



# ACTUARIAL ASSOCIATION OF EUROPE

## Sustainability – and why it considers actuaries?

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# Agenda

- **Sustainable finance**
  - EU plans and development
  - Reporting and
- **Sustainable underwriting**
  - General aspects on this
  - What might mean more specifically for Life/Pension/non-life side
- **Examples of the progress**
  - Complying with some principles to come more popular – e.g. UN principles
  - Work on climate scenarios
  - Actuarial climate index

# Sustainable finance – overview 1/3

- **EU is strongly supporting the transition to a low-carbon, more resource-efficient and sustainable economy.** EU has also been at the forefront of efforts to build a financial system that supports sustainable growth. The main landmarks:
  - [UN 2030 agenda and sustainable development goals](#)
  - [Paris climate agreement](#) → 40% cut in greenhouse gas emissions, investment gap €180 billion per a year.
  - [European Green Deal](#) → Europe to become the first climate neutral continent by 2050
    - the [European Green Deal Investment Plan](#) (Jan 2020) which will mobilise at least €1 trillion of sustainable investments over the next decade. It will enable a framework to facilitate public and private investments needed for the transition to a climate-neutral, green, competitive and inclusive economy.
- In the EU's policy context, sustainable finance is **understood as finance to support economic growth while reducing pressures on the environment** and taking into account social and governance aspects.
- Aims at **supporting the delivery on the objectives of the [European Green Deal](#)** by channeling private investment into the transition to a climate-neutral, climate-resilient, resource-efficient and just economy, as a complement to public money.

# Sustainable finance – overview 2/3

The **Commission's action plan on financing sustainable growth** has the following steps:

- Establishing a **clear and detailed EU taxonomy**, a classification system for sustainable activities
- Creating an **EU Green Bond Standard** and labels for green financial products
- Fostering **investment in sustainable projects**
- Incorporating **sustainability in financial advice**
- Developing **sustainability benchmarks**
- Better integrating **sustainability in ratings and market research**
- **Clarifying** asset managers' and institutional investors' **duties regarding sustainability**
- Introducing a '**green supporting factor**' in the EU prudential rules for banks and insurance companies
- Strengthening **sustainability disclosure and accounting** rule-making
- Fostering **sustainable corporate governance** and **attenuating short-termism** in capital markets

# Sustainable finance – overview 3/3

- **Expert groups** (HLEG, TEG, MSEG, platform on sustainable finance) have been active helping on the work publishing reports widely used in the decisions making and development.
- **Sustainability related reporting requirements** are developing fast track in EU and the insurance sector has been bit worried on the speed and unawareness. Delegated regulation on regulatory technical standards (RTS) being drafted including a wide set of new demands. Also methodologies for EU climate [benchmarks](#) and disclosures for benchmarks are being developed.
  - TCFD recommendations
  - Non-financial reporting directive (NFRD) consultation 2020
  - Sustainable finance disclosure regulation (SFRD) under consultation  
→ timing not flexible, content might be
- AAE has **actively commented** on different proposals
  - Sustainable finance strategy ([https://actuary.eu/wp-content/uploads/2020/07/ec-consultation\\_sustainable-finance-strategy\\_aae-response-0720-final.pdf](https://actuary.eu/wp-content/uploads/2020/07/ec-consultation_sustainable-finance-strategy_aae-response-0720-final.pdf))
  - Reporting ([https://actuary.eu/wp-content/uploads/2020/09/ESA ESG AAE RESPONSEFORM.pdf](https://actuary.eu/wp-content/uploads/2020/09/ESA_ESG_AAE_RESPONSEFORM.pdf))

# Sustainable underwriting 1/3

- insurers have an **important role in societies** so the ways societies changes in time will inevitably affect also insurers important to understand, influence and be part of this change
- **On the S (social responsibility) and G (good governance)** the ground seems to be already stable in EU but there certainly might be for instance new public responsibilities for insurers on what is considered to be the 'new norm'
  - **good governance** certainly has nowadays growing needs for transparency, gender and age – balance.
  - **social responsibility** might mean more and more offering products to a wider range of customers (excluding might not be possible in similar ways). Also there might growing pressure on how to deal with issues around **information, tech and data regulations**.
  - The **social media** takes care excesses are told to a wide audience with reactions to follow...
- The asset side '**exclude – avoid – invest in**' – principle is already applied in underwriting in term of how risks are understood. Usually e.g P&C insurers have had to decide what risks they are underwriting and what not, how to price and whether a third party (re-insurer) is part of the puzzle



# Sustainable underwriting 2/3

- When **customer-needs change**, then new products and different covers are needed also.
  - Currently we are dealing with **cyber risks** and the new needs consumers have. Insurers are struggling with what data and models should they use in setting the price and modelling the risks and what would be the critical policy conditions
- **Avoid investing vs. avoid underwriting.** In national legislations there is a lot of requirements for certain type of industries to have an insurance cover – and it might be mandatory also for the insurer to provide that cover which makes it trick to have principles against something.
- On the **Public-Private side evolution**, through decades more responsibilities that governments used to have towards companies or citizens have been passed to the private side which might have been a good progress but puts then the pressure on insurers when changes occur. Are there risks that cannot be insured and thus be avoided... Similar discussion that right now is going on in the insurance side on shared resilience solutions (SRS) because of COVID-19

## Life / pensions

- **Demographic risks** might take a really long time to evolve so that the risk profile changes substantially – on the other hand crisis like the current COVID-19 might affect on the sudden mortality increase rate
- **Contracts are very long** – for instance pension policies with guaranteed rates could face some issues if the market will become more volatile. Same applies obviously on unit linked contracts value development and also on fee levels if the underlying asset becomes highly turbulent
- **Mortality and disability covers** can also be of long maturity and depending on the national insurance policy law not that substantial pricing changes can be made.
- **Lapse rates** can be high in life contracts and also savings withdraws if the environment / society gets more turbulent – pension side is more stable in this sense
- In the long run **changes in population**, immigrants, where people live etc. would have a massive impact both to respond properly on the new needs but also to make the needed changes to the pricing, UW process and product/pension plan conditions.

## Non-life

- Non-life contracts **might be shorter** and also have more possibilities for insurers to change pricing or adjust the policy wording to cover less of the new risks
- Non-life **pricing and the accuracy**;
  - data use, knowing details of the customer and the property, vehicle or other physical asset becomes important.
  - Using cleverly this information in pricing and in adjusting the policy conditions
- Making a **strategic appetite** on both the risks to underwrite and the products to sell will be needed



# UNEP PSI principles - Insurance

- Already a **number of insurers comply with the principles** globally (10% in premium or \$6 trillion in assets)
- **4 main principles** for insurers to take into account when making business decisions, publishing reports and offering products. Some that might concern actuaries in the near future (subsections on the main principles):
  - **Integrate** ESG issues into risk management, underwriting and capital adequacy decision-making processes, including research, models, analytics, tools and metrics
  - **Develop products and services** which reduce risk, have a positive impact on ESG issues and encourage better risk management
  - **Support** prudential policy, regulatory and legal **frameworks** that enable risk reduction, innovation and better management of ESG issues
  - **Dialogue with governments and regulators** to develop integrated risk management approaches and risk transfer solutions
  - **Participate** in relevant disclosure or reporting frameworks
- **In future** more pressure might come to comply with these principle but also for the principles itself to be updated

# Sustainable finance and the work on scenarios

- **Soft requirements into Solvency II** for actuaries and risk management on taking into account sustainability related matters in their responsibilities – will have an impact on modelling and the use of scenarios (e.g Best estimate, ORSA)
- EIOPA will be putting forward consultations on **more detailed requirements** on the **ORSA** process, which is seen as an efficient tool for insurers to warm up/create the needed understanding
- **EU stress test 2021 consultation** introduced climate change related stresses for insurers
  - The **length of these scenarios** still open, if long then new approaches might be needed and actuaries needs to be active
  - Also might need **new ways to model the impact** of the risks as the balance sheet and own funds can easily be affected in many ways.
  - Might not be part of the stress thou.
- **Scenario providers** exists and part of the work might need to be outsourced
- Difficulty lays in the way different matters **are connected with each other's** – Societal change, market reactions, macro-side and in which way this all is driven by consumers and the changing mind-set of citizens

# Actuarial climate index \*

**BACKGROUND.** The first Actuaries Climate Index ([ACI](#)) was developed in North America and went live in November 2016 and 2018 in Australia (AACI).

**STRUCTURE OF THE ACI.** The ACI is based on analysis of seasonal data for six index components collected since 1961.

- The index measures changes in extremes of high and low temperatures, high winds, heavy precipitation, and drought, as well as changes in sea level, expressed in units of standard deviations from the mean for the 30-year reference period of 1961 to 1990, for the United States and Canada combined and by region.
- Combining six components over a five-year measurement period, the index's moving average smooths out monthly and seasonal fluctuations for a meaningful measurement of long-term climate trends.

**DATA ISSUES.** The ACI uses gridded datasets for all of the components except mean sea level. Each of these grids covers an area of 2.5 degrees latitude by 2.5 degrees longitude, and the data values are in effect averages over that area. This provides more manageable amounts of data, which have been collated and checked by the data provider.

- The [European Climate Assessment & Dataset](#) (ECA&D), which is based in Utrecht, collates data provided by European meteorological services, and produces gridded data sets for Europe.
- The question of missing data will need to be addressed, as the availability of readings in some parts of Europe is quite limited. The gaps may be filled by the use of reanalysis but this does introduce a level of approximation which might not be considered acceptable.
- Also satellite data might become one option, e.g Space4Climate, in this regard.

**USAGE OF THE INDEX.** The Index will provide information on trends in the frequency of extreme events that could be attributed to climate change. Decisions to follow how could be published.

- Climate indices provide useful information for actuaries, insurers, regulators and policy makers in relation to the frequency of the occurrence of extreme climate events.
- They do not provide information on the losses which arise due to these events. Anyway there's progress on the development of an Actuaries Climate Risk Index, which would incorporate information on the losses arising from past events which could be of assistance in setting reserves and capital requirements and indeed pricing for such risks (e.g American Academy of Actuaries publication).

**NEXT STEPS.** AAE to make decisions about the development of the EurACI to make the Index available.

- This may require some pragmatic decisions to be taken about the level of data quality and scope of the index
- The AAE will need to establish governance procedures in relation to the publication of the Index and to keep it under constant review
- Ultimately, the target should be a global actuaries climate index, which is likely to rely significantly on satellite data to cover the oceans as well as land areas where reliable data is sparse

\*) full story, published by Society of actuaries in Ireland can be found here: <https://web.actuaries.ie/development-european-actuaries-climate-index>

# Sustainability – Why this considers actuaries?

- The investment side has a lot of developments going on the EU side – to have an understanding of this help to be on track when sustainability related reports and business practises flows widely to insurers and pension funds
- Actuaries might be closely related on the different reports that are provided – also purely sustainable finance related issues (Asset reports, non-financial reporting) might require the attention from actuaries working in the insurance company or in a pension fund.
- In Solvency II by now only soft requirements will be brought in on sustainability at the first stage – but even bringing this to ORSA might be a major work. Also stress tests are assumed to start including in future also the sustainability related scenario
- When any updates on requirements relating to information provided for customers (PRIIPS, IDD on insurance side) are put in place then also new and holistic understanding on this subjects will be needed
- The assumption is that sustainability will be more and more part of all of the insurance business. Therefore the general understanding is needed for all employees and deep understanding from many of the experts
- The ways actuaries analyse and bring awareness of risks is of key with sustainability – this understanding will be needed across the insurance/pension business – pricing, reserving, ALM, Risk management etc.



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