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Climate Risks: Impact on the Economy, Insurance & Actuaries

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Climate and nature-related risks dominate the WEF Global Risk Register

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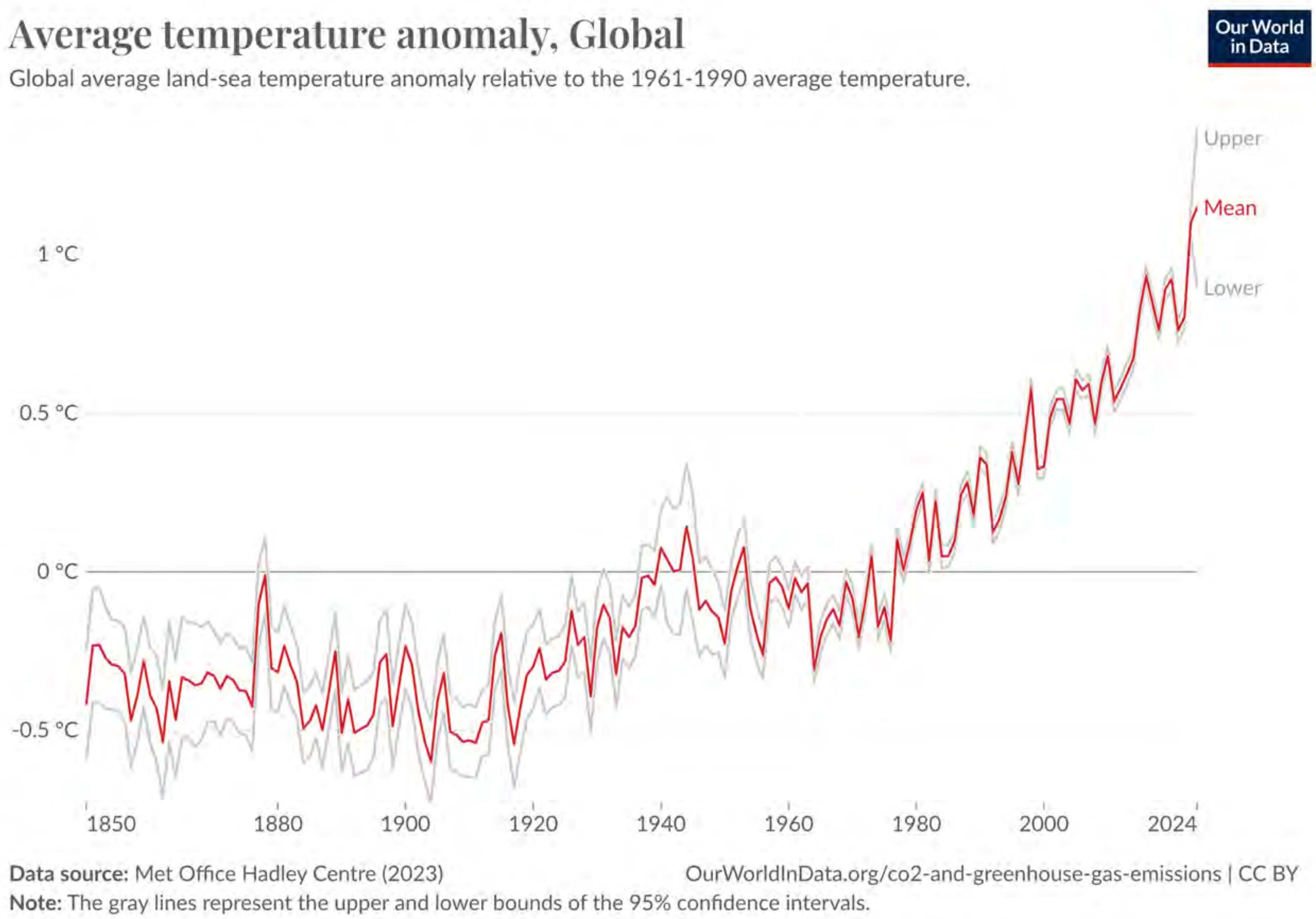
Top 5 Global Long-term Risks in terms of likelihood

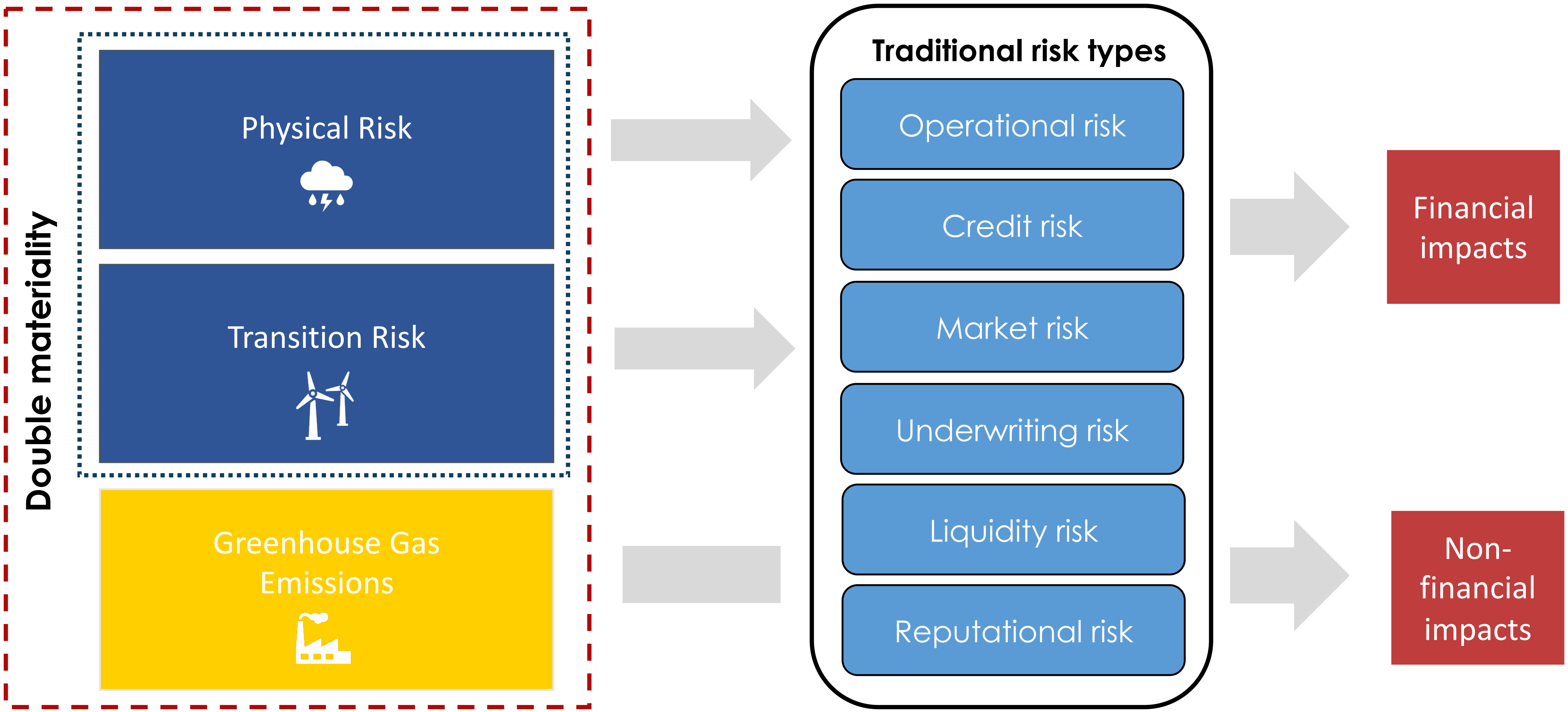
	2020	2021	2022	2023	2024
1	Extreme weather	Extreme weather	Climate action failure	Failure to mitigate climate change	Extreme weather events
2	Climate action failure	Climate action failure	Extreme weather	Failure of climate change adaptation	Critical change to Earth's systems
3	Natural disasters	Human-made environmental damage	Biodiversity loss	Natural disasters and extreme weather	Biodiversity loss
4	Biodiversity loss	Infectious diseases	Social cohesion erosion	Biodiversity loss	Natural resource shortages
5	Human-made environmental disaster	Biodiversity loss	Livelihood crises	Large scale involuntary migration	Misinformation and disinformation

Economic Environmental Geopolitical Societal Technological

Global Temperature Rise



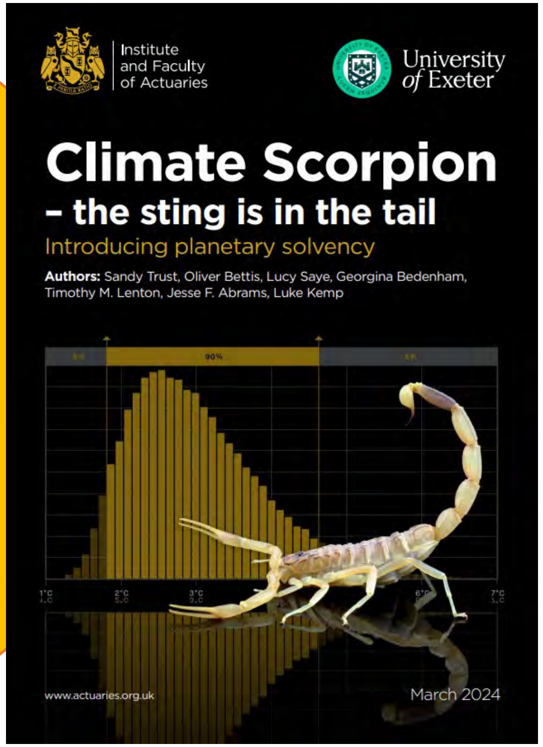
Climate Risk > Economic Risk > Financial Risk



Actuaries and the Climate Crisis

Professional Responsibility

Relevant Skillset



ACTUARIAL ADAPTATION: EXPLORING NEW ROLES FOR ACTUARIES IN RESPONSE TO CLIMATE CHANGE

ACTUARIAL SOCIETY
SOUTH AFRICA

Actuarial Climate Roles in Insurance

HEADLINE FIGURES

$417 billion
losses from Nat Cat in 2024

$1.9 trillion
global climate finance flows in 2023

2.4%
of global climate finance to MENA

ACTUARIAL ROLES

Underwriting

- Pricing and product development
- Strategy development
- Client advocacy and transition planning
- Other: risk management, reserving, reporting etc.

Investment

- Investment analysis and selection
- Investment policy, strategy and targets
- Stewardship
- Other: risk management, valuation, data, reporting etc.