

AODP Global Climate Risk Survey 2017 for Asset Owners

Response ID:24; 39Z24KcY2QnhD5PKy Data

1. Login

New Login

Password : AO0624

2. Introduction

This is an exciting year given the forthcoming FSB Task Force guidelines that are expected to recommend minimum standards of disclosure for asset owners. Climate change has now become a central issue for financial markets.

Climate risk is of course only one risk that investors have to analyse. We acknowledge this. However, as a multi-sector, multi-asset class and non-diversifiable risk, its scale and profile require special attention.

This year, we have structured our survey to align with the four key areas highlighted by the FSB Task Force: Governance, Strategy, Risk Management and Metrics & Targets. Your response can therefore be used as your primary method to satisfy the FSB guidelines. Participating in the AODP survey will provide a unique opportunity to assess your organisation's performance against its peers, highlighting areas of competitive advantage along with opportunities to hone your services to better meet the increasing demands of your clients.

Information on further benefits of disclosing, our methodology, assessment process and ratings definition is provided throughout the survey or [on our website](#). There is no cost associated with disclosure.

Please advise us of your intention to disclose below. You can then return to complete the survey at a later date. This year, we have included the current information we hold on your fund, to assist you in completion. Please review, correct and/or add information as necessary to ensure we have the most up to date information on which to base our ratings.

The survey will be open for responses until November 30th 2016.

You can find the 2016 Global Climate 500 Index Report [here](#). You can find the 2016 Global Climate 500 Index Report [here](#). This report received extensive media coverage globally – including BBC Business TV, BBC Radio 4, [Bloomberg](#), [Reuters](#), [Forbes](#), [Financial Times](#), New York Times, [The Australian](#), and [Die Welt](#) among others.

For any enquiries regarding the survey, please contact us at disclosure@aodproject.net and one of our team will contact you.

Kind regards,

Julian Poulter
Chief Executive Officer

ORG_ID

AO0624

1. Please advise us of your intention to disclose. You may come back at a later date to complete the survey.

Yes

Please provide a reason why are you not disclosing this year.

Please click *Next* to save.

About AODP

The Asset Owners Disclosure Project (AODP) is an independent global not-for-profit organisation that recognises the specific financial risk attributes of climate change.

The AODP has developed the world's leading reporting framework for institutional investors encompassing the disclosure and management of climate risk. AODP indices are unique in evaluating the long-term climate risk and management actions of asset owners, asset managers and other investment chain service providers.

AODP's free best practice implementation methodology that can be found on our website: www.aodproject.net.

7. Analyst

4.

Navigation

Status

5. Survey Respondent's Details

2. Please provide your details as the survey respondent

First Name : Bill

Last Name : Hartnett

Role Title : Head of Sustainability

Email : bhartnett@lgsuper.com.au

Phone : +61 2 9333 3089

6. Asset Owner Details

3. Please complete the below information for the organisation you are disclosing

Full Asset Owner Name

Local Government Super

Common Abbreviation

LGS

Parent Organisation

Name of Trustee Company

LGSS Pty Ltd ATF Local Government Super

Country

Australia

State/Region

NSW

City/Town

Sydney

Website

www.lgsuper.com.au

Twitter handle

@socialLGS

Facebook page

<https://www.facebook.com/pages/Local-Government-Super/489766431037668>

7.

4.0.1 - Which of the following best describes your organisation?

Please select from below options

Pension fund

Please specify

Please select your pension fund type from below options

Industry/sector/multi-employer fund

Please select appropriate industry category

Government / Military

What types of pension plans does your fund offer?

Hybrid

8. Personnel

5.0.2 - Please provide details of the following key persons in your organisation

	Full Name
Chairman	Craig Peate
Chief Executive Officer	Peter Lambert
Chief Investment Officer	Craig Turnbull
Chief Financial Officer	Tony Griffin
Chief Risk Officer	Donna Heffernan
ESG/Sustainability Officer	Bill Hartnett
Responsible Investment Officer	Alice Martin
Trustee Chairman	Craig Peate

Comments:

6. What is your total number of staff?

95

9.

7. 0.3 - What was your total Assets Under Management at the end of your last financial reporting period?

AUM (full number)

7422103452

Reporting currency

USD

Financial Reporting Period End (YYYY/MM/DD)

2016/06/30

8. 0.4 - At the end of your last financial reporting period, what was your total Assets Under Management held in long term retirement savings funds or similar long term capital funds?

7422103452

9. 0.5 - Please indicate the value of your investments held in each of the following asset classes at the end of your last reporting period.

Equities : 2878921261

Property : 528406977

Infrastructure : 237161926

Hedge funds : 1010637970

Fixed income : 1145735011

Private equity : 436250609

Cash : 838520530

Other : 346469168

Total : 7422103452

Comments:

10.

10.0.6 - Please indicate, for each asset class, the percentage of your investments that were managed internally or by an associated internal group at the end of your last financial reporting period.

Equities : 1%
Property : 64%

11.0.7 - Please indicate the percentage of your portfolio held in passive investments.

7%

11.

12.0.8 - Who is your primary investment consultant?

Please select from the below

Other (please give details below)

Comments: JANA

13.0.9 - Who is your primary proxy adviser?

Australian Council of Superannuation Investors

Comments: Other: Glass Lewis

12.

14.0.10 - Who are your primary external asset managers?

State Street Global Advisors
Other (please specify)
Macquarie
MFS Investment Management
Vanguard
Wellington Management

Comments: Vanguard, SSgA, Hermes, AMP Capital

13. Section 1: Governance & Strategy

2. Key Question

1.01 - Do you have a role/team with specific climate change capability within your organisation, dedicated to integrating climate risk management into the investment process?

Please select

Yes

Please indicate which part of the organisation this role sits in

Specific team/role within Investment strategy (CIO)

Please indicate the total number of staff with climate expertise

2

Comments

LGS has a Head of Sustainability who reports directly to the CIO and CEO and is responsible for dealing with climate issues. In 2014/15 LGS expanded its sustainability team to include a Sustainability Officer to help support the Head of Sustainability manage climate issues.

3. 1.02 - How are climate change issues integrated into your organisation's policy framework? Please provide link to policy

Select all applicable answers from below options

Dedicated section within ESG policy and/or responsible investment principles/statements
Included in other policy (please give details below)

Comments

We specifically address climate change risks and how these are managed in our investment process in a range of LGS policies and process documents.

The LGS Investment Policy, the LGS Due Diligence Policy and the LGS Risk Management all reference the LGS SRI Policy to ensure that responsible investment issues are integral to all aspects of the management of the LGS investment portfolio. Failure to do so is a breach of the Investment Policy Statement (IPS).

In the LGS SRI Policy we acknowledge climate change as being the largest environmental risk facing our portfolio and commit to a six step approach to managing carbon risks in a climate change specific section. The SRI Policy is available online at:-

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

4. 1.03 - Have you disclosed to your members and/or stakeholders how climate change risk management solutions are integrated into your investment processes?

Select all applicable answers from below options

Yes, through website
Yes, through annual/half/quarterly reports or responsible investment report
Yes, through social media (Facebook, twitter, etc.)
Yes, through newsletter/email
Other (please describe)

Please add supporting material and give page reference – provide link(s) in the comments or attach file(s)

Comments

<https://www.lgsuper.com.au/assets/Documents/Annual-Reports/20142015-Annual-Report-Print.pdf>

Our Annual Report details our investment approach including how we integrate climate risks and opportunities into our portfolio, portfolio carbon footprint reports, the performance of our Sustainable Australian Shares (which is an investment option for our members that excludes coal mining), our investment in green bonds and our approach to proxy voting.

Yes, through website at <https://www.lgsuper.com.au/investments/sustainable-investment/sustainable-investment-reports-and-policies/>

Yes, through social media (Twitter and LinkedIn). We regularly post updates on LGS climate related activities on Twitter and provide links to climate change science and related information.

Twitter handle : @socialLGS. We also post information about our climate activities on LinkedIn at <https://www.linkedin.com/company/local-government-super>

Yes, through newsletter/email -

<https://www.lgsuper.com.au/forms-and-resources/newsletters/>

Other: Industry and member presentations, articles in industry publications, media releases, annual report.

i) Industry presentations – LGS regularly presents to the institutional investor community. Presentations in 2015/16 at industry events convened by the Responsible Investment Association of Australia, PRI and Investor Group on Climate Change covered low carbon investments and LGS' carbon screen.

ii) Member presentations – LGS regularly present to local councils in NSW about our investment approach, including the risks that climate change presents to our portfolio.

iii) Articles in industry publications – LGS contributed an article to the June 2016 Superfunds magazine (Australian publication) on the portfolio investment benefits of our high -carbon sensitive negative screen.

iv) Media releases – Post June 30 2016, LGS issued several media releases around our RI programme including our approach to climate change risks and opportunities.

RI Report - We published an annual snapshot of our RI achievements for 2015 which included details on our low carbon investments, carbon audits for managers and climate related engagement with listed companies.

5. Please attach any supporting material relevant to the question above

14. Section 1: Governance & Strategy

6. 1.04 - Do you correspond with your stakeholders or members regarding any climate change related campaigns?

Select from below options

Yes, we provide this information to members/stakeholders who contact us via campaigns

What climate change related campaigns have you responded to?

Vote Your Pension

350/Fossil Free

Other campaign (please give details below)

Comments

Other Campaign: ACCR led campaigns in Australia and Aiming for A activities internationally. We also receive individual inquiries from members on climate change issues that are not campaign related, for which we also provide a direct response outlining our approach to the risks and opportunities.

As a result of NGO campaigns on fossil fuel divestment and stranded assets, we have received an increased number of emails from members asking about our investment process and how we integrate climate change into investment decisions. We respond to all inquiries on a case by case basis, providing members with detailed information in response to their particular questions. Our Financial Planners have also engaged with members during member presentations and member meetings about our approach to climate risks and opportunities.

11. 1.04 - Do you provide information to stakeholders regarding the impact of climate change on future liabilities / claims?

Select from below options

Comments

7. 1.05 - Have you engaged with policymakers or regulators on climate change related issues over the last year?

Please select the total number of engagements

Yes, with 5 or more

Comments

We are highly active in the IGCC as members of the Management Committee and participants in the policy and research committees. We engage indirectly through our membership to the Investor Group on Climate Change in addition to participating in the Investor Group on Climate Change Policy Subcommittee and in collaborative engagements with international policy makers.

8. On what issues have you engaged with policymakers or regulators over the last year?

	Issue	Policymaker/regulator name
#1	Carbon and energy pricing	National governments
#2	Low Carbon Investment Incentives	Green finance bodies
#3	Carbon and energy pricing	Australian Government
#4	Adaptation	Australian Government
#5	Other	Australian Government

Please ensure if you have selected 'other' that you provide complete details: As a result of our involvement with several IGCC working groups, we also engaged with the Australian Government about climate policy and priorities for Australia, national reduction targets, structure of national emissions reduction programme, funding for emissions projects, and carbon risk disclosure.

9. 1.06 - Have you engaged with any sector regarding its share of the carbon budget and the need to support policy in order to survive a carbon tightening period?

Select from below options

Yes (please give details below)

Comments

Collaborative engagement via IGCC and ACSI with companies in sectors including aviation, energy, mining and finance.

10. 1.07 - Please select all of the collaborative engagement initiatives and/or industry associations you participate in.

Select all applicable answers from below options

Carbon Disclosure Project (CDP)
Principles for Responsible Investment (PRI)
Investor Group on Climate Change, Australia/New Zealand (IGCC)
United Nations Environmental Program Finance Initiative (UNEPFI)
Montreal Pledge
Portfolio Decarbonisation Coalition
Asia Investor Group on Climate Change (AIGCC)
Investor Network on Climate Risk (INCR)

Comments

10. Key Question

1.08 - Do you incentivise or penalise any of the following for managing long term climate risk performance of your investment portfolio?

Select all applicable answers from below options

- Internal Portfolio Executives / Portfolio Managers
- External asset managers
- Proxy voting advisors
- Investment consultant

Comments

Our external investment managers and asset consultants are well familiar with LGS' commitment to responsible investment which is contained in the Investment Management Agreements and reinforced at face to face meetings. It is essential that they demonstrate at least moderate capabilities in this field (and be receptive to engagement with LGS) in order to remain in the role. This acts as a strong 'incentive'. LGS has previously terminated mandates with external managers due to climate change issues as the investment approach eventuated as much more carbon intensive than the thematic that LGS had expected. LGS' internal managers (for listed equities and property) both have a strong mandate to reduce the fund's exposure to climate risks through shorting high carbon stocks and ensuring our properties undergo climate risk assessments and are highly energy and water efficient. We employ proxy advisors that offer an RI voting option that is more supportive of ESG related resolutions than conventional voting guidelines.

11. 1.09 - How is climate change risk management embedded into your investment consultant agreement?

Select from below options

- Climate change risk be integrated into strategic asset allocation (SAA) and manager selection by our asset consultant

Comments

LGS' main investment policies guiding the scheme include the LGS Investment Policy, the LGS Due Diligence Policy and the LGS Risk Management Policy which all reference to the LGS SRI Policy to ensure that responsible investment issues are integral to all aspects of the management of the LGS investment portfolio. There is a separate and distinct section on climate change in the LGS SRI Policy where climate change is referred to as the largest environmental risk facing our portfolio and where we commit to a six step approach to managing carbon risks. Since 2011 our investment management agreements with our external equities managers have included reference to LGS SRI Policy and established ESG reporting requirements in addition to negative screens including the high carbon sensitive screen. Our mandates with our external asset consultants refer to LGS interest and expectations on climate change-related investment issues.

12. 1.10 - How are climate change issues factored into asset manager selection process by your investment consultant or internal investment executive?

Select all applicable answers from below options

- They review each investment manager's climate change policies

Comments

Our approach depends on the asset class. Where climate change risks are considered material (itself determined by ESG and Carbon Risk Framework) we will review the managers for their approach to managing climate change risks as part of our short listing process. This can be conducted as a review of their presentation material; website and publicly available policies as well as direct questioning by LGS' Head of Sustainability in face to face meetings with follow up meetings where needed. LGS also conducts an ESG and carbon analysis on test portfolios provided by potential fund managers. We also require our external asset consultants to review and report potential managers for their approach to managing ESG and carbon risks. There are then further questions on ESG and carbon required

under the LGS' Due Diligence policy which all managers must complete prior to gaining a mandate from LGS. LGS' implementation of the high carbon sensitive negative screen means that all of our external managers have a smaller investment universe to make investment from as 57 highly carbon intensive companies are automatically excluded from investment consideration. Depending on the asset class, LGS does not necessarily go with the highest ESG or climate rated manager (this particular refers to equities and bonds managers). Rather we look for high quality investment managers with an understanding of ESG/climate risk and where we feel that LGS can enter ongoing dialogues and interaction on carbon and ESG issues in the portfolio. We undertake and share our 6 monthly ESG and carbon audits on each manager to facilitate this engagement process. In some asset classes e.g. infrastructure, private equity and international equities it is becoming apparent that some managers are developing IP capabilities around ESG and climate change. Those managers are appealing to LGS and we encourage their progress. However the managers must first and foremost demonstrate a professional and sophisticated investment approach.

13. Key Question

1.11 - How is climate change risk management embedded into your asset manager agreements?

Select all applicable answers from below options

- They refer to our climate change policy
- We operate an overlay on their investments
- They refer to our ESG policy

Comments

The LGS IMA's include instructions for our FM's to comply with our high sensitive carbon screen. All new investment management agreements signed with new managers contain clauses referring the Manager to LGS SRI Policy. Additionally LGS has introduced ESG and carbon reporting requirements for all new investment management agreements in listed equities. These typically require managers to provide some form of quantitative evaluation of ESG and carbon risks in the portfolio as well as to provide case studies whereby ESG and carbon issues influenced the 'buy, hold and sell' decisions for individual stocks. LGS also has a formal SRI Overlay that we apply across our domestic and international equities. This overlay restricts investment in companies deriving more than: - 33% of revenues from high carbon activities (coal mining, oil sands and coal fired electricity generation); as well as - 10% revenues in gambling, weapons, old growth forests - 0% revenues in tobacco and controversial weapons as well as companies rated as high ESG risks that are not managing these risks well (with a separate screen for high ESG risk nuclear power companies). Several LGS negative screens specifically target climate change risks.

16. Section 1: Governance & Strategy

14. 1.12 - Do you engage with credit ratings agencies regarding their climate risk strategies?

Select from below options

- Yes

Please indicate what engagement actions you take.

Select all applicable answers from below options

- We believe credit ratings on high carbon debt are inaccurate and are engaging with credit rating agencies about this
- We believe credit ratings on high carbon debt are inaccurate and are engaging with regulators about this

Comments

In April 2016 we signed a letter to credit ratings agencies requesting that they integrate ESG issues including climate risks and opportunities into credit ratings. We have also continued preliminary discussions with credit agencies and regulators about climate risks via industry groups in Australia including ACSI and PRI.

15. 1.13 - Do you have an engagement policy that includes how you engage with investee companies around climate change issues?

Select from below options

Yes

Please add supporting material and give page reference – provide link in the comments or attach a file

Comments

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

The LGS SRI Policy requires us to engage with companies on ESG and climate issues. In addition to engagement that is carried out on our behalf by our proxy voting advisors, research providers and fund managers, LGS engages directly with companies and through collaborative investor groups. LGS provides significant resources to collaborative initiatives, including:

- i) Participating in the Management Committee of the Investor Group on Climate Change,
- ii) Director and a representative on the Member Council of the Australian Council of Superannuation Investors
- iii) A signatory to the Carbon Disclosure Project
- iv) A signatory to the UNPRI.

16. Please attach a policy if it is not available online

17. 1.14 - Have your policies, principles, statements or board directives suggested / acknowledged the limitations of any of the following in managing climate risk? Please provide link(s)

Select all applicable answers from below options

Traditional Strategic Asset Allocation models

Indexation

Short term manager incentives

Use of fund managers to trade out the risk in the event of rapid carbon repricing

VaR measurements

Comments

i) Traditional Strategic Asset Allocation (SAA) Models - In our 2014 SAA review we commissioned external expert research on climate change impacts on our strategic asset allocation because we did not believe that it was adequately captured in the traditional SAA review undertaken by our asset consultant.

ii) VaR measurements - LGS does not apply VaR measurement techniques to measure portfolio risk.

iii) Indexation - LGS is moving away from passive mandates whose benchmarks are market cap weighted indices. We are moving to active strategies across all asset classes. This enables us to develop approaches that address climate risks and opportunities. An example of this is the high carbon sensitive negative screen we introduced in 2014 as well as the ESG integrated enhanced passive international equities mandate developed with Hermes in 2012. LGS has also been looking at low carbon indices which capture broad market returns by investing in companies with lower carbon profile. However LGS is yet to invest in these indices.

iv) Short term manager incentives - The majority of our new investment management agreements include long term incentives as opposed to short term incentives as we are trying to encourage longer term thinking.

v) Use of fund managers to trade out the risk in the event of rapid carbon repricing - LGS believes that it would be difficult for managers to time exits from high carbon stocks in the event of rapid carbon repricing. LGS acknowledges that we have high carbon assets in our investment portfolio. To reduce market timing risks LGS have employed specific mandates and fund managers that have a low carbon focus in order to develop a form of hedge, or protection, from the negative impacts that could result from the rapid repricing of carbon.

17. Section 2: Portfolio Carbon Risk Management

2. 2.01 - Does your proxy voting policy (or your proxy voting advisor's policy) include direction on climate change issues?

Select from below options

Yes - our proxy voting advisors policy includes direction to vote in support of positive climate change resolutions

Comments

We have instructed our proxy voting advisors to use their RI voting guidelines which ensures we support the majority of climate change related resolutions for our international holdings.

3. 2.02 - Have you reviewed proxy advisors / managers / company management recommendations on any climate change related resolutions?

Select all applicable answers from below options

Asset manager recommendations

Proxy advisor recommendations

Company management recommendations

Comments

We regularly engage with our proxy advisors and fund managers when assessing upcoming resolutions, particularly those related to climate change, to ensure that we are supporting as many climate related resolutions as possible (where appropriate). We also consider company recommendations when reviewing resolutions.

4. Key Question

2.03 - Is your proxy voting record publicly available? Please provide link

Select from below options

Yes, within one week

Comments

We publicly disclose our voting intentions before company meetings on our website at www.lgsuper.com.au/proxyvoting .

5. 2.04 - Does your published proxy voting record include examples of your voting position on recent climate change related issues?

Select from below options

Yes, it includes examples of our climate change related voting (please give brief details)

Comments

Origin Energy, Rio Tinto - We supported climate change resolutions in relation to scenario planning and climate change reporting.

6. 2.05 - In the 2016-17 AGM seasons, do you intend to disclose your voting intentions to your members or stakeholders in advance of the AGM's?

Select from below options

Yes - we provide this information to members/stakeholders

Comments

We publicly disclose our voting intentions before company meetings on our website at www.lgsuper.com.au/proxyvoting.

18. Section 2: Portfolio Carbon Risk Management

7. Key Question

2.06 - How did you vote on the following key climate resolutions in the past 12 months?

	For	Against	Abstain	Split vote	No shareholding
Chevron item 7: Report on Climate Change Impact Assessment	X				
Chevron item 8: Report on Reserve Replacements	X				
Chevron item 11: Independent Director with Environmental Expertise		X			
Exxon item 5: Climate Expert on Board		X			
Exxon item 12: Report on Impacts of Climate Change Policies	X				
Exxon item 13: Report Reserve Replacements in BTUs	X				
Suncor: Regularly disclose preparations for low-carbon future					X
Glencore: Strategic Resilience for 2035 and Beyond					X
Anglo American: Strategic Resilience for 2035 and Beyond					X
Rio Tinto: Strategic Resilience for 2035 and Beyond	X				

Comments: Across our Australian and international listed equities portfolio we supported 22 out of the 26 climate related resolutions in 2015/16 covering scenario planning, strategy, reporting, policy risk, expertise on the board, policy and commitment and carbon reduction targets. Key resolutions that we supported for Australian companies included requesting climate change scenario planning for Origin Energy Ltd (one of Australia's largest energy generators) and climate change reporting for Rio Tinto Ltd. Whilst we did not support the resolution on carbon reporting and reduction targets put to the Australia & New Zealand Banking Group Ltd (as a result of a commitment from the organisation to continue current reporting and further enhance disclosure), we directly engaged with the company to understand more about their lending profile and exposure to fossil fuel intensive activities, with a view that they should enhance their transparency about current and future lending.

8. Key Question

2.07 - Have you successfully engaged with companies on climate change related issues over the last year, resulting in demonstrable achievements?

Successfully engaged with 10 or more companies/issues

Comments: 22 direct engagements – 10 of which focused specifically on climate risks and opportunities (where LGS were the key proponents in raising climate related issues) 190 engagements conducted on our behalf by our partners – 19 of which covered climate change risks and opportunities in detail Climate related issues addressed: • Disclosure • Management risk • Scenario planning • Climate change policy and support for lobbying organisations Key outcomes from engagement: • Increased disclosure on climate scenarios and company capabilities • Clarification on internal climate change policy and support for lobbying organisations • Increased transparency on exposure to high risk sectors • Increased number of companies undertaking internal scenario planning and development of risk mitigation plans • Increased Board awareness of the need for action and integration into business strategy • Increased engagement from companies with investors on climate risks and opportunities

9. What were the most notable and demonstrable key achievements of your climate change related engagement activities in this period? Defined as the company you are engaging with agrees to.

	Company	Achievement
#1	BHP Billiton	Further risk analysis (incorporating climate change)
#2	Origin Energy	Further risk analysis (incorporating climate change)
#3	ANZ	Further risk analysis (incorporating climate change)
#4	Westpac	Further risk analysis (incorporating climate change)
#5	James Hardie	Disclosure
#6	Santos	Further risk analysis (incorporating climate change)
#7	Rio Tinto	Further risk analysis (incorporating climate change)
#8	Lend Lease	Further risk analysis (incorporating climate change)
#9	Mirvac	Further risk analysis (incorporating climate change)
#10	Qantas	Further risk analysis (incorporating climate change)

10. Key Question

2.08 - How many climate change related resolutions do you intend to file, co-file, lead or support in 2016/2017 AGM season?

Not known at this stage

Comments: LGS is unlikely to file any resolutions however we will look to support climate change resolutions on a case by case basis.

Please provide details of the resolutions you intend to file, co-file, lead or support.

	Role	Company name	Resolution type	Additional comments
#1				
#2				
#3				
#4				
#5				
#6				
#7				
#8				
#9				
#10				

Comments:

10. 2.09 - Have you assessed the current gains and/or losses associated with climate change exposed and/or carbon related investments in your portfolio to date?

Select all applicable answers from below options

- Yes, we have assessed physical damage / insurance related losses
- Yes, we have assessed the climate change related asset valuation gains/losses
- Yes, we have assessed the impact of commodity price fluctuations

Comments

- Losses due to: -
- Fossil fuel stigmatisation
- Anticipated climate risk related regulation
- Impact of developments in renewable energy technologies
- Other factors: Supply and demand imbalance

11. Key Question

2.10 - Do you measure portfolio-level risk associated with physical impacts relating to climate change?

Select from below options

Yes, we measure physical impact risks within the following asset classes, representing approximately [x]% of total portfolio AUM

Please select % range from dropdown

50%-74%

Please select all asset classes that apply

- Equities
- Property
- Infrastructure

Comments

- We engage in carbon portfolio audits.
- We also regularly assess the climate change risks to our direct property portfolio

12. Key Question

2.11 - Do you measure portfolio-level risks associated with potential climate change related 'stranded assets'?

Select from below options

Yes, we measure stranded asset risks within the following asset classes, representing approximately [x]% of total portfolio AUM

Please select % range from dropdown

50%-74%

Please select all asset classes that apply

- Equities
- Property
- Infrastructure
- Private equity

Comments

As a result of ongoing assessment of stranded asset risk we restrict investments in carbon intensive activities including coal mining, oil tar sands mining and coal fired electricity generation.

20. Section 2: Portfolio Carbon Risk Management

13. Key Question

2.12 - Does your organisation calculate portfolio-level carbon liabilities or estimate stranded asset levels under a variety of direct or intrinsic carbon price scenarios?

Select from below options

Yes, we use extensive scenario testing and research

Comments

As an asset owner that considers climate change as the largest ESG risk impacting our members long term returns, LGS advocates for the world to follow the IEA's "450 Scenario" which provides greater chance to keep temperature increases below the dangerous 2 degree level. LGS believes the most significant immediate carbon investment issue is the actual policy shock, particularly given the recent agreement reached at the Paris COP. We saw in 2014 that a carbon price imposition has not been the only way that countries have announced that they will reduce their carbon emissions – (e.g. there have been efficiency announcements, lifting of coal fired stations efficiency standard etc.). LGS has positioned our strategic asset allocation and introduced our high carbon sensitive screen to address this risk. We also believe that both moves would also give protection against the introduction of a global carbon price. LGS looks at carbon pricing scenarios and considers the World Energy Outlook report as an excellent source for research. The IEAs three scenarios New Policies; Current Policies and 450 Scenario have been presented to the LGS Investment Committee. The lack of growth for the coal industry out to 2020 and then its strong retraction to 2040 is one of the key investment and portfolio risk reasons underpinning LGS' introduction of the high carbon risk screen in 2014.

14. 2.13 - Do you use a forward looking base case for climate change risk mitigation?

Select from below options

Yes, we use a trajectory (please provide details of trajectory used)

Comments

See response to 2.12.

15. 2.14 - What percentage of your total portfolio is invested in high carbon and/or emissions-intensive sector assets?

Please select % range from dropdown

1% - 24%

Please provide AUM held in high emitting assets for each sector if known

Non-renewable resources and energy : \$60,855,126

Utilities (ex. renewables) : \$22,447,186

Materials : \$107,475,536

Transportation : \$50,300,580

Comments

The above calculations are for listed equities only.

Non renewable resources and energy: coal and consumables+ oil & gas exploration and production + oil and gas

drilling
Utilities: electric utilities
Infrastructure:
Materials: diversified metals and mining + aluminium
Transportation: Airlines, Air Freight & Logistics, Trucking

GICS sub industry codes used to determine high carbon stocks. E.g Electric utilities, diversified metals and mining, coal and consumables, aluminium.

16. 2.15 - Do you assign a risk premium or use a shadow carbon price to allow better mitigation of climate risk within your investment portfolio?

Select from below options

Yes, we allocate a risk premium

Comments

LGS acknowledges that climate risk is the largest long term ESG risk in our portfolio. We actively introduced strategies in asset allocation across all asset classes as well as mandates within asset classes, all of which are aiming to protect against climate risk over the long term. These low carbon focused strategies are generally aimed at narrower investment universes which over short time frames may lead to greater volatility in returns. Given there is great uncertainty in climate risk (across all its manifestations being physical risk, regulatory risk, market risk) LGS is not able to arrive at a single figure to allocate as a climate portfolio risk premium. Without such methodology to measure all these risks, the industry has not been able to develop an appropriate framework and therefore is limited in its ability to allocate a climate portfolio risk premium.

21. Section 2: Portfolio Carbon Risk Management

17. 2.16 - Have you considered the probabilities and uncertainties associated with any of the following pathways to a low carbon economy?

Select all applicable answers from below options

- Pro-active policy by governments (e.g. US Congress) towards stringent carbon pricing
- Pro-active policy by the People's Republic of China's next five year plan
- Momentum through regional regulatory measures (e.g. EPA's) and regulatory convergence (e.g. emission trading scheme connections)
- Disruptive Economics (e.g. German solar supply impacting both local Utility Asset Valuations and Chinese oversupply to the USA) and Innovation
- Thematic divestment / re-investment by leading asset owners
- Re-active policy in response to extreme physical events (e.g. Hurricane Sandy, wheatbelt droughts, etc.)
- The development of a globally harmonised emissions price driven by an exposed industry, e.g. aviation

Comments

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 analyzing 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 in 2017 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.

We have also developed a carbon risk framework tool that is used in assessing all new investment opportunities. The framework provides an evaluation of magnitude of climate risks (regulatory, physical impact, changing demands, stranded assets, stakeholders) within an asset class and then identifies the approaches that LGS can take to develop an investment hedge or response to these risks.

18.

Key Question

2.17 - What range of climate change-related portfolio risk mitigation action do you undertake?

Select all applicable answers from below options

Hedging allocation of low carbon assets to hedge against high carbon stranded assets

Negative screens (or positive inclusion criteria) on selected investment options

An overlay on our core portfolio

Underweighting/divesting of specific stocks exposed to carbon risk

Low carbon investments, e.g. carbon bonds

Underweighting/divesting of specific sectors exposed to carbon risk

Negative screens (or positive inclusion criteria) on all investments

Investment in adaptation assets (flood barriers, sea walls, etc.)

Investment in certified "green" real estate

Fund manager mandate guidance

Comments

19. Key Question

2.18 - Do you identify, disclose and quantify your investments in low carbon assets?

Select from below options

Yes, we identify, disclose and quantify low carbon investments

Comments

We disclose our total low carbon investments on our website at
<https://www.lgsuper.com.au/assets/Documents/riSnapshot2015.PDF>

20. 2.19 - Have you made a commitment to invest in Low Carbon assets as part of a strategy to manage/mitigate climate risk in your portfolio?

Select from below options

Yes, at the overall portfolio level (please specify total value): \$600,628,323

Please specify the value allocated within these asset classes (please provide the full number, not in millions or billions)

Please provide the approximate % of total portfolio AUM represented by the total amount identified above

5%-15%

Comments

Equities: \$70,301,823
Fixed Income: \$55,968,532
Property: \$390,969,179
Infrastructure: \$1,598,523
Hedge Funds: \$49,476,486
Private Equity: \$32,313,780
Other: \$78,358,963
Total: \$600,628,323

22. Section 3: Metrics

2. Key Question

3.01 - Have you calculated your portfolio emissions intensity?

Select from below options

Yes, in certain asset classes

Please provide tCO₂e/US\$bn in AUM (or alternative). Please specify below if alternative methodology used

Domestic equities: : 205.4
International equities: : 143.8
Property: : 12

Please provide the approximate [x]% of total portfolio AUM represented by the selected asset classes

50%-74%

Comments

The figures provided above are tonnes CO₂e/\$ million invested for Scope 1 + Scope 2 emissions for our investments.

3. Key Question

3.02 - Have you benchmarked your portfolio carbon emissions intensity performance?

Select from below options

Yes

What did you use as a benchmark? (e.g. for Equities, we use a default benchmark MSCI ACWI)

MSCI World

What was your portfolio emissions intensity performance against benchmark?

90-99% (0-10% below benchmark)

Comments

Carbon footprint performance :
• Australian equities = 4.5% below the MSCI Australia index
• International equities = 9.5% below the MSCI World (ex. Australia) index

4. Key Question

3.03 - Does your organisation currently have an emissions intensity reduction target for the investment portfolio over the next year?

Select from below options

No

Please specify the type of reduction and give details below

Comments

5. Key Question

3.04 - What is the total value of investments in low carbon assets in your portfolio in the following areas (across all asset classes)?

Please provide the total amount invested in low-carbon assets (please provide the full number, not in millions or billions)

600628323

Please indicate which of the following low-carbon asset categories you invest in and, where possible, please provide the amount you have invested (please provide the full number, not in millions or billions)

Renewable energy infrastructure: 20738375

Renewable energy companies: 6821738

Energy efficiency companies/investments: 442875793

Other clean technology investments: 32313780

Adaptation assets (e.g. flood barriers, seawalls): 18934007

Low-carbon financial products (e.g. carbon bonds): 60953922

Other (please give details below): 17990271

Please provide the approximate [x]% of total portfolio AUM represented by the selected asset classes (Please select % range from dropdown)

5%-15%

Comments

Sustainable agriculture and waste and recycling technologies

23. Disclosure

2. 4.01 - Please indicate if you are happy for your response to be made publicly available.

Select from below options.

Yes, make my response publicly available

Please specify questions you wish to withhold from public disclosure

N/A

Please provide a reason for withholding public disclosure

N/A

Comments

3. 4.02 - Please indicate whether your response has been externally assured or verified?

Select from below options.

No

If so, by whom?

Not externally verified.

Comments

25. Feedback Page

In our efforts to continually improve the AODP research and ratings process, we would appreciate your feedback.

Please provide your comments below.

2. Please provide feedback.

More detail on the scoring methodology breakdown for each answer would be appreciated (similar to that provided in the 2016 survey).

26. Thank You!

Thank you for participating in the 2017 AODP Global Climate Risk Survey. Your input is very important to us. If we require any further information regarding your responses we will contact you directly.

If you have any further feedback or questions please contact us at disclosure@aodproject.net.