

Working Party Research Topic / Title:	Climate Change WP
Practice Area Research Committee Member Shadow	Tbc
Source of idea	Life Board
Working Party Chair	Tbc
What issue is this research topic trying to address?	There is a huge amount of climate change research. It can be difficult for life actuaries to know where to start to find relevant information. This WP aims to help life actuaries efficiently find such information
Who will be the audience for this research?	All actuaries (and other professionals) working in or advising life insurance companies who require a knowledge of potential climate change impacts on life insurance companies.
What do we see as being the output/deliverables of the research?	<ol style="list-style-type: none"> 1. A continually evolving library of relevant sources of data and analytical papers 2. An annual survey of current practices within life insurance companies 3. In-depth analyses of key elements of climate change modelling within life insurance companies 4. Regular articles/blogs highlighting the work carried out and signposting the library and survey results 5. Webinars/sessional papers detailing the analyses work 6. Support relevant consultations from external stakeholders <p>It is proposed to include the following in scope:</p> <p>A1. Embedding climate change risks into life insurers' risk frameworks</p> <ul style="list-style-type: none"> • How are life insurers implementing climate risk management? • What scenarios/time horizons are they considering? <p>A2. Financial risks of climate change to life insurers</p> <ul style="list-style-type: none"> • Understanding potential impacts on core assets – equities, property, bonds; consider sectorial differences • Allowing for climate change risk in the treatment of illiquid assets with long terms to maturity: <ul style="list-style-type: none"> ○ (i) mark to model valuation; and ○ (ii) internal credit ratings. • Assessing the sustainability of buy-to-hold matching adjustment portfolios over a run-off time horizon.

	<ul style="list-style-type: none"> ○ Internal climate ratings methodology to rank fixed income investments by sustainability. ● Assessing the sustainability of unit-linked and with-profits funds. <ul style="list-style-type: none"> ○ What are the potential criteria by which consumers may assess whether a life product is sustainable? ○ What are the practical difficulties preventing life insurers from offering a swathe of products backed by investments that meet green criteria? ● When will the probability of a major transition over one-year exceed 1-in-200? And consider scenario modelling more broadly. <ul style="list-style-type: none"> ○ Modelling extreme climate-related events outside of the historical data set. ● How can the actuarial profession influence life insurers to reallocate capital to more climate resilient assets and/or to exploit the investment opportunities presented by climate change? <p>A3. Demographic risks of climate change to life insurers</p> <ul style="list-style-type: none"> ● What causal factors of mortality and morbidity risk are likely to be most affected by climate change? <ul style="list-style-type: none"> ○ Health care spending per capita ○ Global availability of clean drinking water ○ Air quality ● Impact of economic effects of climate change on policyholder lapse risk <p>A4. Reporting of life insurers</p> <ul style="list-style-type: none"> ● What statutory reporting is required? ● What metrics are life insurers using? ● How are life insurers implementing TCFD?
<p>What are the timescales of the research?</p>	<ol style="list-style-type: none"> 1. Library established within 3 months 2. Blogs/articles within 1 month of completion of library 3. Survey completed within 6 months

	<ul style="list-style-type: none"> 4. Presentation of survey results at Life 2021 5. Identify areas to analyse within 6 months 6. Analyses complete within 12 months
What previous work has been done in this area recently?	The Sustainability Board has produced a Practical Guide for Life Actuaries and we intend to build upon this. We are not aware of a library specifically focussed on the needs of life companies. We will ensure any analyses carried out do not duplicate existing research.
Will 3 rd party data be used?	No
Proposed membership	16-20 covering a mix of industry and consultants from a range of countries
If currently operational, add list of members	Tbc
Additional volunteers required	Yes
Frequency and type of meeting	Monthly progress meetings via Teams (or similar)
Engagement with external stakeholders	A need to reach out to companies and regulators to understand current/planned practices in order to carry out the in-depth analyses
IFoA resource and support required	Minimal – standard WP support