



Institute
and Faculty
of Actuaries

Climate and sustainability thematic review

Alan Marshall, IFoA

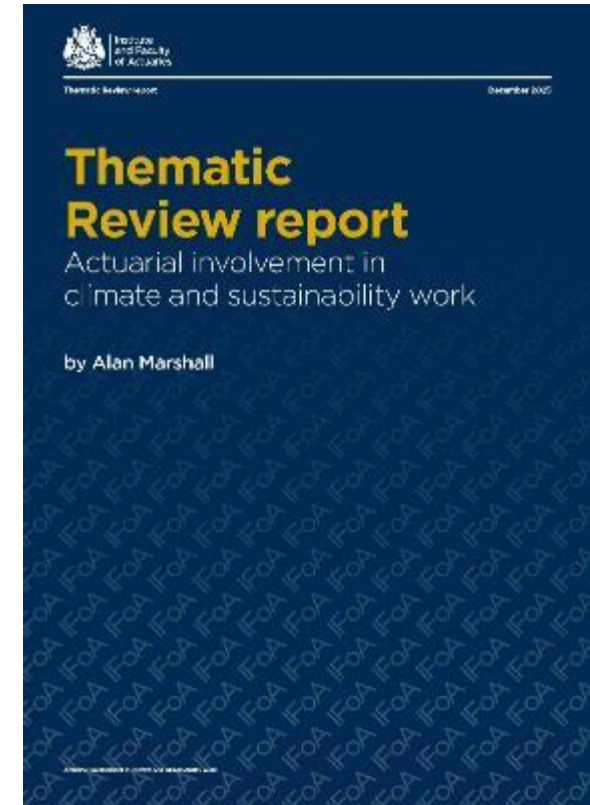
David Gordon, IFoA

Sam Younger, IFoA Regulatory Board Chair

Georgina Bedenham, GAD

Hello and Welcome! What we'll cover today....

- Overview of Thematic Review Programme
- Climate and sustainability thematic review highlights
- Climate and sustainability – actuaries in the field
- Polls – no right/wrong answers!
- Questions (please use Q&A button)



Institute
and Faculty
of Actuaries

POLL 1 – Main area of work



A) Insurance



B) Pensions



C) Investments



D) Wider Fields



E) All-rounder



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

Thematic Review Programme

Objectives of the Thematic Review programme



Thematic review programme

Work to date

Pensions
Actuarial
Factors
2020

General
insurance
pricing
2021

Climate-related
risk
2021

Funeral plan
trusts
2022

Equity release
2022

Corporate
pensions
2023

Data science
and AI
2024

Pensions on
divorce
2024

Cyber Risk
2024

Pension
Scheme Design
2025



Institute
and Faculty
of Actuaries

Ongoing and future activity

Topic	Brief description	Status
Consumer Fairness and Financial Inclusion	Understand the role of actuaries in considering the needs of the consumer and promoting fair access to financial products	Launching soon
Pensions advice in new funding environment	Expanding advice provided by pensions actuaries following new funding rules and other significant pensions developments (such as CDC and superfunds)	Scoping Q2 2026





Institute
and Faculty
of Actuaries

Climate and sustainability review

Climate change – current context

World Meteorological Organisation (WMO) State of the Global Climate 2024¹

“The annually averaged global mean near-surface temperature in 2024 was $1.55\text{ °C} \pm 0.13\text{ °C}$ above the 1850–1900 average. This is the warmest year in the 175-year observational record, beating the previous record set only the year before”

Planetary Health Check 2025²

“The 2025 PHC report concludes that seven out of nine Planetary Boundaries have been breached, with all of those seven showing trends of increasing pressure – suggesting further deterioration and destabilization of planetary health in the near future”

¹ <https://wmo.int/publication-series/state-of-global-climate-2024>

² <https://www.planetaryhealthcheck.org/>



POLL 2 – Climate and sustainability knowledge and experience



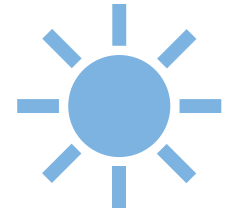
A) Total newbie



B) Know basics



C) Know my
stuff



D) Expert



Institute
and Faculty
of Actuaries

Published scope

Climate and sustainability thematic review

Actuaries have a crucial role in considering and communicating the financial risks of climate change and sustainability. The IFoA has become a thought leader in this area over recent years, issuing high-profile reports on climate and related topics. The purpose of this thematic review is to build on significant IFoA regulatory and thought leadership resources.

The review will examine the:

- extent and range of climate and sustainability work among the IFoA membership
- organisational context in which actuaries undertake such work
- application of professional and technical standards to such work
- views of members on the existing IFoA offering in this area



Review Scope and Approach



Involvement of
actuaries - Case
Studies



Business and
Regulatory
environment



Education and
Lifelong Learning



Existing standards
and guidance



Collaboration



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

Report highlights

Main Conclusions

Increased actuarial involvement and influence

- increased actuarial involvement and influence across a wide range of domains
- case studies providing significant insight on actuaries' work on the ground
- emphasises the need for ongoing IFoA support for actuaries

Climate-related risks continue to evolve

- emerging scientific evidence that tail risk and tipping points are crystallising
- important that actuaries continue to support thought leadership, policy development, and robust decision-making
- continued collaboration with other experts is key



IFoA Regulatory Board thoughts on the report



This report provides a valuable and timely overview of the activities of actuaries navigating this high-profile area of risk.



The Board recognises that - since actuaries are usually working alongside other experts rather than in isolation - any further specific IFoA actions need to be very carefully considered.



The Board is therefore examining how existing guidance and professional skills resources can be enhanced to recognise the ever-changing landscape and further support actuaries.

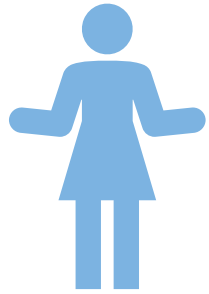


We will continue to engage with those IFoA members and volunteers who take an active interest in climate and sustainability with a view to amplifying the voice of the profession.

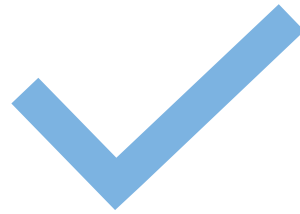


Institute
and Faculty
of Actuaries

POLL 3 – Climate and sustainability actuarial standards and guidance



A) Too little



B) Just right



C) Too much



Institute
and Faculty
of Actuaries

Case Studies – Actuaries working in climate and sustainability

TCFD-aligned climate
scenario analysis project

Investment principles
and decisions

Insurer assessments for
bulk annuity
transactions

Setting decarbonisation
goals for an underwriting
portfolio

Climate change
executive briefing

Net Zero project



Institute
and Faculty
of Actuaries

Climate and sustainability – insights from actuaries

Climate and sustainability considerations are embedded across functions, with a focus on cross-disciplinary collaboration

Projects have actuaries from a central team assisting with climate-related work, acting as a bridge between risk and wider business

Actuaries are involved either where it cuts across their core work or other teams need actuarial input on climate.

In Sustainable Investment, actuaries lead the development of data-driven climate-risk metrics

Climate and sustainability risks should be embedded into decision-making processes across the organisation.

We work with clients to identify and prioritise climate-related risks and opportunities, developing bespoke solutions



Institute
and Faculty
of Actuaries



Government Actuary's
Department

Insights from GAD's climate work

Georgina Bedenham | 27 January 2026

Climate Change



Analysing climate risk across government

We provide **impactful advice** to navigate the critical challenges of climate change, ensuring **effective decision-making and preparedness** for a sustainable future.

We provide support with:



Identification and
quantification of climate-
related risks



Climate scenarios and
analysis

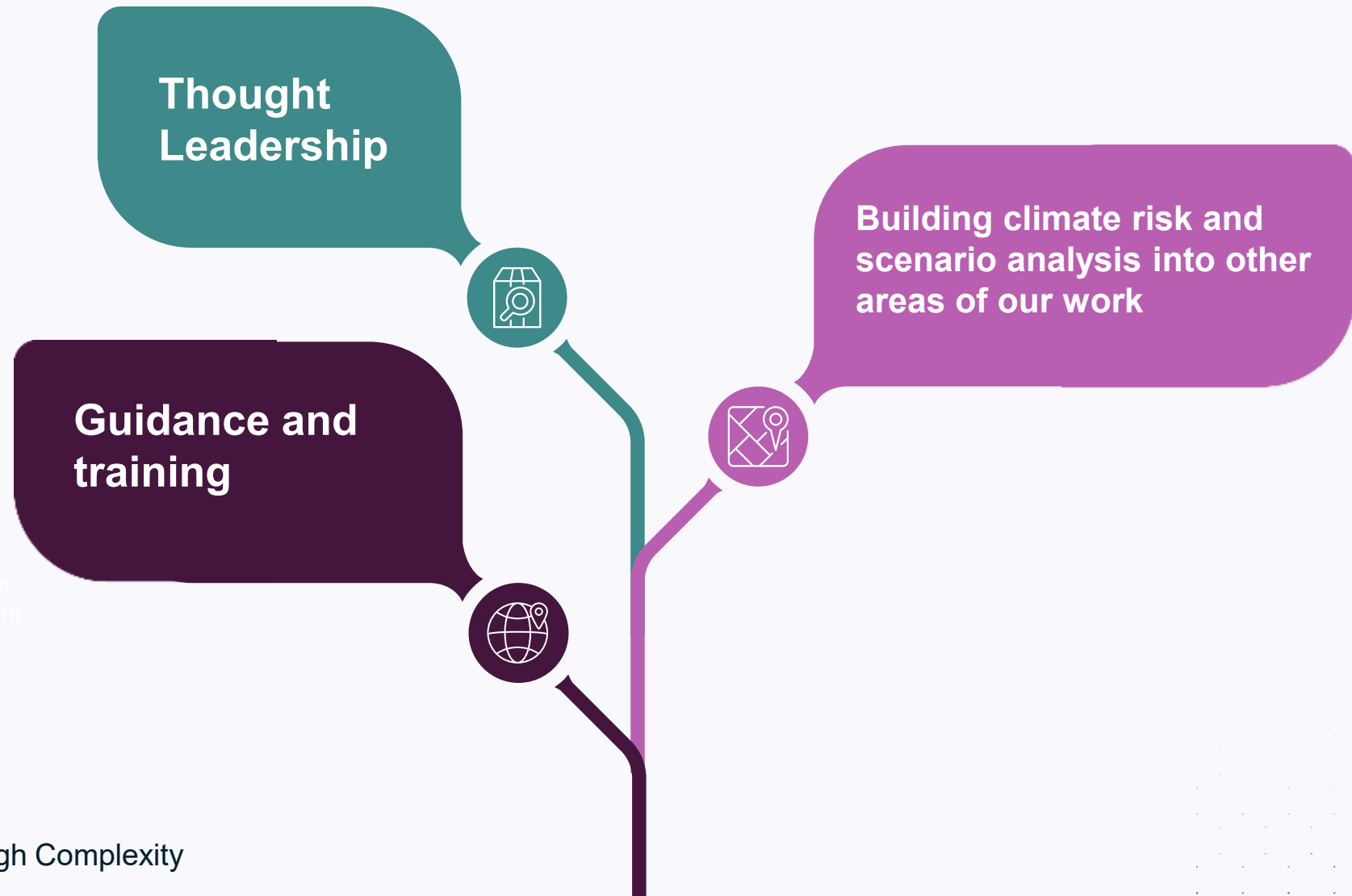


Climate-related modelling
and quality assurance



Climate Related Financial
Disclosures (TCFD)

Additional areas of climate support



Support for the Risk Protection
Arrangement at the Department
for Education

Key takeaways for actuaries





Institute
and Faculty
of Actuaries

Review findings

Finding – Broadening horizons



Wide range of domains and territories

Extended involvement in insurance, pensions and investments

Wider fields such as Banking and climate consulting

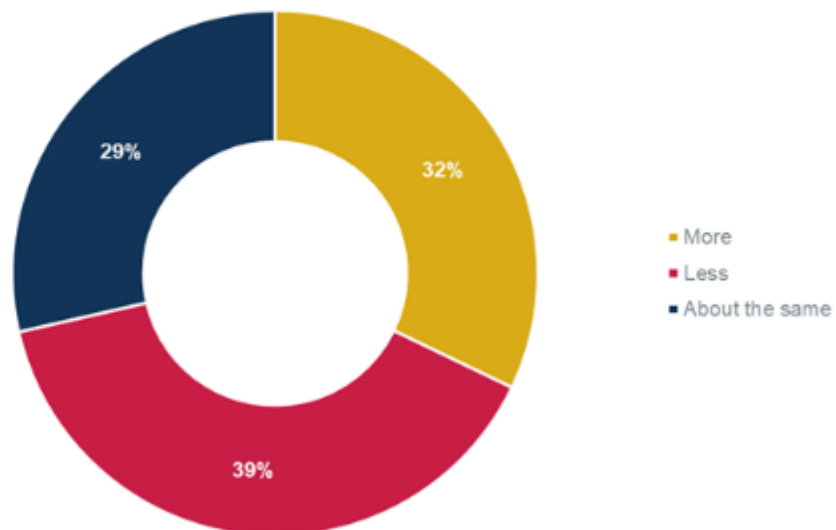
Increased levels of actuaries in senior leadership roles focused on climate and sustainability



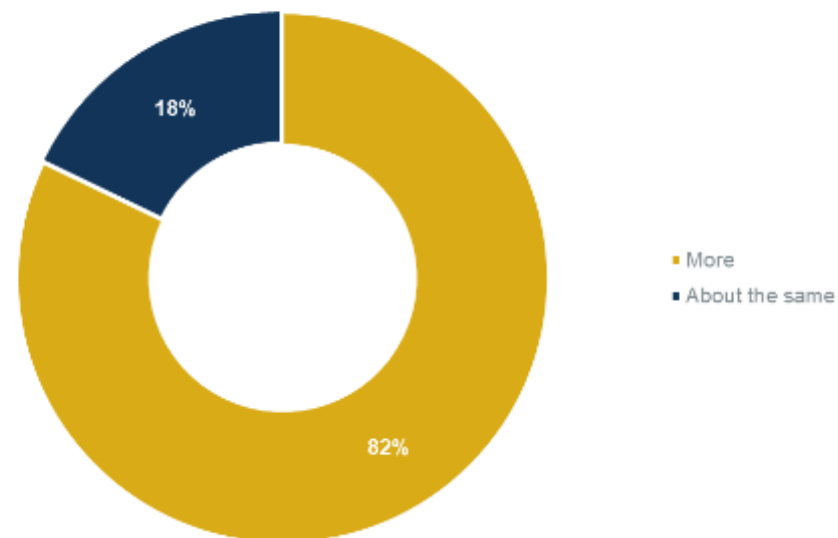
Institute
and Faculty
of Actuaries

Broadening horizons

With respect to climate and sustainability work at your organisations, what is the level of: involvement of actuaries compared to other professionals



With respect to climate and sustainability work at your organisations, what is the level of: involvement of actuaries compared to 3 to 5 years ago



Institute
and Faculty
of Actuaries

Finding – Thought leadership and collaboration



Global actuarial community has recognised the emerging risks associated with climate change for many years

Actuaries have increased thought leadership output and played a considerable role in driving this forwards

Involves working with other disciplines, recognising their expertise, and promoting that of actuaries

Actuaries collaborate extensively both within their firms, and through thought leadership activity



Institute
and Faculty
of Actuaries

Thought leadership



Parasol Lost: Recovery plan needed³

³ <https://actuaries.org.uk/media/isvotyer/parasol-lost.pdf>

⁴ <https://actuaries.org.uk/media/ascndk0h/biodiversity-and-nature-related-risks-for-actuaries-an-introduction.pdf>



Biodiversity and nature related risks for actuaries: an introduction⁴



Institute
and Faculty
of Actuaries

Finding – Supporting actuaries



IFoA supports actuaries, across Regulatory, Policy, Communities, and Learning

Critical that support keeps pace with requirements of members and their organisations

Guidance and risk alerts

Lifelong learning and volunteering opportunities



Institute
and Faculty
of Actuaries

Supporting actuaries

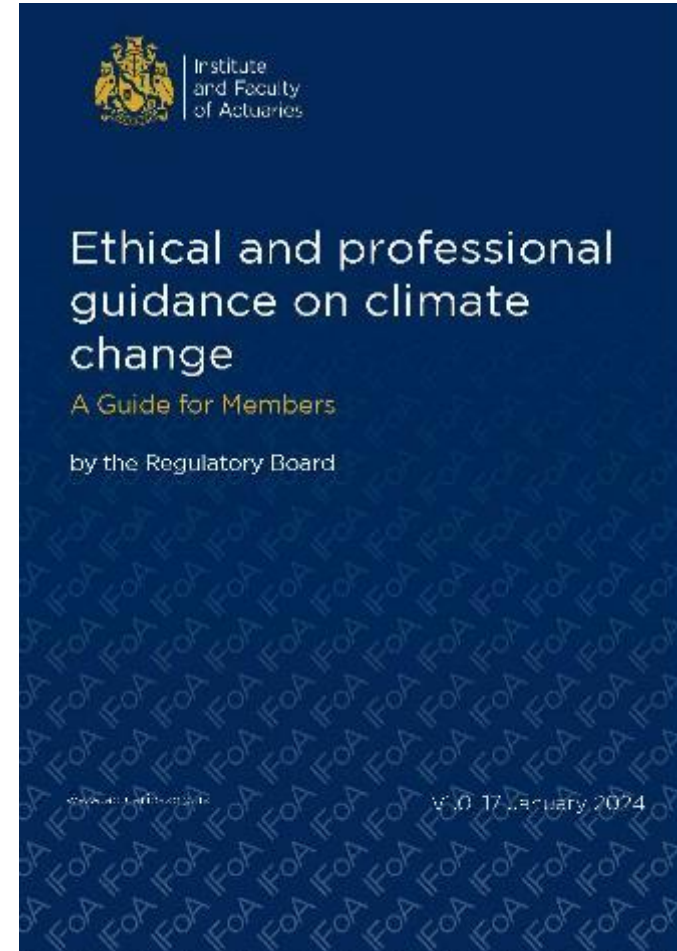


Risk Alert

Climate change scenario analysis

Key message

The financial risks from climate change should be considered within the context of scenarios when referring to, relying on, or performing climate change analysis. Data is evolving rapidly and there is a risk, when using current published scenarios, that an Actuary will underestimate climate risk.

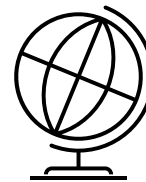


<https://actuaries.org.uk/media/ue4hdq3l/risk-alert-climate-change-scenario-analysis.pdf>
<https://actuaries.org.uk/media/f1ih0kzh/ethical-and-professional-guidance-on-climate-change.pdf>



Institute
and Faculty
of Actuaries

Finding – unrelenting science and political change



scientific output continues to confirm impacts of global warming, and influence of human activity

Scenarios deemed tail risks in the past, are now appearing in the main body of expected outcomes

Geopolitics threatens consensus view on extent of human influence and how to mitigate harms

critical that actuaries continue to focus on evidence-based analysis and research

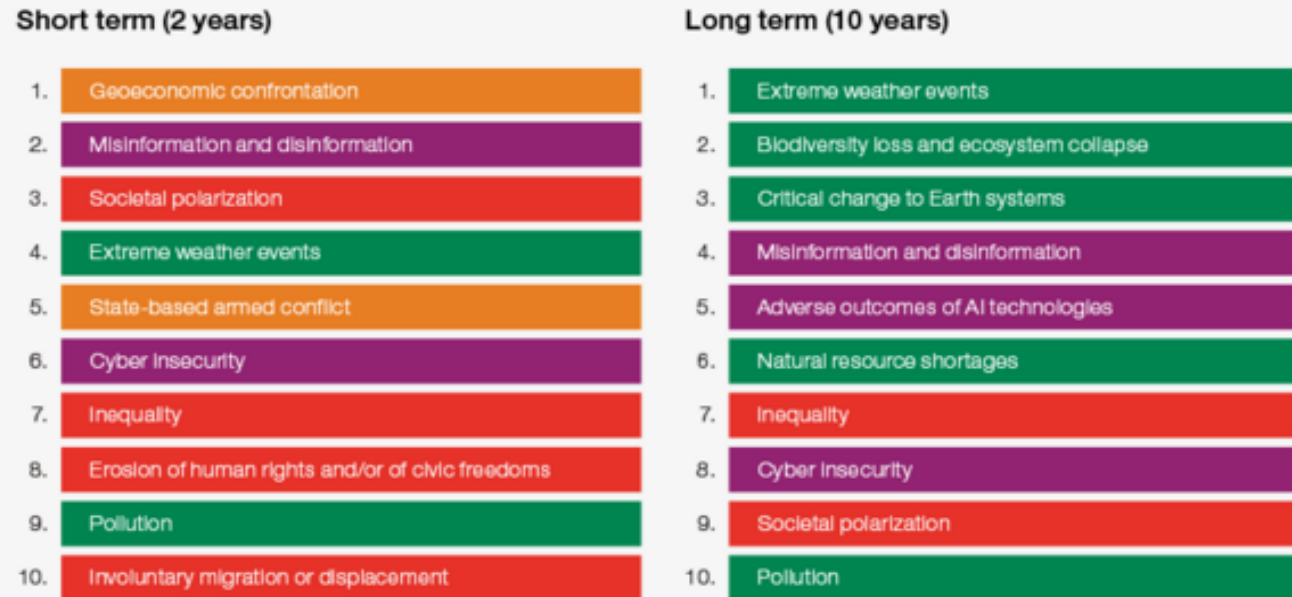


Institute
and Faculty
of Actuaries

Unrelenting science and political change

FIGURE 3 Global risks ranked by severity, short term (2 years) and long term (10 years)

Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period.



Source

World Economic Forum Global Risks Perception Survey
2025-2026

Risk categories

■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological

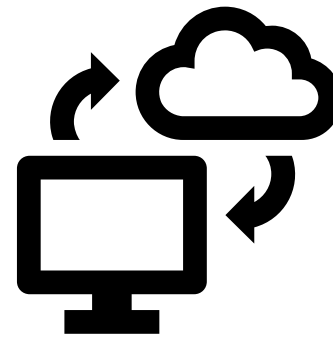
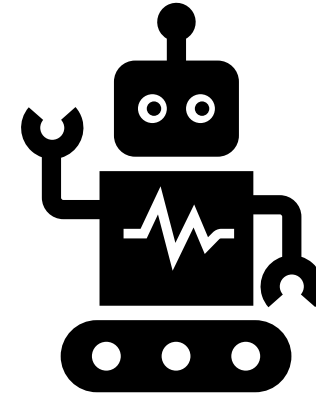
<https://www.weforum.org/publications/global-risks-report-2026/digest/>



Institute
and Faculty
of Actuaries

POLL 4 – Which of these high-profile topics will you spend the most time considering in 2026?

- A) Climate-related risk
- B) AI advances
- C) Cyber risk



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.



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

Thank you