



SUSTAINABILITY & THE ROLE OF THE ACTUARY

Why, how....?

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Story....

The Hippocratic Oath:

Historically taken by physicians to uphold an ethical code in practicing medicine....

Think of sustainability issues as the Hippocratic Oath for actuaries.

Climate and ESG (Environment, Social, Governance) is not a new requirement *per se*, but conceptually implicitly included in existing rules

The AAE Vision and Value Statement also includes "*concern for the public interest*"

All actuaries will have to ask themselves at some point how sustainability impacts their work. Risk management, pricing, valuations

Why single out sustainability?

1. Otherwise climate and ESG risks are often ignored in practice
2. Dual materiality – impact of funds, systemic risk exposure
3. Individually little impact or exposure, collectively substantial
4. Raising specific awareness of sustainability risks is the route chosen by an increasing number of governments, regulators & supervisors, companies and professional associations

Professionalism and ethics

Professionalism – doing something well...

Ethics – doing the right thing...

“Problems are rarely mono-casual, there are many aspects of it and solutions have many potential, sometimes unintended, consequences. In real life, it is very difficult exploring all consequences and (unintended) side effects but professionals should strive to be as comprehensive as possible.”

- Gabor Hanak

Where did the kidney come from:

A sustainability checklist for actuaries

A. BASICS – stabilise - visible, operational, direct activities

1. Hygiene factors: wash and gloves = reporting SFDR, ORSA etc
2. Stop the bleeding = divest from coal, big oil, tobacco..... Mitigation
3. Blood type match = asset liability matching, risk profile – exposure.
4. Check HR, BP, temperature = ITR, VaR of asset portfolio, underwriting.

One metric only; long term vs short term behaviour

B. PROFESSIONALISM – individual impact, risk, governance

1. Where did the kidney come from = are we making returns with economic externalities on ESG front?
Reputation, greenwashing, market risk, credit risk
2. Consider the side effects of your medicine and treatment plan = transition vs physical risk
3. Which patient do you save = middle of the road

i.e. we cannot become climate warriors as this could damage the profession.

Doing nothing does the same.

4. Crutches, stents = investment and financing of adaptation: flood defences

C. ETHICS – high level, systemic, influence, invisible impact

1. The smoking lung specialist = we are the risk managers and the large investor advisor
2. Double materiality: lifestyle vs environment = investment p.f. vs own risk exposure
3. Medical aid = who’s paying – start investing and financing. What if no one pays?
4. EMA – European Medicines Agency = industry regulation – EIOPA, EU directives

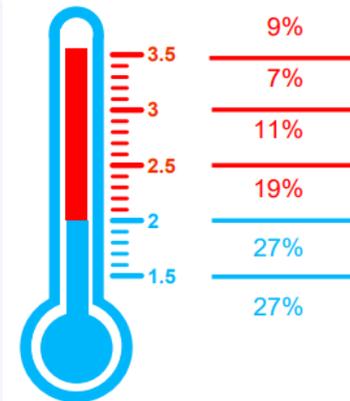


Implied Temperature Rise

Fund: 2,48°C

Benchmark: 2,64°C

Share of the index with a certain warming potential



Transplant successful but the patient died...

Reporting madness...yet...

Emissions of CO2 keep rising,
With large emitters getting top sustainability ratings.

Over a 15 year horizon, a 2 degree scenario would result in less risk overall
– transition risk driven while physical risk has a small impact.

Over a 50 year horizon 2 degrees would result in higher heat stress and
potentially higher systemic instability – drought, heatwaves, mass
migration, inequality, financial instability.

How do we represent this in an ORSA?

As a professional body:

Continuous Education:

[Climate Issues \(actuaries.org\)](https://www.actuaries.org)

- The impact on assets
- The impact on liabilities
- Climate change as one of many ESG themes, why the focus?
- Scenarios and time horizons.
- Regulation, reporting, risk
- The S and the G of ESG
- The E other than Climate Change

Watching our own footprint as organization:

- Travel to meetings
- Gender dynamics

As an industry:

Technical contribution to political processes



EU committee shocked as Ferber deletes climate measures in Solvency II reforms

14 June 2022

Published in: Regulation, Solvency II, Climate change and sustainability

Companies: European Parliament, Committee on Economic and Monetary Affairs

The European Parliament's rapporteur for Solvency II reform, German MEP Markus Ferber, has come under fire from fellow parliamentarians for removing proposals relating to climate change in his draft report for the Committee on Economic and Monetary Affairs (Econ).

In its reform package for Solvency II, the European Commission had proposed measures to encourage the sustainability of the EU's insurance sector.

These included requirements for all insurers to assess the materiality of their exposure to climate change; for firms with material exposures to perform regular scenario analysis; a regular review of Solvency II's natural catastrophe risk calibrations; and for the European Insurance and Occupational Pensions Authority (Eiopa) to research whether capital charges on assets should be lower for green investments (also known as green-supporting factors).

In Ferber's draft amendments, published 6 June, all references to these measures were removed.

In an Econ meeting on 13 June, three parliamentarians vowed to restore – and possibly strengthen – the Commission's original clauses.

EUROPEAN STANDARD OF ACTUARIAL PRACTICE 3

Existing ESAP3 implicitly covers ESG risks under article 3.1.1.

*“In considering whether the ORSA process follows an appropriately structured approach to uncertainty, the actuary should take into account whether it [...] enables **new and emerging risks**, and approaches to risk, to be incorporated as they are identified”*

ESAP3 was approved in 2017 and is now subject to a mandatory review, including a view to **explicitly incorporate sustainability-related matters** (e.g. climate scenarios in ORSA)

New AAE taskforce launched in April 2022, led by Jules Krijgsman van Spangenberg (Netherlands, ASSC).