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Practical insights into the implementation of climate risk management

Life Climate Change Working
Party

#LifeConf22





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Introduction

Scott Eason



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Introduction

The Life Climate Change Working Party

- Set up in 2021 to help actuaries interested in the practices of life insurers in respect of climate change risk management
- 19 volunteer members working across 4 workstreams – Risk Frameworks, Reporting, Asset Risks and Liability Risks
- Scope is to provide a rolling delivery of 3 items
 - Library of relevant sources of data and analytical papers
 - Survey of current practices within life insurance companies
 - Deep dive analyses of key issues within life insurance companies



Introduction

This presentation

- In 2021, each workstream produced a blog identifying the most relevant documents to read
- In 2022, we ran a detailed survey with 46 questions across the 4 workstream areas
 - This was completed by 22 Life Insurance companies
- This presentation uses the results of the surveys to provide views on common, best and minimum acceptable practices, as well as future expected developments and needs*



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Risk Frameworks

Adél Drew

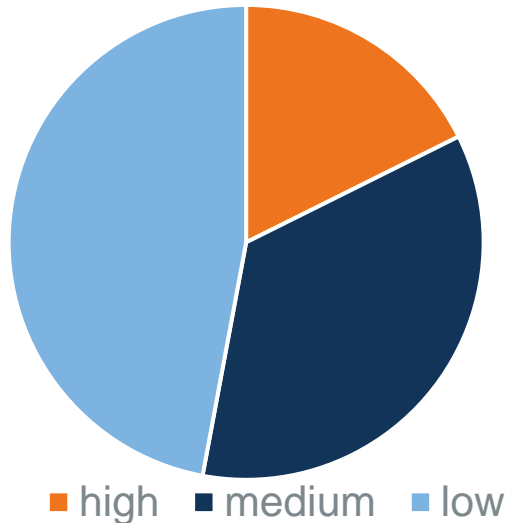


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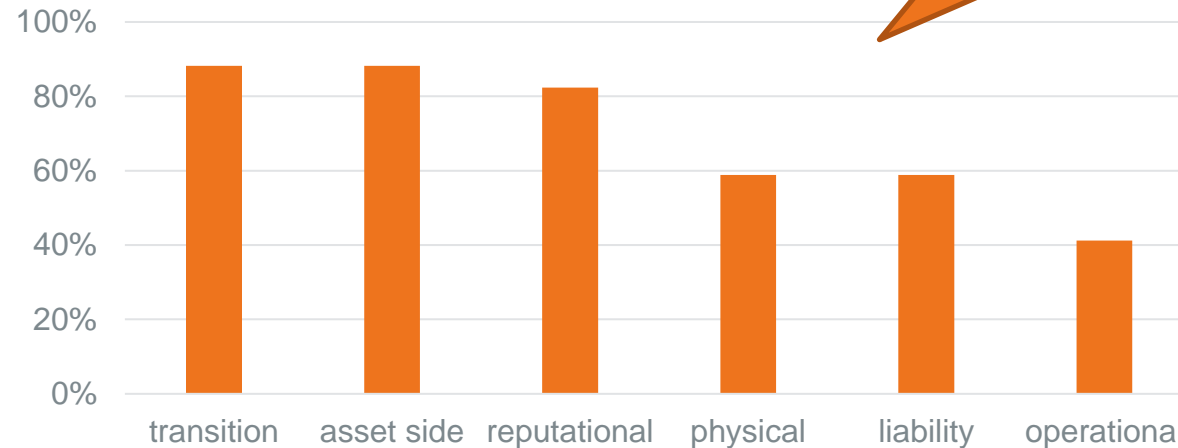


Risk exposures and materiality

To what extent does your firm consider itself exposed to climate risks?



Which risks?



“..the most likely impacts from the effects of climate change would be expected to be seen in the performance of the assets.”

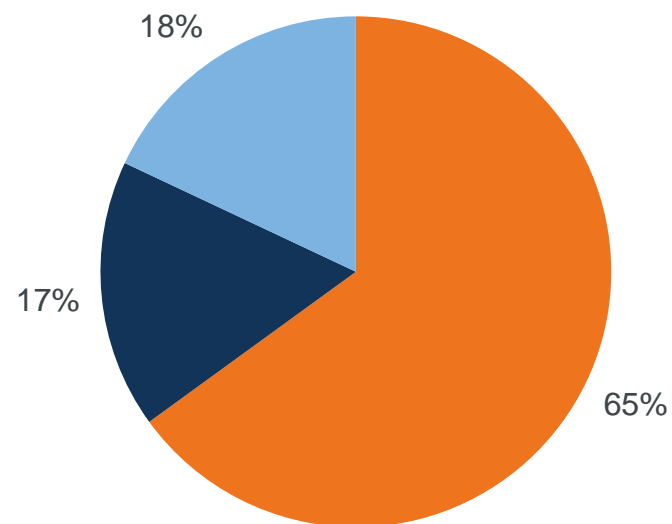
- All respondents consider their firm exposed to climate risks.....but with varying degrees of severity.
- As expected, large consensus on the impact of climate change in transition and asset risks – but less on the physical and liability risks.



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Governance

Does your firm have a climate risk management strategy?



■ Climate risk incorporated in firm strategy

■ Separate climate risk strategy

■ No climate risk strategy

- 87% of responses indicated that the Risk Function is heavily involved in climate risk strategy
- “working to...incorporate the impact of climate risks on our strategy and business planning”
- “separate executive governance committee”
- “Group Sustainability Oversight committee”
- “discussed regularly at Executive...and Board”
- “reporting all metrics”



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Embedding Climate Risk Management: Live Poll (1)

To what extent is climate risk embedded within your risk framework?

Rank from 1 – 5

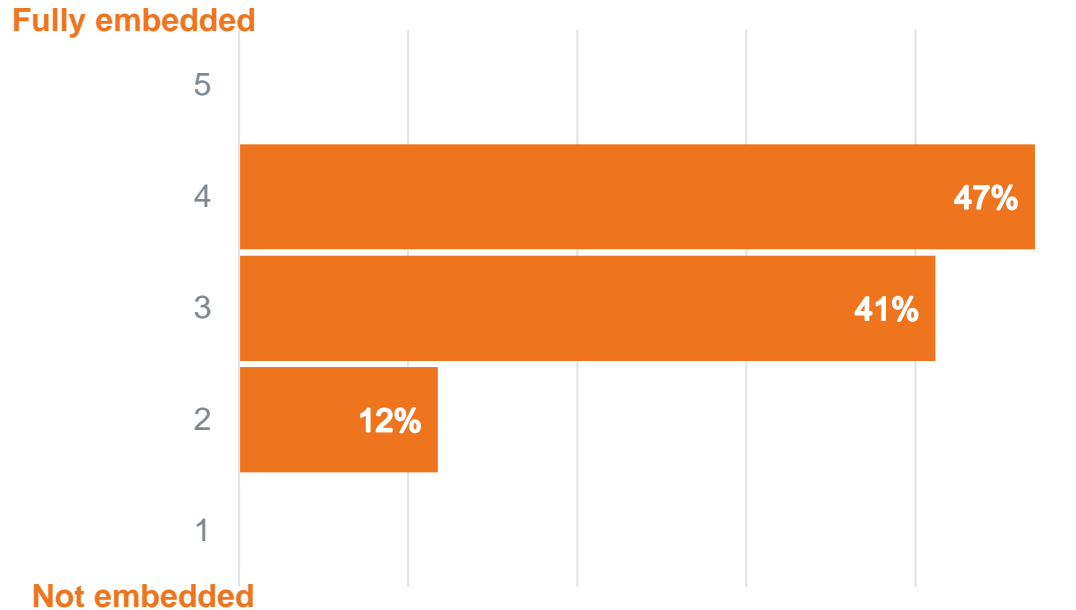
1 being not embedded yet

5 being fully embedded

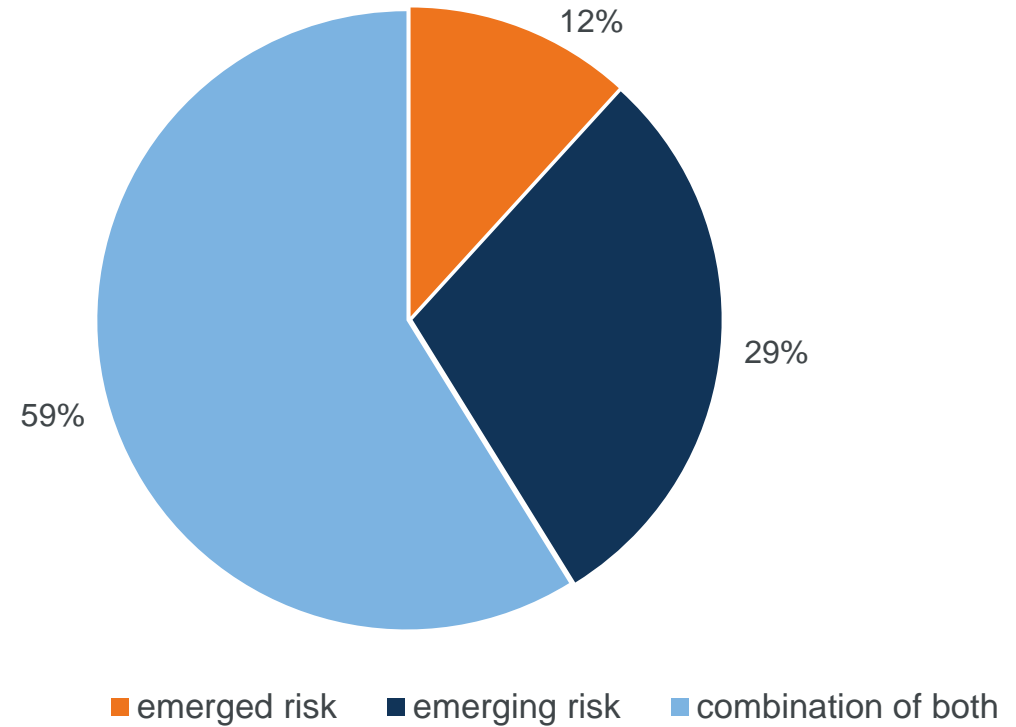


Risk framework

To what extent is climate risk embedded within your risk framework?



How is climate risk treated within the risk management framework of your firm?



- 100% of survey respondents replied that climate risk is explicitly covered in their firms' risk framework
- Difference observed in how climate risk is viewed by Companies.
- Most firms consider climate risk as a cross-cutting risk, rather than a stand-alone risk.



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ORSA Climate Scenarios: Live Poll (2)

Are your climate scenarios assessed:

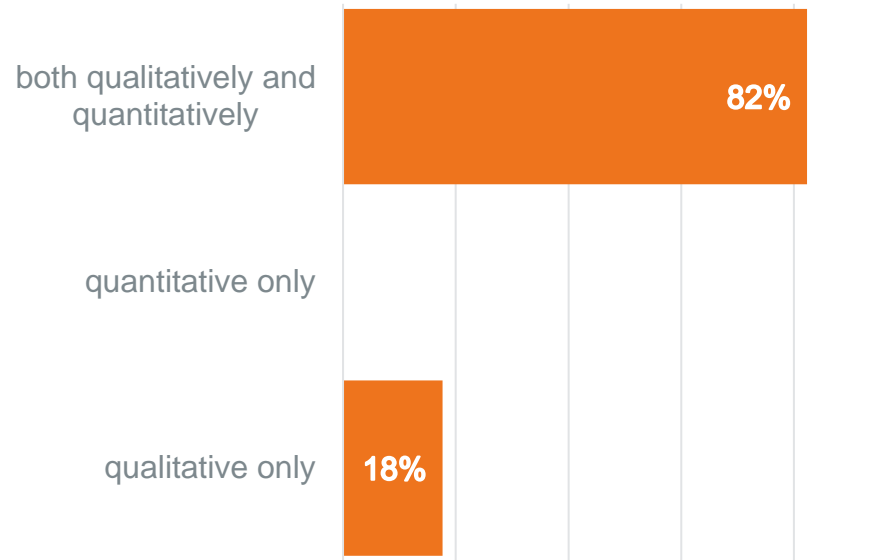
1. Qualitatively
2. Quantitatively
3. Both qualitatively and quantitatively



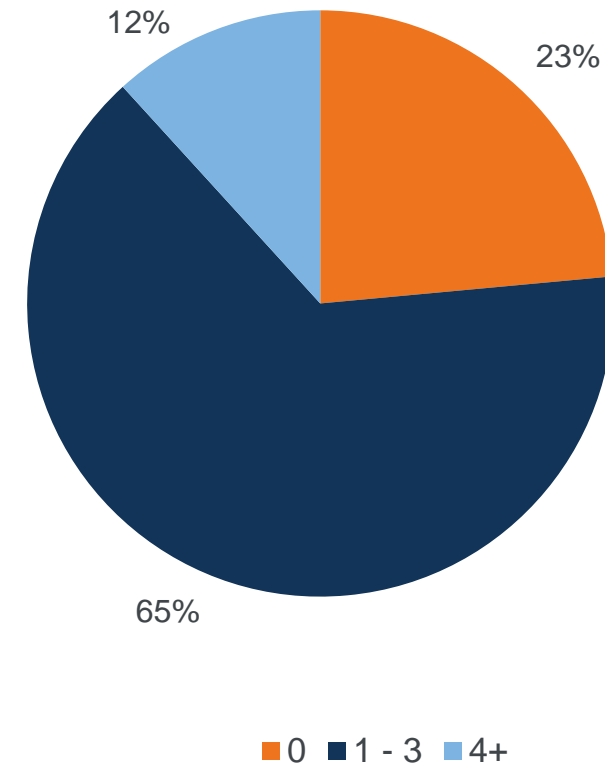
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ORSA Climate Scenarios

How are your climate scenarios assessed?



How many of your ORSA scenarios relate directly to climate?



- "ORSA scenarios generally work best as 'shock' type effects, whereas climate change effects are more likely to manifest over an extended period."
- Use of a variety of existing scenarios like CBES, NGFS and Paris
- Failed transition scenario



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Liability Risk

Rajinder Poonian

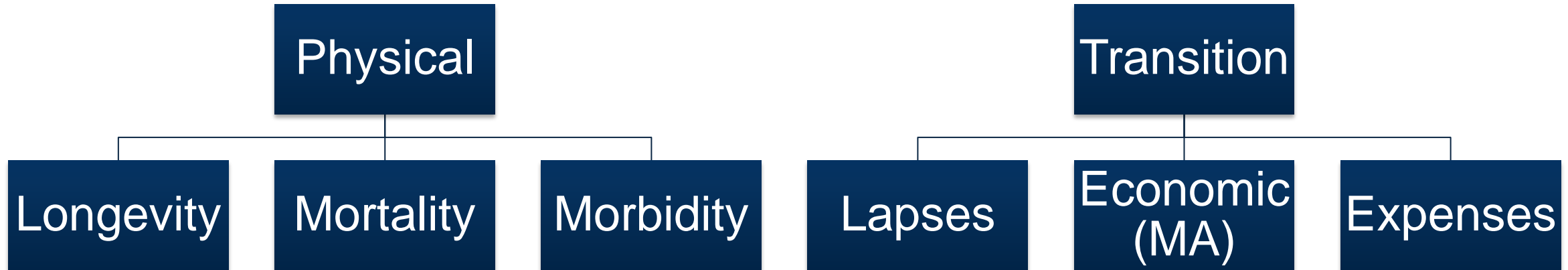


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Insurance Risk - Materiality

What are the most material areas when considering how to allow for climate change within liability modelling?



Insurance Risk - Liability modelling & assumptions

- ❖ 1 respondent making allowance in mortality modelling
- ❖ 1 respondent making allowance in mortality assumptions
- ❖ 0 respondents making allowance in morbidity modelling or assumptions



Insurance Risk - Multivariate nature

How have you allowed for the multivariate nature of climate change mortality drivers? If you have made allowance for underlying causes of mortality changes (e.g. heat events, pandemics), in your modelling, what techniques have you used?

- Positive responses were rare
- Included responses that acknowledged
 - Increase in summer temperature related events vs Decrease in winter temperature related events
 - Increase in extreme weather events
 - Air pollution
 - Uncertainty of how society will change



Insurance Risk - Liability Stress Testing

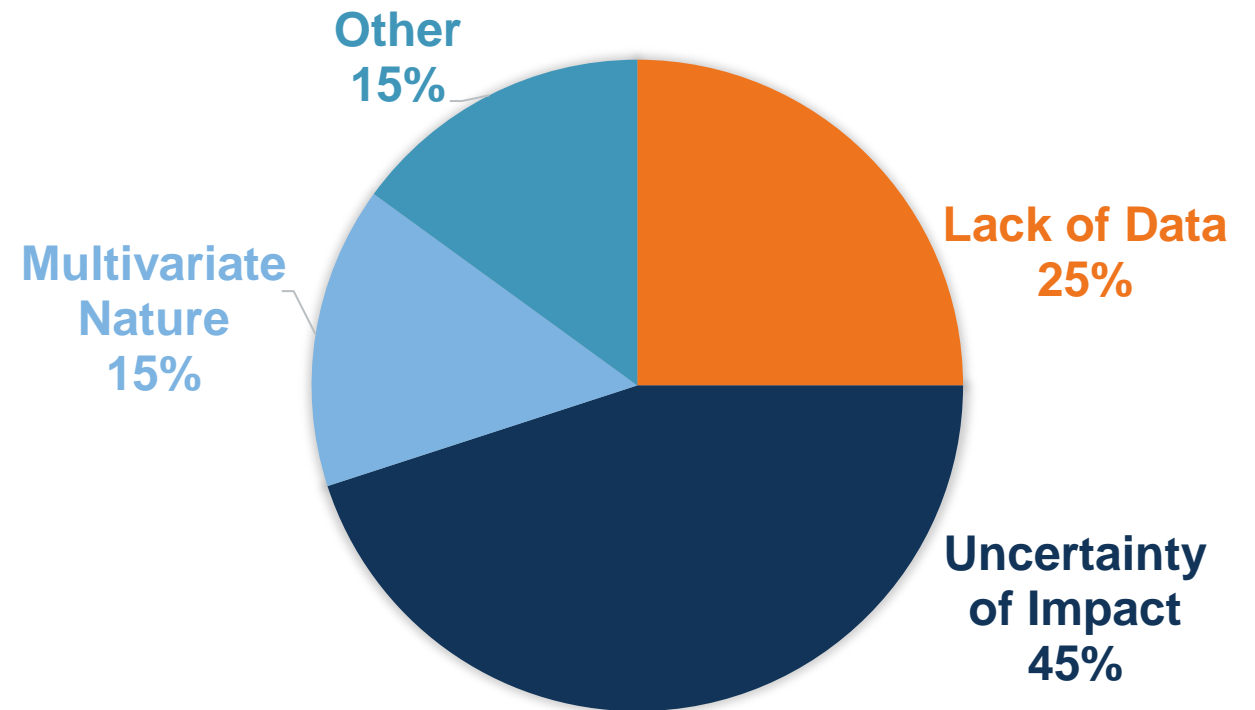
- **Purpose:**

- Life Insurance Stress Test (PRA)
- Climate Biennial Exploratory Scenario (PRA)
- ORSA & Business Planning

- **Stressed Risks:**

- Longevity / Mortality
- Policyholder behaviour
- Expenses
- Operational

DIFFICULTY IN DETERMINING STRESS LEVEL



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Insurance Risk - Reinsurance

What allowance have you made or considerations have you taken for reinsurance in respect of liability-related climate risk?

- Similar risks are also relevant for the modelling of reinsurance
- Additional factors considered:
 - Reduced capacity and/or increased costs
 - Potential higher concentration of risk for the reinsurer
 - Which may also include effects of climate on General Insurance



Insurance Risk - Data Sources for Liability Modelling

What data are you using to support your analysis?

- Internal
- Reinsurer
- Research bodies & universities
- Climate Biennial Exploratory Scenario (CBES)
- Network for Greening the Financial System (NGFS)
- Third-party firms



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Asset Risks

Andy Kitchen



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Divest or Engage?

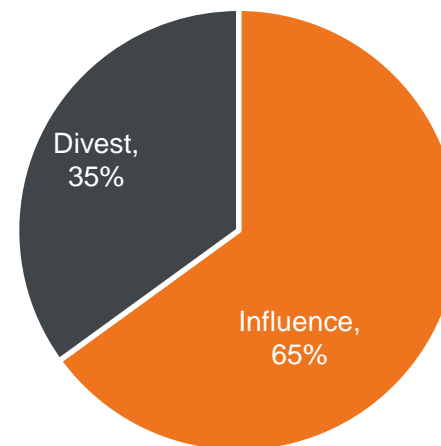
In its transition to net zero, will your company primarily divest from heavily-polluting companies or remain invested and seek to influence as an Asset Owner?

Background: Three types of Sustainable Investing?

- a) ESG investing: *outside-in risk management*
- b) Ethical investing: *'not in my portfolio'*
- c) Impact investing: *targets real world additionality*

Results

- Most prefer to stay and influence
- But... a large minority prefer to divest



Consider: Real world impact; Divestment to influence



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Asset Manager Oversight

How does your company, as an Asset Owner, direct and monitor climate-related investment decisions taken on its behalf by its asset managers?

Results: Varying degrees of oversight

- Varies by investment approach. Segregated mandates – high control. Pooled funds – low influence.
- Very few leave decisions to Asset Manager (AM) discretion with limited oversight.

Results: Common approaches

- Minimum standards, eg: require AM to consider material ESG risks and opportunities; adhere to AO policies (eg engagement, exclusions); PRI signatory
- Annual assessments, eg: assess AM alignment with relevant Asset Owner (AO) policies; embedded into general stewardship governance cycle
- Data obligations, eg: require AM to disclose emissions, green revenues, exposure to fossil fuels
- Require improvement, eg: timebound requests to align with AO expectations, with threat of mandate termination if milestones not met
- Regular discussions, to support ongoing review and improvement

Consider: Best practice (FRC Stewardship Code)



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Transition risks: a major factor?

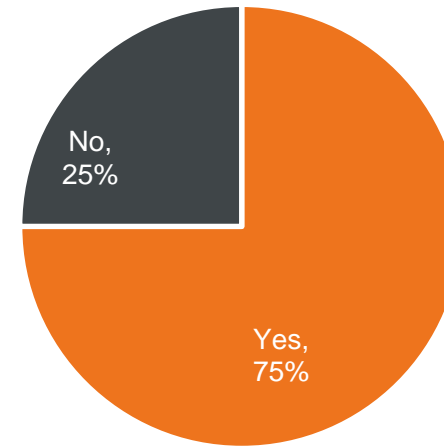
Does your company consider climate "transition risks" a major factor in the long term value of its assets and therefore solvency?

Background

- “Transition risks can occur when moving towards a less polluting, greener economy... some sectors of the economy face big shifts in asset values or higher costs of doing business.” ([BoE](#))
- “Limiting global warming to 2°C or below will leave a substantial amount of fossil fuels unburned and could strand considerable fossil fuel infrastructure” ([IPCC](#))

Results

- Majority consider transition risk a threat to solvency
- ‘No’ could be due to eg hedging, nature of assets, well capitalised
- ‘No’ may be informed by nascent climate-financial impact modelling



Consider: Modelling limitations; Transition risk continues to grow



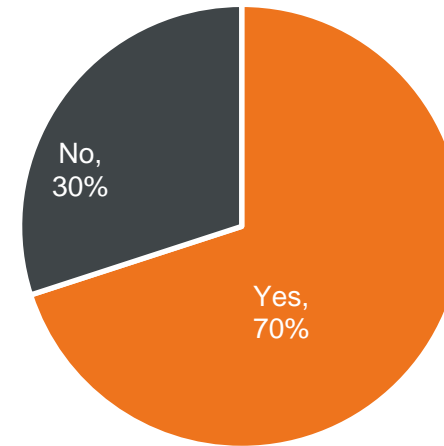
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Impact investing

Does your company engage or intend to engage in climate-specific direct or indirect impact investing?

Background

- Impact investing moves beyond 'net zero portfolios', which can be achieved through divestment and exclusion
- Impact investing implies 'additionality' – i.e. impacting the real economy
- Outcomes could be in support of low-carbon economy and/or eg UN's Sustainable Development Goals



Results

- Majority undertake (or plan) impact investment
- 'No' – may be due to concerns over the boundaries of fiduciary and legal obligations, though could indicate lack of general interest
- 'Yes' – may be driven by misunderstanding, eg allowing for ESG factors has limited to zero "impact" on decarbonising the 'real economy'

Consider: Life companies' understanding of Fiduciary obligations; Customer preferences



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Data providers: ESG factors & portfolio emissions

Which providers of ESG data and portfolio carbon metrics does your company (/asset manager) use to inform asset owner oversight (/investment decisions)?

Background

- ‘ESG factors’ inform investment decisions
- ‘Portfolio emissions’ data helps track progress against net zero portfolio targets
- Life insurers often utilise both (directly or through AM)

Results

- majority use MSCI for both ‘ESG factors’ and ‘portfolio emissions’ data
 - often supplemented with data from other providers eg: ISS, Bloomberg, S&P, Sustainalytics, Vigeo Eiris, ISS
- Reasoning behind choices is unclear. Considerations likely to include: data quality, coverage, benchmarking, cost and marketing
- Majority of Life companies or their AM supplement climate data with internal research (75%) or plan to in the future (10%)
- Only one respondent asserted no allowance for emissions data, stating data is “*not yet available at a sufficiently credible state*”

Consider: Data limitations (assumptions and methodologies); Data assurance options



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Sharing products' sustainability credentials

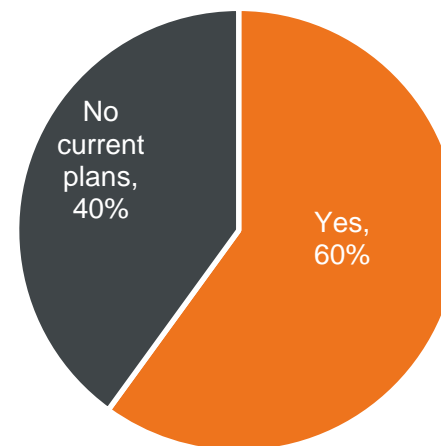
Does your company plan to communicate an assessment of investment products' sustainability credentials to current and prospective policyholders?

Background

- Life companies may disclose product-level sustainability credentials
 - eg marketing material; regulatory disclosures; voluntary disclosures

Results

- A small majority plan to communicate investment products' sustainability credentials
- The remaining respondents may be driven by:
 - lack of framework
 - greenwashing concerns
 - a perceived lack of demand
 - tech/data limitations



Consider: FCA 'ESG Sourcebook' and 'Sustainability Disclosure Requirements'



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Climate risk management in insured funds

Do you have any strategies to actively manage climate risks in any of your insured funds (eg MA portfolio, unit-linked funds, with-profits funds, other)

	Yes	No	Maybe in Future
Sector or company limits or exclusions	80%	10%	10%
Vote at shareholder meetings (inc. AO via policies)	65%	25%	10%
Engage with industry or other bodies	80%	15%	5%
Require Asset Managers to consider ESG factors	90%	0%	10%
Use of ESG factors in passive investments (eg 'tilts' / ESG tracker)	65%	25%	10%
Track and react to climate metrics	75%	5%	20%

Results

- Majority utilise a range of well-established asset owner climate risk management activities.
- Most undertake active AO stewardship, eg engagement with industry or other bodies; voting at investee shareholder meetings.
- All respondents require AM to consider ESG factors or may do in the future.
- 25% do not undertake shareholder voting (even through AO policies). May be due to lack of equity and/or segregated mandates.
- 25% do not use ESG factors in passive investments. May be due to tracking error fears, though arguably minimal real world impact.

Consider: Best practice (FRC Stewardship Code; Principles for Responsible Investment)



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Climate Disclosure Reporting

Craig Follows



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Frameworks used in Climate Reporting & Target Setting

Many different voluntary frameworks are being used for Climate Reporting.

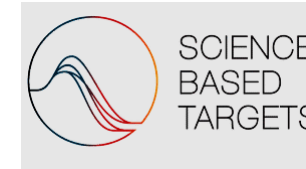
Only 40% of the respondents used a formal framework when setting their Climate Targets.



TCFD recommendations are structured around four themes, which are setting the foundations for climate reporting world-wide

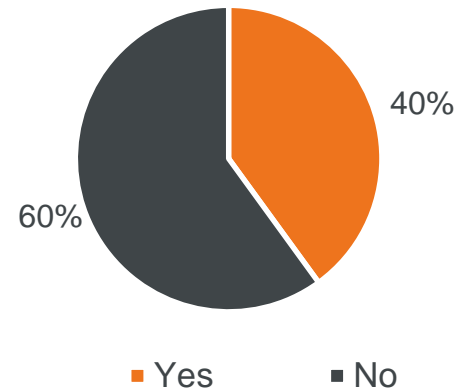


The SASB, as part of the IFRS, guides disclosure of sustainability information



Targets adopted by companies to reduce GHG emissions are considered “science-based” if they are in line with the latest climate science necessary to meet the Paris Agreement.

Following a formal framework to setting climate targets

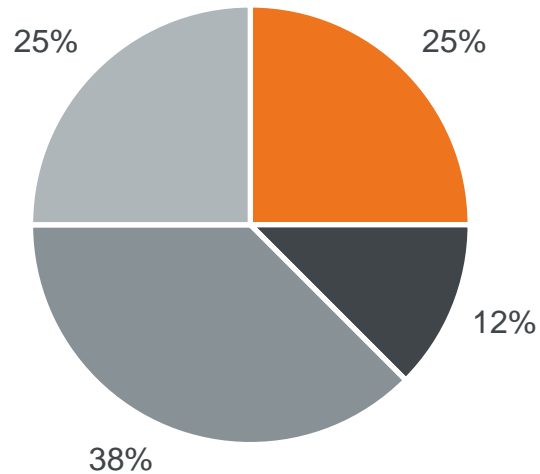


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Industry Disclosures

For 2021/22 disclosures, a variety of approaches were adopted by the market

Life Insurers' Disclosure Approaches



- Climate / TCFD Report
- Sustainability / ESG report
- Within annual accounts
- Combination

The difference in approaches adopted by firms shows the lack of 'best-practice' when disclosing climate-related information.

It is likely that the lack of standardised climate reporting is resulting in firms choosing to publish their climate-related information using a combination of approaches.

As best-practice develops, we think comparability should improve across all climate-related disclosures. Although it is likely a mixture of approaches will remain.

Based on research of YE20 disclosures, the working party noted that separate climate and/or ESG reports tend to publish more detail around their climate-related risks and emissions, and are more likely to follow the TCFD guidelines.



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Responsibility for Climate Reporting

Different approaches are used when assigning responsibility for climate reporting

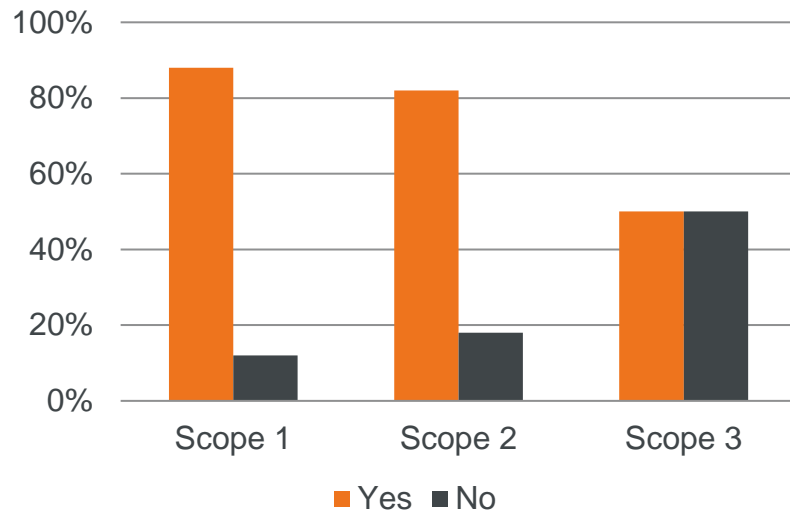
C-Suite (CRO/CFO)	One approach has been to assign the responsibility for climate reporting to one (or more) members of the Board.
Spread across departments	While in other cases, climate reporting (and the responsibility thereof) has been divided between several departments, such as Actuarial, Finance, Investments, etc.
Investment team	Some participants chose to assign overall responsibility to their Investment team. We expect that these firms are Life Insurers with large (proportional) AUMs.
New role (e.g. Chief Sustainability Officer)	Finally, some firms have created new climate-specific roles in Senior Management. Where this is the case, climate reporting is often within the role's remit.

- A key goal of most firms should be to transition from 'project' based climate reporting into a more sustainable approach by embedding this requirement into their BAU processes. Some firms have already met this milestone, with others focusing their efforts on this goal.
- The key decision is whether it is better to have a dedicated 'Sustainability' team, or embed responsibility across departments.



Reporting on scope 1, 2 & 3 emissions

Proportion of Firms Reporting on different Scopes



- Most firms are reporting on scopes 1 & 2, which is now mandatory for larger firms in the UK.
- However, nearly all firms have identified data gaps when planning their climate-related disclosures for scope 3. And there is currently a lot of reliance on external data providers.
- Scope 1 & 2 do show the emissions from business operations. However, It is important to develop scope 3 reporting covering invested assets as, for asset owners, this will be where the vast majority of emissions are incurred.

Background to definition of Scopes

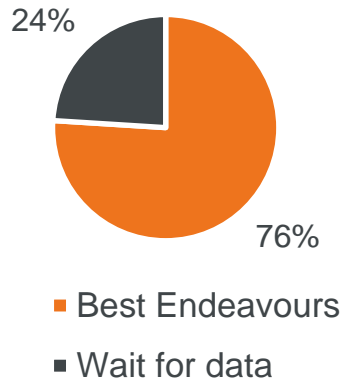
1. All direct greenhouse gas emissions
2. Indirect greenhouse gas emissions from consumption of purchased energy
3. Other indirect emissions that occur in the value chain



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Best Endeavours Reporting

It's promising that most firms are taking a best endeavours approach



There are benefits to doing so, such as:

- Developing the capabilities and expertise to report on climate risk
 - Providing an indication of the climate-related financial risks facing the firm
 - Developing 'best practice' within the industry
 - Data will never be perfect so important to not wait too long
-
- A key challenge in emissions reporting is the quality, reliability and availability of external data.
 - Companies can partially address data issues by using proxies and estimates to plug in the data gaps. While these methods are constrained by the quality of data, they are a starting point towards effective climate reporting.
 - As data quality improves the reporting and the estimation methodologies are expected to improve.
 - The majority believe that their data limitations will be overcome within the medium term (approximately 5 years)



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Suggested Next Steps

Obtain a complete estimate for GHG emissions from underlying investments:

- For listed equity and fixed interest, third-party data providers can already supply company emissions data.
- The carbon analysis of a property portfolio can be based on a numbers of sources such as energy data from utility suppliers or estimated benchmarks.
- The emissions from private assets can be estimated by comparison with similar public companies.

Develop forward looking metrics to input into climate transition plans:

- The main focus is the journey to net zero by 2050. To get there interim carbon reduction targets will need to be agreed upon and monitored.
- Development of additional metrics such as the 'Implied Temperature Rise' (ITR) shows the climate warming scenario with which a product or portfolio is aligned, and takes account of planned future reductions.

High quality reporting can enhance the reputation of the company

- Don't make it a compliance exercise. The reports should be useful for shareholders and customers.
- Demonstrating green credentials will improve a company's reputation.





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Next Steps / Q&A

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Publishing the data and next steps

We will publish the anonymous data on our webpage and linkedin page

<https://www.actuaries.org.uk/practice-areas/life/research-working-parties/climate-change>

<https://www.linkedin.com/groups/7409315/>

Our next steps will be to identify and explore areas of deep-dive that will be valuable for Life actuaries. We are looking for experts to contribute to this. Anyone willing to support this work, please email [**scott.eason@Barnett-Waddingham.co.uk**](mailto:scott.eason@Barnett-Waddingham.co.uk)



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Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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Appendix

Terms, acronyms used and links
to key documents

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Appendix

SS 3/19	Enhancing banks' and insurers' approaches to managing the financial risks from climate change	https://www.bankofengland.co.uk/prudential-regulation/publication/2019/enhancing-banks-and-insurers-approaches-to-managing-the-financial-risks-from-climate-change-ss
SFCR	Solvency and financial condition report	
CFRF	Climate Financial Risk Forum	https://www.bankofengland.co.uk/climate-change/climate-financial-risk-forum
Dear CEO letter Oct 22	Letter from Sam Woods 'Managing climate-related financial risk – thematic feedback from the PRA's review of firms' SS3/19 plans and clarifications of expectations'	https://www.bankofengland.co.uk/prudential-regulation/letter/2020/managing-the-financial-risks-from-climate-change



Appendix

ORSA	Own Risk and Solvency Assessment	
CBES	Results of the 2021 Climate Biennial Exploratory Scenario (CBES)	https://www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario
NGFS	Network for Greening the Financial System	https://www.ngfs.net/en
Paris Agreement	The international treaty agreed at the UN Climate Change Conference in Paris in December 2015	https://www.un.org/en/climatechange/paris-agreement
FCA ESG Sourcebook	Rules and guidance concerning a firm's approach to ESG matters	https://www.handbook.fca.org.uk/handbook/ESG.pdf
SDR	Sustainability Disclosure Requirements (at time of writing being consulted on by FCA in CP22/20)	https://www.fca.org.uk/publications/consultation-papers/cp22-20-sustainability-disclosure-requirements-sdr-investment-labels



Appendix

FRC Stewardship Code	Stewardship standards for those investing money on behalf of UK savers and pensioners	https://www.frc.org.uk/investors/uk-stewardship-code
PRI	Principles for Responsible Investment	https://www.unpri.org/
SASB	Sustainability Accounting Standards Board (now part of IFRS Foundation's International Sustainability Standards Board (ISSB))	https://www.sasb.org/
Science Based Targets	An approach to show organisations how much and how quickly they need to reduce emissions to prevent the worst effects of climate change	https://sciencebasedtargets.org/

