



CLIMATE TRANSPARENCY REPORT 2018

Local Government Superannuation Scheme

About the Climate-related Disclosure Indicators

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

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

As a result, the PRI introduced climate-related disclosure indicators that can be used to align with the TCFD recommendations in the 2018 PRI Reporting Framework.

About this report

This report is an export of only the climate-related indicators from the 2018 Reporting Framework response. The full Public Transparency Report is available here (https://guestreporting.unpri.org/surveys/PRI-reporting-framework-2018/-F5C54EAF-8148-4225-9337-A40145F285B7/00000000-0000-0000-0000-000000000000/doc/2/-%7C%7C*complete*%7C*public*/Merged/). It shows the responses to all the completed climate indicators, even those you chose to keep private. It is designed for your internal review or – if you wish - to share with your stakeholders.

The PRI will not publish this report on its website if you have designated your 2018 climate reporting as “private”. Otherwise, you will be able to access the Climate Transparency Report of your organisation and that of other signatories on the [PRI website](#) and on the [Data Portal](#).

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

TCFD Recommendations Index

Strategy and Governance - CC			TCFD Recommendation			
Indicator	Reported	Disclosure	Governance	Strategic	Risk Management	Metrics & Targets
SG 01.1	-	Private	N/A	N/A	N/A	N/A
SG 01.3	✓	Private				
SG 01.3a CC	✓	Private				
SG 01.3b CC	✓	Private				
SG 02.2	✓	Public	N/A	N/A	N/A	N/A
SG 07.1 CC	-	Public				
SG 07.1a CC	✓	Public				
SG 07.1b CC	✓	Public				
SG 13.1	✓	Public				
SG 13.1a CC	-	Public				
SG 14.1 CC	✓	Public				
SG 14.2	-	Public				
SG 14.2a CC	-	Public				
SG 14.3	-	Public				
SG 14.4	-	Public				
SG 14.4a CC	-	Public				
SG 14.4b CC	-	Public				
SG 14.5	✓	Public	N/A	N/A	N/A	N/A
SG 14.6	✓	Public	N/A	N/A	N/A	N/A
SG 14.7 CC	✓	Public				
SG 14.8 CC	✓	Public				
SG 14.9 CC	✓	Public				
SG 14.10 CC	✓	Public	N/A	N/A	N/A	N/A
SG 15.1	✓	Public	N/A	N/A	N/A	N/A
SG 15.2	-	Public	N/A	N/A	N/A	N/A
SG 15.3	-	Public	N/A	N/A	N/A	N/A

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

ORGANISATIONAL OVERVIEW

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

MAIN CHARACTERISTICS	
Name	Local Government Superannuation Scheme
Signatory Category	Non-corporate pension or superannuation or retirement or provident fund or plan
Signatory Type	Asset Owner
Size	US\$ 5 - 9.99 billion AUM
Main Asset Class	Multi-Asset
Signed PRI Initiative	2007
Region	Oceania
Country	Australia
Disclosure of Voluntary Indicators	100% from 38 Voluntary indicators

Local Government Superannuation Scheme

Reported Information

Private version

Strategy and Governance

PRI disclaimer

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

Investment policy

SG 01

Mandatory

Public

Core Assessed

General

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

SG 01.1

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

Yes

SG 01.2

Indicate the components/types and coverage of your policy.

Select all that apply

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

SG 01.3

Indicate if the investment policy covers any of the following

- Your organisation's definition of ESG and/or responsible investment and it's relation to investments
- Your investment objectives that take ESG factors/real economy influence into account
- Time horizon of your investment
- Governance structure of organisational ESG responsibilities
- ESG incorporation approaches
- Active ownership approaches
- Reporting
- Climate change and related issues

SG 01.3a
CC

Describe how your products or investment strategy might be affected by the transition to a lower-carbon economy.

The LGS Sustainable and Responsible Investment Policy identifies climate change as the biggest risk faced by our fund and commits us to address climate change risks and opportunities through our ESG integration and active ownership strategies. We believe that by integrating ESG factors including climate change into our investment process, we are better able to manage long-term financial risks and in turn, provide strong returns for our members. As a result, we are confident that we are meeting our fiduciary duty under Australian law in that we are ensuring we take all risks into account when making investment decisions i.e. not just financial risks but also environmental, social and governance risks as well. The overarching LGS Investment Policy Statement, Due Diligence Policy and Risk Management Statement all refer specifically to the SRI Policy to ensure that RI issues (including climate risks and opportunities) are integral to all aspects of the management of the LGS investment portfolio.

We believe that investors need to minimise climate risk and send a strong signal to the market about moving towards a global low carbon economy. Continuing to invest in carbon intensive activities puts our members' retirement savings at risk and undermines any progress society is able to make in reducing global carbon emissions.

To date we have introduced a carbon screen across our listed equity and fixed income investment mandates and we invest in over \$950 million in low carbon opportunities including renewable energy, energy efficiency and green buildings.

SG 01.3b
CC

Describe how climate-related risks and opportunities are factored into your investment strategies or products.

© We factor climate-related risks and strategies into our investment strategies or products.

We adopted an initial framework for managing climate investment risks and opportunities across our fund in 2009.

We regularly conduct reviews of our investment strategy to ensure we are addressing climate risks. The review process involves formally engaging the LGS Board and Investment Committee, the CEO, the CIO and the LGS Investments Team in addition to our external asset consultants, fund managers and investment research providers throughout various stages to raise awareness and increase knowledge of climate change investment risks and opportunities and seek input into the development of future investment strategies.

In 2013 we commissioned expert research on climate change impacts for our strategic asset allocation because we did not believe that it was adequately captured in the traditional review undertaken by our asset consultant. The work involved using different climate scenarios (such as the World Energy Outlook) and analysing how subsequent climate policy may impact the return and volatility forecasts for each asset class. The analysis resulted in a slight adjustment of our allocation to listed equities, which has had a beneficial impact on overall returns. We are looking at integrating a similar assessment into our next strategic asset allocation process using updated scenario analysis that has been published over the last year by various parties including the World Energy Outlook by the International Energy Agency and the IPCC.

In 2016/17 we developed a new ESG assessment framework to gauge performance on key issues including climate change for all existing and new investments. We are also working with the LGS Board to see how we can better incorporate this type of analysis into the risk management and investment decision processes.

In addition to these developments, in 2014 we introduced a new set of carbon focused investment restrictions that were applied across our listed equities and fixed income asset classes. In developing these, we looked at the key sources of carbon emissions globally. Once the key sources of carbon emissions had been narrowed down (we determined these to be coal and oil tar sands mining and coal-fired electricity generation), we undertook extensive analysis to identify appropriate revenue thresholds to ensure that our investable universe and risk profile were not dramatically altered. The shortcomings of this approach were that whilst we excluded some very large carbon emitters/sources of carbon emissions, we were not addressing other carbon intensive activities or companies outside these sectors. We were also not addressing the significant impacts of other key sources of carbon emissions such as those from the oil and gas industry.

Having implemented the carbon screens and monitoring the impact they have had on our investment returns and risk profile, in addition to carrying out extensive portfolio carbon audits,

we are now in a much better position to identify ways to improve our carbon screens as well as prioritise issues and companies with whom we should engage. Both of which we are committed to undertaking in 2018. Whilst carbon data availability and integrity did not significantly impact our initial development process, the substantial improvement in these areas over the last two-three years will only add more value to the next stage of our strategy to address climate risks across these and additional these asset classes.

We do not factor climate-related risks and strategies into our investment strategies or products.

Other RI considerations, specify (1)

Other RI considerations, specify (2)

SG 01.4

Describe your organisation's investment principles and overall investment strategy, and how they consider ESG factors and real economy impact.

Investment beliefs:

"ESG factors and sustainability are important considerations in driving both long term investments returns and reducing risk, and these factors are likely to become more important in all investment decisions."

The Trustees recognise that the fund is long term in nature, and the long term prosperity of the economy and the wellbeing of society depends on a healthy environment, social cohesion and good governance of LGS and the companies in which we invest.

Strategy:

Mission - *"To enhance the retirement income of our members."*

Vision - *"With a focus on local government and sustainability, we provide personalised, high quality service and solutions to our members representing good value."*

Goals - LGS has four key strategic goals covering growth, brand, investments and capability. ESG is incorporated into the underlying targets for each of these.

SG 01.5

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

LGS invests on behalf of our members using a responsible investment approach. We believe that this approach minimises risk, generates better long term returns and is in line with our members' interests. A responsible investment approach means integrating ESG considerations into investment decision making processes.

LGS is the largest certified responsible investor in Australia with investments across Australian and international shares, property, infrastructure, fixed income, private equity and absolute return asset classes.

The LGS Sustainable and Responsible Investment (SRI) Policy provides a formal framework for integrating ESG considerations into all of our investments. Reviewed annually, the LGS SRI Policy details our internal processes for assessing and undertaking investments. It is available online at <https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>. This Policy sets down the sustainability principles by which LGS will be managed, and the requirements for all investments made by LGS. It covers the total investment portfolio, with specific policies for public and private equity investments and direct property. It includes the following strategies:

ESG integration:

We aim to integrate, monitor and manage ESG risks throughout the investment process to ensure we are safeguarding our members' interests. Key ESG integration strategies we use include:

- **Negative screens** - We will not invest in controversial industries and limit our exposure to activities which we view as long term investment risks e.g. tobacco, weapons, gambling and some fossil fuels.
- **Positive screens** - We seek out investment opportunities that have a positive social and/or environmental impact on society e.g. renewable energy generation, recycling and sustainable

agriculture. We currently have approx. AU\$950 million invested in low carbon opportunities and AU\$40 million in community infrastructure.

- **SRI Overlay** - We short sell or replace stocks when our fund managers are unable to direct funds away from controversial or high risk companies through investments in co-mingled trusts.
- **Investment practices** - We monitor our investments for ESG risks and engage with our fund managers and advisors on how to integrate ESG considerations into the investment process. To ensure that external managers are fulfilling our fiduciary duty, we integrate responsible investment parameters into the selection, appointment and monitoring processes.

Active ownership:

We are committed to being an active owners of our investmetns and believe that by working with the superannuation industry and engaging with companies on ESG issues, we can minimise potential risks across our investment portfolio, maximise memebr returns and make a difference to society. Engagement strategies we use to influence change include:

- **Company engagement** - We actively engage with companies about ESG issues through one-on-one meetings, briefings, phone calls and letters.
- **Proxy voting** - We undertake voting at shareholder meetings for the companies we invest in and publish our decisions before meetings to ensure transparent voting practices.
- **Industry collaboration** - We work with the superannuation industry to advocate for change on environmental, social and/or governance risks across industries.
- **Transparency** - We disclose comprehensive information about our sustainable and responsible investment practices to raise awareness about how we manage our members' retirement savings.

No

SG 02	Mandatory	Public	Core Assessed	PRI 6
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New selection options have been added to this indicator. Please review your prefilled responses carefully.

SG 02.1	Indicate which of your investment policy documents (if any) are publicly available. Provide a URL and an attachment of the document.
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Policy setting out your overall approach

URL/Attachment

URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

Attachment (will be made public)

Formalised guidelines on environmental factors

URL/Attachment

URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

- Attachment (will be made public)
- Asset class-specific RI guidelines

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

- Attachment (will be made public)
- Screening / exclusions policy

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

- Attachment (will be made public)
- Engagement policy

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

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

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Proxy-Voting-Policy.pdf>

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

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

- Climate-related issues

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

- Attachment
- Climate change and related issues

URL/Attachment

- URL

URL

<https://www.lgsuper.com.au/assets/Documents/LGS-Sustainable-and-Responsible-Invest-Policy.pdf>

- Attachment
- We do not publicly disclose any investment policy components

SG 02.3 Indicate if your organisation's investment principles, and overall investment strategy is publicly available

- Yes
- No

SG 02.4 Additional information [Optional].

Governance and human resources

SG 07 CC

Voluntary

Public

Descriptive

General

**SG 07.1
CC**

Indicate the roles in your organisation, and indicate for each whether they have oversight and/or implementation responsibilities for climate-related issues.

Roles present in your organisation

- Board members or trustees
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- Chief Executive Officer (CEO), Chief Investment Officer (CIO), Investment Committee
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- Other Chief-level staff or head of department, specify
 - Head of Sustainability**
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- Portfolio managers
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- ESG portfolio manager
- Investment analysts
- Dedicated responsible investment staff
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- External managers or service providers
 - Oversight/accountability for climate-related issues
 - Assessment and management of climate-related issues
 - No responsibility for climate-related issues
- Investor relations
- Other role, specify (1)
- Other role, specify (2)

**SG 07.1a
CC**

For the board level roles or for which you have climate-related issues oversight/accountability or implementation responsibilities, indicate how you execute these responsibilities.

Responsibilities for overseeing climate-related issues and activities within LGS include:

- **Board** - The LGS Board has ultimate responsibility for the oversight of our approach to climate change. The Board meet on a bi-monthly basis and provide final review and approval for the LGS SRI Policy (including carbon investment restrictions) and participation in climate related activities such as the recently launched Climate Action 100+ (this follows review and approval by the CEO and Investment Committee).
- **Investment Committee** - The board-level LGS Investment Committee consists of six people, four from the LGS Board and two external independents. The Investment Committee meet on a bi-monthly basis to review LGS' strategic asset allocation, investment mix and potential new investment opportunities. An RI report is prepared for each investment committee meeting. This report covers recent climate change related activities and engagements that we have undertaken in addition to ESG and carbon reviews of potential new investment opportunities. The IC are also provided with an update on our exposure to low carbon investments and potential new investment opportunities. The Investment Committee are responsible for overseeing the implementation of the LGS SRI Policy, including any changes to the policy (which is reviewed on at least an annual basis).
- **CIO** - The LGS CIO oversees the Investments Team which includes the RI team. The Head of Sustainability reports to the CIO and seeks their feedback and approval for RI policy reviews and related implementation activities including all climate related issues and activities.

**SG 07.1b
CC**

For the management-level roles which assess and manage climate-related issues, provide further information on the structure and process involved.

- **Head of Sustainability** - The LGS Head of Sustainability has the main responsibility for overseeing our approach to managing climate change risks and opportunities. They are responsible for the development and review of all RI related policies, including our commitment to managing climate risks and the carbon investment restrictions in the LGS SRI Policy and our approach to engagement on climate issues in the LGS Proxy Voting Policy. They are also responsible for overseeing all climate change related activities, including participation in industry working groups on climate change (e.g. PRI and IGCC) and external engagements with companies on climate risks and opportunities.
- **Portfolio managers** - The LGS Portfolio Manager utilises carbon data provided by the RI team members for the internally managed SRI Overlay.
- **Dedicated RI staff** - The two LGS Sustainability Analysts are responsible for implementing all climate-related components of LGS policies and activities including proxy voting, company engagement, negative screens, reporting, participation in collaborative initiatives and manager reviews.
- **External managers and service providers** - Depending on the asset class and type of investment (trust vs. active mandate), RI parameters including carbon related investment restrictions and performance reporting are usually included in the investment management or service agreement for external managers and service providers. In the majority of cases, the external manager is required to provide a level of oversight and accountability for RI performance and is also responsible for implementation across their portfolio, with some input from LGS.

ESG issues in asset allocation

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

SG 13.1 Indicate if your organisation executes scenario analysis and/or modelling in which the risk profile of future ESG trends at portfolio level is calculated.

- We execute scenario analysis which includes factors representing the investment impacts of future environmental trends
- We execute scenario analysis which includes factors representing the investment impacts of future social trends
- We execute scenario analysis which includes factors representing the investment impacts of future governance trends
- We consider scenario analysis that includes factors representing the investment impacts of future climate-related risks and opportunities

Is this scenario analysis based on a 2°C or lower scenario?

- Yes
- No
- We execute other scenario analysis, specify
- We do not execute such scenario analysis and/or modelling

SG SG 13.1a CC Please describe the resilience of your organisation’s strategy, considering different future climate scenarios.

Strategy affected	Changes to strategy	Description of scenario and time-horizon	How analysis has been used
Listed equities and fixed income	Reduction in exposure to carbon intensive activities	In 2014 we used the IEA's 2 degree scenario to identify the most at risk sectors from the move to a low carbon economy over a 15 year period. In 2018 we will analyse our portfolio holdings across both asset classes against numerous scenarios including the IEA's 2 degree scenario to see how we can improve our approach to managing climate risks and opportunities.	The 2014 analysis was used to develop our first set of carbon investment restrictions. The analysis in 2018 will be used to further refine our carbon investment restrictions and broader approach to managing our exposure to carbon in the longer term.

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

We do the following

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

SG 13.3

Additional information. [OPTIONAL]

As per the LGS investment restrictions, the fund will not actively invest in companies that derive any revenue from controversial weapons and tobacco. LGS will not actively invest in companies that derive 10% or more of their revenue from armaments, gambling and old growth logging or more than 33% of revenue from high carbon activities including coal mining, oil tar sands mining and coal-fired electricity generation. The fund will also not invest in companies that display high ESG risk. While these restrictions formally cover listed Australian and international equities, where possible LGS will endeavour to extend these restrictions across other asset classes including fixed income, credit and unlisted assets.

SG 14**Mandatory to Report Voluntary to Disclose****Public****Additional Assessed****PRI 1****SG 14.1**

Describe the process used to identify short, medium and long-term risks and opportunities that could have a material impact on your organisation and its activities.

The LGS Risk Management Framework covers all material risks, both financial and non-financial, to the Trustees strategic and business operations.

In identifying risks and opportunities for the organisation, LGS firstly determines the Risk Appetite Statement, which sets out the tolerance levels which the Trustee is comfortable in the course of running LGS's operations. LGS's material risks are then identified by the Board, Committee, Senior Management, as well as operational staff (alongside consultation with regulators, external consultants); through board/committee meetings, workshops, reviews, and strategy planning sessions. These risks are benchmarked against the Risk Appetite Statement, and assessed on the material impact on LGS's business operations. The treatment and controls which are then assigned to mitigating these risks are designed based on the Risk's frequency/likelihood (short, medium, long-term risk) and consequence/severity factors. The rating of material risks has been based on the International standard for risk management (AS/NZS ISO 3100:2009). These risks are then registered, monitored, and regularly reported to the relevant stakeholders for the necessary overview or action.

**SG 14.1
CC**

Describe the processes used to determine which climate-related short, medium and long-term risks and opportunities could have a material impact on your organisation and its activities.

We use a number of processes to determine which climate-related risks and opportunities could have a material impact on LGS, including:

- Undertaking internal research on developments across at risk sectors;
- Procuring external research from MSCI ESG research, brokers, industry associations, NGOs and academics;
- Reading the latest climate science and associated research from the IPCC and international academics;
- Participating in industry forums/events and working groups, including:
 - IGCC Climate Change Investment and Finance Summit
 - IGCC Policy working group
 - IGCC Low Carbon Finance working group
 - IGCC Property working group
 - IGCC Adaptation working group
 - IGCC Disclosure working group
 - PRI Oil and Gas working group
- Undertaking individual and collective company engagements to build a better understanding of how companies are managing climate risks and opportunities.

Information garnered from the above is then used to:

- Assess our strategic asset allocation;
- Identify potential new investment opportunities;
- Develop future investment restrictions;

- Engage with policy markers;
- Identify priority company engagement targets;
- Feed into the manager selection and review processes;
- Inform our property sustainability strategy.

SG 14.2

Some investment risks and opportunities arise as a result of long term trends. Indicate which of the following you act on.

- Changing demographics
- Climate change and related issues

**SG 14.2a
cc**

Please describe how you define “short”, “medium” and “long term”, and describe your material climate-related issues over these time horizons.

	Definition	Description of material climate-related issues
Short term	0-1 year	<ul style="list-style-type: none"> • Political risks - Policy uncertainty impacting our ability to invest in low carbon solutions. • Regulatory risks - increasing regulation requiring action on climate risks in international jurisdictions. • Mitigation risks - Reducing emissions from our current investments. • Transition risks - minimising the impact to our investments from the transition to a low carbon economy e.g. transition away from fossil fuel powered electricity and closure of coal-fired electricity generators. • Physical risks - increased frequency and severity of extreme weather events and natural disasters affecting broader society including our investee companies and their ability to generate a profit. • Reputational risks - risk of LGS members leaving the fund if they believe we are not managing climate risks and opportunities appropriately.
Medium term	1-10 years	<ul style="list-style-type: none"> • Political risks - Policy uncertainty impacting our ability to invest in low carbon solutions. • Regulatory risks - increasing regulation requiring action on climate risks in international jurisdictions. • Financial risks - risk of financial losses due to unforeseen climate risks and impacts. • Transition risks - minimising the impact to our investments from the transition to a low carbon economy e.g. transition away from fossil fuel powered electricity and closure of coal-fired electricity generators. • Adaptation/physical risks - increased frequency and severity of extreme weather events and natural disasters affecting broader society including our investee companies and their ability to generate a profit. • Reputational risks - risk of LGS members leaving the fund if they believe we are not managing climate risks and opportunities appropriately.
Long term	10 years +	<ul style="list-style-type: none"> • Financial risks - risk of financial losses due to unforeseen climate risks and impacts. • Adaptation/physical risks - increased frequency and severity of extreme weather events and natural disasters affecting broader society including our investee companies and their ability to generate a profit.

SG 14.3

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

- Established a climate change sensitive or climate change integrated asset allocation strategy
- Targeted low carbon or climate resilient investments
- Reduced portfolio exposure to emissions intensive or fossil fuel holdings
- Used emissions data or analysis to inform investment decision making
- Sought climate change integration by companies
- Sought climate supportive policy from governments
- Other, specify
- None of the above

SG 14.4

Indicate which of the following tools you use to manage emissions risks and opportunities

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

other description

We engage with companies in the energy, resources and banking sectors to ensure they are incorporating climate change risks and opportunities into their business strategies.

- None of the above
- Resource scarcity
- Technology developments
- Other, specify(1)
- Other, specify(2)
- None of the above

**SG 14.4a
CC**

Please provide further details on these key metric(s) used to assess climate related risks and opportunities.

Metric Type	Coverage	Purpose	Metric Unit	Metric Methodology	Metric Trend	Limitations / Weaknesses
Carbon footprint (scope 1 and 2)	LGS direct property portfolio.	Used to track energy efficiency and carbon performance over time to ensure we are reducing emissions.	Scope 1 = 71 tonnes CO ₂ e Scope 2 = nil due to the purchase of renewable energy (100% GreenPower)	Australian National Greenhouse Account Factors 2016	Tracking lower over time.	
Portfolio carbon footprint	International listed equities	Used to enable comparison with other investors.	145.2 tonnes CO ₂ / \$ million sales	Weighted average carbon intensity is the sum product of the portfolio weights and carbon intensities.	Lower than the benchmark (MSCI ACWI ex Aus = 213.4).	This metric indicates a portfolio's exposure to potential climate change-related risks relative to other portfolios and/or benchmark. It is agnostic to ownership share but does facilitate comparison with non-equity asset classes.
Total carbon emissions	International listed equities	Allows us to understand our total carbon exposure (and track it over time with a view to reduce it) and identify potential high emitting companies for engagement.	195,568 tonnes CO ₂ e	Sum of all emissions in the portfolio based on our ownership share.	Lower than the benchmark (MSCI ACWI ex Aus = 144).	Doesn't take into account non-equity asset class ownership.
Carbon intensity	International listed equities	Useful to compare like for like companies within the same/similar sectors.	161.6 tonnes CO ₂ e/\$m sales	The ratio of portfolio carbon emissions normalised by the investor's claims on sales.	Lower than the benchmark.	Intensity indicators are useful when comparing and engaging with like for like companies within the same sector however they do not accurately portray overall impact.

Exposure to carbon-related assets	International listed equities	To understand our exposure to carbon related assets relative to a 2 degree scenario.	Renewable power capacity, Gas power capacity, Coal power capacity, Oil Production, Gas Production, Coal production, ICE vehicles, Hybrid vehicles, Electric vehicles.	Work undertaken by 2dii - the model quantifies the evolution of the exposure over the next 5 years to specific technologies and then compares this exposure to the 2 degree benchmark.	n/a	Only covers a limited number of sectors at present.
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SG 14.5 If you selected disclosure on emissions risks, list any specific climate related disclosure tools or frameworks that you used.

- **Carbon portfolio audits by MSCI ESG Research** - Every six months we assess our listed equity managers on the carbon performance of the companies in their portfolios. We monitor our exposure to fossil fuel intensive companies to better understand carbon risks and opportunities and determine future restriction thresholds and engagement priorities. These reports focus on our total carbon footprint based on ownership of companies (i.e. tonnes CO2e/\$ million invested and total CO2e), but also provide intensity measures (i.e. tonnes CO2e/\$ million sales) to enable us to compare companies within the same or similar sectors. A summary of the results of these audits is published on the LGS website at <https://www.lgsuper.com.au/investments/sustainable-investment/sustainable-investment-reports-and-policies/>.
- **Taskforce for Climate-related Financial Disclosure** - We have disclosed our approach to managing climate risks and opportunities via the PRI annual reporting process, in line with TCFD recommendations.

SG 14.6 Additional information [Optional]

In terms of indicators, we prefer to use the tonnes CO2e/\$ million invested indicator for assessing actual ownership of (and therefore ability to influence). Many other investors in the industry seem to be deferring to intensity indicators. Intensity indicators are useful when comparing and engaging with like for like companies within the same sector. Ultimately we believe that multiple indicators will be developed and utilised to address carbon risks across investment portfolios.

SG 14.7 CC Describe your risk management processes for identifying, assessing, and managing climate-related risks.

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

Please describe

The LGS Sustainable and Responsible Investment Policy identifies climate change as the biggest risk faced by our fund.

We monitor existing and emerging regulatory requirements related to climate change in Australia and overseas and regularly provide feedback on existing and emerging climate related policy developments in Australia and overseas.

At present, we do not specifically define risk terminology or have a climate-specific risk classification framework.

SG 14.8
CC

Describe your processes for prioritising climate-related risks.

Assessing and prioritising material risks for different investment products:

We have a different tolerance/revenue threshold for our main equities portfolio vs. our Sustainable Australian Shares (SAS) investment product. Our negative screen on coal and oil tar sands mining and coal-fired electricity generation of 33% of revenue/assets that is applied to our main equities portfolio is reduced to a 0% threshold for the SAS option. For this option we also exclude investment in other fossil fuels including the mining and extraction, production, supply and transportation for the coal, oil and gas industries (meaning no investments in any direct fossil fuel activities) as well as extending the screen to cover all companies that provide significant services to these activities. These screens were introduced as a result of comprehensive research on 'at risk' activities and sectors as well as feedback from our members about the need to limit their exposure to fossil fuel related activities.

SG 14.9
CC

Do you conduct engagement activity with investee companies to encourage better disclosure and practices around climate-related risks?

Yes

Please describe

We engage with the listed companies in which we invest through a variety of channels, including direct engagement with company board members and senior executives, via fund managers and through our involvement in industry groups and associations such as ACSI and the IGCC. To identify and prioritise companies for engagement, we examine climate related risks for each sector and then look at company disclosure and efficiency relative to their peers. We then engage with companies directly and indirectly to disclose the climate related risks and opportunities that are being considered within the governance, strategy and risk management processes of their business. We ask companies to demonstrate how climate change is integrated into the business and for companies to provide greater disclosure on climate related risks and metrics in line with TCFD recommendations. We also encourage companies to disclose their public policy activities as they relate to climate change and to ensure that their position is consistent throughout their memberships to industry associations.

Pending the outcome of these engagement activities, we may look to other escalation activities such as filing shareholder resolutions or to exclude the company from our investment portfolio if we believe that they are not managing their climate risks appropriately.

In 2018 we will be encouraging all companies to disclose in line with TCFD recommendations and also look to engage with companies in asset classes outside the listed equity space.

No, we do not engage

SG 14.10
CC

Describe how you use data from climate-related disclosures.

We use company emission data to help build a picture of our exposure to climate change risks and opportunities. By examining a range of indicators, we are able to identify companies with high emissions and/or low levels of carbon efficiency relative to their sector. As a result we are then able to prioritise engagement activities and develop appropriate investment strategies to ensure we are managing climate risks across our portfolio.

SG 15	Mandatory to Report Voluntary to Disclose	Public	Descriptive	PRI 1
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New selection options have been added to this indicator. Please review your prefilled responses carefully.

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

SG 15.2	Indicate the percentage of your total AUM invested in environmental and social themed areas.
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	%
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10

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

	Asset class invested
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Listed equity

	% of AUM
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0.1

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

	% of AUM
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5

- Infrastructure
- Commodities
- Hedge funds
- Cash
- Other (1)

Brief description and measures of investment

Listed equity: Allocation to specific mandate to invest in companies generating at least 50% of revenues from renewable energy, water treatment, waste and recycling and resource efficiency. 9.5% of this mandate is invested in renewable and alternative energy generation.

Fixed income - SSA: Allocation to green bonds issued by supranational agencies such as the IFC and European Investment Bank.

Fixed income - corporate (financial and non-financial): Allocation to green bonds issued by Australian corporates.

Private equity: Two mandates in a well-diversified 'clean technology' private equity 'fund-of-fund' investing in early stage and growth technologies in the area of environmental, resource and low carbon products and services.

Property: We purchase 100% GreenPower for all base building electricity requirements across our direct property portfolio. We have also installed solar panel arrays at 4 of our properties, with plans to expand this where feasible.

Hedge funds: LGS has allocated investment to a fund that invests in the Australian electricity wholesale market and related derivatives including renewable energy certificates and/or any other environmental related markets.

Infrastructure: We invest in two renewable energy infrastructure funds that includes solar and wind generation.

Green buildings

Asset class invested

Listed equity

% of AUM

0.3

- Fixed income - SSA
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Infrastructure
- Commodities
- Hedge funds
- Cash
- Other (1)

Brief description and measures of investment

Listed equity: Allocation to specific mandate to invest in companies generating at least 50% of revenues from renewable energy, water treatment, waste and recycling and resource efficiency. 33% of this mandate is invested in building related energy efficiency activities.

Fixed income - SSA: Allocation to green bonds issued by supranational agencies such as the IFC and European Investment Bank.

Fixed income - corporate (financial and non-financial): Allocation to green bonds issued by Australian corporates.

Property: The LGS direct property portfolio achieves an average 6 star NABERS Energy rating with 100% GreenPower, and 5 star NABERS Energy rating without GreenPower as result of an extensive energy efficiency program for over 7 years.

- Sustainable forestry
- Sustainable agriculture
- Microfinance
- SME financing
- Social enterprise / community investing
- Affordable housing
- Education
- Global health
- Water
- Other area, specify

No