ASSET OWNERS DISCLOSURE PROJECT

2016 Global Climate Risk Survey

Version 4

Who is 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.

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 – the world's largest pension funds, sovereign wealth funds, insurance companies, foundations and endowments.

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

Background to the survey

The AODP Global Climate Index was first published in 2012 and provided stakeholders with a ranking and rating to indicate how each major asset owner performs in managing their exposure to climate risk. The objective of the survey is to facilitate incorporation of climate change capability in the pension and superannuation industry and throughout the wider investment sector.

The launch of AODP's fourth global survey comes ahead of the critical 2015 Paris Climate Conference in December, which will see nations thrash out a legally binding and universal agreement on climate.

AODP sends survey invitations to the world's largest long-term investors (pension funds, insurers, sovereign wealth funds, foundations and endowments) with at least USD2 billion assets under management.

The survey comprises approximately 40 multiple-choice questions covering the following three key areas assessing the asset owner's capability in managing portfolio climate risk:

Engagement / The degree to which asset owners transparently disclose information to and actively engage with the general public and the investment chain: i.e. their members and stakeholders, investment consultants, asset managers and investee companies.

Portfolio Carbon Risk Management / How effectively asset owners are measuring, monitoring and managing climate change risks within their portfolios.

Hedging & Low-carbon investment / The extent of any low-carbon investments held by the asset owner. An asset owner's ranking within each of these categories will be provided back to each asset owner, highlighting where they need to improve and how.

The ratings are based on a mixture of publicly available information and asset owner disclosures. Survey responses are used to rank and rate the asset owners to create the AODP Global Climate Index, to be released in April 2016. The top 500 asset owners (by AUM) that decline the invitation to participate are researched by our team of analysts and assessed using publicly available information or information provided to us by their members or stakeholders. Asset owners are rated from AAA through to D grade, with an additional X category for those asset owners that appear to be doing absolutely nothing to manage climate risk.

Disclosure / Points awarded for making the survey response public.

Performance / Points awarded for implementing elements of climate change best practice

Why Respond?

AODP's research and index is of great benefit to asset owners, the broader investment industry and governments to help clarify asset owners' capability in managing climate risk. The ratings present the only opportunity for asset owners to compare and differentiate themselves from their peers in terms of climate change risk management. By participating, you send a strong signal to your stakeholders that you are taking climate change seriously.

Members and other stakeholders increasingly demand transparency on ESG issues, and completing the Global Climate Index Survey can be one means of meeting these expectations.

By responding to our survey, you can:

// Gain valuable insights into your performance relative to other asset owners

// Learn how to apply best practice in managing climate change risks and opportunities.

// Demonstrate to your stakeholders your commitment to managing one of the largest long-term risks to their portfolio

// Use our risk based approach as an alternative to a pure divestment strategy.

// Improve your rating by directly disclosing the information we need to effectively assess your organisation.

AODP's team of analyst rates the largest 500 asset owners on available information regardless of whether or not they disclose to AODP. Many asset owners have found that it is better to respond directly given that your website is unlikely to provide us with the level of detail we require for rating and thus your rating would be negatively affected compared to a direct disclosure.

Perhaps more importantly, an increasing number of asset owners are realizing that following the process of responding to AODP's survey is closely tied to best practice methodology and this can help your organisation progress towards better policies, strategies and processes.

Additionally, at a time when civil society is placing more pressure on asset owners for answers, AODP as the leading standard for climate risk disclosure can show an asset owner is acting responsibly to its stakeholders by disclosing and achieving a positive rating.

Indeed there are a number of live campaigns around the world such as Vote Your Pension, The Vital Few, Go Fossil Fuel Free, Greenlight Campaign and others that are facilitating communication between stakeholders and investors and AODP uses feedback from its campaign partners on responsiveness and transparency to assist in the rating of asset owners.

This is particularly relevant for those set owners who have come under pressure to divest their portfolios of fossil fuels, an action that AODP's more risk based approach doesn't support except as part of an overall hedging strategy.

What if our organisation cannot easily obtain the data?

All asset owners have the same issue when it comes to climate change risks and especially those risks associated with the impacts of a low carbon economy driven by the threat of carbon pricing or intrinsic equivalents. The emissions intensity and other climate attribute data of an investment may be already factored in to an investment decision at the asset level but provides another layer of risk when aggregated at the portfolio level. Capturing this attribute data and rolling it up through many asset classes and many managers represents a major long term data management challenge but one that leaders have already commenced and one that is necessary in order to properly mitigate the risks. There are some questions where few or no asset owners have calculated total portfolio exposure but for which the stretch target is achievable and desirable.

Being unable to report the data at this time helps an asset owner drive its best practice plan by creating strategies to acquire the data for future reporting.

Next Steps

The survey is available online and will be open to complete until January 22nd 2016.

All data is to be provided to the most recent financial year and submitted in your local reporting currency. We then will convert this to USD at your reporting date for comparative purposes. It is intended that the survey is to cover the operations of an entire organisation and all of its investment portfolios, not just one inves§tment portfolio. Where a question is answered with respect to only one investment portfolio the investment portfolio selected should be the default or largest investment portfolio.

The ratings and rankings will be published in the new AODP Global Climate Index in April 2016. A copy of the report will be sent to you.

If you have any questions please send us by email at disclosure@aodproject.net and one of our team will contact you.

How to use this document

Throughout this document, the survey questions and available answers will be set out, along with their associated scores. You will find them in tables like the following:

Question ID number	Section of survey	Question	Maximum points available
1.01	Engage	Please indicate whether you give permission for your response to be made publicly available or not.	15
		Potential answer	*Points*
		Potential answer	*Points*
		Potential answer	*Points*

Some questions are 'Key Questions'. These questions are deemed to be critical to our methodology and ratings, and are weighted and scored accordingly.

You will also find guidance for some questions below that relevant question's table, designed to clarify ambiguity and help you fill out the survey.

Engagement

The degree to which asset owners transparently disclose information to and actively engage with the general public and the investment chain: i.e. their members and stakeholders, investment consultants, asset managers and investee companies.

This section combines the three themes of transparency, investment chain alignment and active ownership.

Transparency illustrates how an asset owner is communicating with their members and how much information they are releasing publicly on their investment strategy and decision process. The more transparent an organisation's investment and risk strategy is the better: less available information means less certainty for investors.

Active ownership measures how involved an asset owner is with companies they invest in. When an asset owner buys shares in any company they are able not just to buy and sell that stock as an investment to make money but also to influence the company itself. This includes voting proxies at annual general meetings, being part of shareholder resolutions and using their ownership position to influence the way the company they invest in is being run. In recent years, the awareness of the power of asset owners to control companies has grown rapidly and there are several movements and organisations dedicated to furthering the involvement. Asset owners have a duty to ensure that their investee companies factor long-term climate change risks and other important long-term decisions into their strategy.

Investment chain alignment means that the actions of asset owners, their advisors and fund managers are consistent with the best interests of the beneficiaries. It is important that asset owners manage third party organisations to ensure that they are not putting their own interests first. Climate change is providing asset owners with a new challenge for driving change in their fund managers. One of the key barriers to this change has been incentive alignment – the asset owners we rate typically have an investment horizon of 20 years whereas fund managers that invest on their behalf are rewarded for performance over a much shorter period of time. Asset owners that rate highly in this area are credited for talking responsibility for their assets and provided a superior service to their stakeholders.

1.01	Engage	Please indicate whether you give permission for your response to be made publicly available or not.	15
		Yes, make my response publically available	15
		Yes, make my response publically available except for my response to specific questions.	15
		No, do not make my response publically available.	0

Guidance – 1.01
Please note that if you decide against making your response publicly available this will reduce the total score you receive for the survey. For those that agree to make the disclosure public, certain material can be restricted for commercial reasons.

1.02	Engage	Please indicate whether your response has been externally assured or verified and, if so, by whom?	15
		Yes - it has been externally assured or verified by…	15
		No	0

1.03	Engage	Have you disclosed to your members and/or stakeholders how climate change risk management solutions are integrated into your investment processes?	4
		Yes, through our newsletter/email	1
		Yes, through our website	1
		Yes, through social media	1
		Other	1
		No	0

Guidance - 1.03
You might like to enquire with your communications/member service team. This question ask about any discussion you have had with members regarding stranded assets/physical impacts of climate change and what you are doing to manage the risks involved in those phenomena. You can select as many options as you like.

<table>
<tr><th>1.04</th><th>Engage</th><th colspan="2">Do you correspond with your members/stakeholders regarding various climate change related campaigns?</th><th>5</th></tr>
<tr><td colspan="2" rowspan="8"></td><td rowspan="5">Yes, we provide this information voluntarily to our members/stakeholders</td><td>a) Vote Your Pension</td><td rowspan="5">5</td></tr>
<tr><td>b) Greenlight Campaign</td></tr>
<tr><td>c) The Vital Few</td></tr>
<tr><td>d) 350/Fossil Free</td></tr>
<tr><td>e) Other campaigns</td></tr>
<tr><td colspan="2">Yes, we provide this information directly to members/stakeholders who contact us via campaigns</td><td>5</td></tr>
<tr><td colspan="2">We haven to been directly contacted by any members/stakeholders requesting information</td><td>0</td></tr>
<tr><td colspan="2">No, we do not provide this information</td><td>0</td></tr>
</table>

Guidance – 1.04
This question does not apply to insurance companies. Please skip to Q1.05 instead.

1.05	Engage	Do you provide information to stakeholders regarding the impact of climate change on future liabilities / claims?	5
		Yes	5
		No	0

Guidance – 1.05
This question applies only to insurance companies. Others should answer Q1.04 instead.

1.06	Engage	How are climate change issues integrated into your organisation's policy framework? Please provide a link to your policy	10
		Standalone climate change policy	4
		Dedicated section within ESG policy and/or responsible investment principles/statements	2
		Specific details included in investment police/strategy	2
		Specific details included in risk management policy/strategy	2
		Included in other policy	2
		Covered broadly by ESG policy	1
		No policy on climate change	0

1.07	Engage	Does your organisation have a dedicated ESG or sustainability officer whose responsibility includes integrating climate change risk management into the investment process?		14
Key Question		Yes, this role sits in:	ESG or Sustainability	14
			Risk Management (CRO)	
			Investment Strategy (CIO)	
			Other (please provide details	
		No		0

Guidance - 1.07

This question asks whether you have dedicated climate change capability embedded within your organisation. If this role resides outside your ESG/Sustainability area, please answer yes, and provide the appropriate responsibility area. If you don't have a dedicated role, but this capability is provided, please answer No and provide further information in the comments.

1.08	Engage	In the investment chain, who do you provide long term incentives or risk penalties to in order to specifically reduce your portfolio's exposure to climate change risks?	25
Key Question		Internal portfolio executives/portfolio managers	5
		External asset managers	5
		Proxy voting advisors	5
		Investment consultants	5
		Other (please provide details)	5
		None	0

Guidance - 1.08

This question asks about the contractual arrangements that you have made with the managers that you delegate tasks to. We are interested in the monetary compensation or penalties that are provided to ensure that the managers consider climate change risk, when either making decisions on your behalf or recommendations for your consideration.

1.09	Engage	With regards to your consultant agreement (if you have an investment consultant), please describe how climate change risk is integrated into the arrangement.	10
		Climate change risk is integrated into the strategic asset allocation (SAA) and manager selection by our asset consultant	10
		We don't use an external consultant but we integrate climate change risk into our SAA and manager selection ourselves	10
		Our investment consultant has offered climate expertise	2
		We have requested our investment consultant build capability in climate risk	2
		We don't use an external consultant and don't consider climate change risk in our SAA or manager selection	0

Guidance - 1.09

If you select Option 1 or 2 climate change risk is already accounted for in your SAA and is a criterion in the short-listing of asset managers.

If you select Option 3, your investment consultant will have offered climate expertise, but you have not yet altered your SAA to account for climate change risk, and have not asked for climate change risk management to be a criterion in the short-listing of managers.

If you select Option 4, your consultant does not have climate change capability at the present time, but you have requested that it build this capability into SAA and asset manager selection.

1.10	Engage	How does your investment consultant (or, internal investment executives, if no investment consultant is employed) factor climate change issues into their short listing process of investment managers?	10
		They review each investment manager's climate change policy	2
		They look for investment managers with a strong offering of low-carbon products	2
		They assess investment manager's carbon performance (eg. active ownership, underweighting in carbon)	2
		They use external third party data on investment managers with regard to climate change risk management	2
		Other (please provide details)	2
		They don't factor climate change issues into their short listing process	0

1.11	Engage	How do your current investment manager agreements incorporate climate change issues?	20
Key Question		Through retained bonuses/clawback/options for long term loss/return related to climate change	6
		They have specific guidance on risk premiums, intrinsic carbon prices or stranded asset issues	4
		They refer to our climate change policy	3
		We operate an overlay on their investments	2
		They refer to our ESG policy	1
		By incorporating greater mandate length	1
		By incorporating longer investment horizons	1
		Through mandatory signatory status of initiatives such as CDP and PRI. Please provide further details.	1
		Other - please provide further details.	1
		We don't incorporate climate change issues into our investment manager agreements.	0

Guidance - 1.11

You should indicate arrangements for all investment managers, even if those managers manage a small proportion of the portfolio. Please select all options that apply, and provide details if needed in comments

1.12	Engage	Do you engage with credit ratings agencies regarding their climate risk strategies?	-
		Yes	-
		No	-

Guidance - 1.12

Fund managers are managing a larger number of clients' money; it is considered more appropriate that asset owners form and express their own views regarding the reliability of credit ratings. Failing this, you should require your fund managers to take credit rating reliability into account and engage with credit rating agencies when appropriate.

1.13	Engage	If you answered yes to 1.12, please indicate what engagement actions you take.	15
		We believe the credit rating system doesn't fully account for climate risk and we make adjustments for this in the portfolio	5
		We believe credit ratings on high carbon debt are inaccurate and are engaging with credit rating agencies about this	5
		We believe credit ratings on high carbon debt are inaccurate and are engaging with regulators about this	5
		We believe credit ratings on high carbon debt are reasonably accurate.	0

1.14	Engage	Do you have an engagement policy that includes how you engage with investee companies around climate change issues?	10
		Yes - please upload or provide a link to this policy	10
		No	0

Guidance - 1.14

If you answer yes to this question please ensure you provide a link to or upload a copy of this policy, and provide any relevant details in the comments

1.15	Engage	Have you reviewed your advisors / managers / company recommendations on any climate change related resolutions?	8
		Yes - all three	8
		Asset manager recommendation only	2
		Proxy recommendation only	2
		Company recommendation only	2
		Other	2
		No	0

1.16	Engage	Does your proxy voting policy (or your proxy voting advisor's policy) include direction on climate change issues?	8
		Yes - our own policy includes direction to vote in support of positive climate change initiatives (please give examples).	8
		Yes - our proxy voting advisors policy includes direction to vote in support of positive climate change initiatives (please give examples).	8
		No - we assess and make recommendations on our position on climate change related resolutions on a case specific basis (please give examples).	2
		No - our policy / our proxy voting advisors policy doesn't include specific direction on climate change	0
		We don't have a proxy voting policy	0

Guidance – 1.16

If applicable, please give examples of their position on climate change issues in the comments section.

1.17	Engage	Do your make proxy voting record publicly available? Please provide link.	8
Key Question		It is publicly available - and it has examples of our climate change related voting	8
		It is publicly available - however we don't have any examples of climate change related voting	4
		It is not publicly available	0

Guidance - 1.17

This question requires the full record of your proxy voting at annual general meetings for the last year. An analytical breakdown of how you voted is not sufficient.

1.18	Engage	When is your proxy voting record publicly available?	8
		Within one week	8
		Within one month	6
		Within three months	4
		Within the next half year	2
		Within the next year	1
		Not available publically	0

1.19	Engage	In the 2015-16 AGM seasons, do you intend to disclose your voting intentions to your members or stakeholders in advance of the AGM's?	4
		Yes - we provide this information to members/stakeholders	4
		No - but we are considering how we reflect members/stakeholders views ahead of key votes	0
		No - we don't believe it's helpful to release this information even if members/stakeholders request this	0

Guidance - 1.19

This question does not require you to indicate your voting intention for all resolutions to be voted on at annual general meetings. Rather, it requires all climate-related voting intentions to be declared before the relevant annual general meeting. This information might be provided to members and stakeholders on your website or social media.

1.20	Engage	Have you engaged with policymakers or regulators on climate change related issues over the last year?	20
		Please select an issue then provide policymaker/regulator name Issues include carbon and energy pricing; low carbon investment incentives; adaptation; corporate disclosure and accounting; investment regulation and disclosure; ending subsidies to fossil fuel companies; other issues.	4 points for each policy maker and regulator
		We haven't engaged with any policymakers or regulators over the last year	0

Guidance - 1.20
Policymakers and regulators can include government, independent statutory or regulatory bodies, including central banks and stock exchanges.

1.21	Engage	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?	6
		Yes - please provide details	6
		No	0

Guidance - 1.21
This question refers to the concept of a carbon budget, as defined by The Carbon Tracker Initiative. As there are still no viable substitutes for certain fossil fuels and other greenhouse gas emitting processes, it has been hypothesised that in allocating parts of the carbon budget to different sectors the privilege to emit carbon should be most generous in those sectors where there is no alternative (for example, aviation and shipping).

<table>
<tr><th>1.22</th><th>Engage</th><th colspan="2">Did you support any filed shareholder resolutions related to climate change in the last reporting period?</th><th>20</th></tr>
<tr><td colspan="2" rowspan="7">Key Question</td><td rowspan="6">Yes</td><td>BP 'Aiming for A' resolution</td><td rowspan="6">2 points for each example</td></tr>
<tr><td>Shell 'Aiming for A' resolution</td></tr>
<tr><td>ExxonMobil 'independent board members with environmental expertise' resolution</td></tr>
<tr><td>ExxonMobil: GHG emissions reduction goals</td></tr>
<tr><td>Chevron 'capex reduction/increased dividend return' resolution</td></tr>
<tr><td>Other resolutions (up to 5 - please provide company name, stock exchange where traded, ticker code, resolution number and further details)</td></tr>
<tr><td colspan="2">No</td><td>0</td></tr>
</table>

Guidance - 1.22
This question asks you to provide details of up to 5 shareholder resolutions related to climate change. You will need to have the company name, stock exchange, ticker code and resolution number on hand.

<table>
<tr><th>1.23</th><th>Engage</th><th>What were the most notable and demonstrable key achievements of your climate change related engagement activities in this period?</th><th>30</th></tr>
<tr><td colspan="2" rowspan="2">Key Question</td><td>Select up to 10 companies that you have successfully engaged with on the following issues:
Emissions reductions;
Capital redeployment into low carbon investments;
Capital restriction and dividend return;
Capacity building; board support without need of shareholder resolution;
Disclosure;
Further risk analysis (incorporating climate change);
Not to lobby against policy;
Not supply capital (eg. bank or goods for carbon production/supply).</td><td>3 points for each company example</td></tr>
<tr><td>No climate related shareholder resolutions supported</td><td>0</td></tr>
</table>

Guidance - 1.23

This question asks you to provide details of up to 10 examples where you have engaged with companies on climate-related issues in the last year. You will be asked about which issue this engagement related to. Note that if you have engaged with one company on multiple issues, you should complete details for that company multiple times, selecting each issue as a separate entry.

Success is defined as obtaining agreement from the company on the action/resolution.

<table>
<tr><th>1.24</th><th>Engage</th><th colspan="2">In the 2015-16 AGM seasons, do you intend to file, co-file, lead or support any climate change resolutions</th><th>20</th></tr>
<tr><td rowspan="6" colspan="2"></td><td rowspan="4">Yes
Please indicate what role you intend to take regarding each resolution.</td><td>File</td><td rowspan="3">3 points for each company example</td></tr>
<tr><td>Co-file</td></tr>
<tr><td>Lead</td></tr>
<tr><td>Support</td><td>1 point for each company example</td></tr>
<tr><td colspan="2">Not known at this stage</td><td>0</td></tr>
<tr><td colspan="2">No</td><td>0</td></tr>
</table>

Guidance - 1.25

This question asks whether you intend to file, co-file, lead or support climate change resolutions in the coming year.

Filing refers to the requisitioning of a shareholder resolution by yourself.

Co-filing refers to the requisitioning of a shareholder resolution in cooperation with other shareholders.

Leading refers to collaborating with other shareholders to petition for a resolution to be filed.

Supporting refers to taking an active, advocacy role relating to the resolution. This might occur, for example, by speaking publicly if in favour of it beforehand. Simply announcing an intention to vote in favour of a climate change related resolution will often not be sufficient.

1.25	Engage	Please select all of the collaborative engagement initiatives and/or industry associations you participate in.	10
		Carbon Disclosure Project (CDP)	1
		Principles for Responsible Investment (PRI)	1
		Institutional Investor Group on Climate Change (IIGCC)	1
		International Corporate Governance Network (ICGN)	1
		Investor Group on Climate Change (IIGC - Australia/New Zealand)	1
		Asia Investor Group on Climate Change (AIGCC)	1
		Interfaith Centre on Corporate Responsibility (ICCR)	1
		Investor Network on Climate Risk (INCR)	1
		United National Environmental Program Finance Initiative (UNEPFI)	1
		Montreal Pledge	1
		Portfolio Decarbonisation Coalition	1
		Other - please specify	1
		None	0

Portfolio Carbon Risk Management

How effectively asset owners are measuring, monitoring and managing climate change risks within their portfolios.

Risk management covers how asset owners manage climate change-related risks at the portfolio level and also how they drive their fund managers to manage climate risk at the fund and company levels. Asset owners need to assess long-term risks and take an evidence-based view of possible and likely future carbon regulation and physical impacts and factor these into investment decisions.

A robust risk management approach is imperative in order to manage the long-term risks associated with climate change. High-carbon assets are commonly capital-intensive and very long-lived. Whether you are developing a coalmine or building a power station, smelting plant or a building, these are assets that last 25 years, often more. Climate change regulation and, in some instances, physical impacts will affect a significant portion of these high-carbon, long-term assets and this therefore poses a huge risk to asset owners whose investment portfolios contain exposure to them.

2.01	Portfolio Carbon Risk Mgmt	**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)**	**6**
		Traditional strategic asset allocation models	1
		VaR measurements	1
		Indexation	1
		Short term manager incentives	1
		Use of fund managers to trade out the risk in the event of rapid carbon repricing	1
		Other	1
		No	0

Guidance - 2.01
In the wake of the Global Financial Crisis, it has been suggested that systemic risks such as climate change are not manageable by using older techniques such as indexation.

2.02	Portfolio Carbon Risk Mgmt	**Have you assessed the current losses due to climate change and/or carbon related investments in your portfolio to date?**	**6**
		Yes, we have assessed physical damage/insurance related losses	2
		Yes, we have assessed the climate change related asset valuation losses	2
		Yes, we have assessed the fossil fuel commodity price related losses	2
		No	0

Guidance - 2.02
'Losses' refers to any value that you believe was lost due to asset price declines or lower than expected revenue streams.

2.03	Portfolio Carbon Risk Mgmt	What factors to you believe are contributing to fluctuations in carbon related investments?	-
		Fossil fuel stigmatisation	-
		Implemented climate risk related regulation	-
		Anticipated climate risk related regulation	-
		Impact of carbon pricing	-
		Impact of developments in renewable energy technologies	-
		Oversupply in the commodity market	-
		Other factors	-

<table>
<tr><th>2.04</th><th>Portfolio Carbon Risk Mgmt</th><th colspan="3">Do you measure portfolio-level risk associated with physical impacts relating to climate change?</th><th>20</th></tr>
<tr><td colspan="2" rowspan="7">Key Question</td><td rowspan="5">Yes, we measure physical impact risks within the following asset classes, representing approximately [x]% of total portfolio AUM</td><td rowspan="5">• All asset classes
• Domestic equities
• International equities
• Property
• Infrastructure
• Hedge funds
• Fixed income
• Private equity</td><td>100%</td><td>20</td></tr>
<tr><td>75-99%</td><td>15</td></tr>
<tr><td>50-74%</td><td>10</td></tr>
<tr><td>25-49%</td><td>5</td></tr>
<tr><td>1-24%</td><td>2</td></tr>
<tr><td colspan="3">No, we expect our managers to measure and manage these risks at the asset level.</td><td>0</td></tr>
<tr><td colspan="3">No, we do not consider this risk.</td><td>0</td></tr>
</table>

Guidance - 2.04
This question requires to you indicate what proportion of your portfolio you have analysed for physical impact risks.

If you select the 'all asset classes' option, please indicate what proportion of your ***entire*** portfolio you have analysed for physical impact risks.

If you select individual asset classes, please indicate what proportion of ***each selected*** asset class have been analysed for physical impact risks.

2.05	Portfolio Carbon Risk Mgmt	Do you measure portfolio-level climate change risks associated with potential stranded assets?			20
Key Question		Yes, we measure stranded asset risks within the following asset classes, representing approximately [x]% of total portfolio AUM	• All asset classes • Domestic equities • International equities • Property • Infrastructure • Hedge funds • Fixed income • Private equity	100%	20
				75-99%	15
				50-74%	10
				25-49%	5
				1-24%	2
		No, we expect our managers to measure and manage these risks at the asset level.			0
		No, we do not consider these risks.			0

Guidance - 2.05
This question requires to you indicate what proportion of your portfolio you have analysed for stranded asset risks.

If you select the 'all asset classes' option, please indicate what proportion of your ***entire*** portfolio you have analysed for stranded asset risks.

If you select individual asset classes, please indicate what proportion of ***each selected*** asset class have been analysed for stranded asset risks.

<table>
<tr><th>2.06</th><th>Portfolio Carbon Risk Mgmt</th><th colspan="3">Have you calculated your portfolio emissions intensity for scope 1 (Direct) emissions?</th><th>20</th></tr>
<tr><td colspan="2" rowspan="7">Key Question</td><td colspan="3">Yes, in all asset classes it is [x] tCo2e/US$bn revenue</td><td>20</td></tr>
<tr><td rowspan="5">Yes, in certain assets classes.</td><td rowspan="5">• All asset classes
Domestic equities
• International equities
• Property
• Infrastructure
• Hedge funds
• Fixed income
• Private equity</td><td>100%</td><td>20</td></tr>
<tr><td>75-99%</td><td>16</td></tr>
<tr><td>50-74%</td><td>12</td></tr>
<tr><td>25-49%</td><td>8</td></tr>
<tr><td>1-24%</td><td>4</td></tr>
<tr><td colspan="3">No</td><td>0</td></tr>
</table>

Guidance - 2.06
This question requires you to indicate the Scope 1 emissions per US$bn in revenue.

If you select the 'all asset classes' option, please indicate the Scope 1 emissions per US$bn in revenue for your entire portfolio.

If you select the 'in certain asset classes' option, please indicate the Scope 1 emissions per US$bn in revenue for each individual asset class. You will also be required to indicate the proportion of total AUM for each asset class listed.

2.07	Portfolio Carbon Risk Mgmt	What is your Scope 1 emissions intensity performance against MSCI ACWI benchmark?	50
Key Question		<80%	50
		80-89%	40
		90-99%	30
		100%	1
		>100%	0

Guidance - 2.07
This question looks to benchmark your emissions intensity against the MSCI All Countries World Index.

<table>
<tr><th>2.08</th><th>Portfolio Carbon Risk Mgmt</th><th colspan="2">Does your organisation currently have an emissions intensity reduction target for the investment portfolio over the next year?</th><th>10</th></tr>
<tr><td colspan="2" rowspan="4">Key Question</td><td rowspan="3">Yes</td><td>It is a targeted percentage reduction of [x]%</td><td>10</td></tr>
<tr><td>It is targeted absolute reduction of [x] tonnes carbon dioxide equivalent (Co2-e)</td><td>10</td></tr>
<tr><td>Other (please describe)</td><td>10</td></tr>
<tr><td colspan="2">No</td><td>0</td></tr>
</table>

Guidance - 2.08
Emissions intensity refers to Scope 1/2/3 emissions per US$bn in revenue.

2.09	Portfolio Carbon Risk Mgmt	How does your organisation calculate your portfolio-level carbon liabilities or stranded asset levels at a variety of direct or intrinsic carbon prices / scenarios?	10
		Extensive scenario testing	10
		Use of research	6
		We ensure our managers and advisors do this	2
		We don't calculate this	0

2.10	Portfolio Carbon Risk Mgmt	Do you think it is necessary to have a forward looking base case for climate change from which to design a risk mitigation strategy?	10
		Yes, we use a certain trajectory (Please provide details)	10
		We are planning a base case now	2
		No, we trust our managers to sell out of any risks at the right time	0
		No, we rely on Strategic Asset Allocation	0

2.11	Portfolio Carbon Risk Mgmt	What percentage of your total portfolio was invested in high carbon or high climate impact sector assets?			20
		Please provide percentages for each asset class, if known.	• All asset classes • Domestic equities • International equities • Property • Infrastructure • Hedge funds • Fixed income • Private equity	1-24%	20
				25-49%	10
				50-74%	6
				75-99%	2
				100%	0
				Unknown	0

Guidance - 2.11

For example, investment in fossil fuel producers, high emitters and emissions-intensive sectors. As 'high carbon' can be defined in various ways please feel free to use assets in Energy, Materials and Utilities (ex renewables if possible) as a proxy. If you use another method, please provide further details.

2.12	Portfolio Carbon Risk Mgmt	Does your fund allocate a portfolio risk premium to allow better mitigation of climate risk?	14
Key Question		Yes - please specify how.	14
		No	0

Guidance - 2.12
A portfolio risk premium allocation involves a requirement that all investments produce a higher rate of return before they will be eligible to be invested in. This is designed to partially mitigate the uncertainty of when and by how much high-carbon related assets will devalue.

2.13	Portfolio Carbon Risk Mgmt	Has your fund considered the probabilities and uncertainties associated with any of the possible following pathways to the low carbon economy?	14
		Pro-active policy by governments (eg. US Congress) towards stringent carbon pricing	2
		Pro-active policy by the People's Republic of China's next five year plan	2
		Momentum through regional regulatory measures (eg EPA's,) and regulatory convergence (eg emission trading scheme connections)	2
		Disruptive Economics (eg German solar supply impacting both local Utility Asset Valuations and Chinese oversupply to the USA) and Innovation	2
		Thematic divestment / re-investment by leading asset owners	2
		Re-active policy in response to extreme physical events (eg Hurricane Sandy, wheatbelt droughts etc)	2
		The development of a globally harmonised emissions price driven by an exposed industry eg aviation.	2
		No, but we have used other broad scenarios to help us assess the risks	1
		No, we let our fund managers assess these risks.	0

Hedging and Low Carbon Investment

The extent of any low-carbon investments held by the asset owner. A fund's ranking within each of these categories will be provided back to each Asset Owner that will highlight where the fund needs to improve and how.

Low-carbon investments include investments in renewable energy, agri-business, water and energy efficiency-related assets as well as the service industries supplying to all these sectors. The low-carbon investment criteria assess which funds are investing in low-carbon assets. That is, whether or not asset owners are hedging their portfolio against climate change risk by allocating money to low-carbon investments. Hedging the climate risk of a portfolio means asset owners have a diversified range of assets that will not all be affected by any rapid re-pricing of carbon. By holding a significant portion of their portfolio in high-carbon assets they are putting themselves at a huge risk as carbon regulation increases. Within a typical diversified portfolio, the portion of carbon-exposed assets could be well over 50% and, with tightening carbon regulation the majority of these are likely to be replaced by low-carbon equivalents. If the high-carbon assets are replaced at the end of their scheduled life then there is little net cost involved.

However, they will most likely have to be sold or closed well before the end of their scheduled life, many of them having lives of 25 years or more. For asset owners to avoid exposure to this situation they need to ensure a healthy balance of low-carbon assets building up in the portfolio, which will benefit from tightening carbon regulation.

3.01	Hedging /Low Carbon	**What range of climate change-related portfolio risk mitigation action do you undertake?** (***Alternative and low-carbon investments will be detailed in the following question***)	**60**
Key Question		Hedging allocation of low carbon assets to hedge against high carbon stranded assets	15
		Underweighting/divesting of specific stocks exposed to carbon risk	15
		Low carbon investments e.g. carbon bonds	8
		Underweighting/divesting of specific sectors exposed to carbon risk	8
		Use of carbon optimised equity indexes	4
		Fund manager mandate guidance	2
		An overlay on our core portfolio	2
		Negative screens (or positive inclusion criteria) on all investments	2
		Investment in adaptation assets (flood barriers, sea walls etc.)	2
		Negative screens (or positive inclusion criteria) on selected investment options	1
		Other (please describe - please list other alternative or low-carbon investsments in Q3.02)	1
		None	0

<table>
<tr><th>3.02</th><th>Hedging /Low Carbon</th><th colspan="2">What is the total value of investments in low carbon assets in your portfolio in the following areas (across all asset classes)?</th><th>50</th></tr>
<tr><td colspan="2" rowspan="8">Key Question</td><td rowspan="7">Please provide the approximate [x]% of total portfolio AUM represented by the selected asset classes.
• Renewable energy infrastructure
• Renewable energy companies
• Energy efficiency companies/investments
• Adaptation assets (eg. flood barriers, seawalls)
• Carbon offset assets (eg. forestation, sinks)
• Low-carbon financial products
• Other</td><td>25-100%</td><td>50</td></tr>
<tr><td>15-25%</td><td>45</td></tr>
<tr><td>5-15%</td><td>40</td></tr>
<tr><td>4-5%</td><td>25</td></tr>
<tr><td>3-4%</td><td>20</td></tr>
<tr><td>2-3%</td><td>10</td></tr>
<tr><td>1-2%</td><td>2</td></tr>
<tr><td colspan="2">None or unknown</td><td>0</td></tr>
</table>

Guidance - 3.02

Low carbon assets include (but are not limited to) investments in renewable energy, mitigation and adaptation assets, carbon-optimised managed funds, green bonds and carbon commodities.

Please provide the total amount invested in low-carbon assets.

<table>
<tr><th>3.03</th><th>Hedging /Low Carbon</th><th colspan="2">Do you make a specific allocation in your portfolio for climate change related investments as part of an overall hedging strategy?</th><th>50</th></tr>
<tr><td colspan="2" rowspan="10">Key Question</td><td colspan="2">Yes, at the overall portfolio level (please specify total value)</td><td>50</td></tr>
<tr><td rowspan="8">Yes, within specific asset classes. Please specify the value allocated within these assets.
• Domestic equities
• International equities
• Property
• Infrastructure
• Hedge funds
• Fixed income
• Private equity</td><td>25-100%</td><td>40</td></tr>
<tr><td>15-25%</td><td>35</td></tr>
<tr><td>5-15%</td><td>30</td></tr>
<tr><td>4-5%</td><td>25</td></tr>
<tr><td>3-4%</td><td>20</td></tr>
<tr><td>2-3%</td><td>10</td></tr>
<tr><td>1-2%</td><td>2</td></tr>
<tr><td>0%/ Unknown</td><td>0</td></tr>
<tr><td colspan="2">No</td><td>0</td></tr>
</table>

Guidance - 3.03

Climate change investments are investments that reduce the exposure of the overall portfolio to the impacts of climate change risk such as physical risks, policy risk, etc. They include (but are not limited to) investments in renewable energy (under private/listed equity), mitigation and adaptation assets (such as flood barriers, energy efficiency projects) in infrastructure, carbon-optimised managed funds, green bonds (FI) and carbon commodities.