-19%)	52% (+48%)	30% (-31%)	0% (0%)	0% (0%)

The numbers in brackets within the table shows the change from 2023 to 2024. Please note that the percentages above may not sum to 100% due to rounding. Source: MSCI via FactSet. Portfolio data as at 30 June 2024. *Credit covers global corporate credit managers within Sub-Investment Grade and Investment Grade Credit asset classes. (We have made a change from 2023 to the criteria for low emitting companies to be considered "Aligned" making it more stringent).

With positively tilted security selection (as a result of the best-in-class ESG approach), SRI Equities have a greater proportion of companies aligned or aligning to Net Zero by 2050, compared to the Australian and International equities under the broader funds. Global Credit, which includes the Emerging Market corporate issuers, has notably lower alignment with less data coverage.

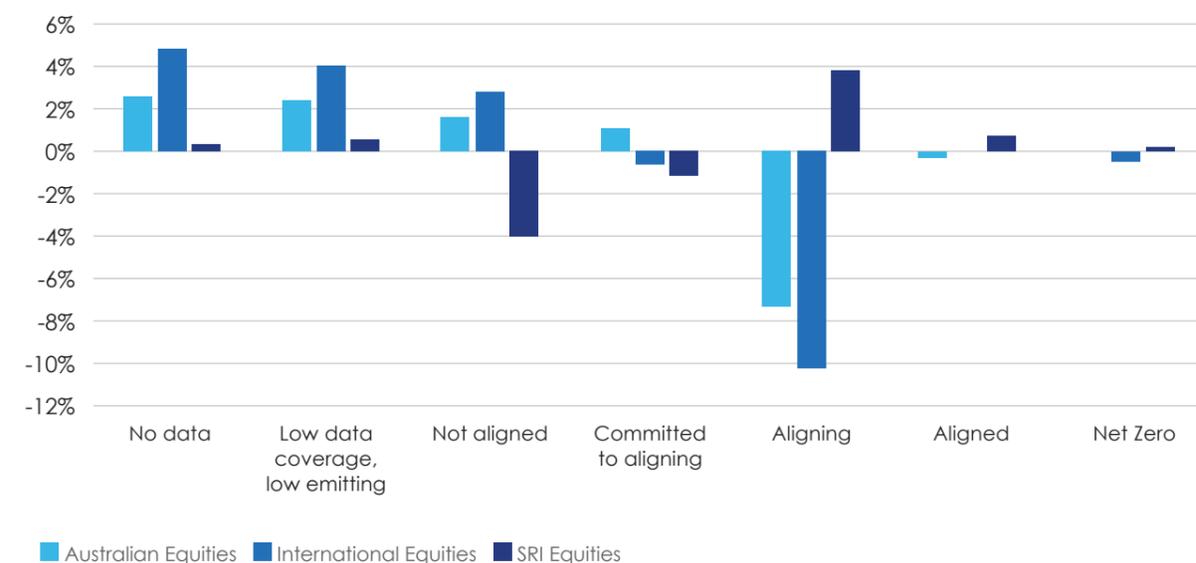
Data availability is either too low, or we have not yet established a methodology to determine alignment for Sovereign Debt, Unlisted Property, Unlisted Infrastructure, Private Equity, Hedge Funds and Alternatives.

We note that an update to the Net Zero Investment Framework (NZIF) was published in June 2024, which contains guidance on evaluating net zero transition plans for some of these asset classes. Going forward, we will consider and evaluate the potential use of the updated framework to report on some of the currently uncovered asset classes.

In FY2024, Net Zero Alignment Pathway data coverage has increased. Notably, there has been an increased allocation to the companies "Aligning" across the asset classes. This is likely due to both improved data coverage and more companies shifting climate policies towards "Aligning" from "Committed to Aligning". Within Listed Property there was meaningful change across categories. Most notable was the allocation to companies "Committed to aligning", this increased from 4% to 52% in FY2024. This is likely because the companies moved from "Not Aligned" or downgraded from "Aligning" since the percentage of "Aligning" companies decreased from 61% to 30%.

Asset class benchmark relative category positioning

Overall, compared to our equity asset class benchmarks, our Australian Equities and International Equities are overweight in "Low data coverage" and "Not Aligned" categories, and significantly underweight in "Aligning". This underweight may have partially resulted from higher allocations into securities with no and low data coverage. This means that should our data coverage improve in the future, our net zero alignment may improve.



Source: MSCI via FactSet. Benchmarks used are: Australian Equities - S&P/ASX 300 Accumulation Index. International equities - MSCI All Country World ex Australia Index. SRI Equities: MSCI World ex Australia SRI Index and MSCI Australia IMI Select SRI Screened Index.



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