Financing transition towards sustainability

The EU Sustainable Finance framework

Martin Špolc, DG FISMA, European Commission

Belgium Financial Forum

9 November 2023

Investment gap

Overall, additional investments of over

EUR 620 billion

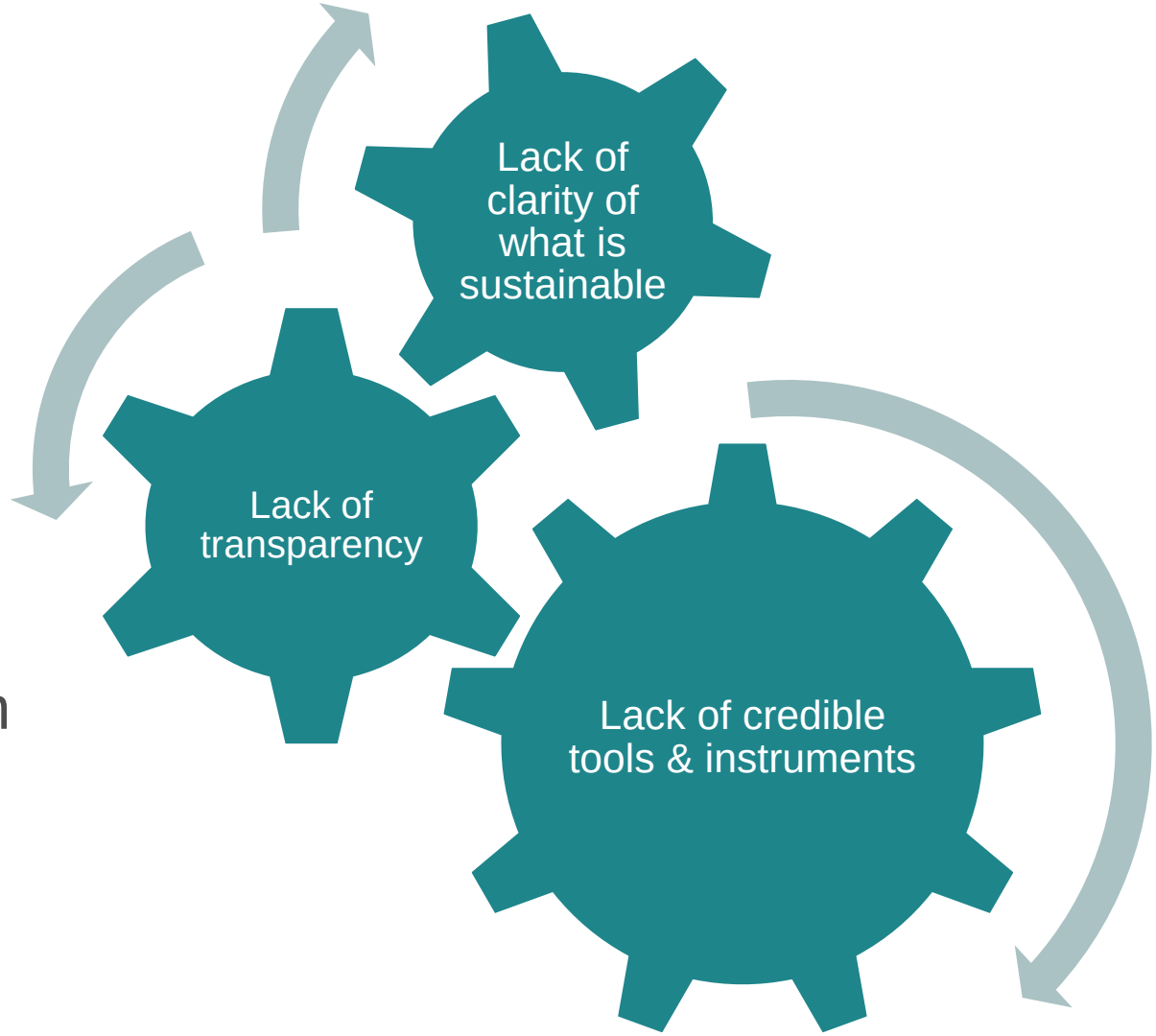
annually will be needed to meet the objectives of **the Green Deal and RepowerEU**

European Commission

Obstacles to scale up sustainable investment

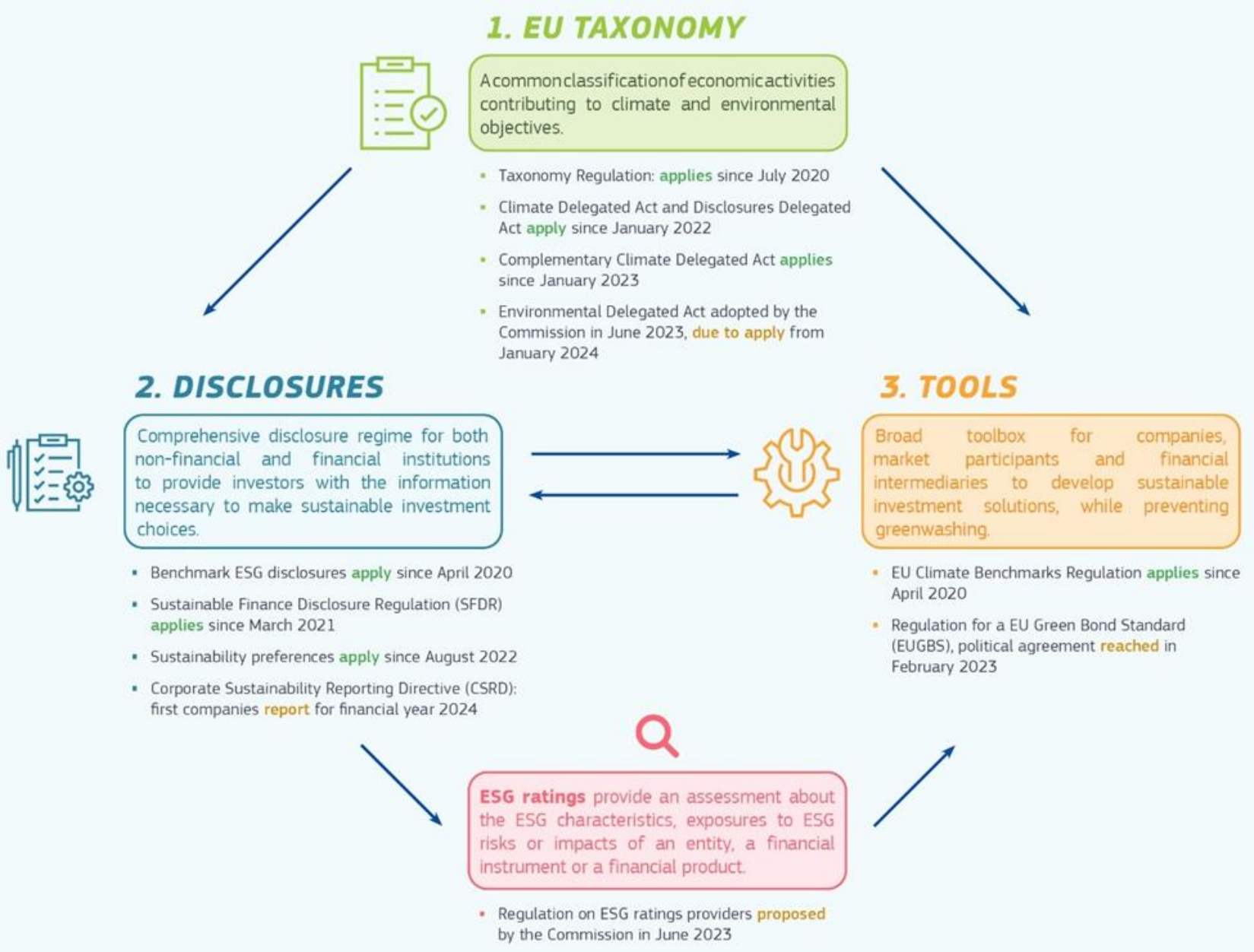
…according to investors, banks, insurance companies, pension funds, asset managers

In 2018, industry called upon the European Commission to address these obstacles

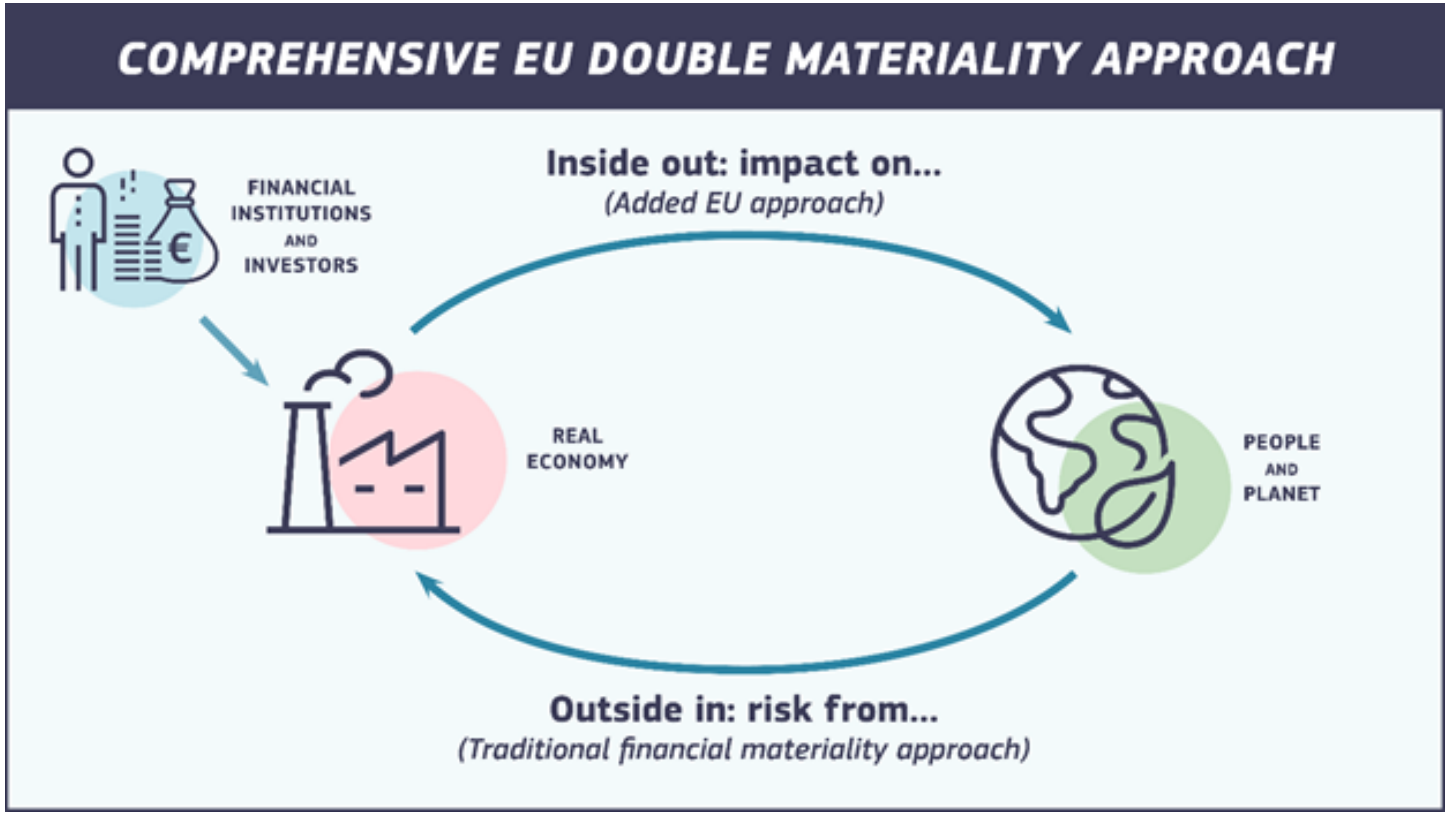


European Commission

EU Sustainable finance foundations since 2018



The EU double materiality approach



EU Taxonomy – defining sustainable

A classification system

Provides clarity on what is an environmentally sustainable activity and under which circumstances.

A measuring tool

Measures the degree of sustainability of an investment and the degree of green activities of companies

A transition tool

Helps investors and companies to plan and report on the transition. It sets the objectives and the direction of travel for different economic activities.

Ultimately, it helps raise the needed investments to build a net zero, resilient and environmentally sustainable economy.

What the EU Taxonomy is **not**:

- It’s not a mandatory list to invest in
- It’s not a rating of the “greenness” of companies
- It does not make any judgement on the financial performance of an investment
- What’s not green is not necessarily brown.

European Commission

What are the objectives of the EU Taxonomy?

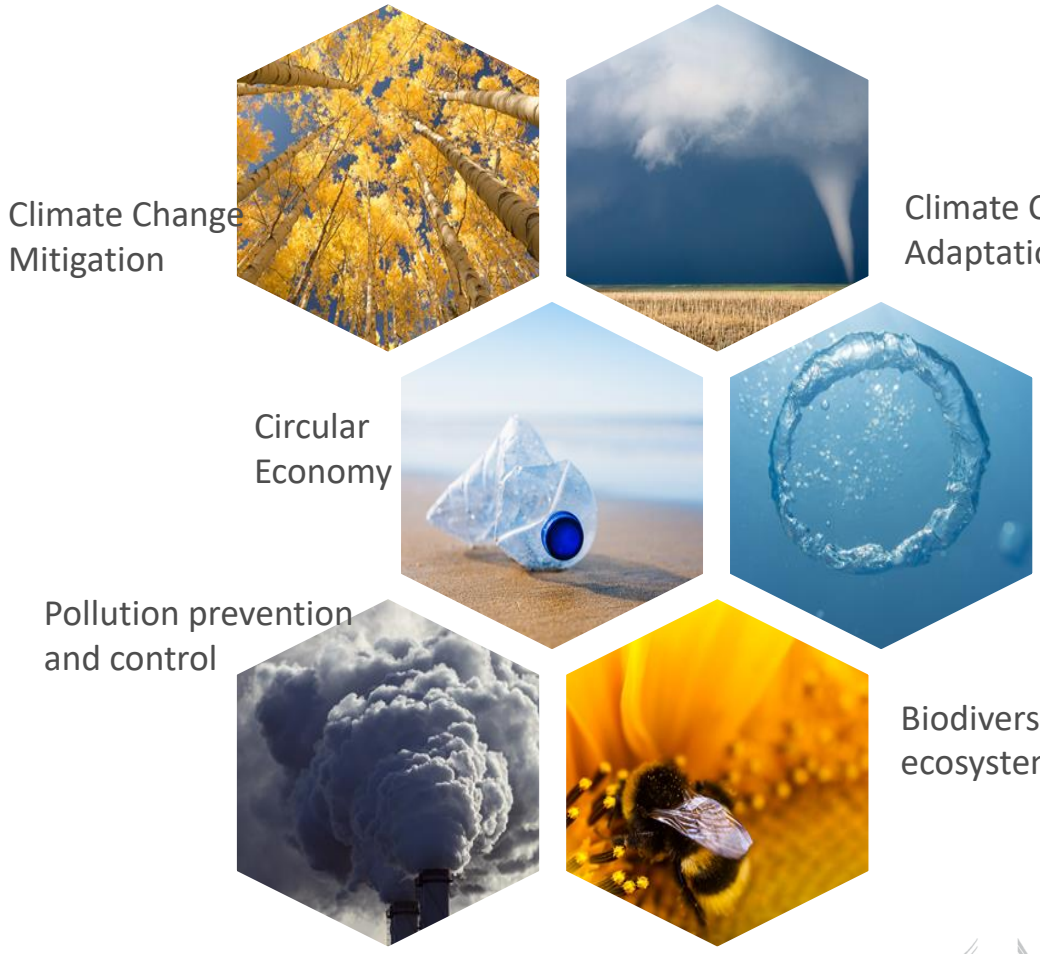
Make a substantial contribution
to at least one of the 6 environmental objectives

+

Do no significant harm
to any of the other 5 environmental objectives

+

Meet minimum safeguards
comply with international minimum safeguards

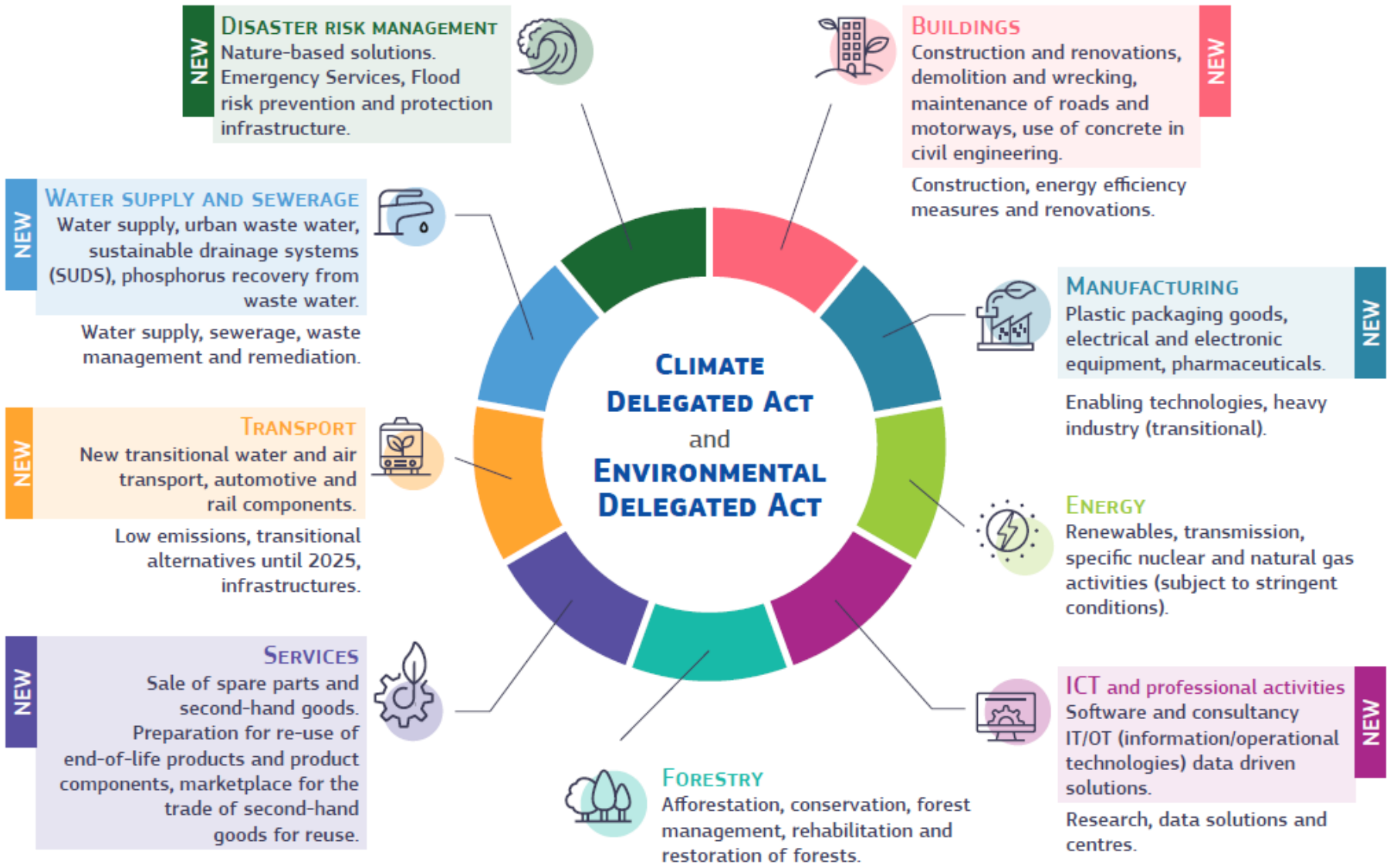


European Commission

Three types of economic activities recognised

- **Low-carbon activities** [high environmental performance achieved already today]
- **Transitional activities** [high environmental performance not yet achieved]
- **Enabling activities**

Power of the EU Taxonomy



Taxonomy – disclosure obligations

The Taxonomy Regulation requires disclosures by

Financial market participants offering financial products in the EU

- **How and to what extent the Taxonomy was used** in determining the sustainability of the underlying investments;
- The proportion of underlying investments that are Taxonomy-aligned, as a percentage of the investment, fund or portfolio.

Large companies who are already required to provide a non-financial statement under the Corporate Sustainability Reporting Directive

The proportion of
- **turnover**
- **CAPEX** and, if relevant, **OPEX**

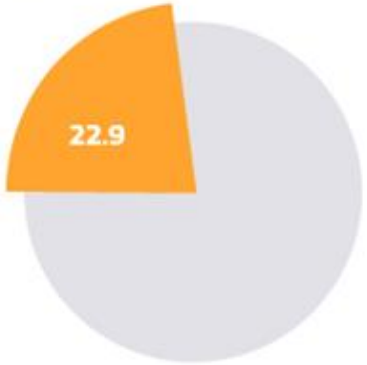
aligned with the EU taxonomy.

European Commission

Average Taxonomy Alignment (for non 0 values)

EU Taxonomy Aligned Revenue
Percent > 0

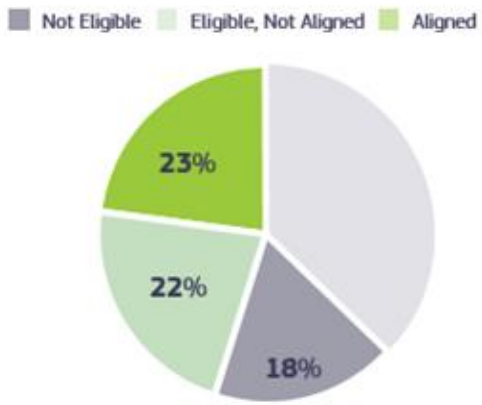
EU Taxonomy Aligned CapEx
Percent > 0



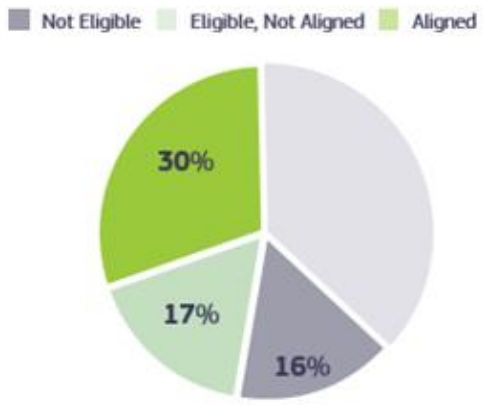
EU Taxonomy Aligned OpEx
Percent > 0

Taxonomy reporting in STOXX 600 Index

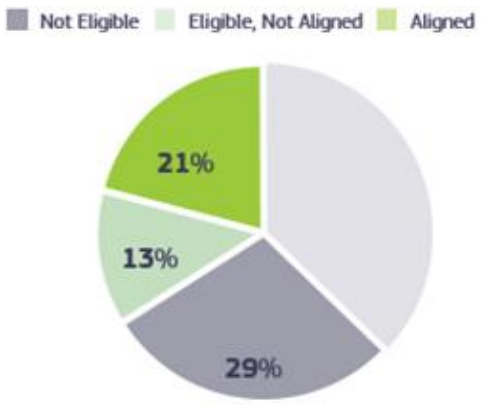
Revenue Disclosure Distribution



CapEx Disclosure Distribution



OpEx Disclosure Distribution



Source: Bloomberg as of 17th May 2023

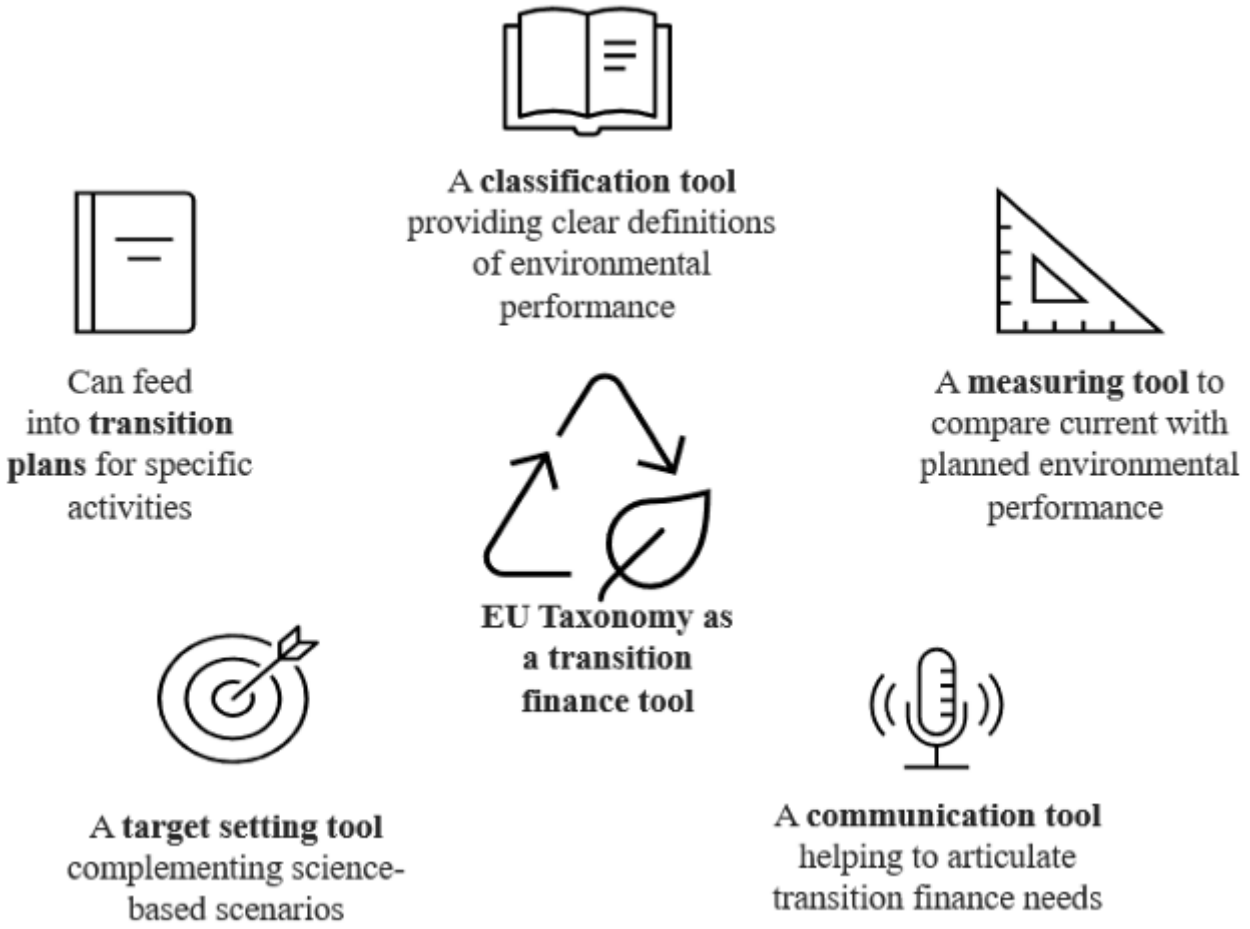
Focus on usability, implementation and simplification

TAXONOMY - EU Taxonomy Navigator – A simple and practical guide for users

EU Taxonomy Navigator (europa.eu)

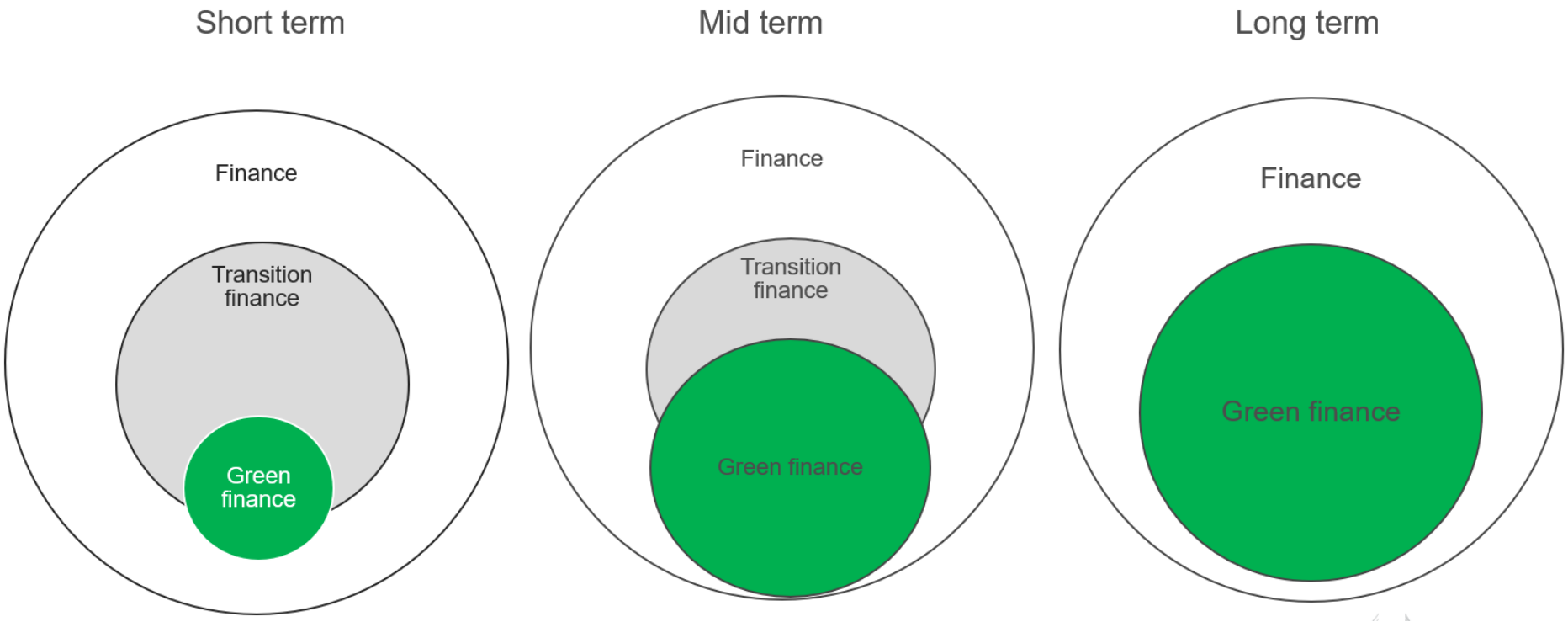
- **EU Taxonomy Compass -** a visual representation of sectors, activities and criteria
- **EU Taxonomy Calculator –** a step-by-step guide on reporting obligations
- **FAQ repository**
- **EU Taxonomy User Guide -** a simple guide for non-experts

What the Taxonomy can be used for



Transition Finance

Relationship between green and transition finance today and over time



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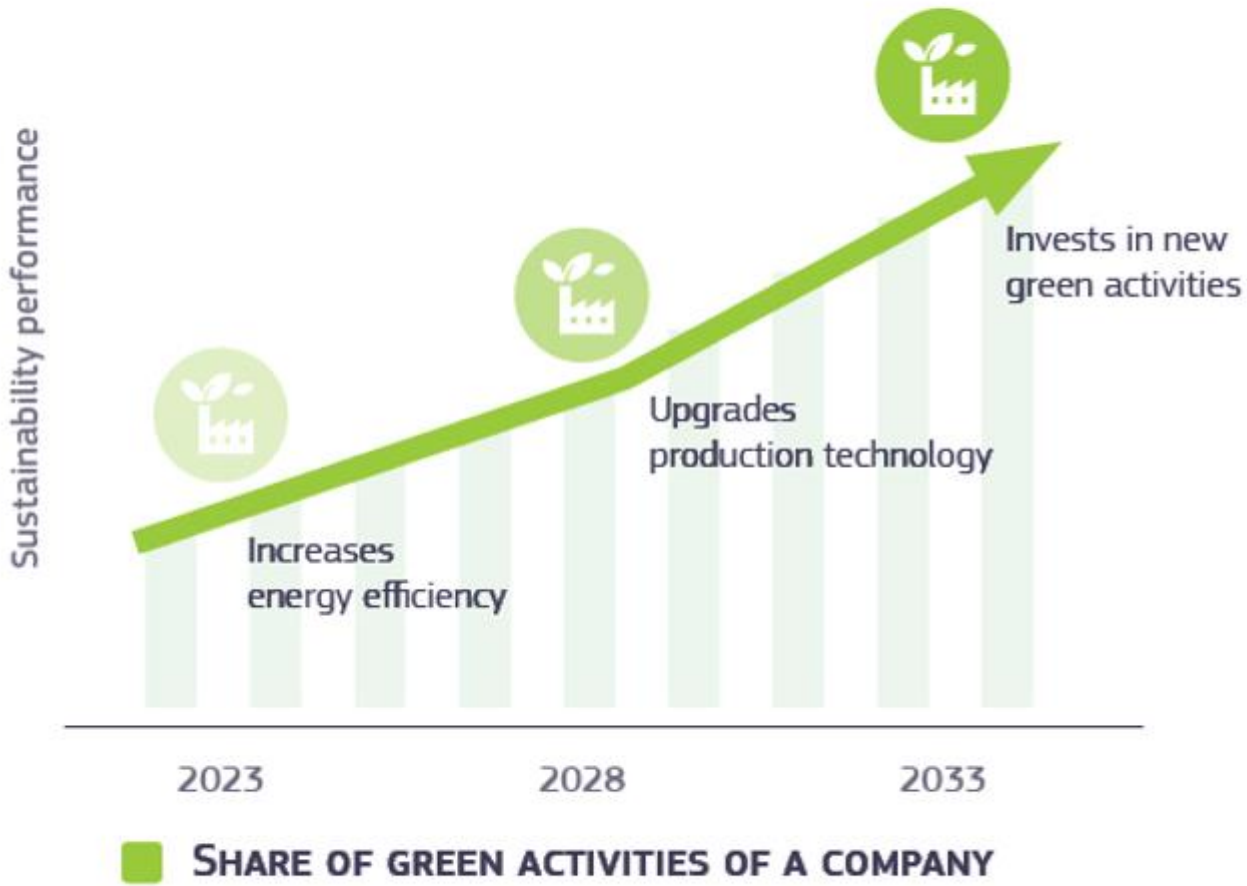
TOOLS FOR FINANCING THE TRANSITION

EXAMPLE OF A COMPANY IN TRANSITION

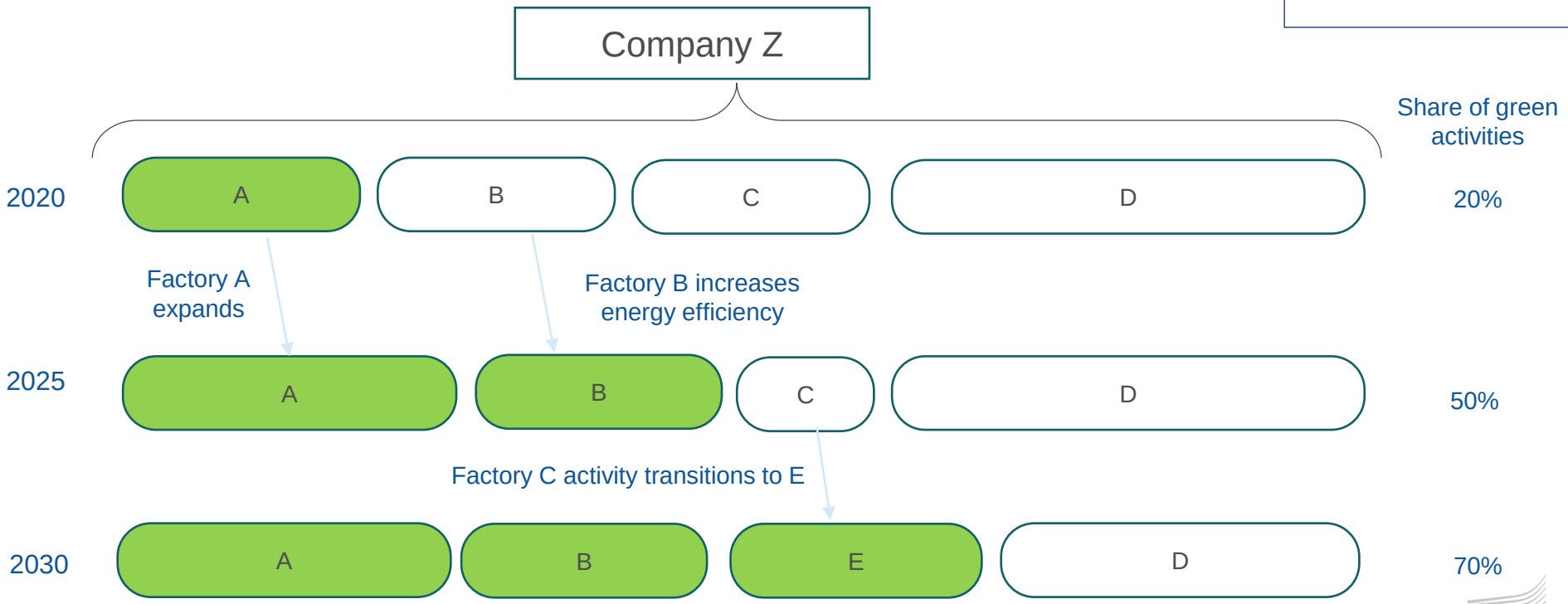


Voluntary tools that companies can use to finance their transition towards sustainability over time include:

- **EU Taxonomy**
- **EU climate benchmarks**
- **European Green Bond standard**
- **Science-based targets**
- **Transition plans**

Transition tool - how can taxonomy help?

- By defining green economic activities, not companies
- The Taxonomy enables companies to transition by gradually increasing their share of green activities



Source: Platform on Sustainable Finance

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Corporate Transparency

- ✓ **Clarity and certainty** on sustainability information for reporting companies and users
- ✓ EU standards cover all sustainability information from the **double materiality perspective**
- ✓ **Covers all three ESG dimensions** of sustainability
- ✓ Critical importance of the **transition plans**
- ✓ **EU standards build on** and contribute to global standards, including the ISSB
- ✓ Adopted by the Commission in July 2023

European Commission

European Green Bond Standard

What is it?

- **A voluntary standard that can be used instead of or in combination with existing market standards.**
- Usable for all main types of bonds and bond-issuers (corporate, sovereign, asset-backed, project bonds,...)
- Open to issuers and external reviewers based outside the EU.

Why do we need it?

- **Sets gold standard for issuing green bonds in the EU.**
- Gives **issuers** clear & reliable way to demonstrate the credentials of their bonds, thanks to link w/ Taxonomy.
- Protects, reassures, and supports **investors**.

→ Supports companies raising major funding to transition towards climate-neutrality.

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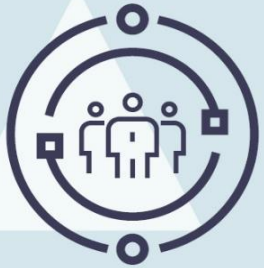
EU sustainable finance strategy – key themes

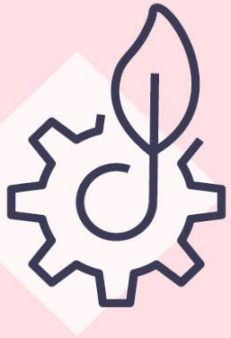
FINANCING THE TRANSITION TO SUSTAINABILITY

This strategy provides the tools and policies to enable economic actors across the economy to finance their transition plans and to reach climate and broader environmental goals, whatever their starting point.



INCLUSIVENESS

This strategy caters for the needs of, and provides opportunities to individuals and small and medium companies to have greater access to sustainable finance.



FINANCIAL SECTOR RESILIENCE AND CONTRIBUTION

This strategy sets out how the financial sector itself can contribute to meet Green Deal targets, while also becoming more resilient and combatting greenwashing.

GLOBAL AMBITION

This strategy sets out how to promote an international consensus for an ambitious global sustainable finance agenda.

European Commission

Thank you

European Commission

Implementing the EBA Roadmap on Sustainable Finance: Climate stress testing and Pillar 1

Belgian Financial Forum| 9 November 2023

Stéphane Boivin | EBA | Acting Head of ESG Risks Unit

EBA's roadmap on sustainable finance

EBA Roadmap sets out EBA's objective and approach in the area of sustainable finance and ESG

Overall objective is to build an adequate framework for EU banks and their supervisors to mitigate ESG risks and support an orderly transition to a sustainable economy

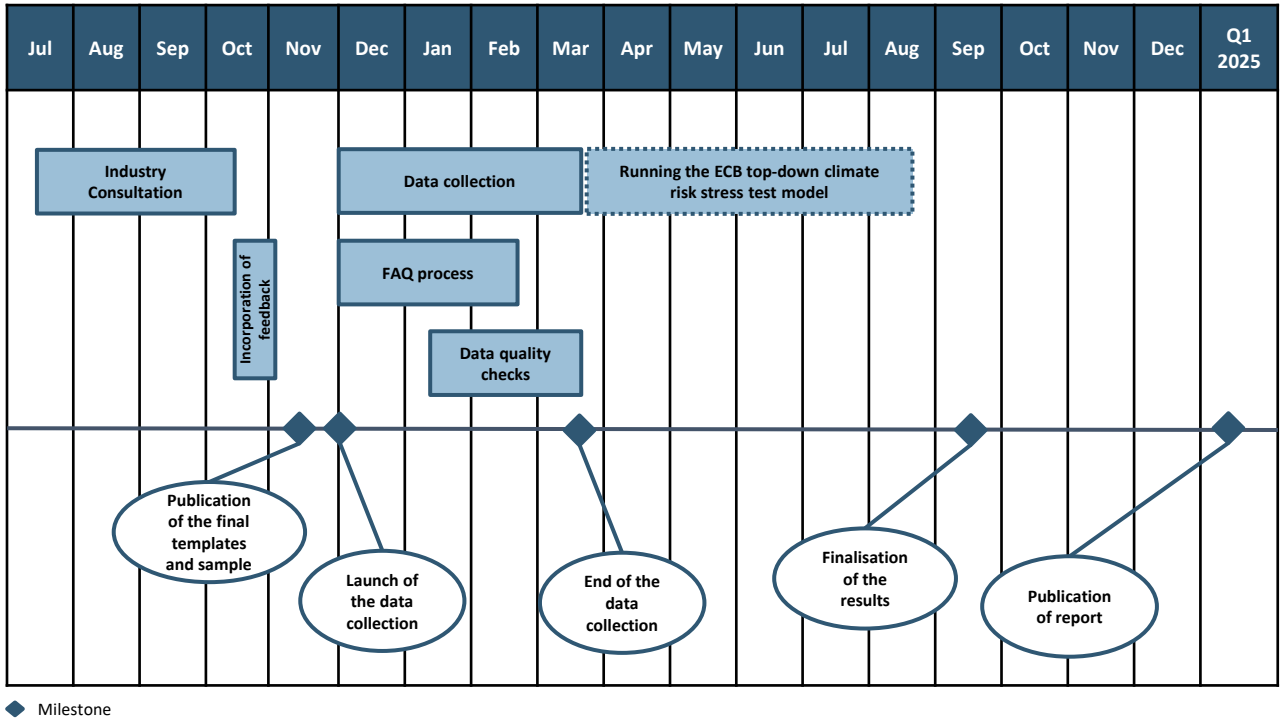
- ensuring a thorough but proportionate application
- fostering resilience of the EU banking sector and broader economy
- facilitating convergence at EU and international levels

through a holistic and sequenced approach

Climate stress testing - One-off exercise

- 8 March 2023: letter from EC asking ESAs, ECB & ESRB to perform a one-off climate stress testing exercise
- **A cross-sectoral and system-wide exercise**, requiring collaboration and coordination among parties involved. Run in a **top-down** fashion. **Results** expected to be published **no later than Q1 2025**
- Primary focus is to assess resilience of financial sector in line with the Fit-for-55 package, while gaining insights into capacity of financial system to support the transition even under conditions of stress
- Exercise based on 3 ad-hoc ESRB climate scenarios:
  - **Baseline scenario**: Fit-for-55 package is implemented as planned in an economic environment that reflects current forecasts
  - **First adverse scenario**: focused on short-term climate-change related risks resulting in asset price corrections and outflows triggered by a sudden reassessment of transition or physical risks
  - **Second adverse scenario**: combination of climate-change related risks with other stress factors, possibly consistent with scenarios for regular stress-testing exercises

High level timeline



Industry consultation

- The draft templates and template guidance for the data collection were shared with the industry for **consultation in July** and feedback was received on **11 October 2023**
- A public hearing with the industry was conducted on the **28 September 2023** to receive preliminary feedback. Almost 300 people attended the public hearing and provided around 80 questions
- Main issues raised by the industry were related to the provision of climate related data (emissions) and the scope of the data collection (e.g. market risk)
- Final template and template guidance expected to be published (together with the sample of banks) **mid-November**

Banking sector module - Overview

- Work on banking sector module will be coordinated by EBA with the support of ECB/SSM
  - EBA will launch data collection on 1 December, supported by CAs, to gather data from participating banks and use it to feed the ECB top-down model developed to obtain results for the banking sector
  - Data collection will cover corporate credit risk exposures and market risk exposures (equity and bonds) as of end of December 2022. No projections from banks will be collected
- **Sample of participating banks** will be composed by same banks as in 2023 EU-wide ST. Additional banks to be selected by CAs based on relevance for this exercise. **Around 110 banks** will take part to the exercise. They have been already informed by their CA about their participation
- **No individual bank results will be published**

Banking sector module - Overview

- Templates aim at collecting aggregated and company level data on climate risk, covering both physical and transition risk. The following data is collected per risk area:

Credit Risk	Market Risk	Real Estate	Interest Income and Fee and Commission Income
•Company level data and aggregated data for **Corporate Loan Exposures**	•Company level data and aggregated data for **Corporate bonds and Equities**	•Aggregated data for **Residential and Corporate Real Estate Exposures**	•Aggregated data for **Corporate loan exposures**

- **A FAQ process** will be implemented to address potential questions that may arise during the data collection process. The FAQ process will be in line with the EU-wide Stress Test. Questions from banks will be collected by CAs using their usual channels (e.g., the SSM will use STAR)

- To ensure accuracy of the submitted data, **Date Quality Checks (DQCs)** will be implemented in collaboration with ECB/SSM

Climate stress testing - Next steps

- One-off exercise
  - Mid-November 2023: Publication of final templates, template guidance, and sample of participating banks
  - 1 December 2023: Launch of the data collection for the banking sector module
  - 1 December 2023 – 15 March 2024: Data quality checks and FAQ process
  - 15 March 2024: End of the data collection
  - Q1 2025: Publication of results
- Other ongoing work
  - Guidelines on banks' ESG risks stress testing (consultation planned in 2024)
  - Development of regular EU-wide climate stress tests
  - Joint ESAs Guidelines on supervisory stress testing

Pillar 1 - Prudential treatment of exposures

Discussion Paper

- Initial analysis of the Pillar 1 framework for credit institutions & investment firms
- Focus on environmental risks
- Questions for consultation

Evidence gathering

- 43 responses from diverse stakeholders
- Further analysis carried out, including on social risks

Report

- Mandates specified in Article 501c CRR and Article 34 IFR
- Environmental and social risks

Monitoring of and contribution to developments at Basel level

Key messages – Addressing data challenges

- **Evidence in academic literature about the effect of environmental risks on risk-metrics**
- **Comprehensive changes to the Pillar 1 framework are warranted only where a clear link between E&S factors and traditional categories of financial risks can be established**
- Important for banks to:
  - develop techniques to identify whether a realised loss is linked to environmental factors
  - develop techniques to identify the extent to which the market prices environmental risks
  - incorporate environmental factors into their own assessments (e.g. pricing of newly originated loans)
- Mispricing concerns of environmental risks can be alleviated by:
  - fostering disclosures of market participants
  - monitoring the incorporation of environment-related forward-looking information in accounting
  - enhancing supervisory reporting to enable the collection of relevant and reliable information on environmental risks and their impact on financial losses of institutions

Key messages - Adjustment factors

- Several stakeholders have suggested introducing environment-related adjustment factors in prudential rules, mostly in the form of **'green supporting'** or **'brown penalising' factors**
- Adjustment factors face challenges complicate their design and implementation
  - **Conceptual challenges** (e.g. overlap/double-counting with existing Pillar 1 mechanisms)
  - **Operational challenges** (e.g. calibration, granularity needed to differentiate exposures and capture forward-looking aspects such as individual transition plans, international cooperation)
- Overall, it is key to:
  - ensure the calculation of RWAs is not distorted
  - maintain risk-based capital requirements which fulfil their function as safeguards against unexpected losses
- **Hence, introduction of such adjustment factors is not supported in the short term**

Key messages - Short-term actions

- **Propose short-term targeted enhancements to the current Pillar 1 framework**

  → Accelerate E&S risks integration across Pillar 1 while preserving its integrity and purpose

  → Improve capture of E&S risks and favour enhancements rather than dedicated adjustment factors

  - Internal models are expected to automatically/progressively capture environmental risks; stress testing programmes under IRB and FRTB-IMA models to explicitly consider environmental risks
  - Encourage inclusion of E&S risks as part of external credit assessments by CRAs
  - Due diligence requirements to explicitly integrate environmental aspects
  - Institutions to account for relevant environmental factors in the valuation of immovable property collateral
  - Institutions to identify whether E&S factors constitute triggers of operational risk losses
  - Progressively develop environment-related concentration risk metrics as part of supervisory reporting
  - Assess how SyRB could be used to address potential environmental systemic risks

Key messages - Medium to long-term actions

- **Propose medium to long-term actions**

  → More comprehensive revisions to Pillar 1 framework to be considered in light of evolving E&S risks

  → International cooperation at BCBS level is important depending on the (fundamental) nature of revisions

  - Reassess how E&S risks can be reflected in risk weights for credit risk SA keeping in mind simplicity
  - Reassess appropriateness of revising IRB RW supervisory formula
  - Reassess appropriateness of including under the market risk SbM a dimension reflecting environmental risks
  - Reassess appropriateness of revisions to the BCBS SA methodology for operational risk
  - Reassess appropriateness of introducing environmental-related concentration risks under the Pillar 1 framework

- **In total, 38 recommendations**

  → 13 proposed short-term actions

  → 19 proposed medium to long-term actions

Key messages – Preparing future work

- **Beyond that, the report is preparing next phases of work on the topic**

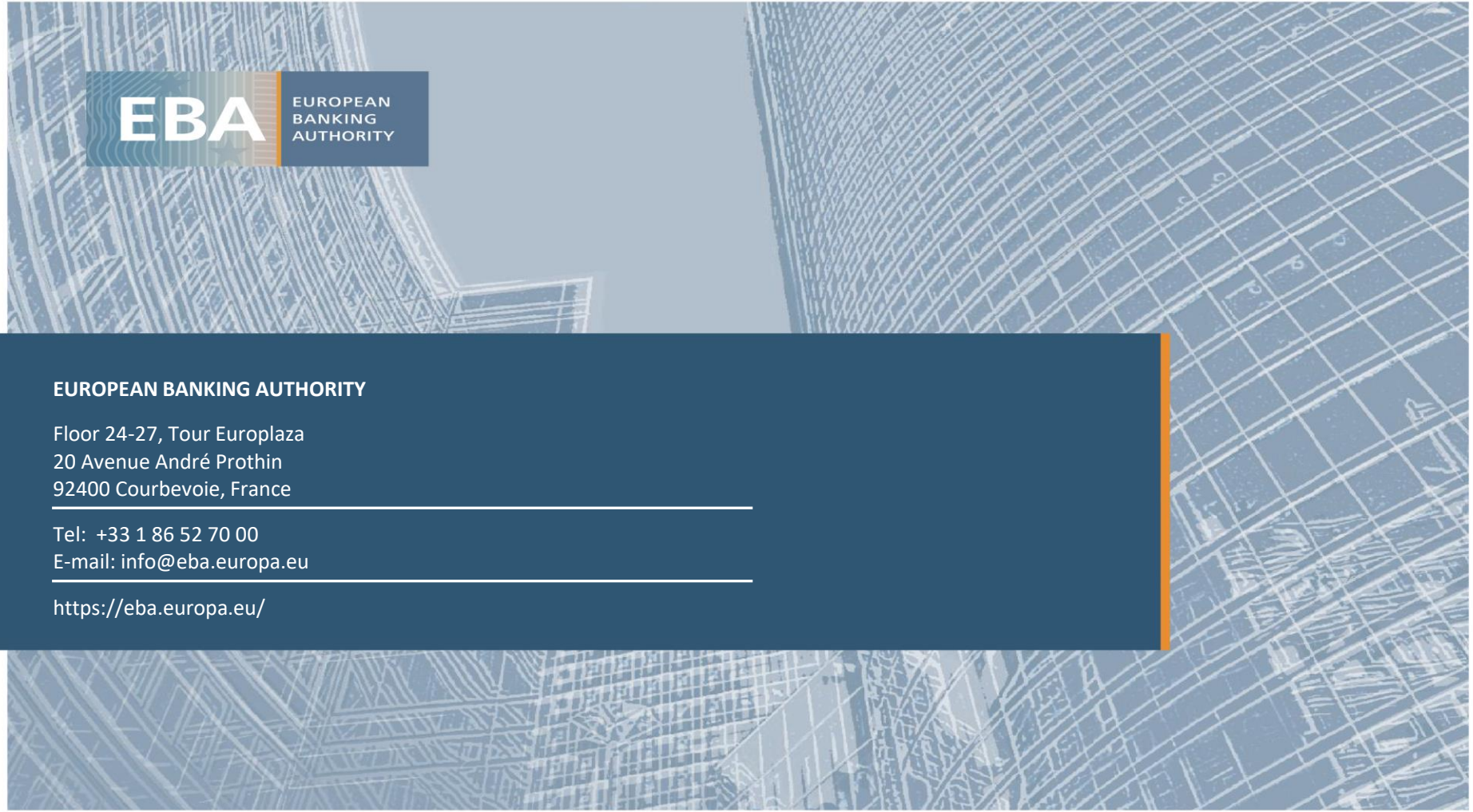
  → CRR3 is expected to introduce additional mandates in Article 501c

  - Incl. assessing the feasibility of introducing a standardised methodology to identify and qualify exposures, based on a common set of principles to ESG risks classification

  → Possible use of scenario analysis to enhance the forward-looking elements of the prudential framework

  - From the Pillar 1 perspective, the use of observed data – i.e. most recent data and historical data, where relevant complemented by expert judgement - represents a structural feature of the prudential framework
  - Despite academic literature showing that some environmental risks are already priced in, most recent data may not yet reflect in full environmental risks due to data challenges/other challenges
  - Hence, possible use of scenario analysis should be considered

  → Role of transition plans as part of future development of risk-based enhancements to the Pillar 1 framework



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CLIMATE CHANGE PHYSICAL RISKS AND THE (RE)INSURANCE CHALLENGES

Belgium Financial Forum

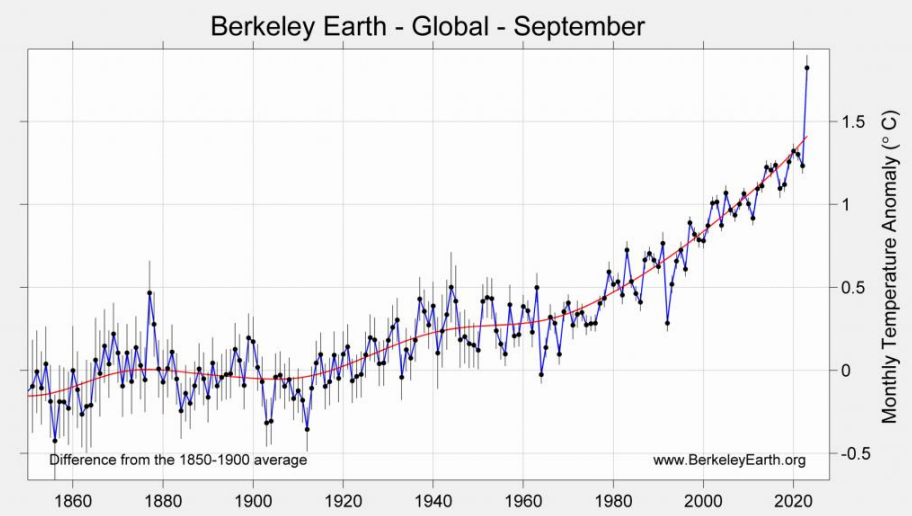
Eddy Vanbeneden
Actuary IABE

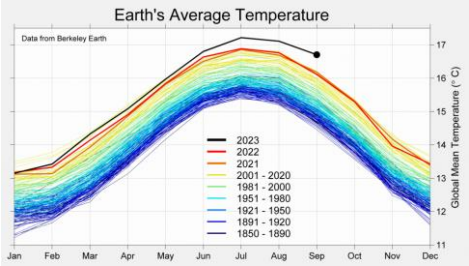
9 November 2023

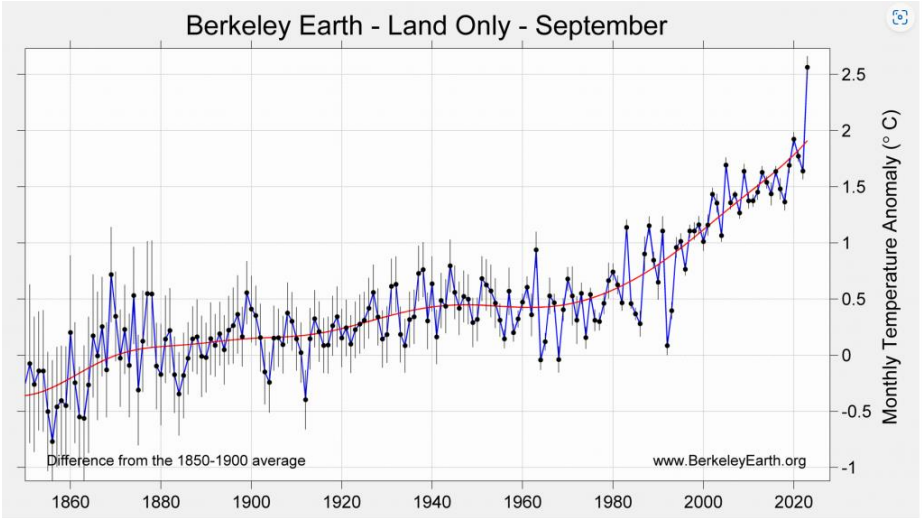
A business of Marsh McLennan

Climate Change

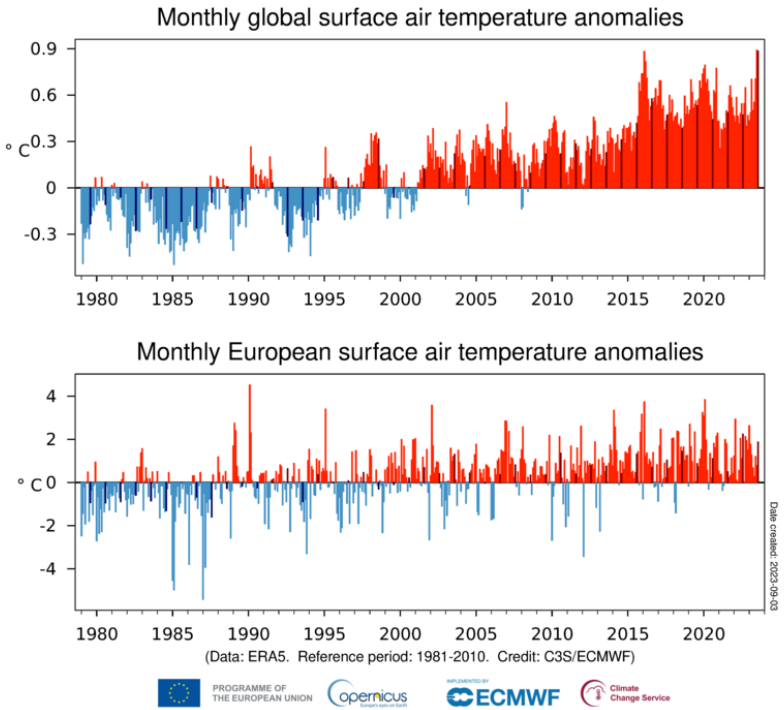
Where do we stand today?







[September 2023 Temperature Update - Berkeley Earth]



Global-mean and European-mean surface air temperature monthly anomalies relative to 1981-2010 from January 1979 to August 2023 with the darker coloured bars denoting the August values. Data source: ERA5. Credit: Copernicus Climate Change Service/ECMWF.

- The global-mean temperature for the boreal summer (June–August) 2023 was the warmest on record globally by a large margin.
  - The average temperature of 16.77°C was 0.66°C above the 1991-2020 seasonal average.
  - The European-average temperature for the boreal summer was 19.63°C, which at 0.83°C above average
- The average global temperature for the twelve months to July 2023 is about 1.3°C above the 1850-1900 level.

[Surface air temperature for September 2023 | Copernicus]

Global Insured Loss Trend

Source: Swiss Re Institute - sigma 1/2023 - Natural catastrophes and inflation in 2022: a perfect storm

Bernd in Belgium
Insured loss – EUR 2,4 bln
Average loss – EUR 32,654

Source: Assuralia

Average annual growth trend of 5–7% in insured losses from natural catastrophes affirm

Since 1992, insured losses have grown by 5–7% on an average annual basis. This includes the period 2012–16 when losses we lower annual mean. Irrespective of yearly volatility, insured losses will likely continue to grow at trend, even when real-time amp factors such as current high levels of inflation recede.

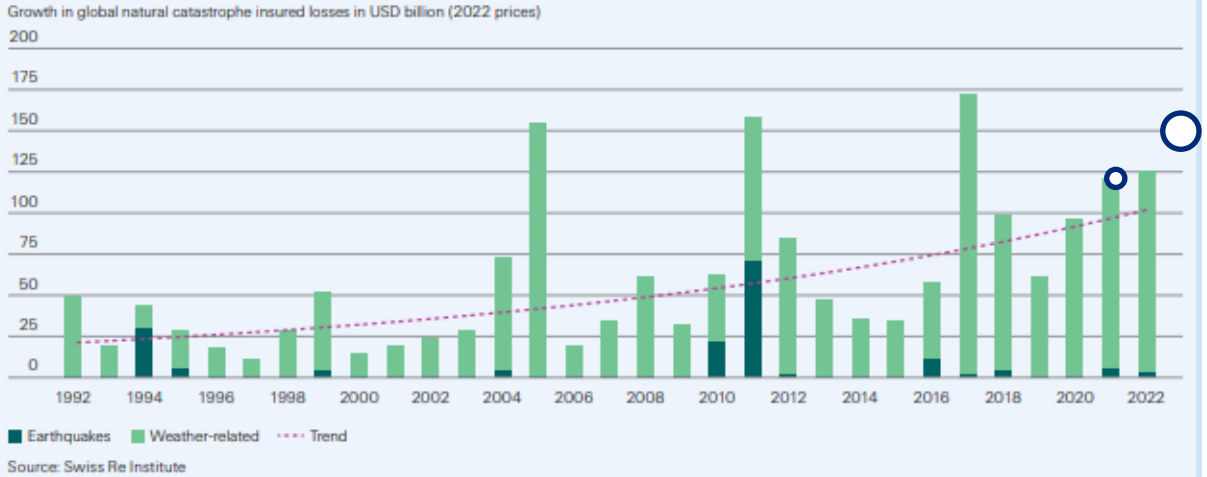
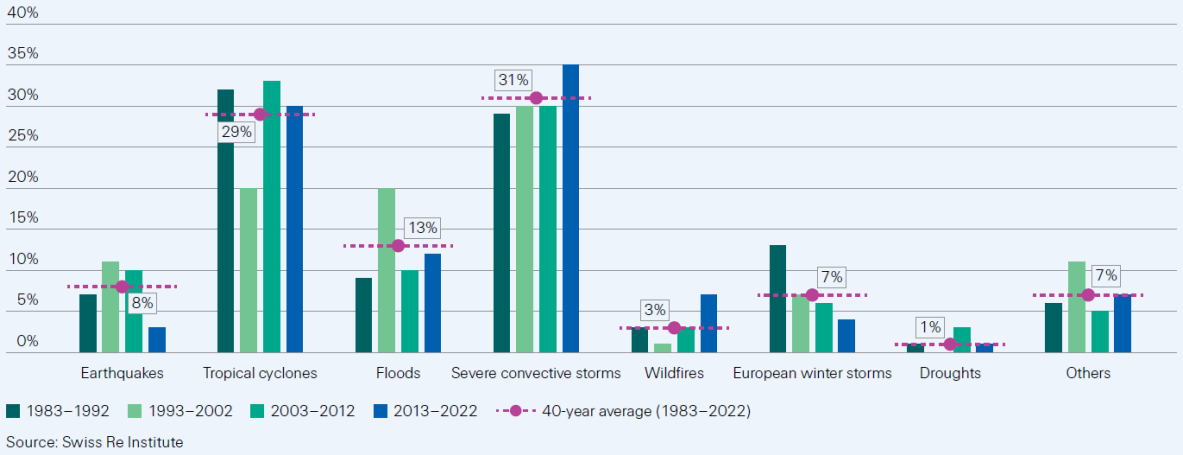
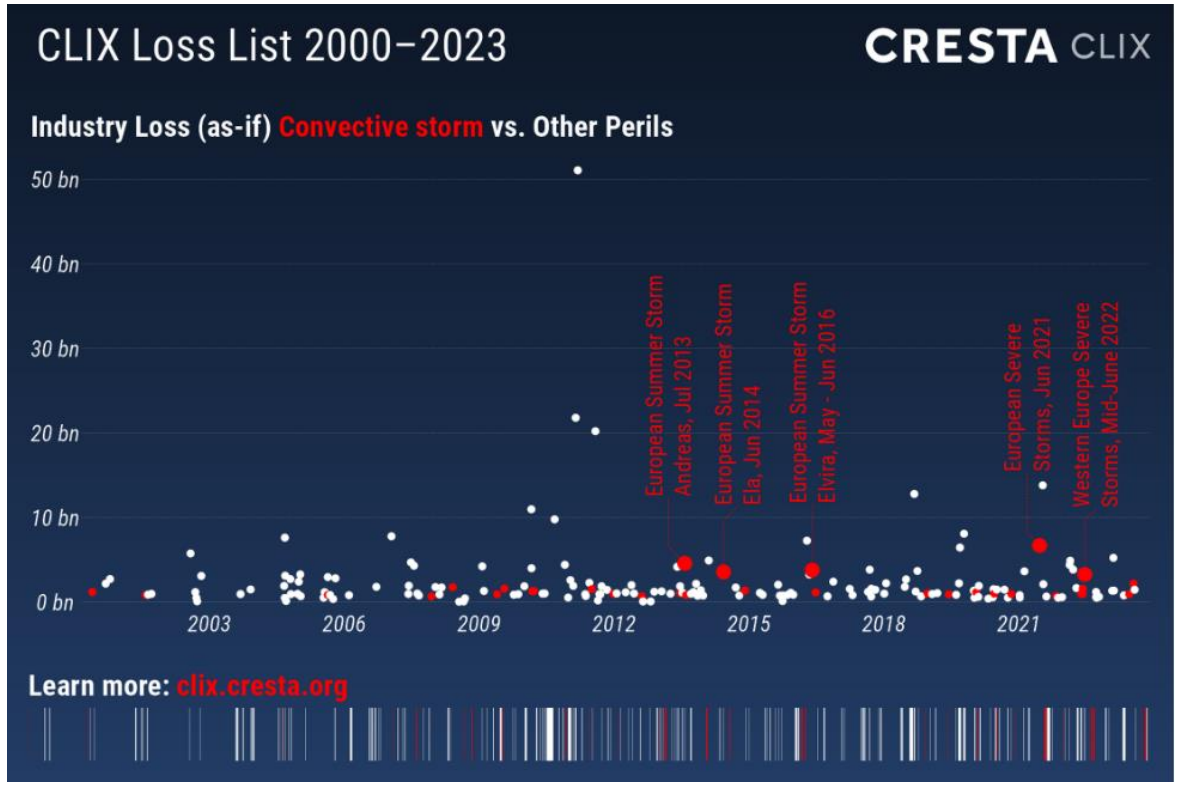


Figure 3
Share of insured losses by peril type by decade





Source: [CRESTA CLIX Quarterly Update Q3 2023 – CRESTA]

GuyCarpenter

Climate Change Physical Risk Impacts

Europe

Windstorm (ETC)

- Slight increase in storminess over Northwest Europe, and a reduction over Southern Europe
- Growing evidence that climate change will lead to a more positive NAO under a high emissions scenario
- Likely small increase in the intensity of the most extreme storms
- Watching associated flood losses in view of increased air humidity

Inland Flood

- Surface water flooding risk will increase across Europe
- River flood is also expected to increase across Europe, with smaller changes in southern Europe and Alpine regions
- Watching infrastructure investments to support adaptation

Coastal Flooding

- Sea level increase
- Direct impact on coastal areas and estuaries
- Adaptation measures are critical

SCS

- Likely increase in the frequency of large hail and damaging winds
- Possible reduction in smaller hail
- Associated flooding is likely to increase

Drought and Subsidence

- Increased temperature
- Change in evapotranspiration patterns
- Drought has a direct impact on crops
- Indirect impact on subsidence risk – other parameters play

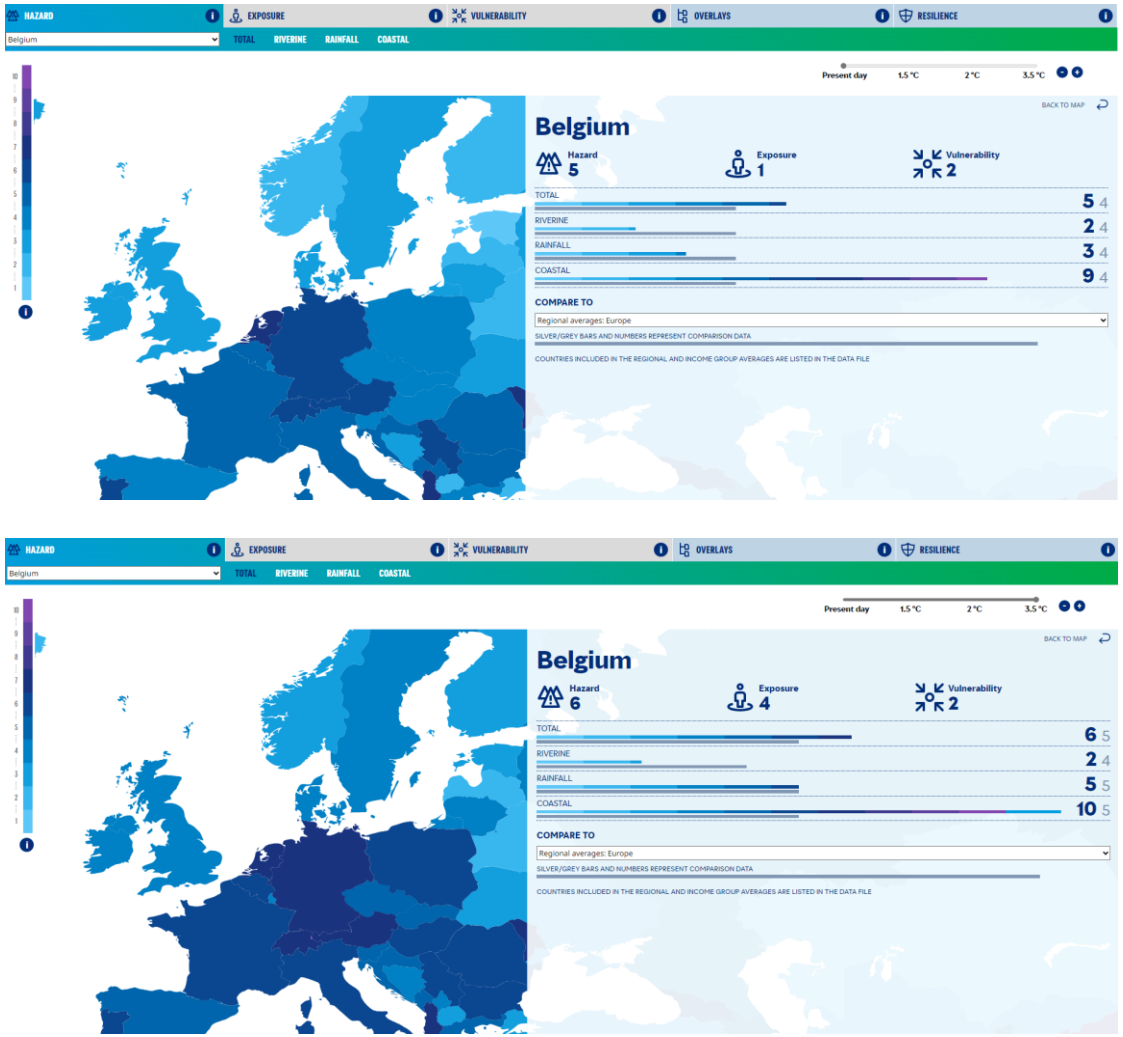
Wildfire

- Increased wildfire risk in southern Europe and the Mediterranean
- Anthropogenic is of primary importance making an estimation future risk difficult

Source: Guy Carpenter

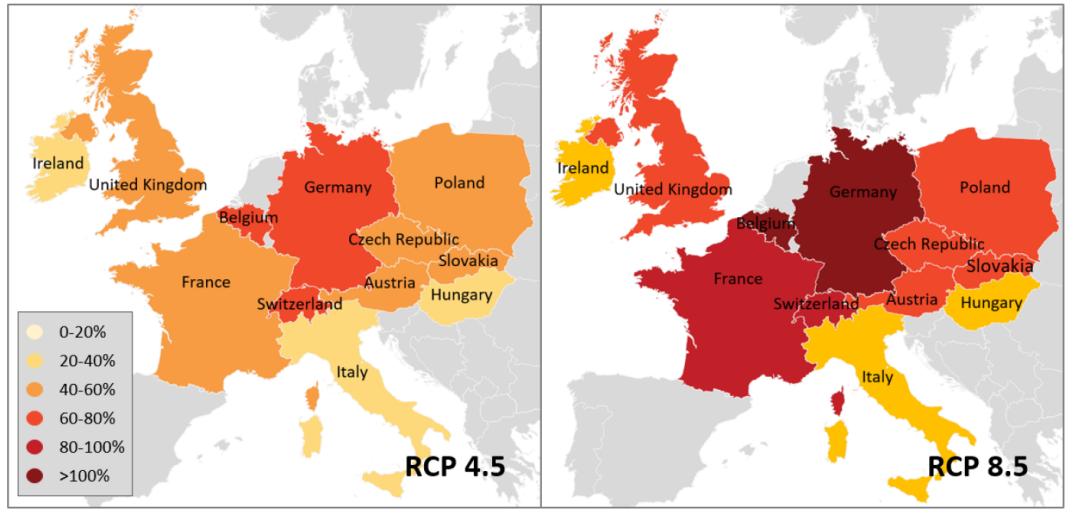
Case Study – Belgium

Main exposure for Belgium compared to neighbor countries is Coastal Flooding



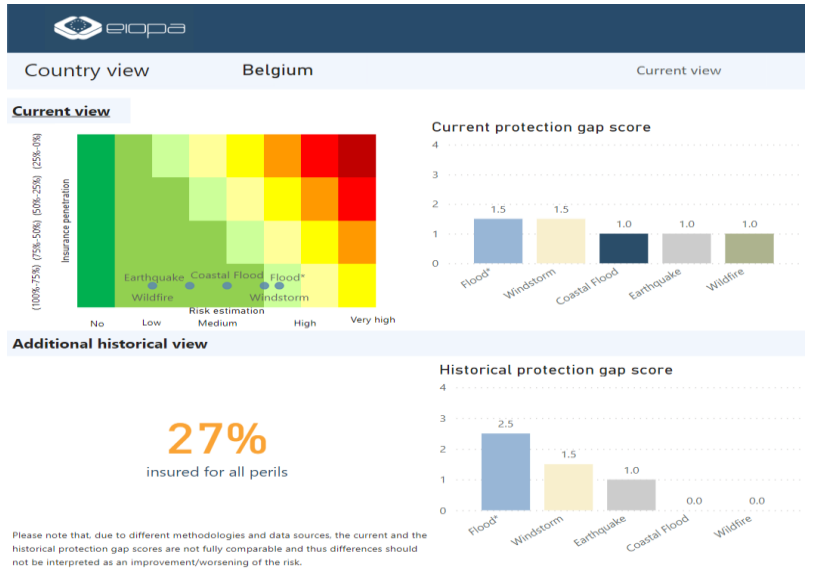
Source: Marsh McLennan Flood Risk Index

Modeled climate change impact on European flood in 2050
Average annual insured losses by country and under different emission scenarios (percentage change from reference view)



The reference view is calibrated against observations from the period 1979-2010, and recent claims data
Source: Moody's RMS Europe Inland Flood HD Climate Change Model

Source: Moody's/RMS



Source: Dashboard on insurance protection gap for natural catastrophes (europa.eu)

- Rainfall exposure is increasing quickly from +1.5°C scenario

Incorporating climate change into business decisions

Motivation to undertake climate change analysis	Time horizon	Example of firm functions impacted
Disclosure: TCFD[1] related	Long	Corporate and Social Responsibility, Finance and Risk, Finance, Actuarial, Sales, Marketing, Exposure Management
Disclosure: Public reporting (eg shareholders)	Medium, Long	Finance, Actuarial, Exposure Management, and Risk
Disclosure: Public policy advocacy	Long	Corporate and Social Responsibility, Finance, and Risk
Business decision: Underwriting and pricing	Short	Sales, Marketing, Underwriting, Finance, Exposure Management, and Actuarial
Business decision: Capital	Short	Claims, Finance, Actuarial, Exposure Management, and Risk
Business decision: Outwards risk transfer (eg reinsurance purchase)	Short	Underwriting, Finance, Actuarial, Exposure Management, and Risk
Business decision: Product development	Medium, Long	Sales, Marketing, Underwriting, Claims, Finance, Actuarial, Exposure Management, and Risk
Business decision: Business Plan	Medium	Sales, Marketing, Underwriting, Finance, Actuarial, Exposure Management, and Risk
Business decision: Risk management, including risk appetite setting	Medium, Long	Underwriting, Finance, Actuarial, Exposure Management, and Risk

Source: A framework for assessing financial impacts of physical climate change: A practitioner's aide for the general insurance sector. Bank of England. 2019.

Depending on corporate risk appetite and management decisions some actions might be:

- Simply monitor scientific developments and report to the Board
- Pricing
  - Integration of climate change trends - Transform modelled long-term loss impacts into moderate annual price increases
  - Impact of adaptation measures
- Review impact on reserving practices
- Strategy on adaptation measures
  - Mapping of infrastructure changes
  - (Re)insurers initiatives
- Adjust reinsurance purchase
- Develop new products
- Public Private Partnership
- Withdraw from certain classes of business or markets

Solvency II

Solvency II and Climate

SF Cat scenarios
More frequent review and more short term forward looking for climate view

Underwriting (and reserving)
Non life underwriting and pricing in light of climate change

ORSA
Guidance on Climate Change materiality and scenarios in ORSA

Climate Stress Tests

New Products

Open questions

(Historical) calibration period for cat scenarios
Latency period for new coverages

Mapping of building characteristics
Infrastructure adaptation

Time Horizon

Stress testing: Science based vs stressed historical events

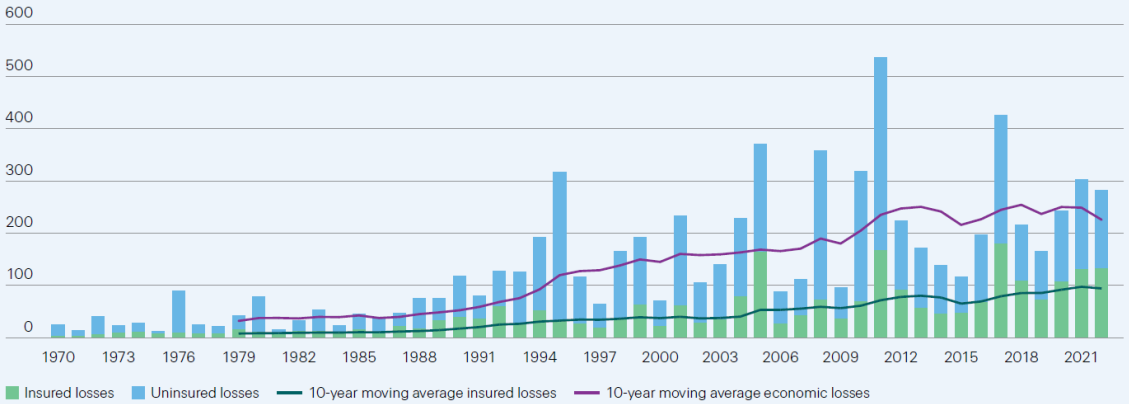
Flexibility and latency period
- Example - Recognition of parametric in SII SF
  - New underwriting / Risk mitigation – basis risk

Alignment with different regulations and reporting: TCFD, IFRS, ISSB, CSRD/ESRS, etc

Protection Gap and Natural Catastrophes

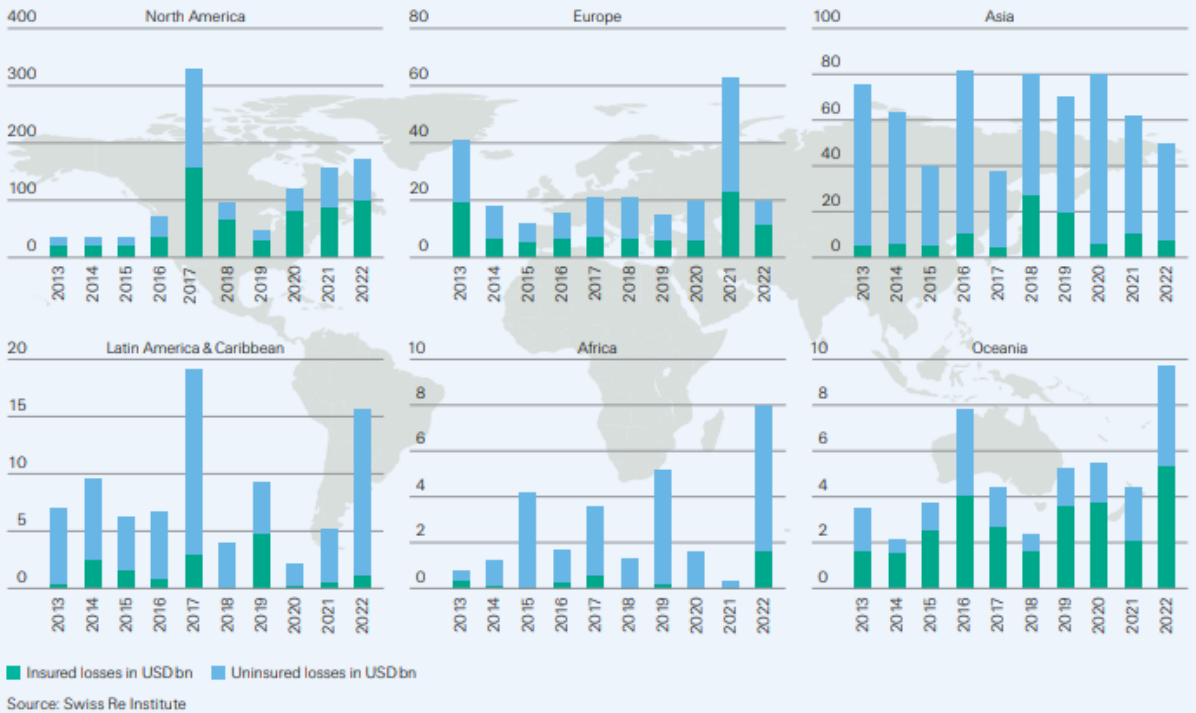
To be amplified by Climate Change?

Figure 23
Insured vs uninsured losses, 1970 – 2022, in USD billion at 2022 prices



Economic losses = insured + uninsured losses. Source: Swiss Re Institute
Source: Swiss Re Institute

Figure 24
Natural catastrophes protection gap by region 2013–2022, in USD billion at 2022 prices



Source: Swiss Re Institute

GuyCarpenter

Source: Swiss Re Institute - sigma 1/2023 - Natural catastrophes and inflation in 2022: a perfect storm

Climate Change

Modelling and Adaptation

> *Reducing the premium via obligations to put in place risk-mitigation measures can, not only limit insurers' exposure to risks, but also incentivize consumers' uptake of NatCat coverage.*

Source: MEASURES TO ADDRESS DEMAND SIDE ASPECTS OF THE NATCAT PROTECTION GAP, EIOPA Staff Paper, July 2023

How can France adapt to a +4°C warming?

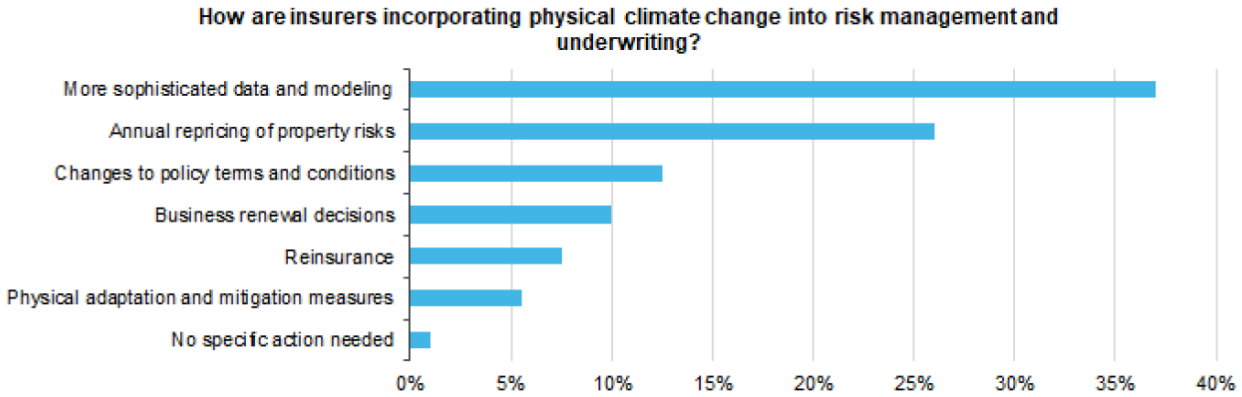
By Audrey Garric

Published on June 12, 2023, at 5:15 am (Paris), updated on June 13, 2023, at 9:51 am

4 min. Lire en français

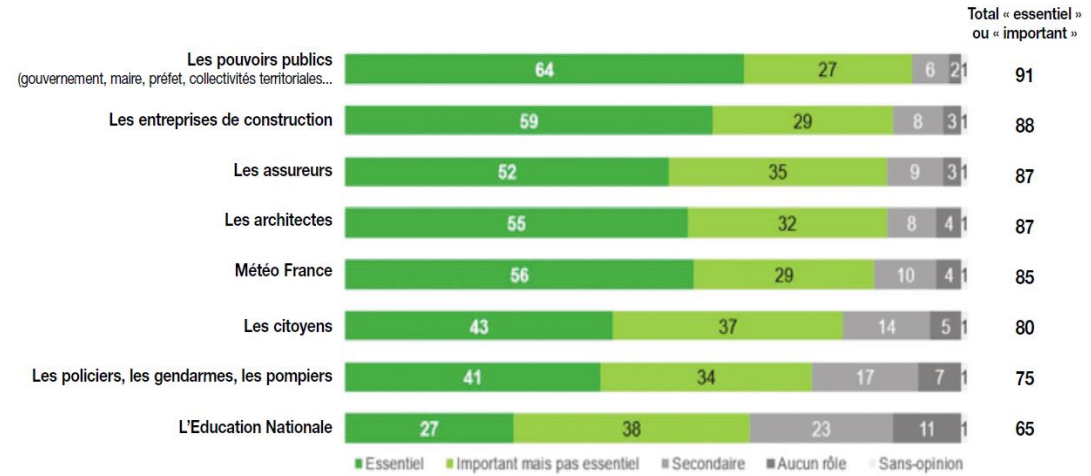
> *Nevertheless, no matter what decisions are made in the coming years, we will have to live with this reality: The planet is warming at an unprecedented rate, and France, because of its geographical position, is warming faster than the global average. The profound transformation of our country is not an option, it's an imperative. There is no plan B. Only plan A: adaptation.*

Source: Le Monde presents the Adaptation project



Results based on responses from more than 100 participants at Moody's insurance conferences
Source: Moody's Investors Service.

Graphique 3 : rôle de chacun des acteurs pour améliorer la prévention des catastrophes naturelles en France (7) (en %)



Source : Etude Elabe pour France Assureurs.

How to switch post disaster financing into pre risk adaptation?

Public authorities plans + (re)insurers initiatives!

Climate Change and adaptation measures

Importance of infrastructure works

- Hans - Norway

Dam partly collapses in Norway as Storm Hans continues to cause chaos

Parts of eastern and central Norway still on red alert as country battles widespread flooding and landslides

Water flows after the Braskereidfoss dam on the Glåma River partly collapsed. Photograph: Cornelius Poppe/EPA

A dam in Norway has partly collapsed as the country battles record high river levels, flooding and landslides after a fatal storm.

Norwegian police were considering blowing up the dam when water from the Glåma River, the country's longest, started spilling out the side at Braskereidfoss hydroelectric power plant.

Source: The Guardian

- Bernd - Belgium

Pourquoi ne pas avoir vidé préventivement le barrage d'Eupen ? Le ministre Philippe Henry répond

À Eupen, le barrage arrivant à saturation mercredi après-midi a finalement du être vidé progressivement, entrainant une augmentation du débit.

Inondations de juillet : "Sans la présence du barrage d'Eupen, la situation aurait été bien plus catastrophique"

Source: La Libre

- Derna - Libya

Libya's deadly dam collapse was decades in the making

With thousands of people dead and tens of thousands more left homeless by floods as a storm burst through the dams next to the east Libyan city of Derna, FRANCE 24 looks back at the years of violence and neglect that left the city ill-prepared for the unprecedented natural disasters of the climate crisis.

Issued on: 13/09/2023 - 21:14 Modified: 14/09/2023 - 14:55 6 min

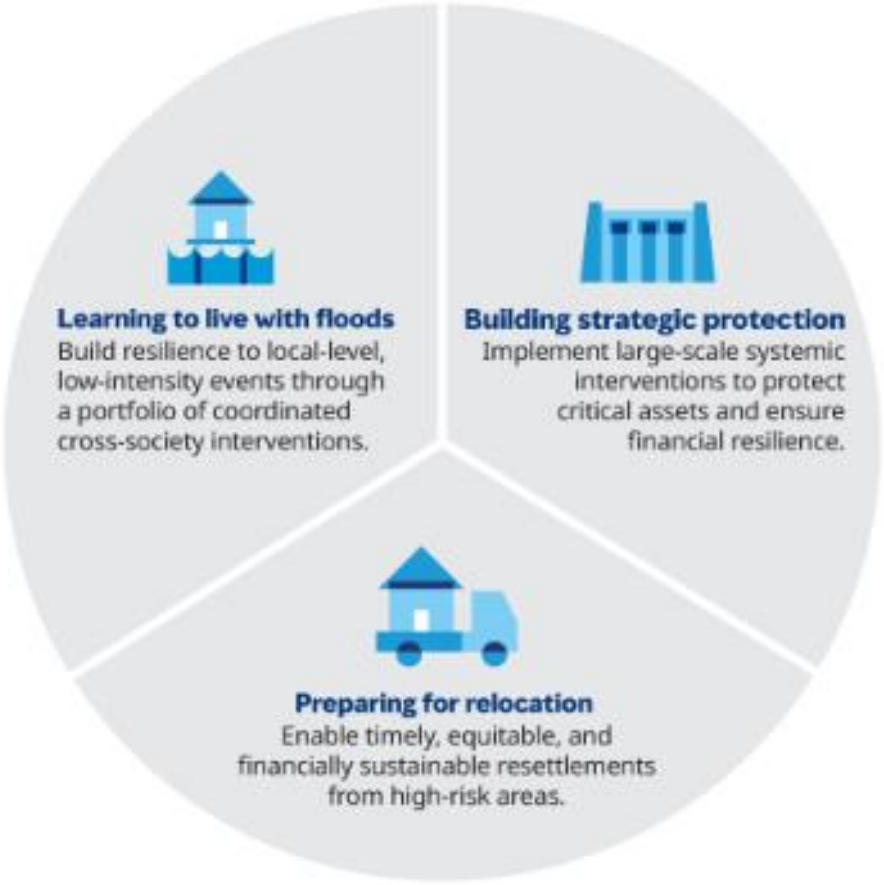
Scientists say the Mediterranean storm that dumped torrential rain on the Libyan coast is just the latest extreme weather event to carry some hallmarks of climate change. © Jamal Alkomaty, AP

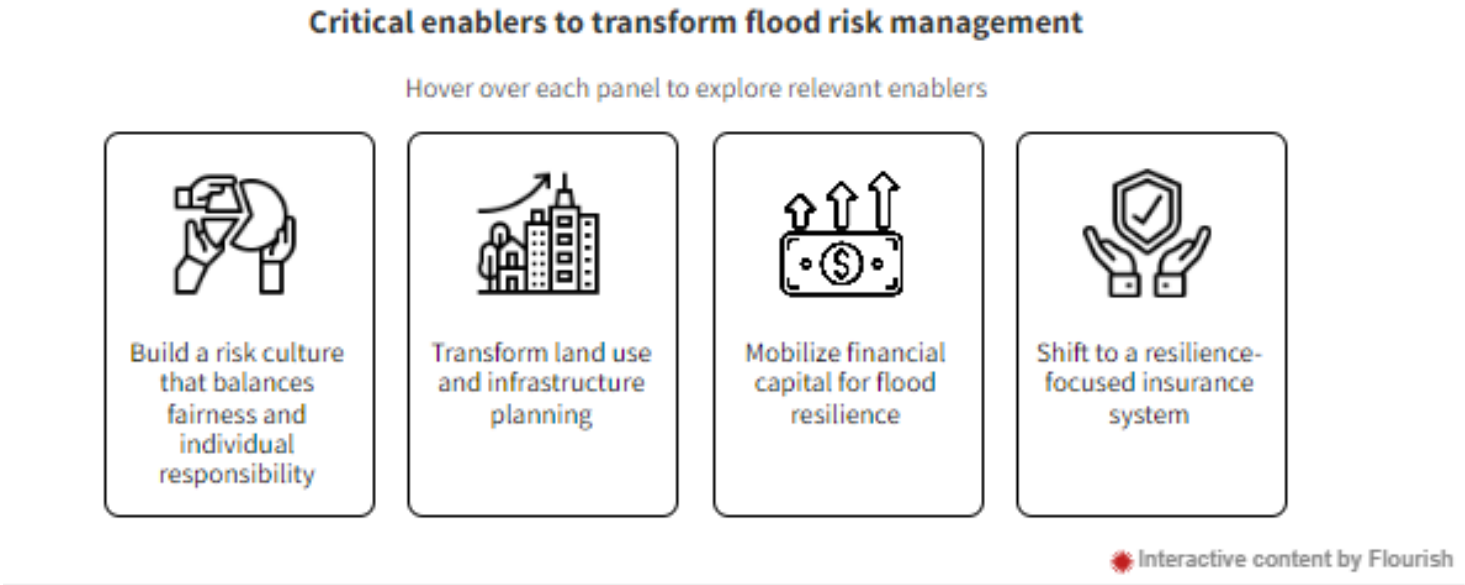
Source: France24.com

Transform Climate Risk Management

Blending adaptation and risk financing measures

- These examples for flood risk management are also providing general background for all perils affected by Climate Change





Source: MarshMcLennan - Staying above water: A systemic response to rising flood risk

Climate Change and adaptation measures

Strengthening of dyke systems:

2€ to 2.9€ saved for each € invested

41% to 68% reduction in economic damages

41% to 65% reduction in population exposed

Building of retention areas to store flood waters:

2.9€ to 3.5€ saved for each € invested

64% to 82% reduction in economic damage

63% to 81% reduction in population exposed

Damage reduction measures for buildings

5.2€ saved for each € invested

Up to 50% reduction in economic damage

No reduction in people exposed

Relocation to flood-safe areas

1.2€ saved for each € invested

17% reduction in economic damage

16% reduction in population exposed

Figure 2. Summary of the main outcomes of the analysis of four adaptation strategies considered in PESETA IV. All results are averaged at EU+UK level and calculated considering future socioeconomic conditions (2100 economy) under 1.5°C, 2°C and 3°C warming scenarios.

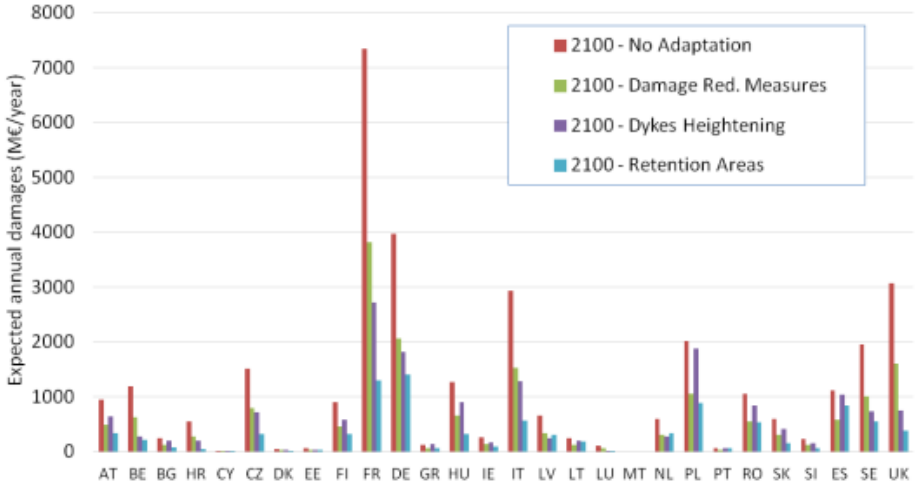


Figure 3. Comparison of expected annual damages in 2100 assuming no adaptation, and with the implementation of three different adaptation strategies. Results are calculated assuming a 2°C warming scenario.

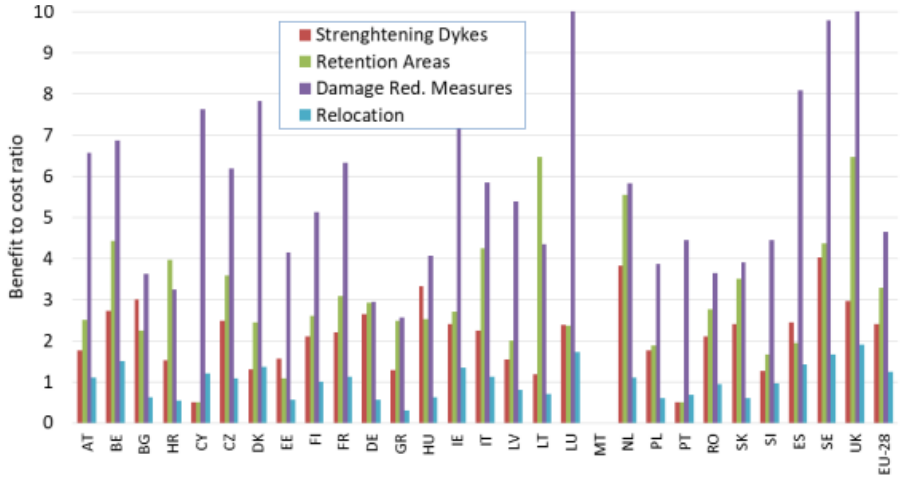


Figure 4. Benefit-to-cost ratio (BCR) values for the adaptation measures considered in PESETA IV, assuming a 2°C warming scenario and socioeconomic projections up to 2100 according to the 2015 Ageing Report. BCR values are based on total discounted costs and benefits over the period 2020-2100.

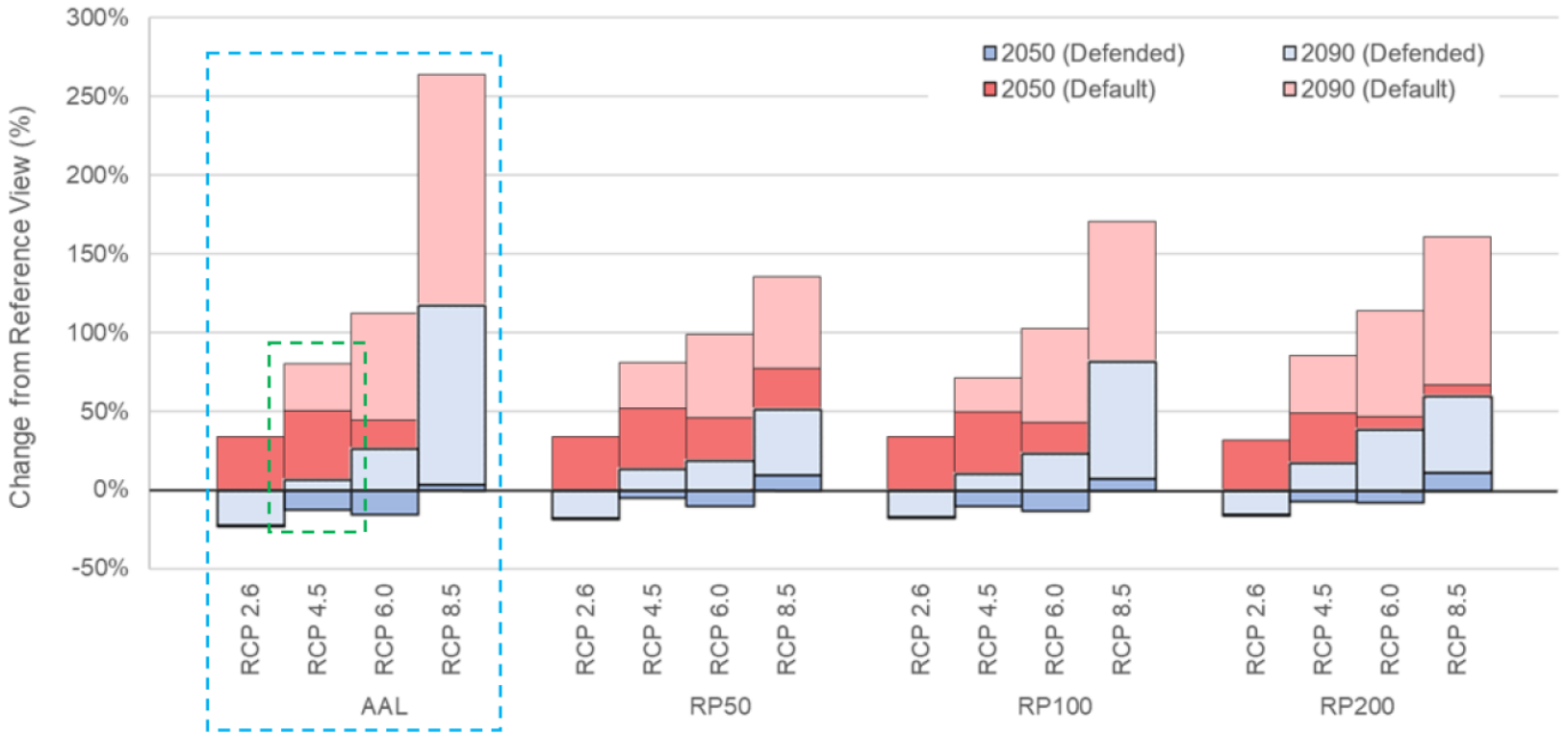
GuyCarpenter

Source: JRC Technical Report - Adapting to rising river flood risk in the EU under climate change 2020

Climate Change and adaptation measures

Physical adaptation measures have a significant impact on modeled flood losses

Change in modeled European flood losses with and without flood defenses for different carbon transition pathways



Modeled climate change impact on annual aggregate insured losses (AAL) by 2050 and 2090 under different emission scenarios (% change from reference view); comparison of results under default and sensitivity ground floor elevation assumptions (ground floor uniformly set one meter above ground level); based on Europe-wide insured exposures and various return periods (RP) (Moody's RMS' view). RCP 2.6 implies an estimated GMST increase of 1.5°C by 2050 and 2100; RCP 4.5 implies 1.8°C by 2050 and 2.4°C by 2100; RCP 6.0 implies 1.7°C by 2050 and 3.0°C by 2100; RCP 8.5 implies 2.3°C by 2050 and 4.6°C by 2100. GMST estimates per Moody's RMS Climate Change Model documentation and derived from CMIP5 (Coupled Model Intercomparison Project Phase 5) ensemble mean estimates.

Source: Moody's RMS

Importance of building resilience and adaptation measures

National and regional initiatives (Infrastructure)

Solutions	Tools and Instruments	Some Examples
Engineered	Enhanced building design standards, road resurfacing, flood barriers, drainage systems	• UK Thames Barrier • Prague Mobile Defences • Copenhagen 'Flood Park' • NL Delta Programme
Nature Based	River restoration, natural flood retention, increasing plant diversity, habitat creation, soil conservation, increasing coastal and marine vegetation, green drainage systems, urban greening	• Indonesia restoring coastal mangroves, reducing groundwater extraction and incorporating sustainable aquaculture • Flanders Coastal Vision
R&D and Data	Risk Analytics, modelling, monitoring, forecasting, big data and other technologies to enhance preparedness, earkly-warning systems and response measures	• Uganda advanced weather forecasts systems to ensure that communities get access to Forecast-based Financing (FbF) before an extreme event hits. Prevent people from contracting flood-induced waterbone diseases • Europe EuMetNet
Policies and Regulation	Building codes, mandatory resilience standards, risk disclosure requirements	• China Sponge City Program to encourage cities to strengthen flood resilience and invest in green and blue infrastructure • TCFD • CSRD/ESRS
Financial	Risk Finance and transfer solutions such as traditional insurance and parametric insurance, risk pooling, green finance investments	• SouthEast Asia SEADRIFF regional risk financing facility • IBRD Cat bonds • Flood Re/CCR/Consorcio • Green Cat Bonds
Behavioral	Changing timing of agricultural practices, supply chain diversification, advisory services, risk information sharing, public engagement, skills development in adaptation actions, evacuation, and relocation	• Relocation of the Quinault Indian Nation Village in Washington to a location well above flood prone areas • Florida evacuation plans

Source: MarshMcLennan - Staying above water: A systemic response to rising flood risk, Guy Carpenter

Example
Prague Mobile Defences

Source: Fotogalerie: Ulice Na Kampě z Karlova mostu v Praze (idnes.cz)

Importance of building resilience and adaptation measures

(Re)insurers initiative

Adaptation - Engineering

Covea

A research programme aims to develop solutions to adapt housing and ensure it can better withstand hazards in the future.

- …tests are being carried out on equipping homes in flood-prone areas with watertight doors and cofferdams in accordance with the regulatory recommendations set out in local risk prevention plans…
- … testing innovative drought-related solutions to mitigate clay soil subsidence using **clay treatment processes** and **environmentally friendly soil rehydration methods** during periods of water stress…
- Given that climate risks are only expected to accelerate, **insurance providers will no longer be limited to playing a "provider/payer" role – they will become increasingly committed to and proactive in monitoring and managing climate change-related risks to minimise the negative impact thereof on risk exposures and claims**

Source:covea_white_paper_climate_change_effect_on_claims_and_insurance_between_now_and_2050_202201.pdf

Rebuild better

Flood Re

- Build Back Better offers homeowners the chance to **install Property Flood Resilience measures up to the value of £10,000** when repairing their properties after a flood. Measures can also be installed so that when water does enter it is easier, **quicker and safer for families to clean up and move back in** – often in a number of days rather than many months.

Source: Build Back Better - Flood Re

Prevention - Early Warning System

EIOPA

- Multiple participants highlighted the implementation of **early warning and alert systems** against extreme weather events in **their underwriting practices**.
  In the examples provided, digital alert messages are typically sent to property insurance policyholders in advance to weather-related events associated with severe rain, wind, hail, storm, snow and cold wave. The alert system is often a default approach in the product's terms and conditions and alert messages are sent to all policyholders according to the geolocation of the insured property. **Weather data and forecasts usually stem from professional external providers.**

Source: Impact Underwriting (europa.eu)

Incentives – Nature based

EIOPA

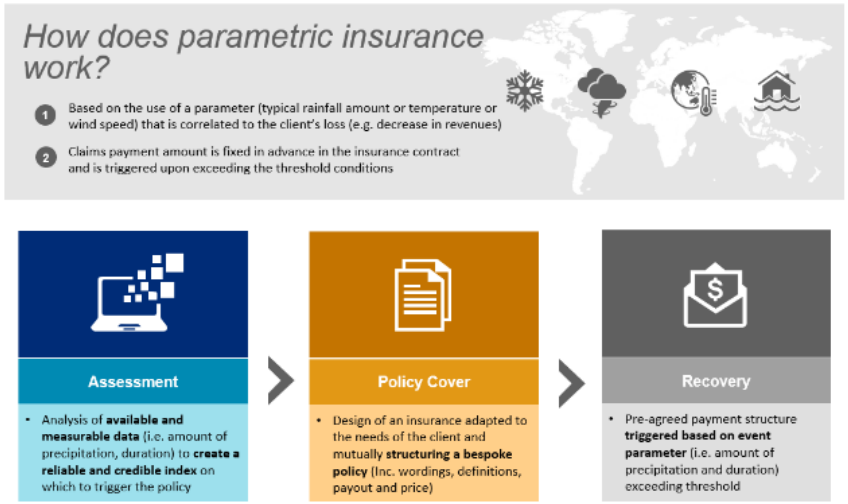
- Through greening roofs with plants, **negative consequences** from heavy precipitation **could be reduced**, for instance in terms of damages related to drains and sewers or pluvial flood. The undertaking incentivizes the construction of green roofs **with a 10% premium discount on property insurance**.

  agroforestry (integration of trees in crop farming) or crop diversification, for instance, can also be considered as effective examples of nature-based adaptation measures against drought risk (EEA (2021)), and could potentially be implemented in crop insurance contracts.

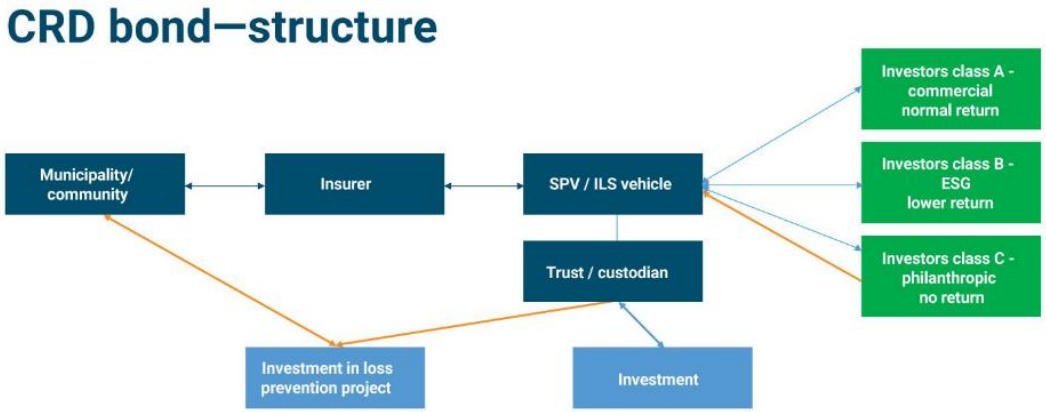
Source: Impact Underwriting (europa.eu)

Financing measures

Exhibit 1: Mitigating under-insured climate risks with parametric insurance



Source: MarshMcLennan



Source: GC in talks with potential investors ahead of first climate resilience bond pilot | The Insurer

- Reinsurance firm Swiss Re, broker Guy Carpenter and insurtech ICEYE Pilot parametric community flood insurance scheme for New York City neighbourhoods - Swiss Re, Guy Carpenter and insurtech ICEYE
- Parametric trigger leverages ICEYE's unique satellite data insights, as well as other data sources that can help to reduce basis risk and ensure the parametric insurance cover is tightly calibrated to actual flood experience.
- To support low- and moderate-income (LMI) communities in high-flood-risk neighborhoods, with the parametric insurance solution designed to pay emergency cash funds after a major flood event.

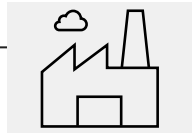
Source: www.artemis.bm, 7 March 2023

Options for re-insurance and risk pooling

A spectrum of risk-pooling models exists for difficult risk types, ranging from pure private partnerships to state-financed funds for non-insurable risks

- Examples of (re)insurance mechanisms used for risk management (non-exhaustive)

PRIVATE ← → PUBLIC



Semi-private pooling reinsurance schemes

- **A joint entity would be set-up by e.g. insurers** where risk can be pooled and knowledge shared
- Participation could be voluntary or legally mandated/compulsory
- **Financing primarily provided by the private sector** and limited (if any) government financing and no committed reserve[1]

Public-private partnership (PPP) reinsurance schemes

- **A joint reinsurance entity is set up which is funded by premiums paid by insurers** for reinsuring the risk
- **Government explicitly provides backing to the reserve** (limited or unlimited) and could also finance the initial build
- Participation could be voluntary or legally mandated/compulsory

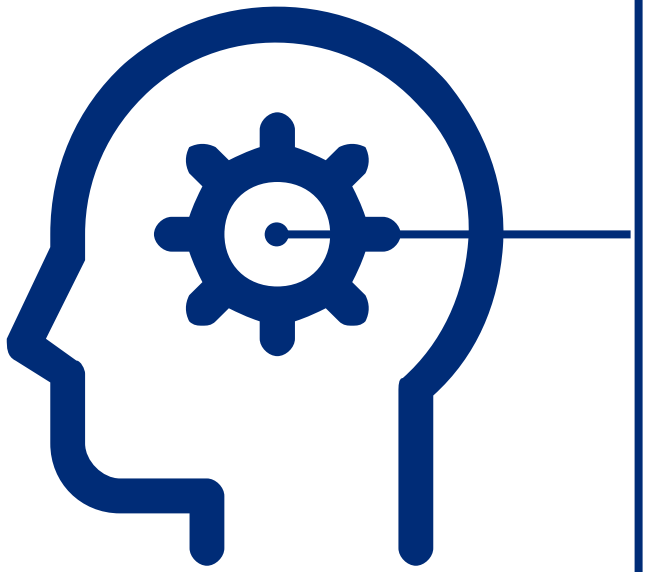
Public funds for non-insurable risks

- **A pure government set-up**, without any direct private involvement
- A fund would be set up with a reserve, built up over time, that can be used to pay out claims in the case of a catastrophic event
- Claims towards the fund should be aimed at **covering risk events that cannot be covered by existing insurance offerings**

1. The government could always choose to provide funding to the entity in extreme circumstances, but without any fixed or defined commitment

CC - Physical Risks and the (re)insurance challenges

Conclusions



Challenge 1

Forward looking approach to cat management and cat modelling – hazard and adaptation

Challenge 2

Developing risk mitigating/adaptation measures – public and private (Protection Gap)

Challenge 3

Linking pricing to forward looking cat management and modelling

Challenge 4

Keeping a flexible regulatory regime to adjust to new reality and needs

Challenge 5

Developing balanced PPP

GuyCarpenter

0421.850.327 - Inscription/Inschrijving FSMA: 14194 R

A business of Marsh McLennan

How can the financial sector support the green transition

Sectoral initiatives to facilitate EU Sustainable Finance objectives

Belgian Financial Forum

"The Climate Challenge, Sustainability and the Implications for the Financial Sector“

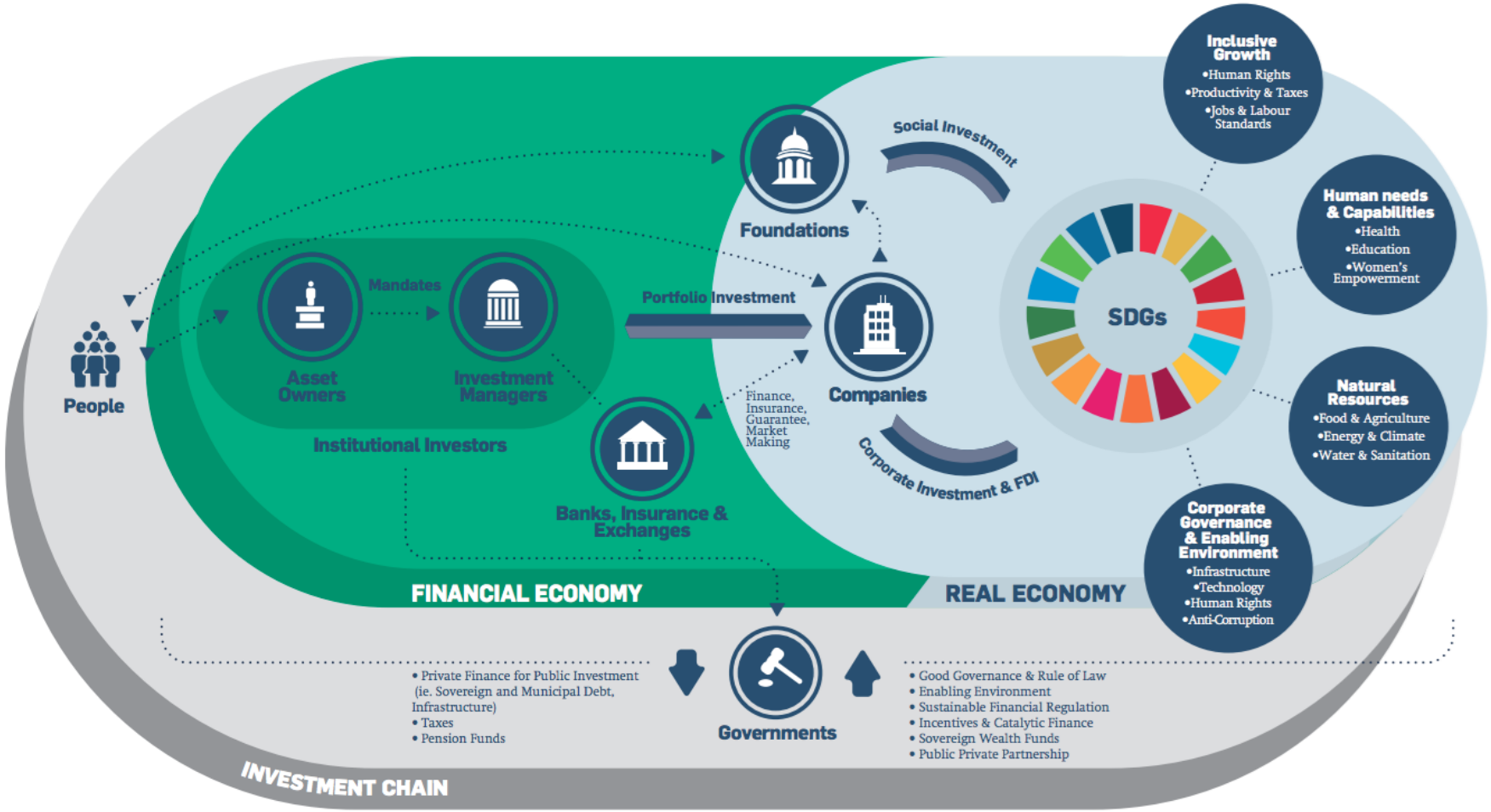
9 November 2023

tom.van.den.berghe@febelfin.be

febelfin

Financial sector in the centre of transition

Mobilising & reorienting capital flows



Source: 'Private Sector Investment and Sustainable Development' UN Global Compact, UNCTAD, UNEPFI, PRI (2015)

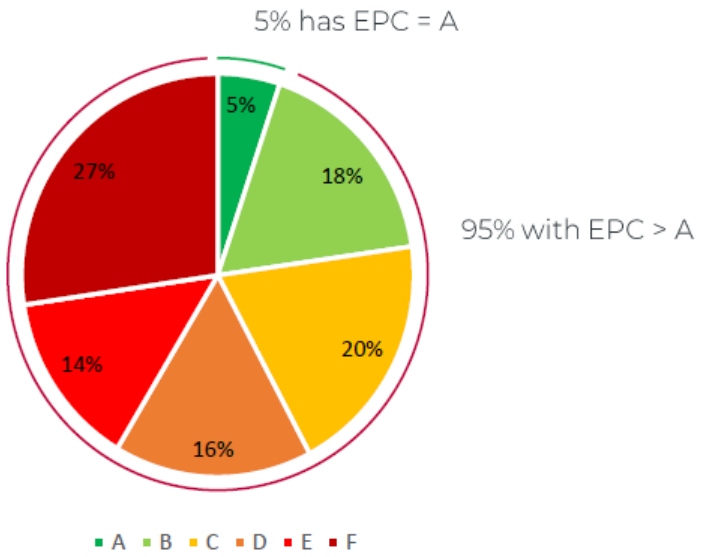
Sustainable lending & investment solutions

- Sustainable loans
  - Mortgages & real estate finance
  - Vehicle loans & leasing
  - Project & impact finance
  - Green bonds
  - Sustainability-linked loans
  - …
- Corporate engagement
  - ESG data
- Sustainable investments
  - Investment products
  - Retail client preferences

Loans

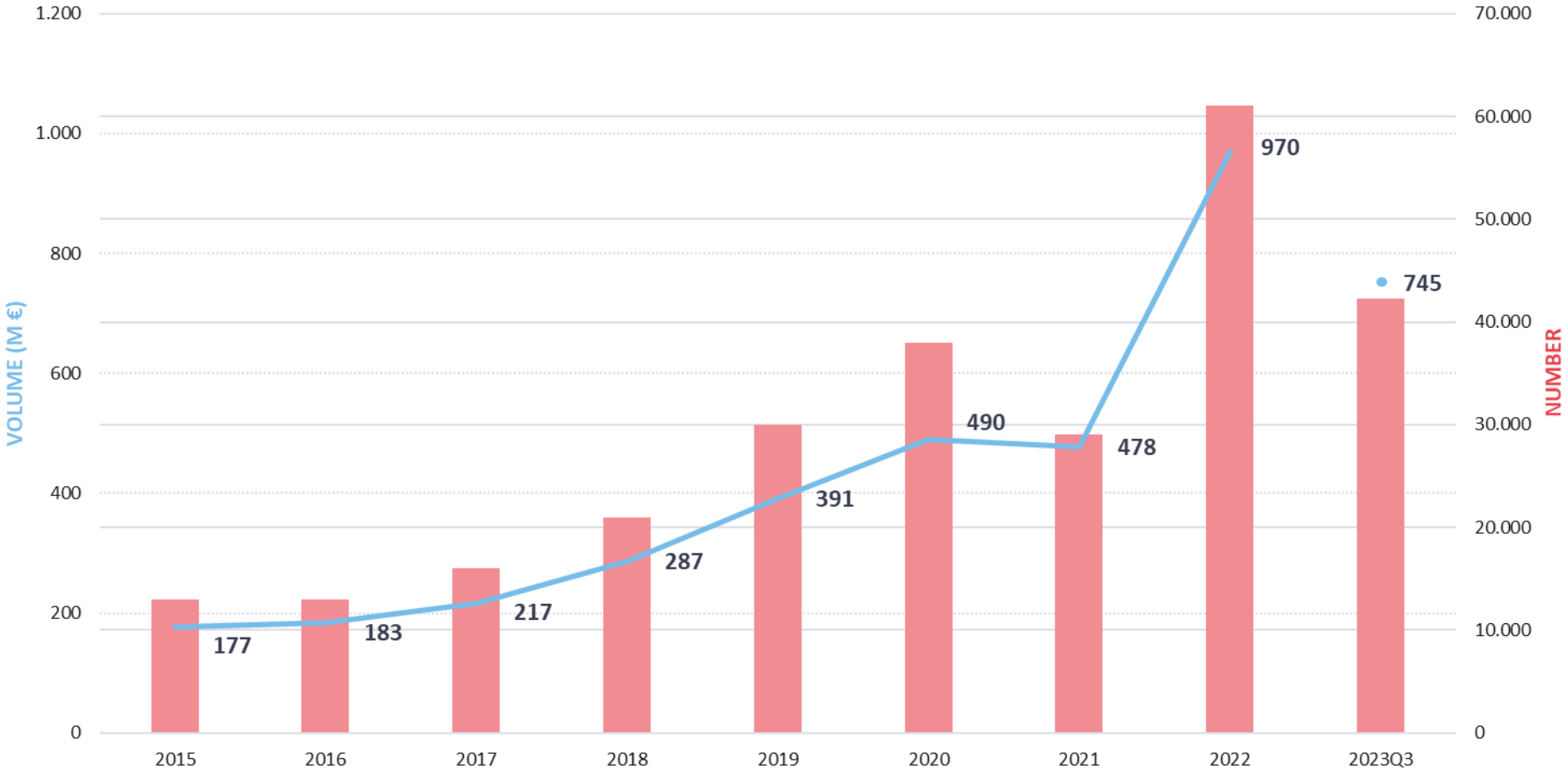
Renovation challenge

- Currently 5% of Belgian residential buildings have EPC A or equivalent
  - Must increase a lot to achieve goal of climate-neutrality in 2050
- About 5,7 million residential houses in Belgium
- 95% will need a (major) renovation
- Est. 45 – 80.000 EUR renovation cost to reach EPC A
- ➔ Investment need of more than 400 billion EUR



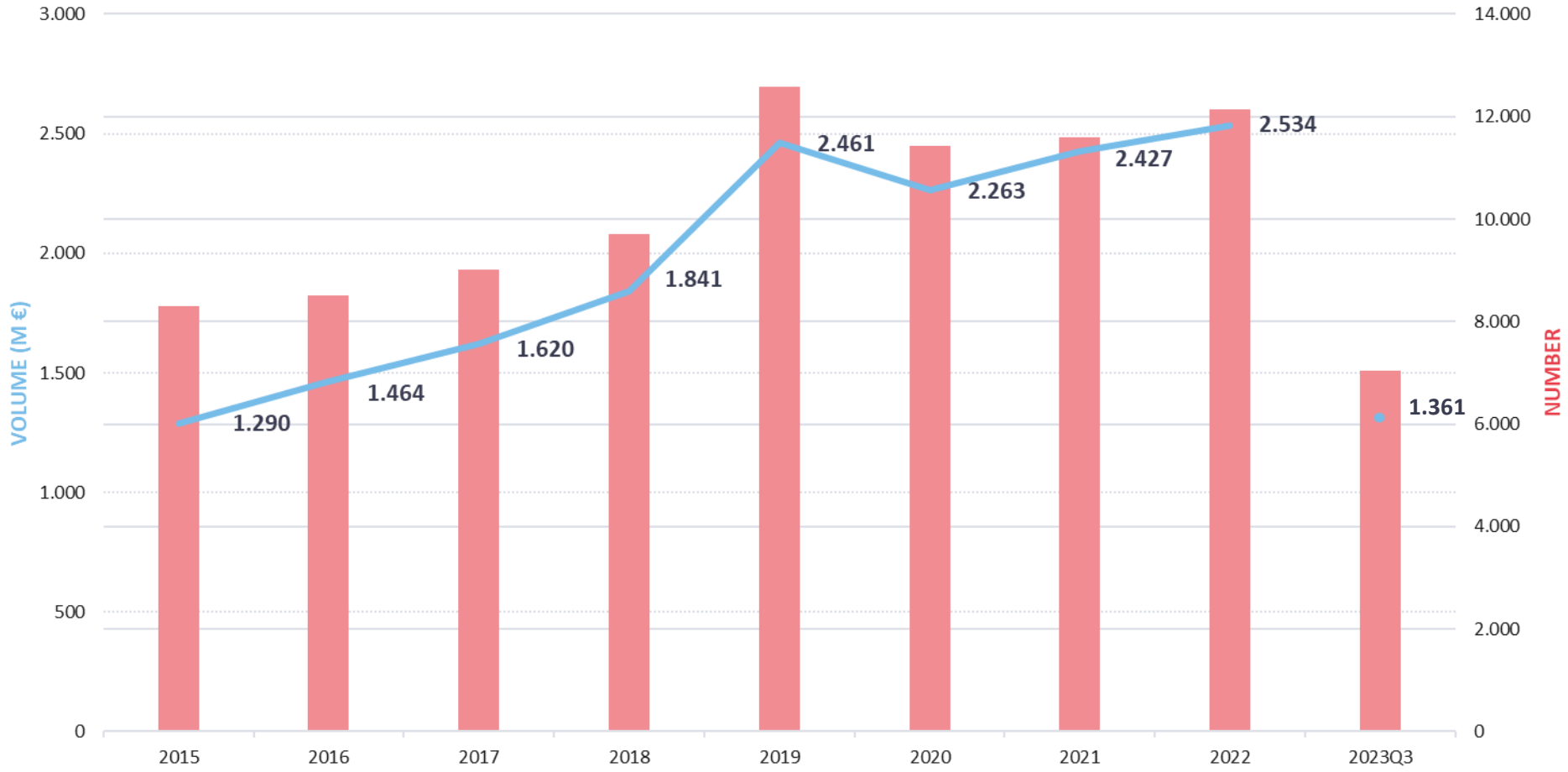
Investments using combination of own reserves, bank loans, government support measures

Consumer loans for energy-efficiency purposes



Source: UPC-BVK

Mortgages for acquisition+renovation (mostly for energy-efficiency purposes)



Source: UPC-BVK

Taxonomy-aligned Mortgages ?

- Very challenging and burdensome to meet all the technical screening criteria of the EU Taxonomy, especially those concerning **Do No Significant Harm** ➔ Currently **no** 'Taxonomy-aligned' mortgages
- Could lead to fragmentation of the Belgian landscape in terms of rules and their implementation. Risk of accusations of **greenwashing** if each actor of the industry takes his own pragmatic interpretation
- Differences in regional EPC calculations, and the financial sector has no direct access to the **regional EPC databases**.

➔ Belgian banking sector has developed a **uniform definition of 'energy efficient' mortgages** that can be used practically in day-to-day business and aligns as much as possible to the substantial contribution criteria of the EU taxonomy. This approach fits the expectations of the Energy Efficient Mortgage (EEM) label.

Energy Efficient Mortgage Label

E.g. Some criteria to be labelled 'Energy efficient'

- Acquisition and ownership of buildings: Definition of National Top 15% = EPC value ≤ 159 kWh/m²y
- Renovation: Definition of improvement = EPC-score -30% in 3 years
- For now, no DNSH or MSS checks

Structural dialogue - LIFE BE FREE

- EU supported LIFE program: Belgian Financing Roundtables on Energy Efficiency
- Objective: Explore, innovate, upscale and mainstream solutions for financing energy efficient renovations of residential real estate, tailored to the Belgian context.
- LIFE BE FREE will:
  - Set up a **permanent multilateral roundtable initiative** involving a wide range of **Belgian public and private stakeholders** and liaising with similar roundtables abroad
  - Organise agenda setting, outline roadmaps and design annual action plans focused on addressing financing challenges and **improve national policy**
  - **Mobilise private finance investments** by supporting coalitions that will analyse, experiment and upscale financing solutions
- 6 partners, lead Febelfin
- 1st Roundtable in Q1 2024

Co-funded by the European Union

ESG Data

Corporate ESG information

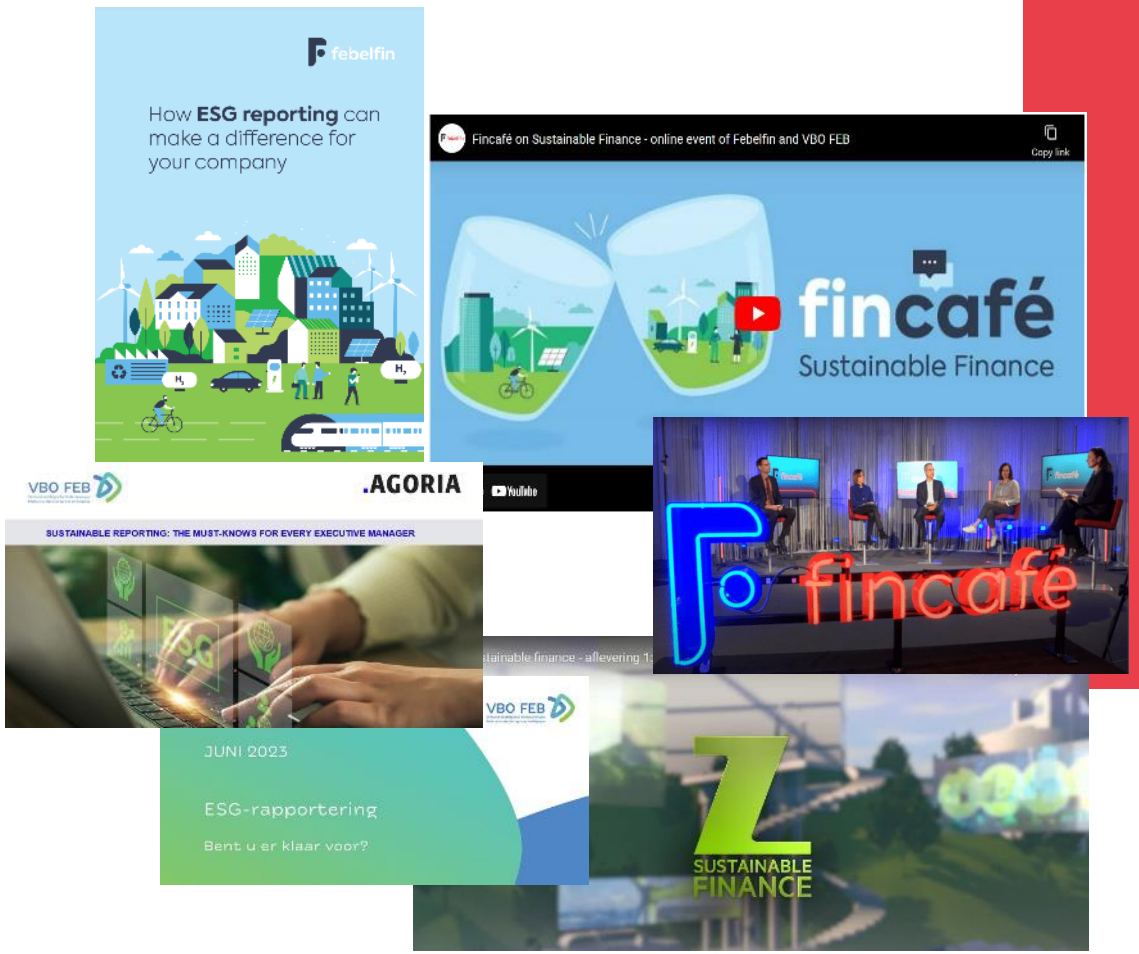
- Banks are producers and consumers of ESG data
  - Banks need data to fulfil their own legal reporting obligations: Pillar 3, Taxonomy, SFDR, stress test, CSRD, etc.
  - Increasing importance in corporate financing decision
- Availability & quality of data varies greatly
- Assurance mostly not present
- Data from external ESG data providers not correlated
- Currently, focus on environment & climate:
  - GHG emissions
  - Energy efficiency of buildings
  - Physical climate risk sensitivity
  - Transition plans
  - Green investments

  But social issues gaining in importance
- Obtaining ESG data from SMEs most challenging

Awareness-raising & harmonisation

- **Awareness-raising** initiatives towards companies about ESG reporting
  - Fincafé
  - Brochure for SMEs
  - TV-series on Kanaal Z
  - Workshops with industry asscoiations: VBO, Agoria, Embuild, Essenscia, …

- **Common sectoral approach** to ESG data gathering
  - Pilot project about Taxonomy-reporting by banks' corporate clients
  - Exploring the development of a common ESG questionnaire for Belgian SMEs, based on EFRAG VSME-template



[Links under images]

Investments and advice

Towards Sustainability initiative

- Label for ‘Sustainable’ financial products
- European scope
- Mitigate confusion in retail and institutional investors
- Avoid greenwashing
- **Not just disclosure but also qualitative & quantitative requirements & restrictions**
- Move the whole market towards more sustainability
  - A minimal norm with rather strict conditions, encouragement to go beyond
  - No niche, but a sustainable product for all investor profiles
- Regular review in multi-stakeholder context
- **Independent governance, supervision & verification**

CLA
Central Labelling Agency
Towards Sustainability

FORUM ETHIBEL

ICHEC
BRUSSELS MANAGEMENT SCHOOL

Universiteit Antwerpen

The legal framework is not the complete solution

SFDR

Transparency about sustainable investment products

- **Avoiding greenwashing**
- Type of sustainability claim ➔ appropriate disclosures in prospectus, reports & website
  - **Art 8**: Products promoting environmental or/and social characteristics
  - **Art 9**: Products having sustainable investment as their objective

BUT

- Used by market as labels, not as intended by regulator
  - Does not aim to ensure a minimal degree of sustainability
- Disclosures too complex for retail investors

"Using an SFDR classification as a means of promoting products is undesirable".

An SFDR classification ['Art. 8' or 'Art. 9'] "in itself should not be presented as substantiation for a certain degree of sustainability of a product".

It is important "not to give the impression that such classifications have been assigned by a third party".

Source: AFM

A label <u>complements SFDR</u> with a **guaranteed minimum degree** of sustainability that is **independently verified.**

The legal framework is not the complete solution

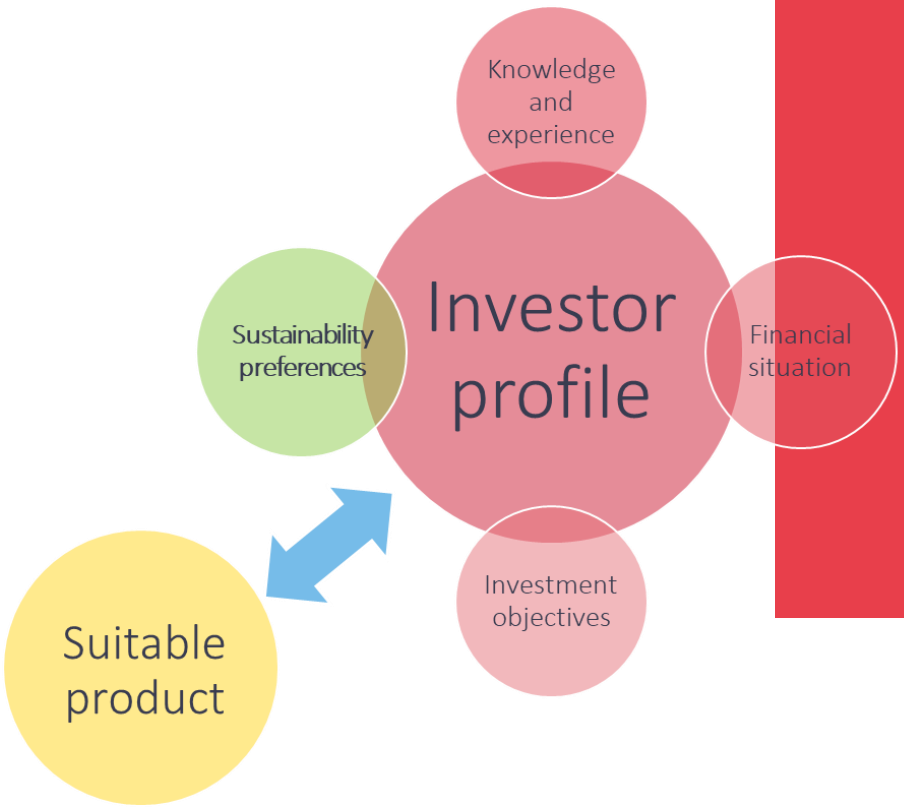
MiFID

Considering the sustainability preferences of investors

- **Avoiding mis-selling**
- Advisor must ask client about sustainability preferences, if any:
  a) minimum proportion that should be invested in **environmentally sustainable investments** as defined under the **EU Taxonomy**
  b) minimum proportion that should be invested in **'sustainable investments'** as defined under the **SFDR**
  c) consideration of '**Principal Adverse Impacts**' on sustainability factors (e.g. GHG emissions, fossil fuels, biodiversity, weapons, diversity, etc)

BUT

- Very complex for retail investors and for advisors
- Low engagement of retail investors: 20% don't care, 79% do care but have no preferences, only 1% expresses specific preferences



A label supports MiFID with a **practical and easy tool** for (retail) investors and investment advisors to understand the ESG profile of a product and assess alignment with personal ESG preferences

Bridging the legal framework and personal convictions

Personal assumptions, expectations & convictions

Minimum guaranteed degree of sustainability

Towards Sustainability Quality Standard & Label

Legal requirements & building blocks

SFDR | **Taxonomy** | **MiFID** | **CBR** | **…**

What are the basic assumptions & expectations of the sustainable retail investor?

1. **No** investments in particularly **harmful** companies
   - *E.g. coal, shale, tobacco, weapons, human & labour rights, etc.*

2. An investment approach seeking some **positive impact**
   - *E.g. favouring better scoring companies, thematic focus, direct impact, voting & engagement*

3. **Clarity** and understandable information
   - *Detailed info about specific personal concerns e.g. fossil fuels, nuclear, biodiversity, water emissions, waste, diversity, inequality, etc*

4. **Assurance** & comfort
   - *Regular 3rd-party expert supervision*

Ambitious and holistic Quality Standard, with independent expert verification

Sustainability strategies

A holistic & multi-faceted approach to sustainability

INTEGRATE - SELECT - FOCUS - OUTPERFORM - ENGAGE

Transparency & Clarity

What is taken into account and how?

FORMAL POLICIES & DISCLOSURES

Avoid harm

Some activities do not belong in a sustainable portfolio

Supervision

Independent verification

CLA Central Labelling Agency Towards Sustainability

FORUM ETHIBEL

ICHEC BRUSSELS MANAGEMENT SCHOOL

Universiteit Antwerpen

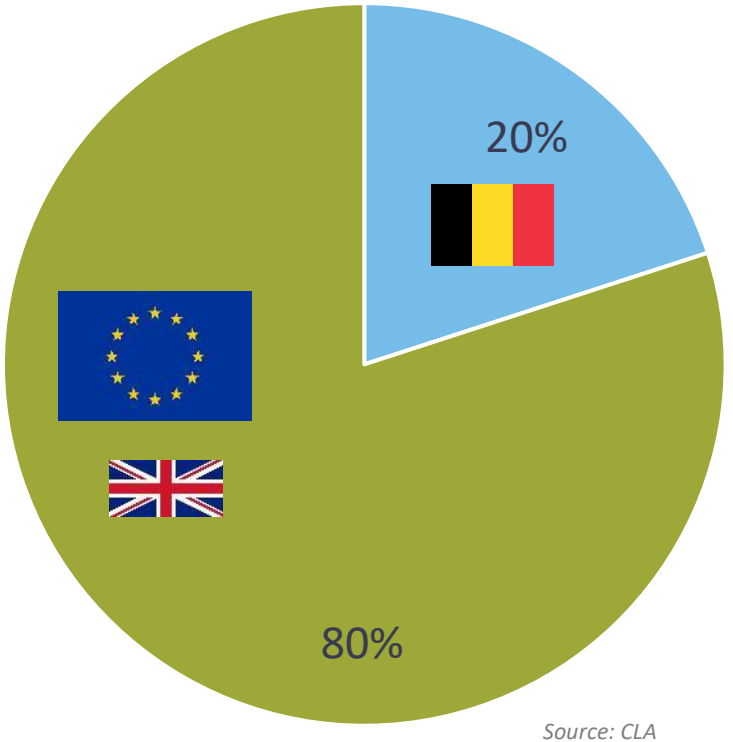
European-level label with broad market adoption

Involved market participants

- 100+ financial institutions
- Banks, asset managers, insurance companies, private bankers, etc
- Indexproviders, rating agencies

from many domiciles

- Belgium
- France
- Germany
- Ireland
- Liechtenstein
- Luxembourg
- Netherlands
- Norway
- Sweden
- United Kingdom

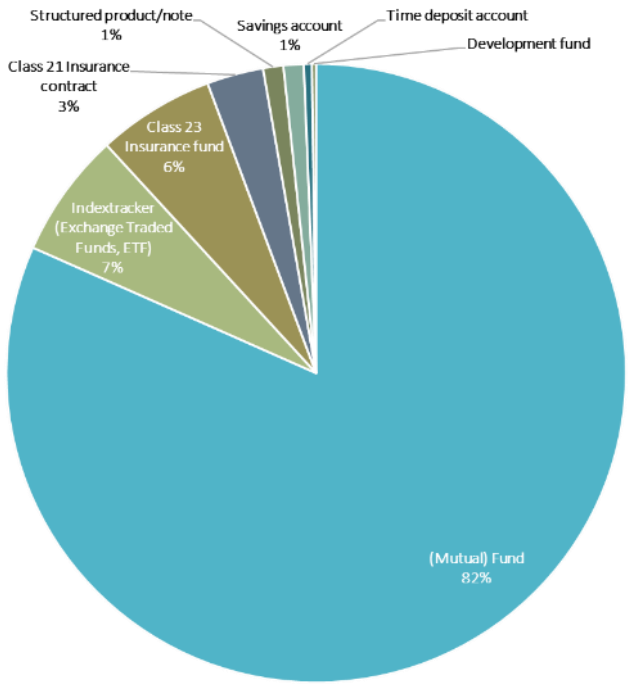


Source: CLA

Number of labelled products

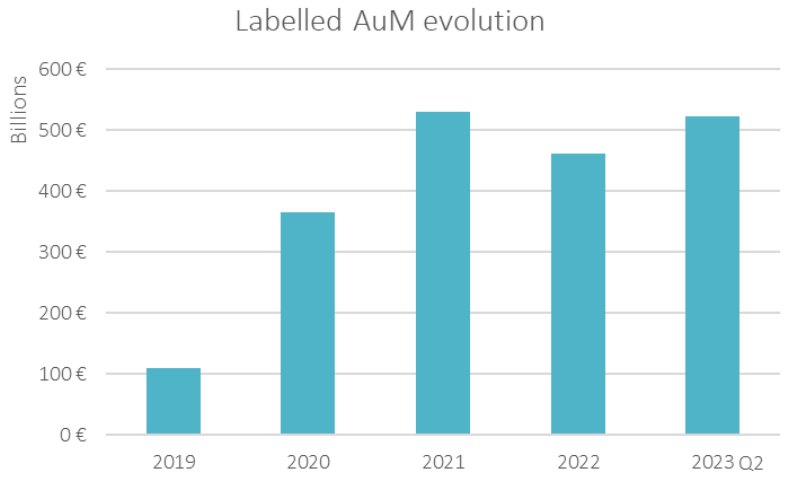
Product types

- Savings and investment products
- Mutual funds, indexfunds, ETFs, insurance funds, structured notes, savings accounts, etc
- Indices



Numbers (June 2023)

- 788 products labelled
- 523 bn. EUR total AUM (483 bn Net.)
  - 25% on BE market, 75% EU

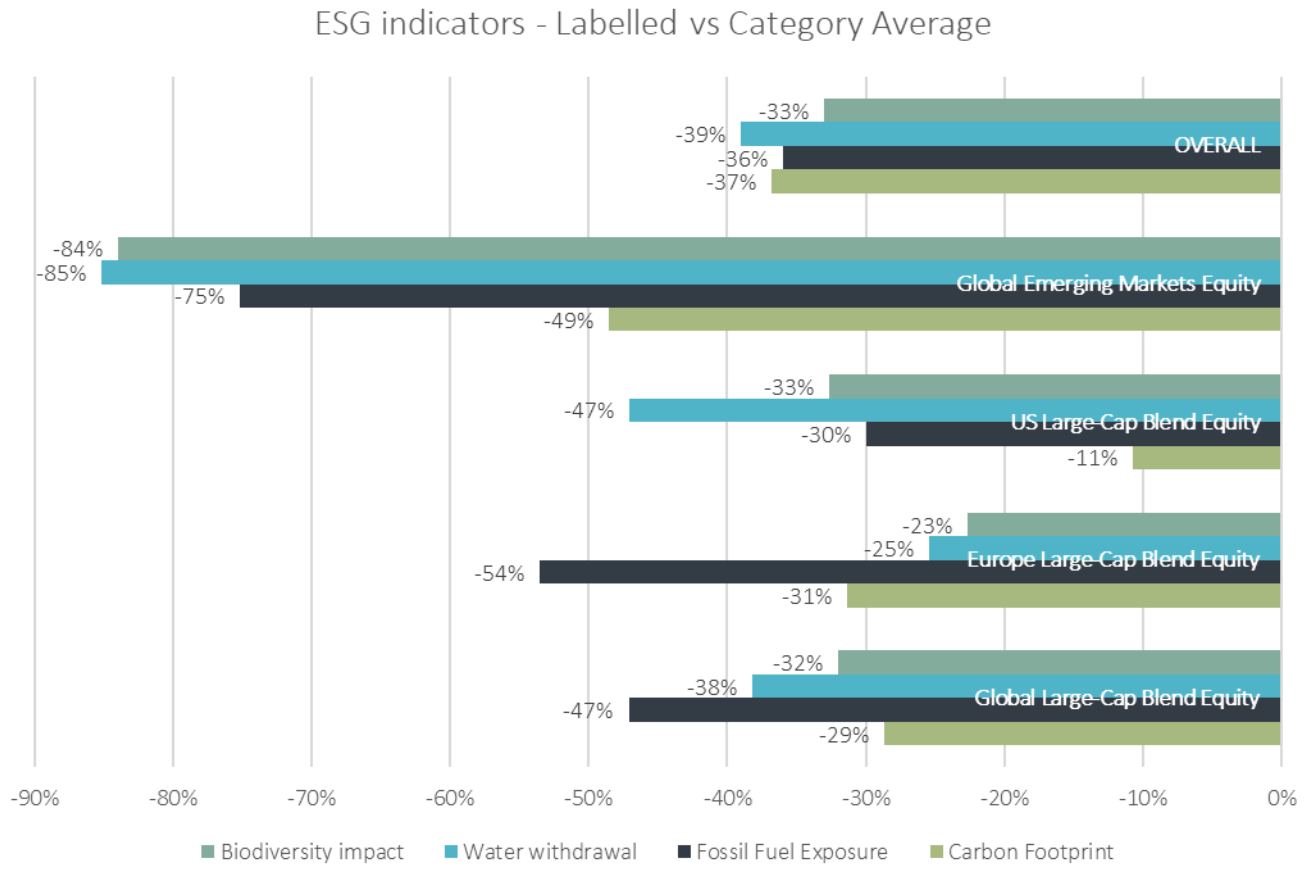


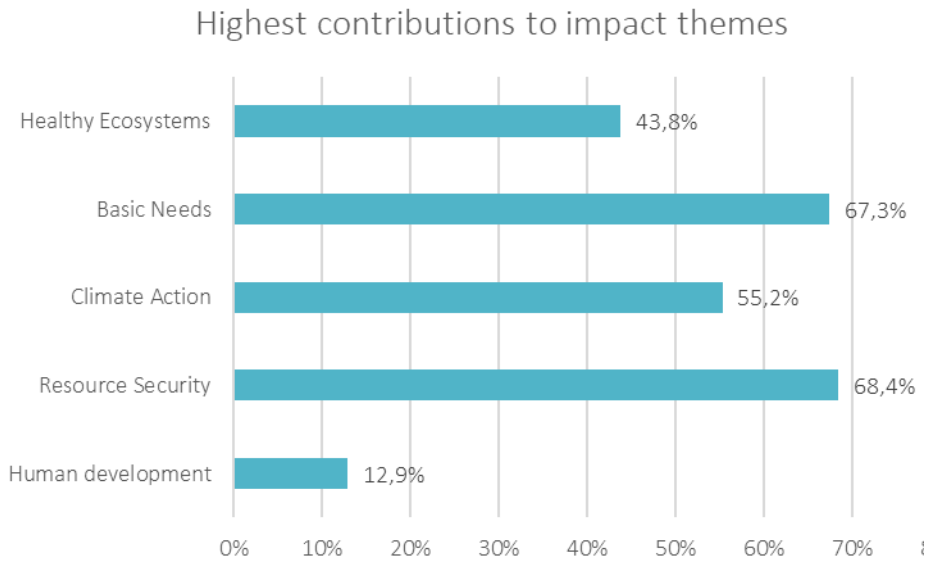
Source: CLA

➔ Most comprehensive label in Europe

See www.towardssustainability.be > Products

ESG performance of labelled products





Source: Morningstar & CLA

Labelled funds (Global & EU portfolios)
Carbon footprint ≈ 30% lower than average
Fossil fuel exposure ≈ 50% lower than average

Role of the label

- The Towards Sustainability label is the **start of the investor's journey** towards sustainable investing, and the **beginning of the conversation** with their financial advisor.
- It is:
  1. Is a **practical and easy tool** for (retail) investors and investment advisors to understand the sustainability-profile of a product and assess alignment with personal sustainability preferences.
  2. Responds to the **basic assumptions and expectations** of investors about sustainability.
  3. Provides investors with the **reassurance** that the product meets a minimum but ambitious degree of sustainability.
  4. Builds upon and supports the implementation of the **EU sustainable finance regulation**.


Q&A

Belgian Financial Sector Federation
www.febelfin.be

The sustainable investment value chain from a EU supervisor's perspective

FSMA

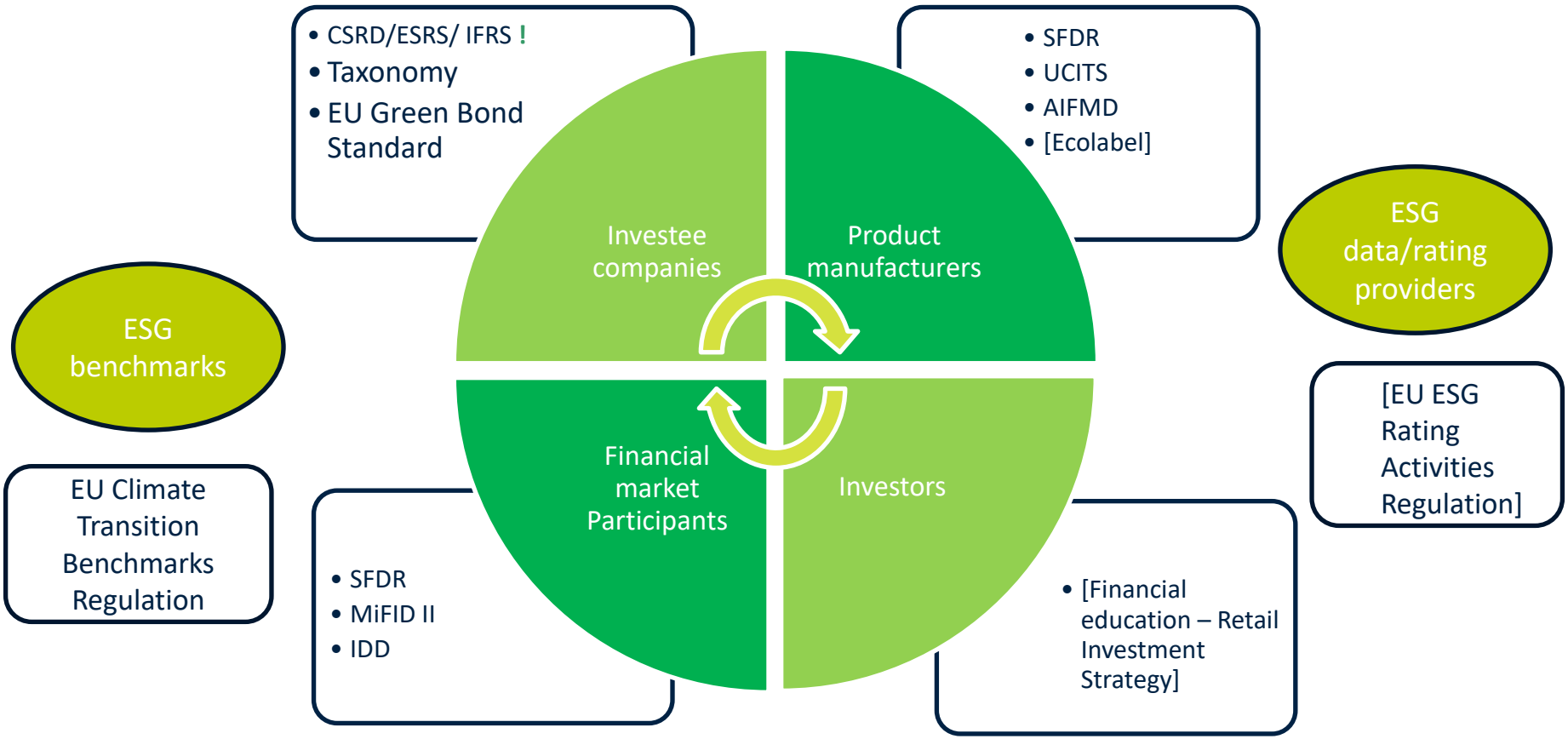
AUTORITEIT
VOOR FINANCIËLE
DIENSTEN
EN MARKTEN

AUTORITÉ
DES SERVICES
ET MARCHÉS
FINANCIERS

Two pivotal challenges for encouraging private investment in a climate-neutral economy

Annemie Rombouts, Deputy Chair, FSMA

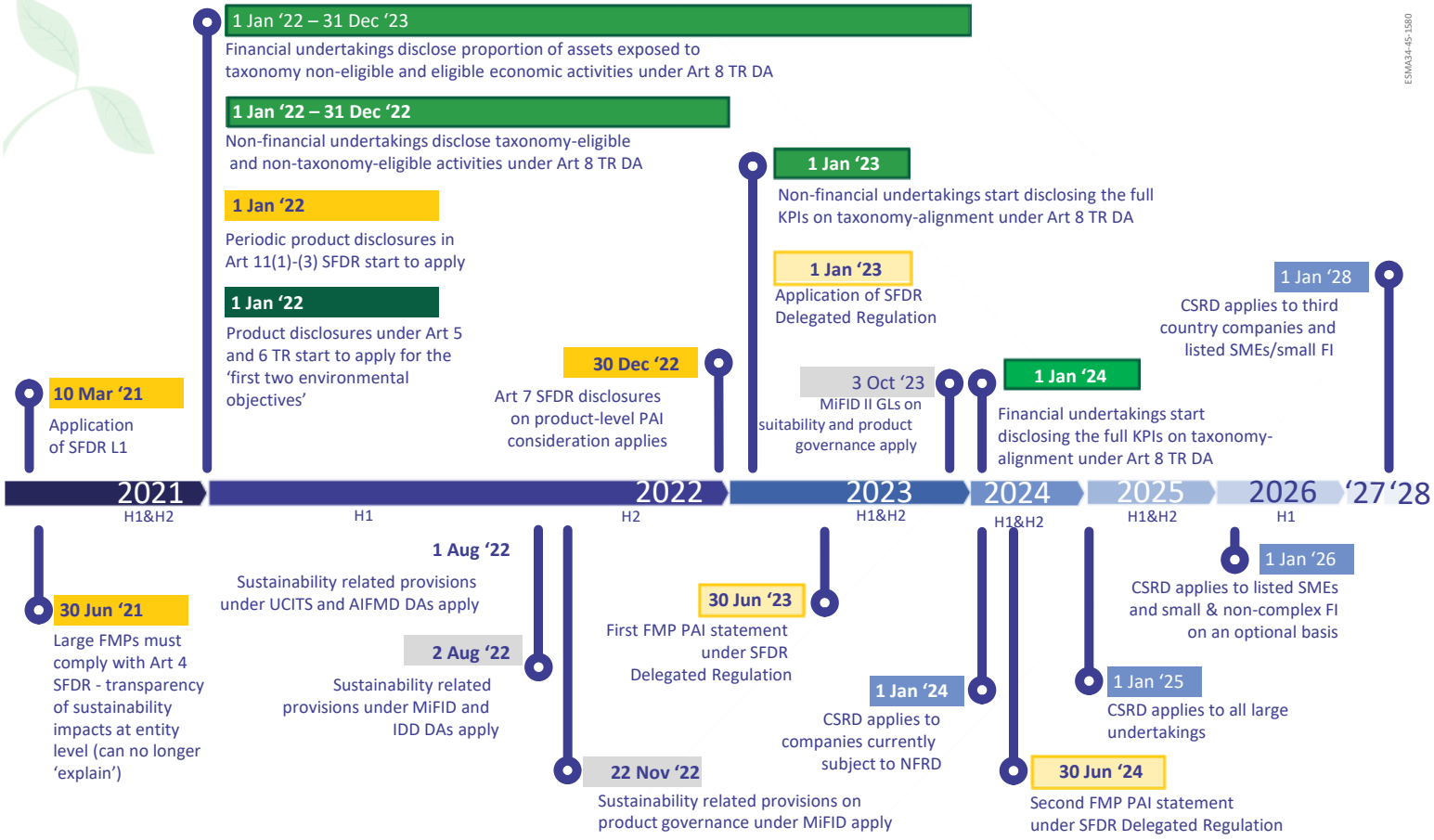
The EU regulatory framework for encouraging private investment in a climate-neutral economy


• CSRD/ESRS/ IFRS !
• Taxonomy
• EU Green Bond Standard
• SFDR
• UCITS
• AIFMD
• [Ecolabel]
ESG benchmarks
ESG data/rating providers
Investee companies
Product manufacturers
Financial market Participants
Investors
EU Climate Transition Benchmarks Regulation
[EU ESG Rating Activities Regulation]
• SFDR
• MiFID II
• IDD
• [Financial education – Retail Investment Strategy]

Last updated: 3 August 2023

SUSTAINABLE FINANCE

Implementation timeline for SFDR | TR | CSRD | MiFID | IDD | UCITS | AIFMD



Basic Sustainability Glossary

EN	NL	FR
Sustainability factor	Duurzaamheidsfactor	Facteurs de durabilité
Sustainable investment	Duurzame belegging	Investissement durable
Sustainability risk	Duurzaamheidsrisico	Risque de durabilité
Sustainability preferences	Duurzaamheidsvoorkeuren	Préférences en matière de durabilité
Environmental objective	Milieudoelstelling	Objectif environnemental
Environmentally sustainable economic activity	Ecologisch duurzame economische activiteit	Activité économique durable sur le plan environnemental
Environmentally sustainable investment	Ecologisch duurzame belegging	Investissement durable sur le plan environnemental
Principal adverse impact	Belangrijkste ongunstige effecten	Principales incidences negatives
Do no significant harm	Geen ernstige afbreuk doen	Ne pas causer de prejudice important

Two pivotal challenges for encouraging private investment in a climate-neutral economy:

address ‘greenwashing’ and take the investor’s view

Addressing ‘greenwashing’, a Union-wide Strategic Supervisory Priority

Greenwashing

*“a practice whereby sustainability-related statements, declarations, actions, or communications do not clearly and fairly reflect the underlying sustainability profile of an entity, a financial product, or financial services. This practice may be **misleading** to consumers, investors, or other market participants.”*

Misleading

“selective disclosure, empty claims, omissions, lack of disclosure, vagueness, lack of clarity, inconsistency, lack of meaningful comparisons, unsubstantiated underlying assumptions, misleading imagery, irrelevance, outdated information, falsehoods”

Addressing 'greenwashing', a Union-wide Strategic Supervisory Priority

- ESMA *Sustainable Finance Roadmap* 2022-2024
- FSMA "*20 projects for the future*"
- ESMA, EIOPA, EBA *Progress Reports on Greenwashing*

in response to EU Commission's request for input on *Greenwashing risks and the supervision of sustainable finance policies*

non exhaustive examples of risks and regulatory/supervisory actions

Investee companies

RISKS

- **financial impact** of climate risks
- c. 2500 Belgian and c. 50.000 EU companies **apply Taxonomy Regulation** and CSRD/ESRS for the first time **between 2023 and 2028**
  - of which 120 listed companies under FSMA supervision
- reporting will be subject to **limited [auditor's] assurance**
- ESG **data and rating providers not [yet] regulated**
- EU **Green Bonds framework = voluntary** and no contractual liability as to use of proceeds

ACTIONS

- **ESMA**:
  - *'The heat is on: Disclosures of Climate Related matters in financial statements', 25 October 2023*
  - sustainable reporting working group (cf. EECS)
  - upcoming guidelines on enforcement of sustainability information
  - statement on sustainability-related disclosure in prospectuses
- **FSMA screens the first application** of Taxonomy Regulation in 2023-2024
- **Regulation on ESG ratings** is a **priority** of the Belgian Presidency of the EU
- FSMA requires **commitment on use of proceeds in prospectuses**

ESG benchmarks

RISKS

- pressure from listed companies wanting to be a constituant (**quality label**)
- poor transparency of methodologies due to the **use of external data providers** (often offering low-correlating ESG ratings)
- lack of control and **oversight on ESG input data** by administrators
- use of **in-house benchmarks**

ACTIONS

- benchmarks part of the ESMA USSP for 2023 – FSMA **screening of disclosures** is ongoing
- use of data providers : application of **outsourcing requirements**
- **moratorium FAQs 10 & 36** : a house index is a complex underlying asset and requires specific attention in the context of target market determination

Product manufacturers

RISKS

- **SFDR**
  - vague definitions
  - difficult distinctions between categories ‘art. 8’ and ‘art. 9’
  - no mandatory link with Taxonomy Regulation
  - room for private labels, ‘home made’ KPI & alternative performance measures
- SFDR sets **disclosure requirements** but can be **perceived as labelling**
- entry into force **SFDR and TR not aligned**
- **fund naming** – some funds may be sailing under false colors

ACTIONS

- Q&A COM, ESA’s
  - art. 9 = 100% ‘sustainable investments’
  - ‘best in class’ = sustainable investment
- Q&A FSMA
  - position on first use of SFDR templates : 0% TR
- SFDR consultation – closes 15/12
- ESMA NLP-analysis on “*ESG names and claims in the EU fund industry*” (2/10/2023) - work on guidelines on funds’ naming (CP 18/11/2022)

Financial market participants/advisors

RISKS

- **consistency of the internal value chain** :
  - FMP: mismatch investment strategy and portfolio
  - FA: mismatch disclosures and product offering
- **ESG knowledge deficit** - capacity to translate the sustainability glossary

ACTIONS

- FMP: **2023** ESMA **Common Supervisory Action** on sustainability risks and disclosures - ongoing
- FMP: FSMA **portfolio screening** through data analytics
- FA: FSMA **survey** on **sustainability preferences**
- FA: **2024** ESMA **CSA announced**

Marketing

RISKS

- marketing is an important **driver**, if not the first, of retail investors' decisions
- marketing in the broad sense is not subject to uniform obligations
- where it applies, regulation is **difficult to enforce a posteriori**

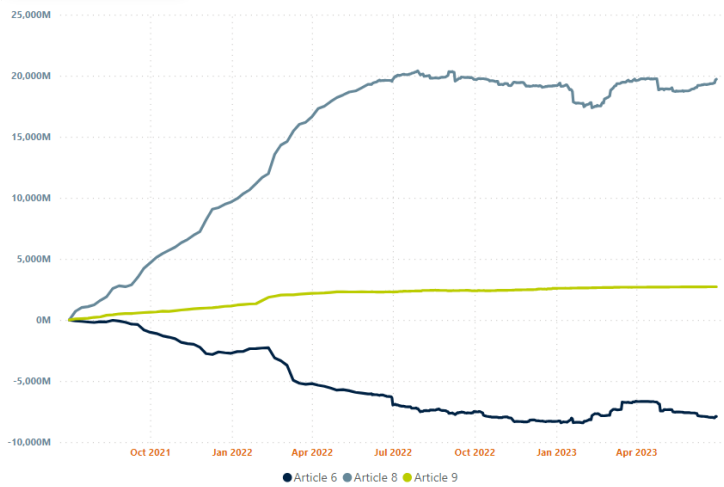
ACTIONS

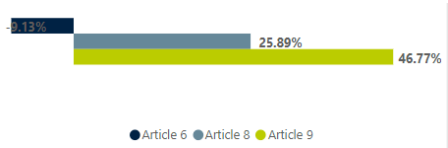
- the **FSMA** is a staunch advocate of **a priori approval** of marketing materials
- 2023 **ESMA Common Supervisory Action** on marketing communications, including mystery shopping
- **COM** proposal on **Retail Investment Strategy**

Regulators evolve towards [better] integrating the investor's view

Cumulative net subscriptions of Belgian public UCIs by SFDR category since March 2021

- Article 8 and 9 UCIs have seen significant net subscriptions since March 2021
  - 22.9 billion (+26%) for Article 8 UCIs
  - Net subscriptions for Article 9 UCIs amounted to 3.1 billion. Subscriptions were steady over the period.
- Funds that are neither Article 8 nor Article 9 saw redemptions of 7.8 billion (-9%).





- In absolute terms, Article 8 UCIs had the largest net inflows (+EUR 22.9 billion).
- On a relative basis, Article 9 UCIs had by far the largest net inflows (+47%)

Recognisable and comparable products

FACTS

- proceeds of **green bonds** do not mandatorily have to be used to finance taxonomy-aligned activities
- Belgium counts 817 UCI's with **each a different** sustainable investment **strategy**
- the **EU ecolabel** project for financial products is currently on hold

[POSSIBLE] ACTIONS

- EU [voluntary] Green Bond Standard –
- SFDR review
- EU wide labelling scheme for financial products ?

Final considerations

OPPORTUNITIES

- **common EU understanding** of 'sustainable activities' –
- availability of **very granular data** on investee companies' current situation and on their ambition

⇩

- managers can evolve from indexhugging and exclusion strategies to **effective impact strategies**
- companies can **engage actively** with investee companies and challenge their data
- financial advisors and supervisors can **contribute** to the retail investors' **sustainability literacy**

CHALLENGES

- avoid **ticking-the-box** approach to regulation
- non financial information is per definition hard to quantify, 'operationalisation' of the regulatory framework requires **capacity building**
  - at all levels of the sustainable investment value chain
  - at supervisory level (case-by case approach)

Useful readings

- European Commission
  - *EC Q&A on SFDR,* 14 July 2021 & 17 May 2022
  - https://finance.ec.europa.eu/news/commission-adopts-european-sustainability-reporting-standards-2023-07-31_en
- ESAs joint statement
  - *ESAs Joint Supervisory Statement on Application of SFDR*, 24 March 2022
  - *ESAs Joint Q1A on SFDR Delegated Regulation*, 17 November 2022
- ESMA
  - *The heat is on. Disclosures of Climate-Related Matters in the Financial Statements,* 25 October 2023
  - *ESG names and claims in the fund industry*, 2 October 2022
  - *Progress Report on Greenwashing,* 31 May 2023
  - *Guidelines on certain aspects of the MiFID II suitability requirements,* 23 September 2022
- EIOPA
  - *Advice to the European Commission on Greenwashing*, 1 June 2023
  - *Technical advice for the review of the IORP II Directive,* v° sustainability, 28 September 2023
  - *Guidance on Integration of Customers Sustainability Preferences under IDD*, 20 July 2022

Useful readings

- FSMA
  - Krachtlijnen van de regels over duurzame financiering - Beheervennootschappen van (A)ICB's (fsma.be)
  - Communication FSMA_2021_06 : Communication générale publiée à l'occasion de l'entrée en vigueur du SFDR
  - Q&A over de inwerkingtreding van de Gedelegeerde Verordening (EU) 2022/1288 (SFDR)
  - Krachtlijnen van de regels over duurzame financiering - Kredietinstellingen (fsma.be)
  - Krachtlijnen van de regels over duurzame financiering - genoteerde vennootschappen
  - Non-financial reporting: progress, but with room for improvement | FSMA
  - Publicatie door ESMA van verklaring inzake duurzaamheidsinformatie die in het prospectus moet worden opgenomen
  - Guidance on art. 8 Taxonomy Regulation
  - Krachtlijnen van de regels over duurzame financiering - Verzekeringsondernemingen
  - Krachtlijnen van de regels over duurzame financiering – Verzekeringstussenpersonen
  - Wikifin.be Ethisch/duurzaam sparen en beleggen/bankieren https://www.wikifin.be/nl/sparen-en-beleggen#paragraph-3

Is the stock return premium green or brown?

Caterina Santi

November 9, 2023

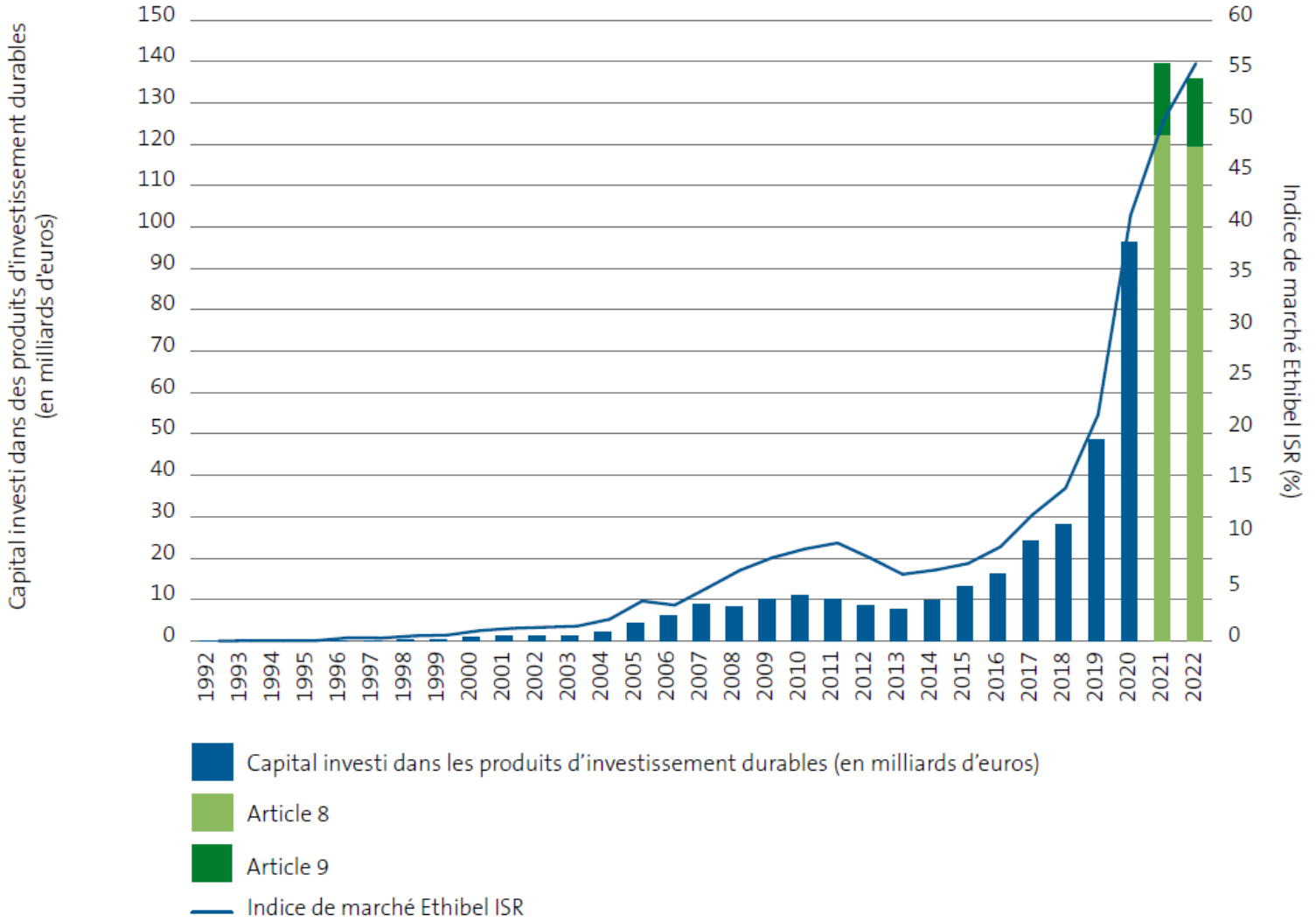
HEC Liège - University of Liège

Outline

- Sustainable investments in Belgium
- Institutional investors and sustainable investments
- Retail investors and sustainable investments
- Carbon premium or greenium?
  - Why is it relevant?
  - Theoretical predictions
  - Empirical evidence
- Conclusions

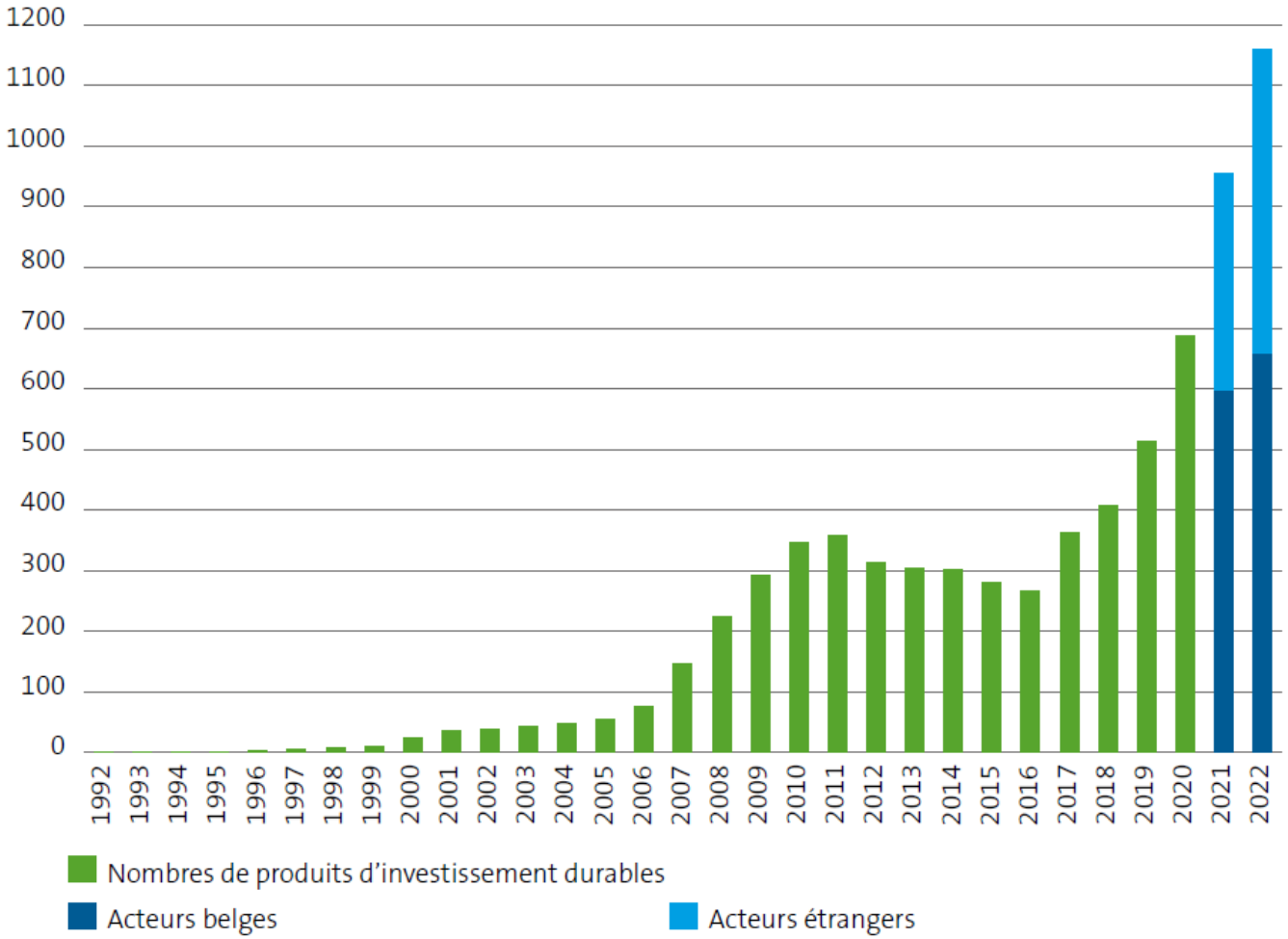
Sustainable investments in Belgium

Capital invested in sustainable investment products in Belgium



Source : Calculs de Forum Ethibel, basés sur les données de BEAMA et des institutions financières participantes. En 2022 (par ordre alphabétique) : AG Insurance, AXA IM, Belfius IP, BNP Paribas AM, CADELAM, Candriam, Capricorn Partners, DPAM, Ethias, Funds For Good, Incofin IM, KBC AM, Leleux Fund M&P, Leo Stevens & Cie, Mercier Vanderlinden AM, NewB, NN IP, Oikocredit Belgique, Triodos IM et la banque Van Lanschot.

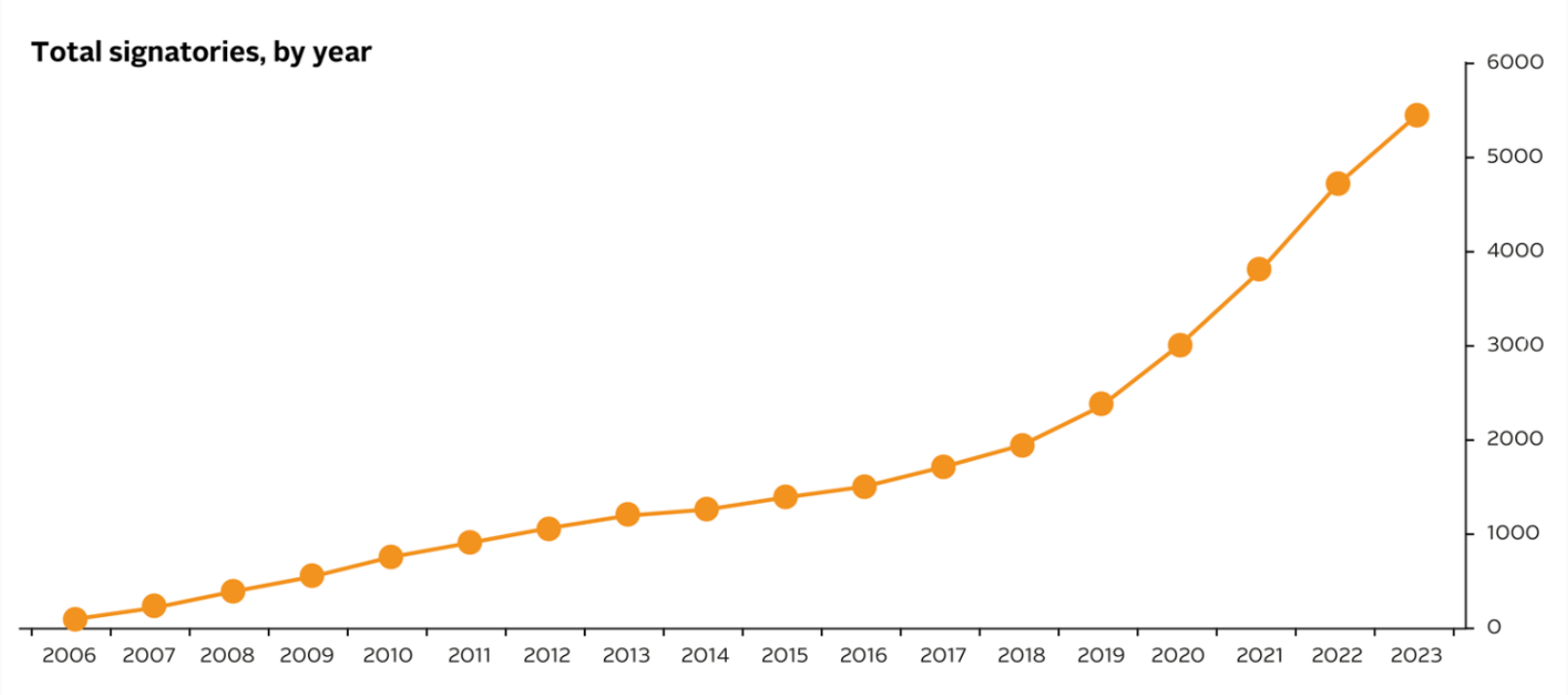
Number of sustainable investment products offered in Belgium



Source : Nombre de fonds (fonds de placement, fonds d'épargne-pension, fonds de fonds, trackeurs indiciels, assurances-vie et fonds durables étrangers autorisés en Belgique, tels que définis dans la méthodologie). Calculs de Forum Ethibel, basés sur des données fournies par les institutions financières et des informations publiquement disponibles.

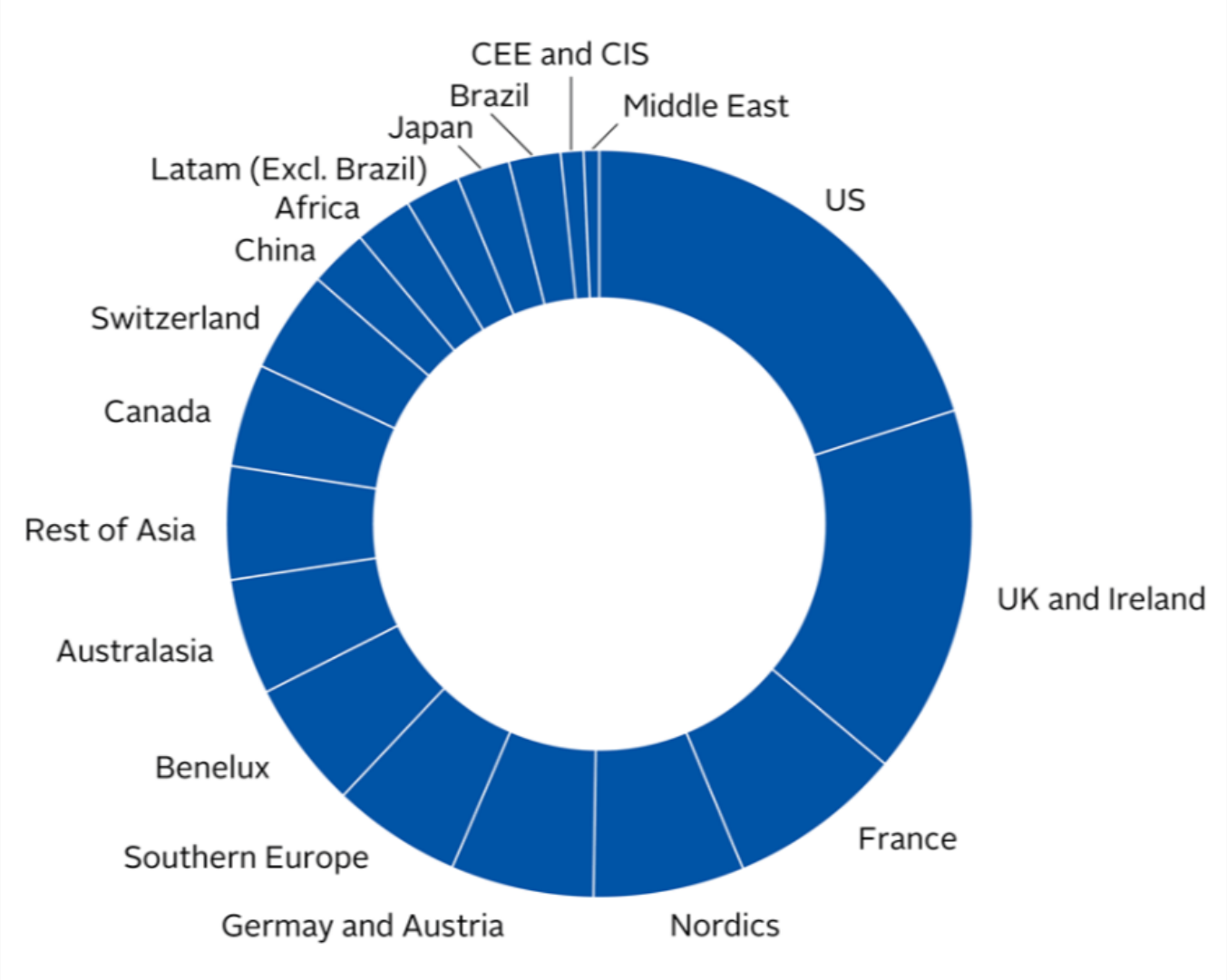
Institutional investors and sustainable investments

Total PRI signatories by year



- **Source**: PRI website.

Total PRI signatories by region



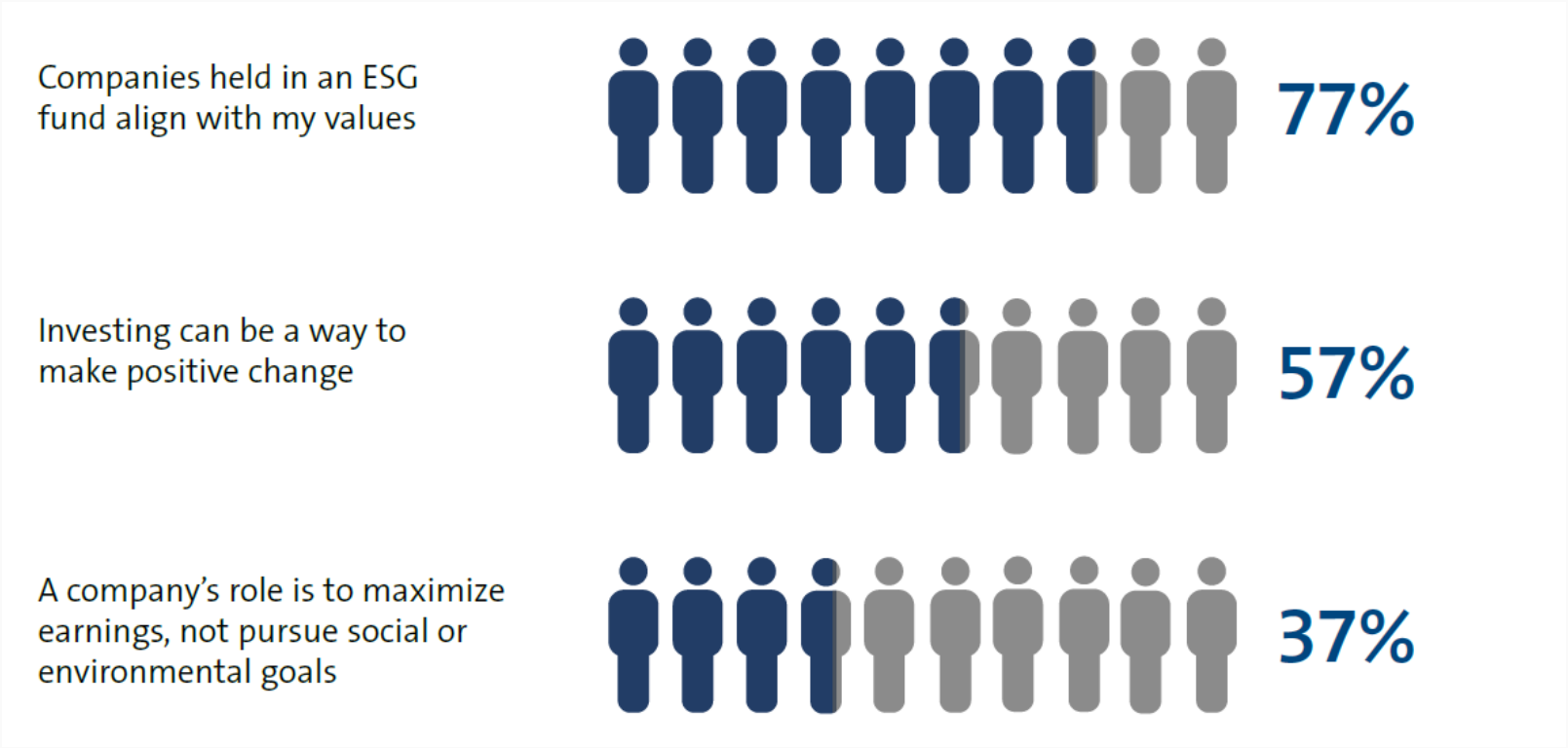
- **Source**: PRI website.

Why do institutional investors cater to responsible investors?

- Pecuniary reasons - fund managers are generally rewarded for increasing fund inflows and the value of AUM (Białkowski and Starks, 2016).
- Sustainability compliance can be seen as a risk management tool (Chen et al., 2020; Hoepner et al., 2020; Krueger et al., 2020; Brandon et al., 2021).
- Sustainable investments are in line with their long-term investment horizon. Financial benefits of ESG practices are only incorporated into firm value over the long run (e.g. Dyck et al., 2019; Starks et al., 2020).

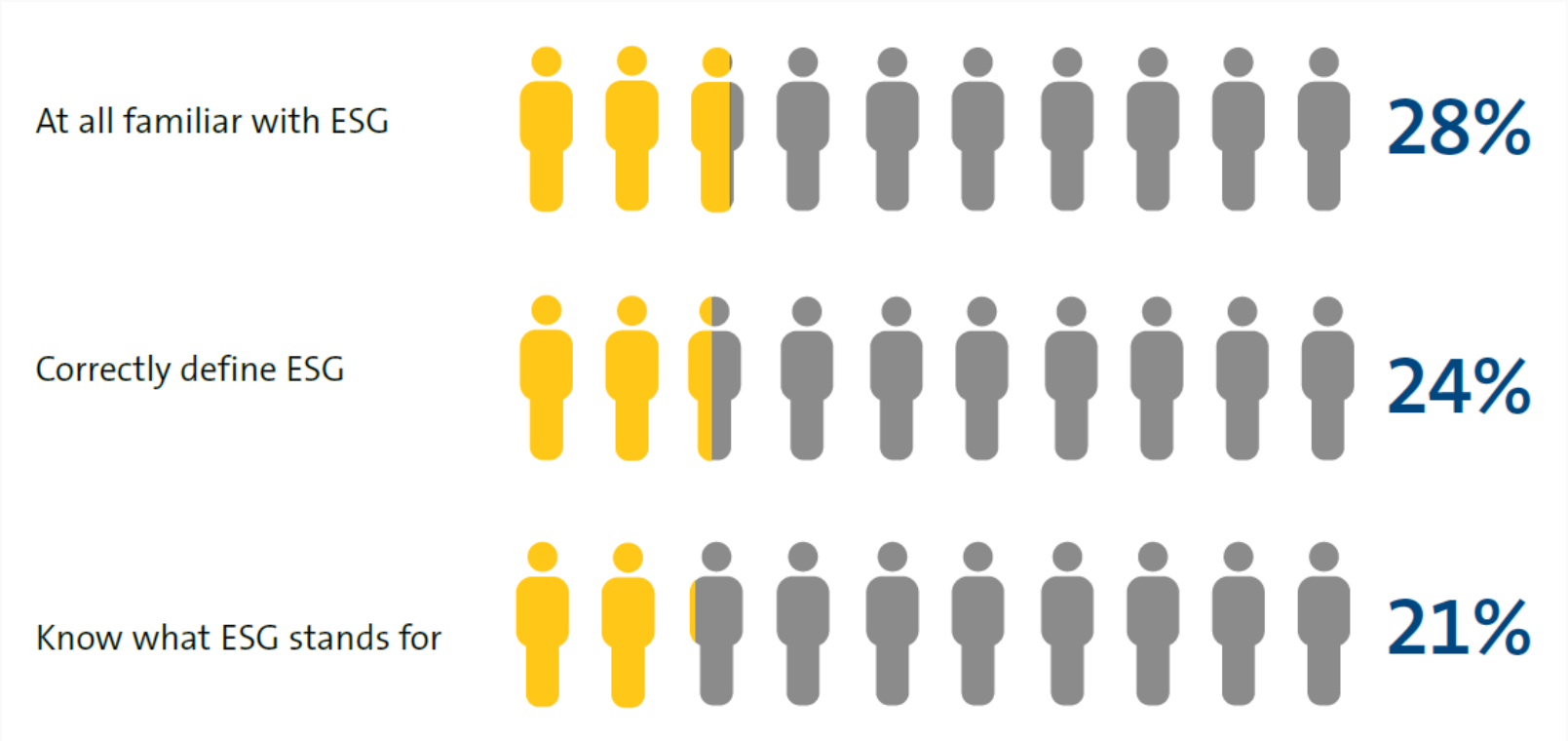
Retail investors and sustainable investments

Beliefs about investing as a mechanism for change



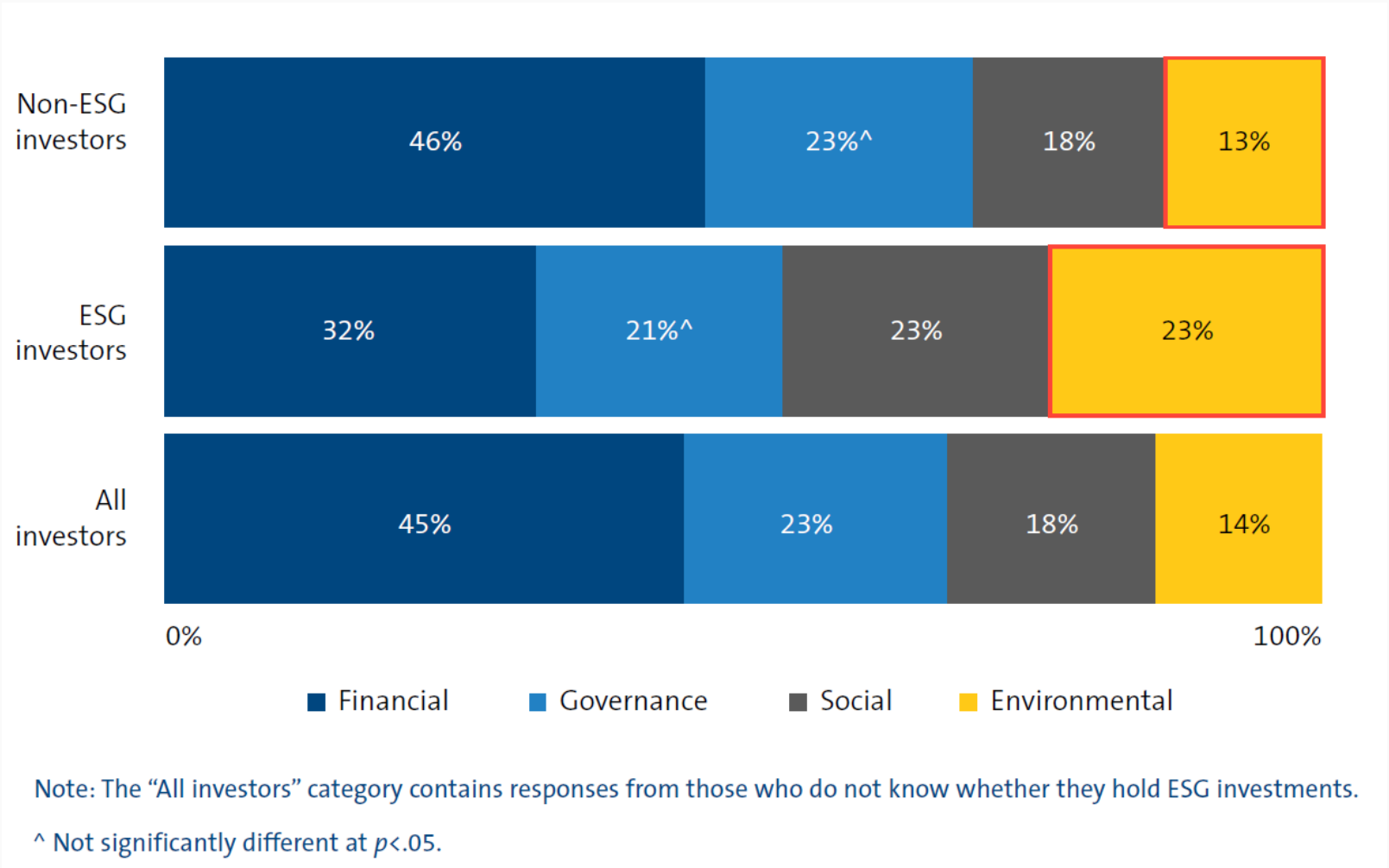
- **Source**: Mottola, G. and Angela Fontes (2022). Investors say they can change the world, if they only knew how: Six things to know about ESG and retail investors. *Consumer Insights: Money & Investing*

Familiarity and knowledge of ESG investing



- **Source**: Mottola, G. and Angela Fontes (2022). Investors say they can change the world, if they only knew how: Six things to know about ESG and retail investors. *Consumer Insights: Money & Investing*

Relative importance of financial, E, S, and G items

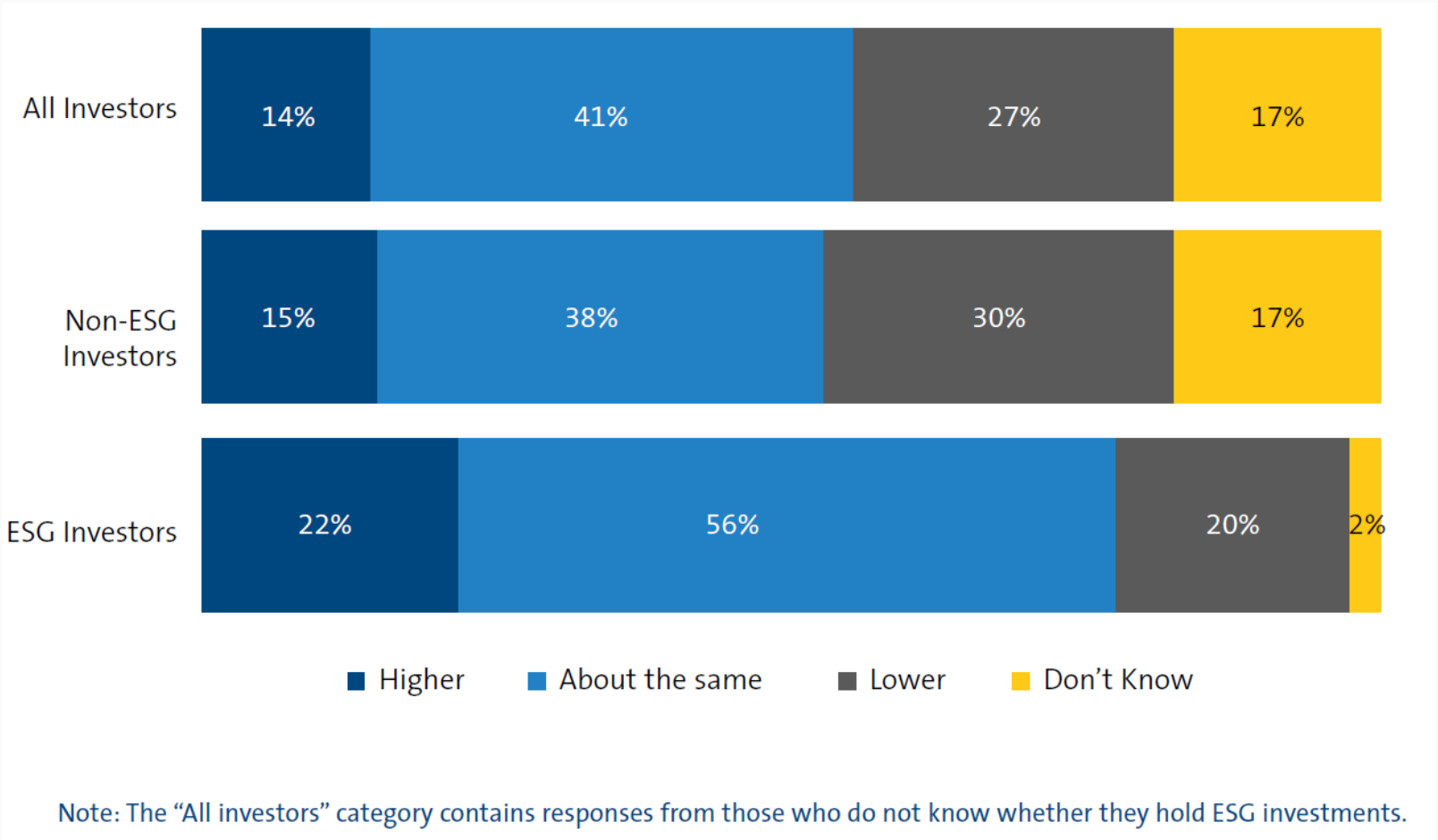


Note: The "All investors" category contains responses from those who do not know whether they hold ESG investments.

^ Not significantly different at $p<.05$.

- **Source**: Mottola, G. and Angela Fontes (2022). Investors say they can change the world, if they only knew how: Six things to know about ESG and retail investors. *Consumer Insights: Money & Investing*

Expected returns of 'sustainable' firms relative to the market



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- **Source**: Mottola, G. and Angela Fontes (2022). Investors say they can change the world, if they only knew how: Six things to know about ESG and retail investors. *Consumer Insights: Money & Investing*

Carbon premium or greenium?

Carbon premium or greenium?

- Carbon premium refers to the excess return of stocks of high-emission (brown) firms as compared to low-emission (green) firms. We can observe a carbon premium because of:
  - compensation for the higher exposure to carbon transition risk,
  - investors' tastes.
- Greenium is a term used to denote the higher returns of green stocks as compared to brown stocks. We can observe a greenium because of
  - sudden shifts in investors' preferences for green stocks,
  - mispricing of carbon transition risk.

Carbon premium or greenium?

Why is the comparison of the return of green vs. brown stocks relevant?

- Both institutional and retail investors are moved by pecuniary motives.
- If financial markets correctly price carbon risk premium, market forces can be an alternative to a global carbon tax to achieve emission reduction targets.

Predictions of theoretical models

- Green assets should have lower expected returns than brown assets (Pastor et al., 2021; Pedersen et al., 2021, Stambaugh, and Taylor, 2021).
  - Investors with green tastes are willing to sacrifice financial returns for social benefits.
  - Green assets are a better hedge against climate risk.
- Green assets can have higher realized returns while agents' demands shift unexpectedly in the green direction (Pastor et al., 2021).

Empirical evidence of a carbon premium

- In the US, stocks of firms with higher emissions earn higher returns, controlling for common risk factors (Bolton and Kacperczyk, 2021; Hsu et al., 2023)
- Bolton and Kacperczyk (2023) find a widespread carbon premium in all sectors over three continents, Asia, Europe, and North America.
  - Short-term transition risk is greater for firms located in countries with lower economic development, greater reliance on fossil energy, and less inclusive political systems.
  - Long-term transition risk is higher in countries with stricter domestic, but not international, climate policies.

Critics to the empirical evidence on the carbon premium

- Aswani et al. (2023) argue that stock returns are correlated only with unscaled emissions estimated by the data vendor, but not with unscaled emissions actually disclosed by firms. Emissions intensity (emissions scaled by firm size) is not correlated with stock returns.
- Carbon emission data are affected by forward-looking bias, using lagged emissions the carbon premium is zero on average globally (Zhang, 2023).
- Atilgan et al. (2023) find that emission data are correlated with earnings surprises and earnings announcement returns suggesting that the carbon premium partially represents unexpected returns and thus mispricing.

Empirical evidence of a greenium

- US green stocks outperformed brown as climate concerns strengthened in recent years (Pastor et al., 2022).
- Karolyi et al. (2023) find reliable evidence that green stocks earned higher returns than brown stocks around the world. This outperformance is associated with lower stock returns of energy firms but not higher returns of technology stocks.
  - The equity greenium effect mostly occurs in North America and during the period before 2016.
  - After 2016, green stocks have started to deliver lower returns than brown stocks in Asia, Emerging markets and Europe.

Conclusions

Conclusions

- Lack of timely reliable data on firms' emissions.
- Carbon transition risk is not fully priced in financial markets.
- Market forces alone are not enough to support the transition.

Thank you for your attention

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