

Harmonization, integration and innovation

Three trends shaping the future of ESG investing

Moody's ESG Solutions Group

Bringing quality, rigor and consistency to the most comprehensive spectrum of capabilities serving core segments as the economy greens

- » Brings together over 30 years of ESG expertise to meet rapidly evolving needs
- » Delivers data, analytics and insight to further enhance best-in-class risk assessment capabilities from MIS and MA



Serving risk management, equity and credit markets

Agenda

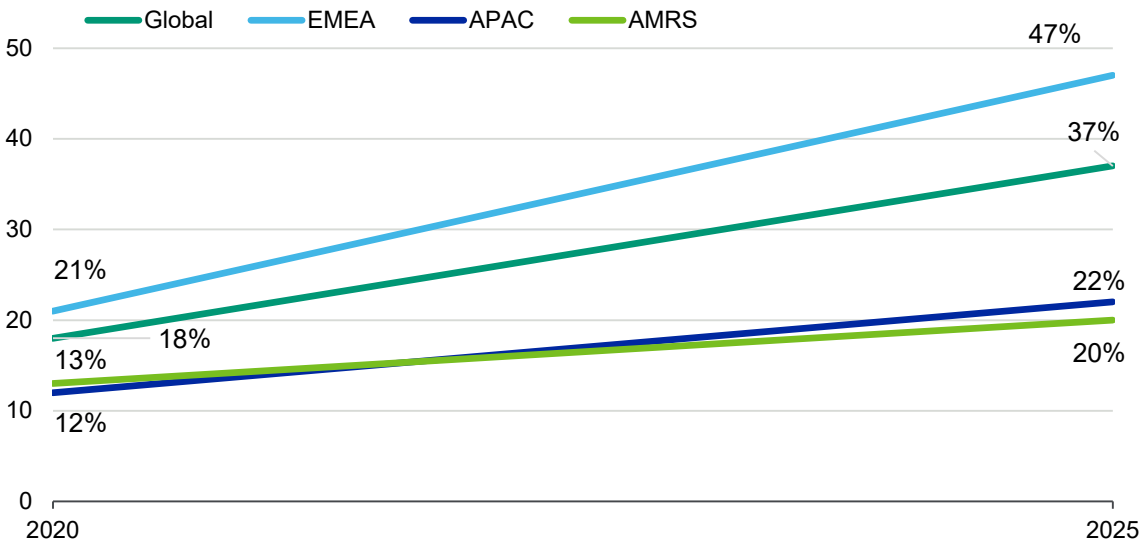
1. The data challenge and path to harmonization
2. Integrating risk management and modelling techniques
3. Innovation in sustainable finance products

1

The data challenge and
path to harmonization

Rising demand and expectations for ESG and climate-related data and content

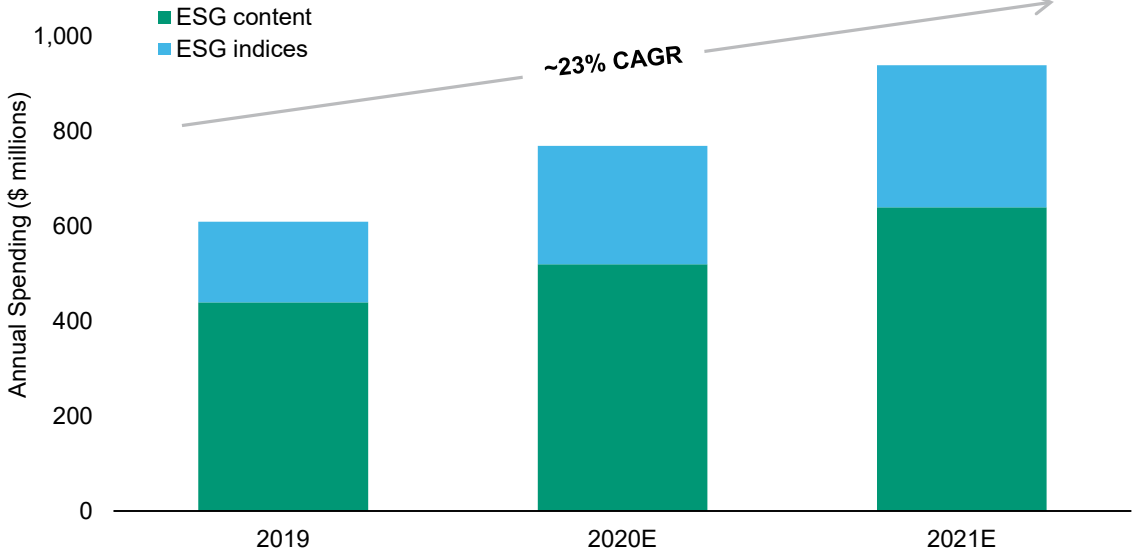
Percentage of assets invested sustainably¹



Trends evidence a long-term shift in investment practices

1. Source: Global Client Sustainability Survey, July – September 2020. BlackRock

Spend on ESG content & indices growing rapidly²

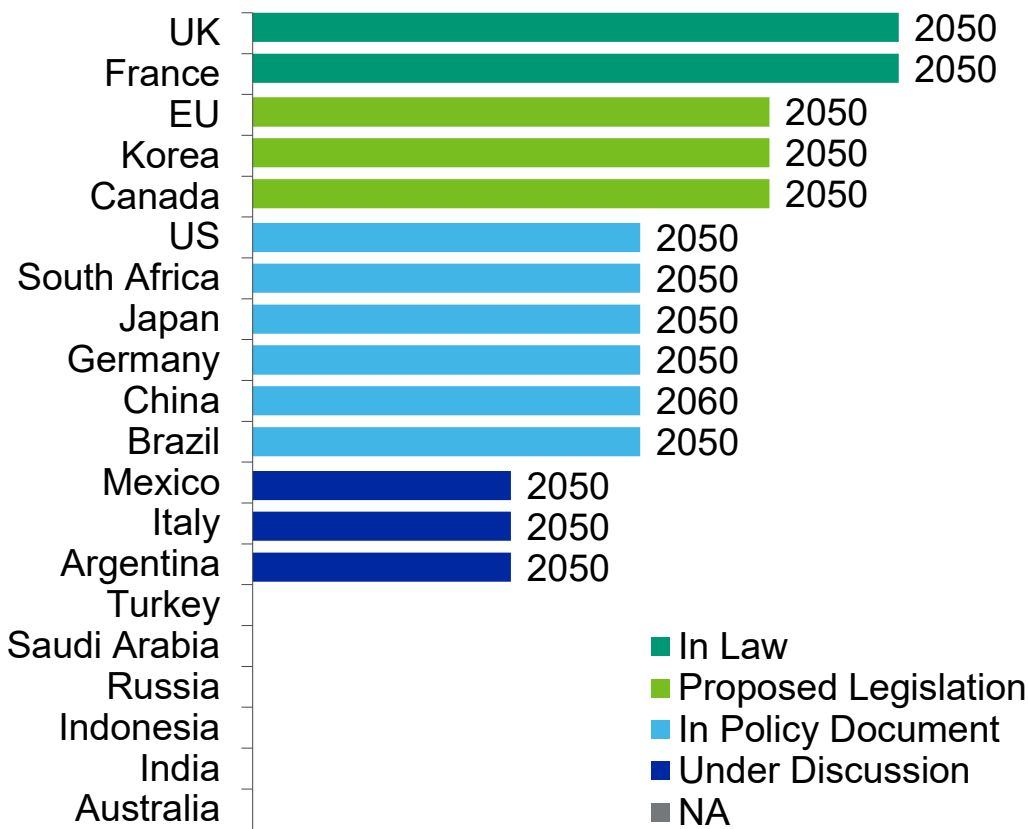


Growing demand for data and benchmarks

2. Sources: McKinsey and Opimas.

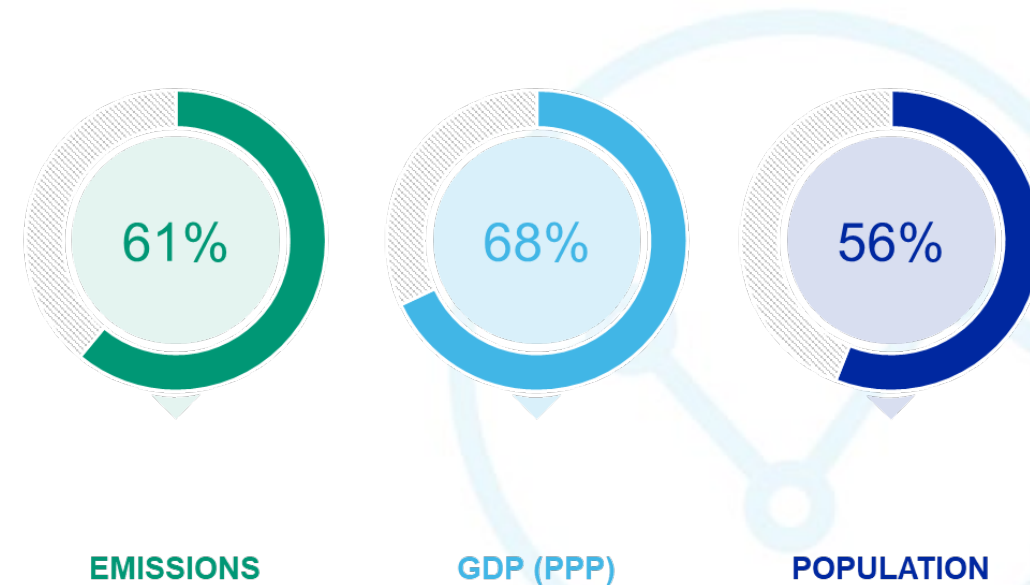
Proliferation of net zero targets will increase the focus on sustainability and transition

Net zero targets across G20 economies¹



1. Sources: Moody's ESG Solutions, Energy & Climate Intelligence Unit

Coverage of net zero commitments by type, %²

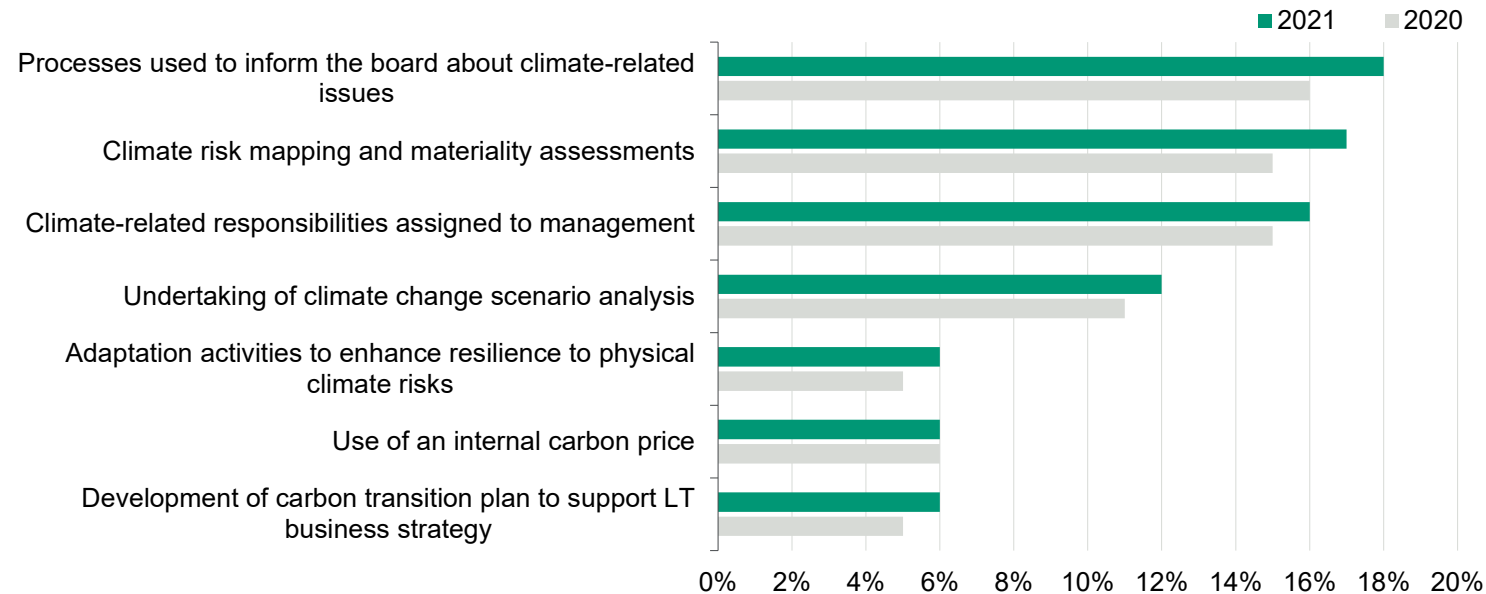


2. Sources: Moody's ESG Solutions, Energy & Climate Intelligence Unit, Oxford University

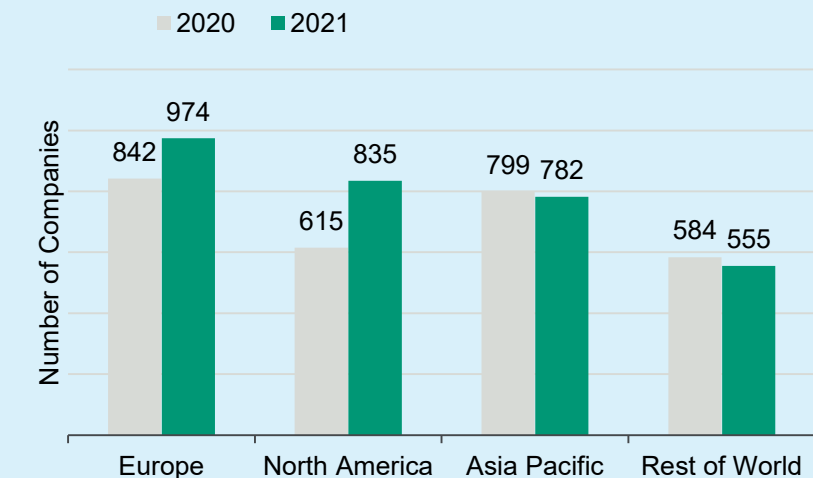
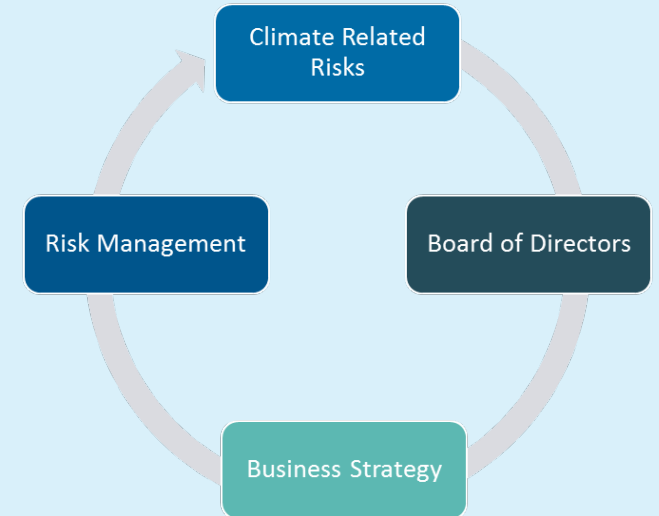
ESG and climate reporting is rising

But companies grappling with how to tie into their business strategies and transition and future resilience

- » We assess the degree to which climate change is incorporated into corporate strategy and governance in line with TCFD recommendations for Over 3,100 companies globally
- » Overall disclosures are improving versus last year, indicating greater TCFD adoption
- » Less than 10% of companies disclosing on adaptation activities to build resilience to physical risks
- » Less than 10% of companies disclosing use of internal carbon price – no improvement since last year
- » Less than 10% of companies are disclosing low-carbon transition plans to support long-term strategy

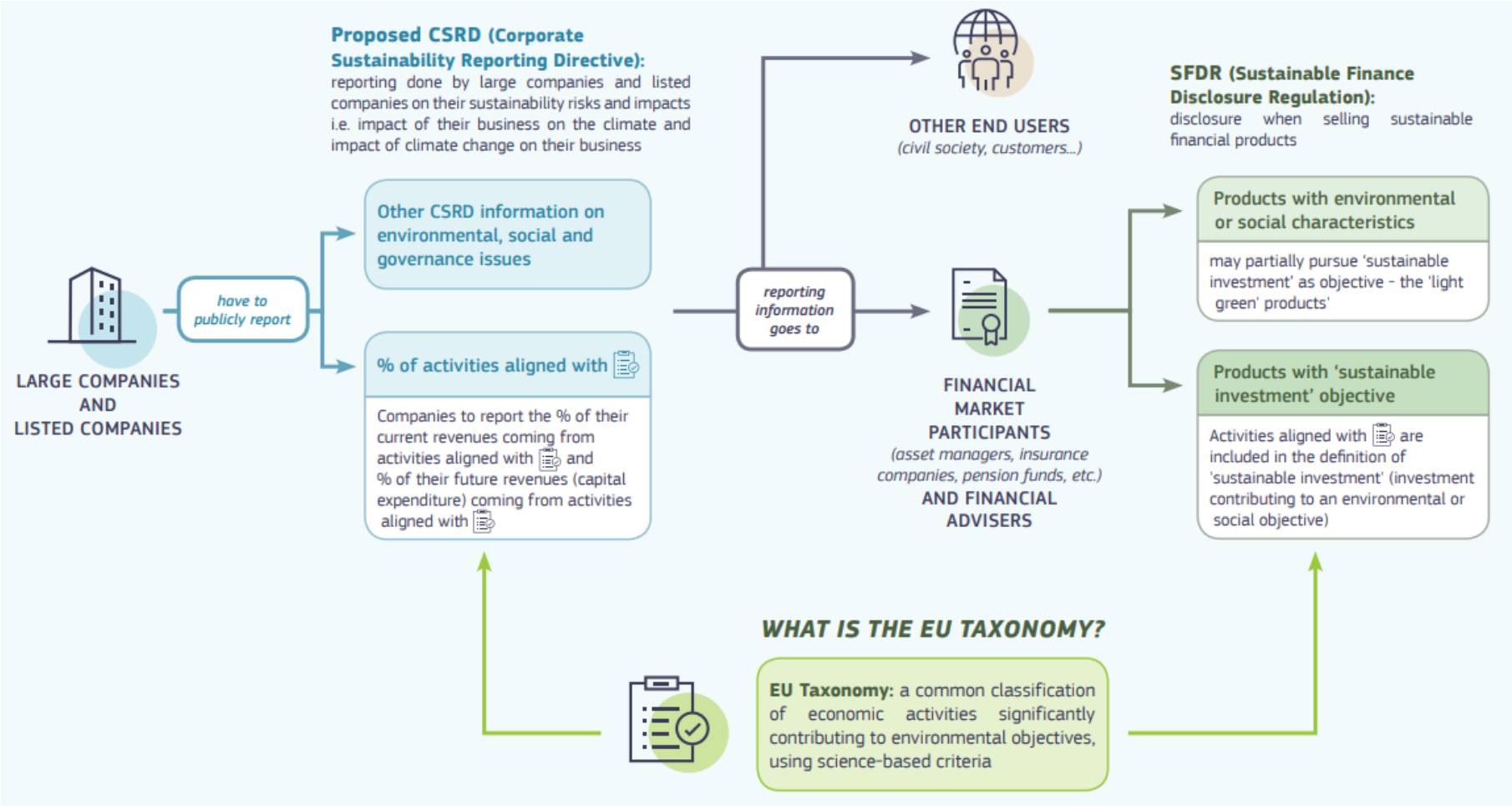


Our approach and coverage



Note: Companies assessed between July 2020 and March 2021 on a 0–100 scoring scale evaluating their strategic approach..
Source: V.E, a Moody's affiliate

Recent regulatory efforts will produce more consistent disclosure and help galvanize investment flows



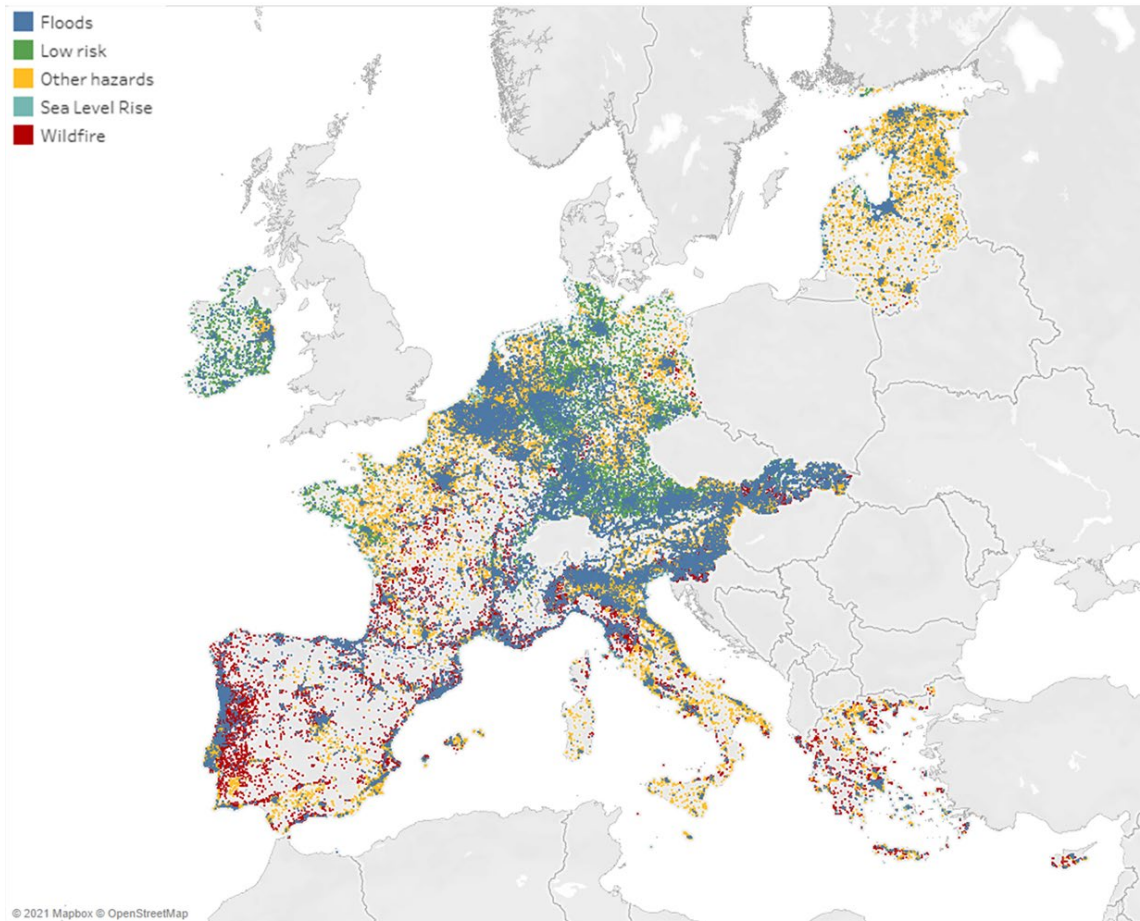
Source: European Commission

2

Integrating risk management and modelling techniques

Greening of central banking

Increasing supervisory focus will reinforce trends around tighter climate reporting and need for enhanced risk management, including climate stress tests, for financial institutions



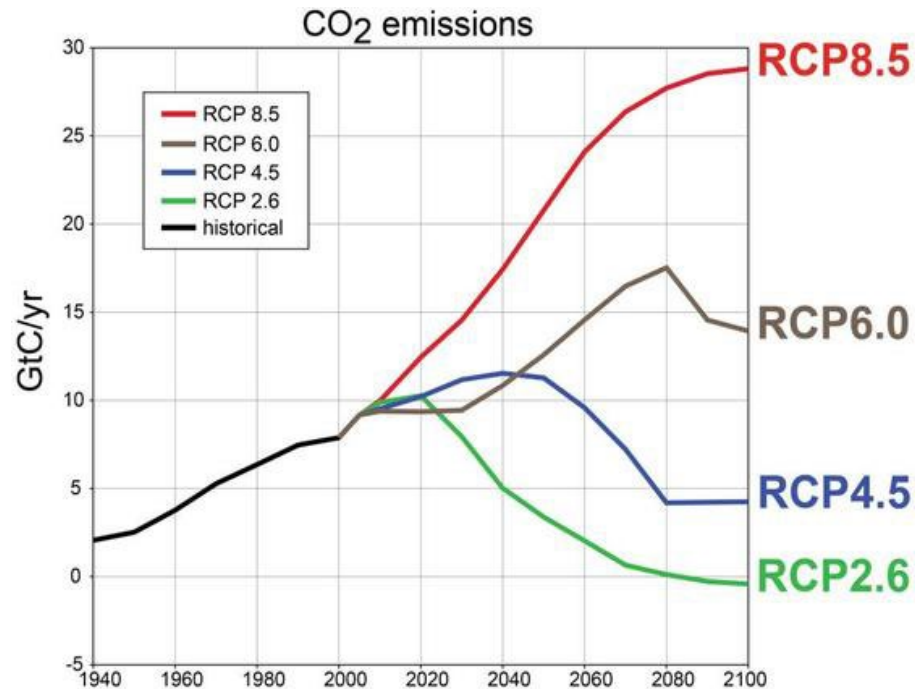
- » Network for Greening the Financial System comprises 90 central banks and supervisors
- » Environmental sustainability now explicitly reflected in the Bank of England's mandate - reflects growing consensus that climate risks pose threat to price & financial stability
- » European Central Bank published preliminary results of climate stress tests covering about 4mn companies and 2,000 banks. The results, which leveraged our climate data, show that without climate policy, physical risks rise significantly, increasing firms' probability of default

Source: ECB calculations based on dataset from Four Twenty Seven (and affiliate of Moody's). Each dot corresponds to a firm in the sample. For simplicity only euro area firms are displayed in the chart, although data are available for a much broader sample.

Climate risk: uncertainty drivers

Transition Risk

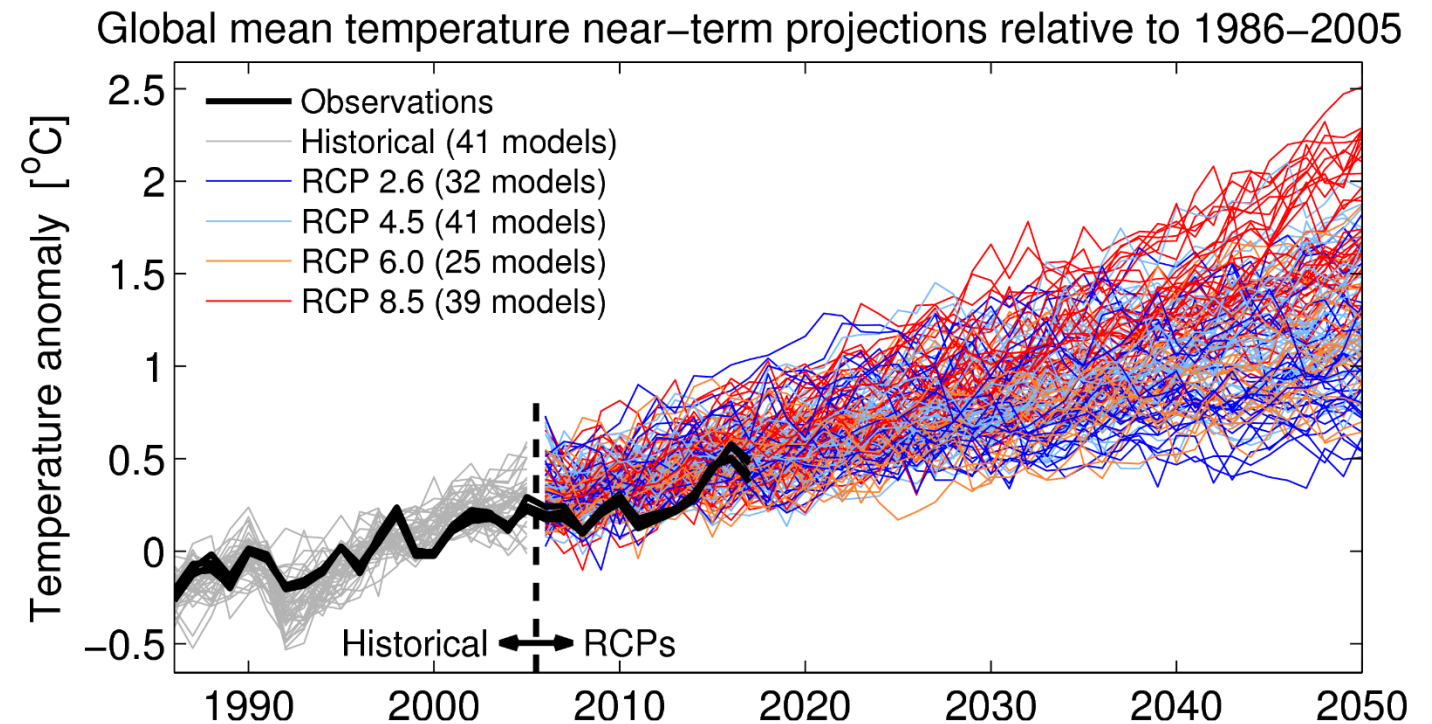
- » Policy, technology, population, economic uncertainty



Source: USGS, adapted from IPCC AR5, 2013

Physical Risk

- » Scientific uncertainty
- » Policy is not a meaningful driver until after 2040



Source: IPCC AR5, 2013

From climate change to credit risk

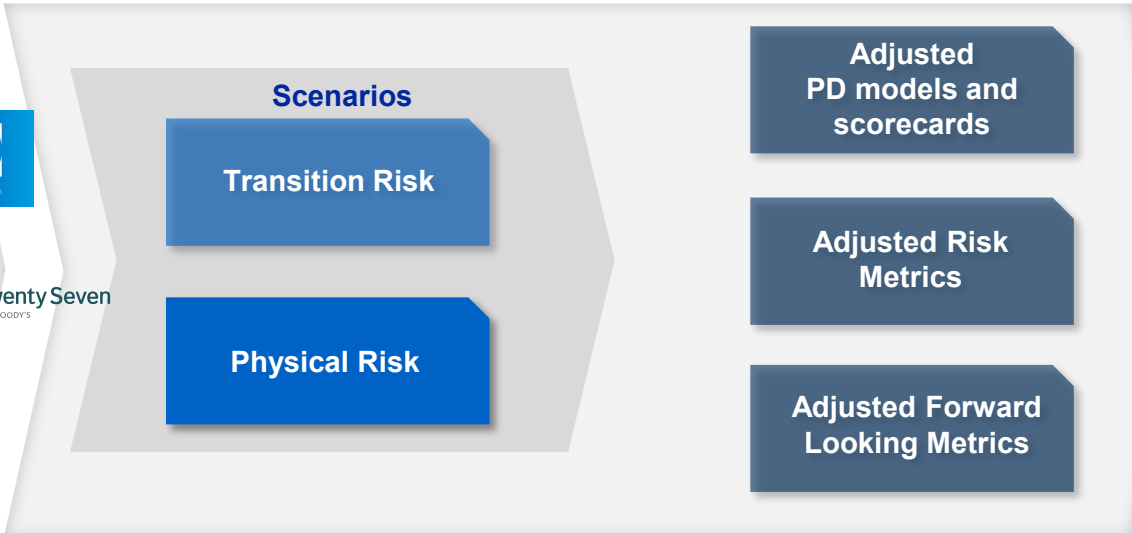


1 *ESG & Climate Change risk Portfolio Profiling*



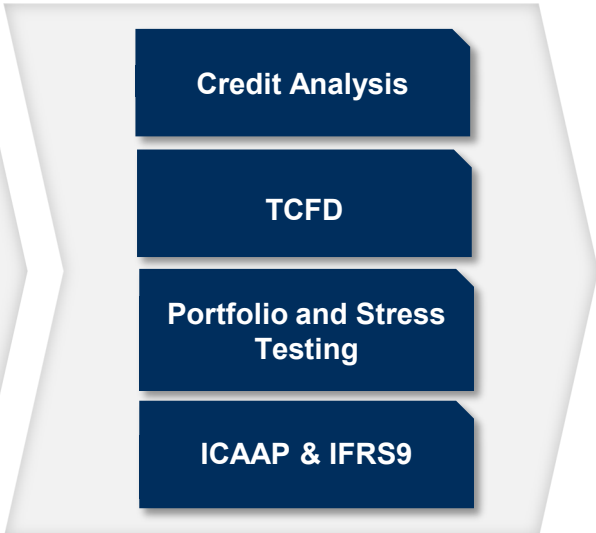
Risk Identification

2 *Scenarios & Credit Model Adjustments*



Risk Quantification

3 *Reporting & integration into BAU*



Reporting

Integration of social risks also gaining increasing attention

More than 50% of ESG controversies last year were linked to social issues

2020 Company Universe Covered by our Controversy Risk Assessment

Period under review



January 1, 2020 -
December 31, 2020

Universe under review



7,938 Companies
39 Sectors

Companies monitored by region



North America: 3,423
Asia Pacific: 1,232
Europe: 1,986
Emerging Markets: 1,297

Percentage of Cases Overall

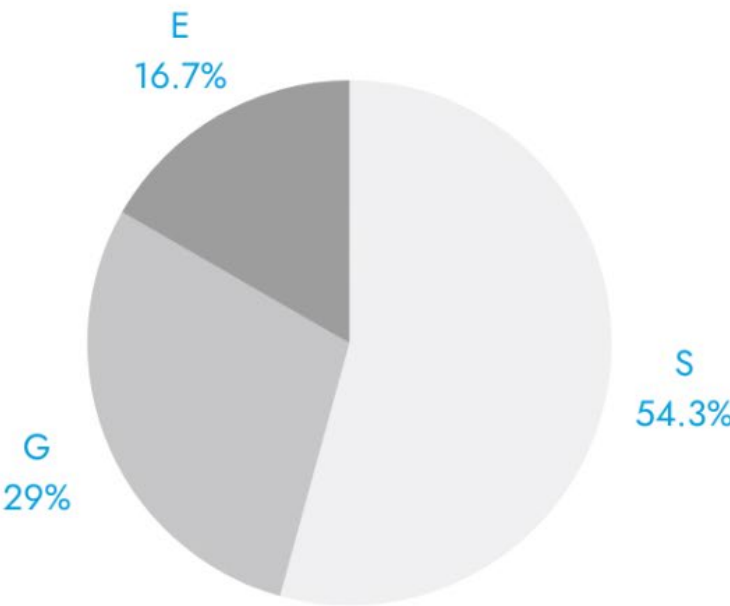
Type of Controversy

Number of Cases Overall

E - 662

S - 2,153

G - 1,152

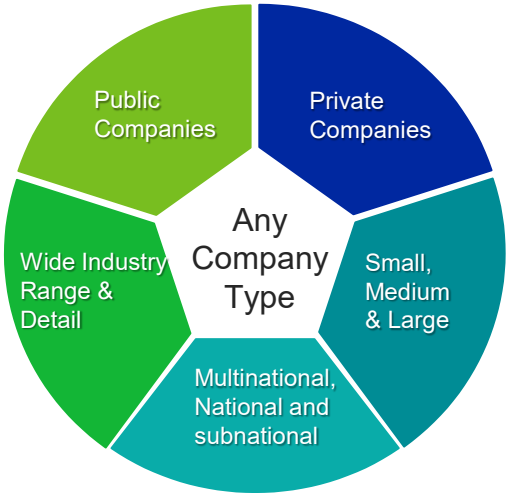


Source: V.E, a Moody's affiliate

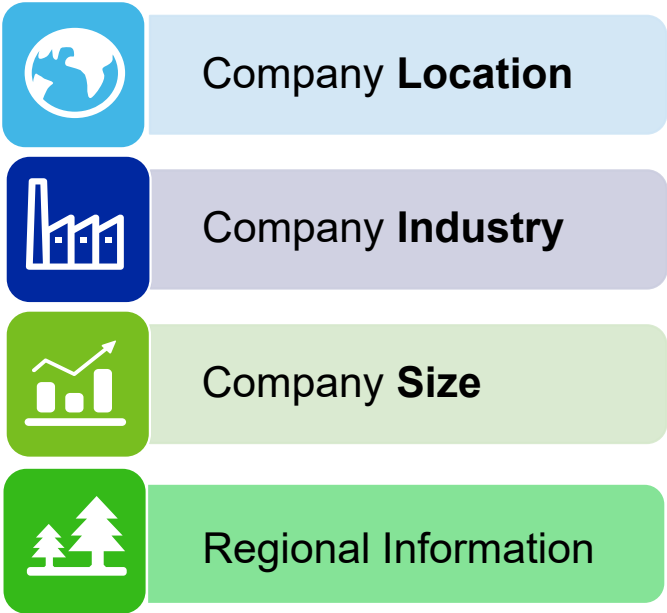
New techniques and methods are bridging the data gap

Applying ESG Score Predictor analytical models

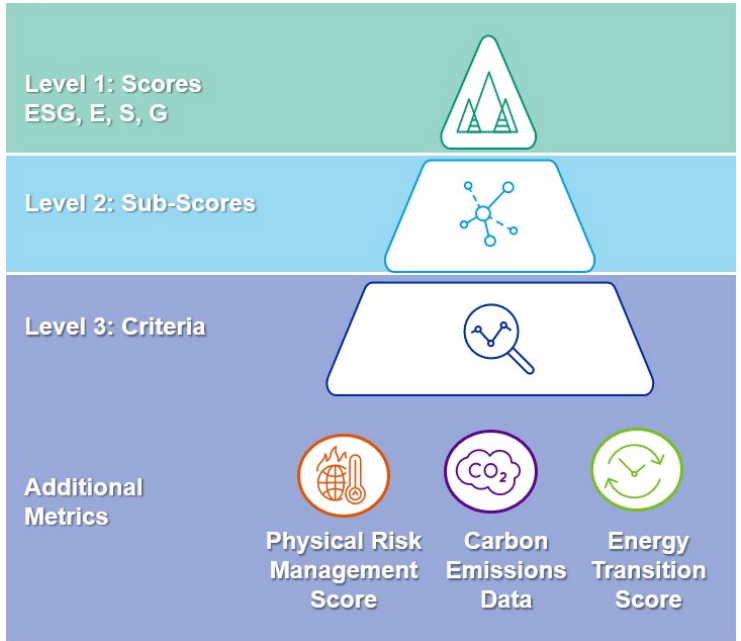
1 Portfolio



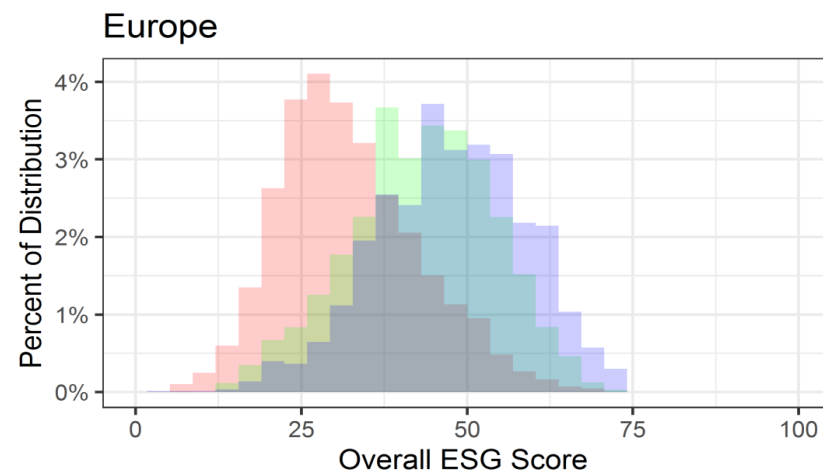
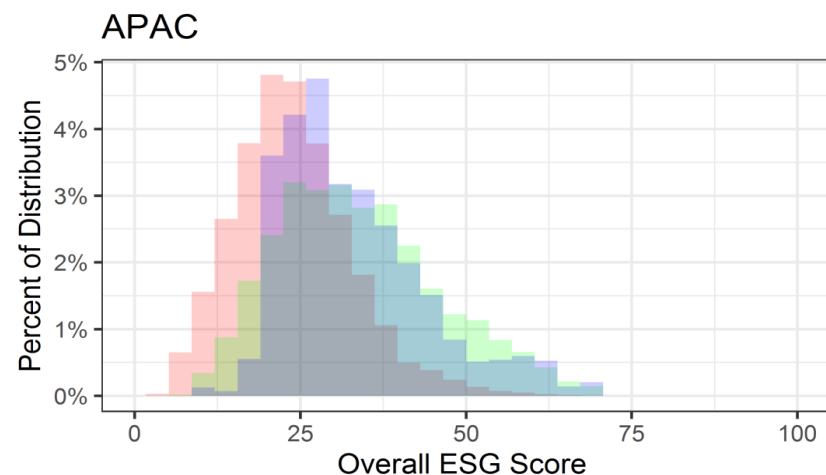
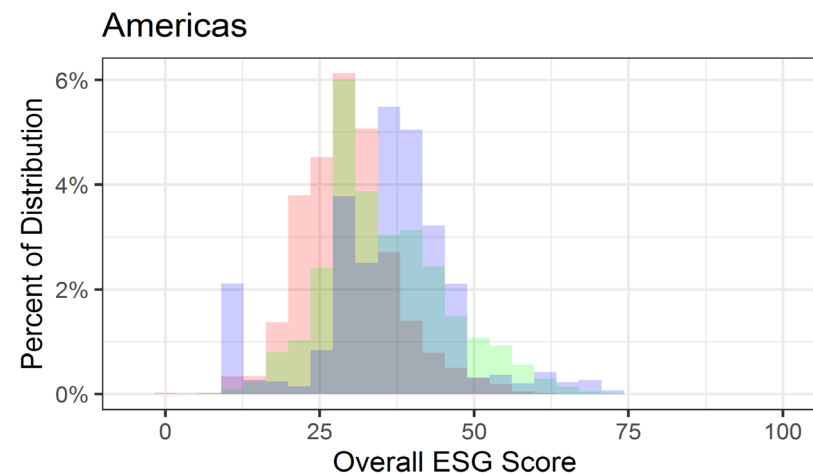
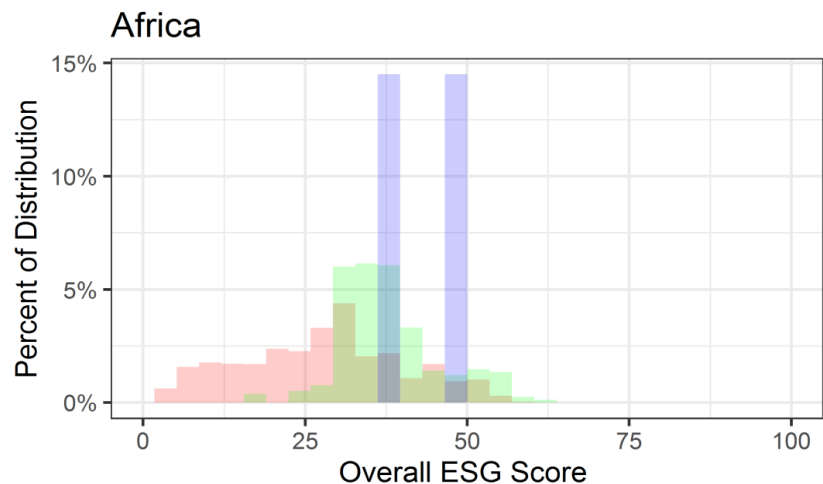
2 Analytics



3 Metrics Estimates



ESG score example: heterogeneity by region



Business Size

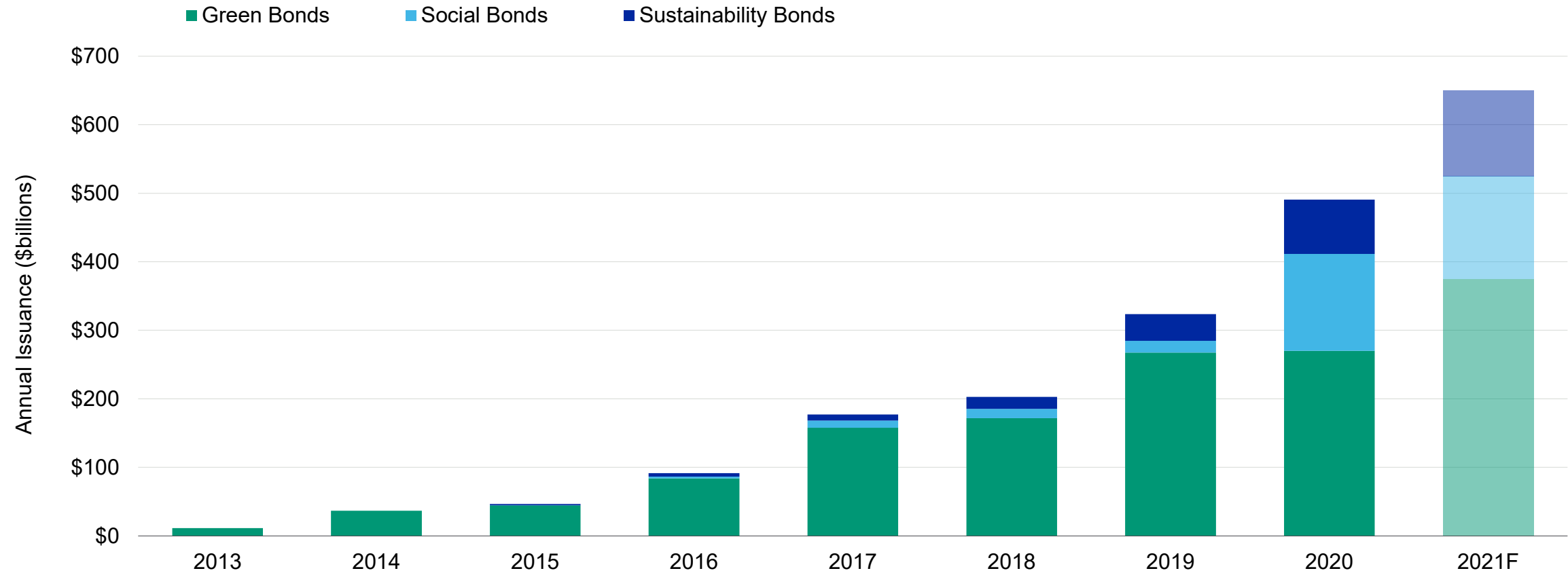
- >2.6 Billion USD
- 2.6M – 206 Billion USD
- <2.6 million USD

3

Innovation in sustainable
finance products

Sustainable finance setting fresh records

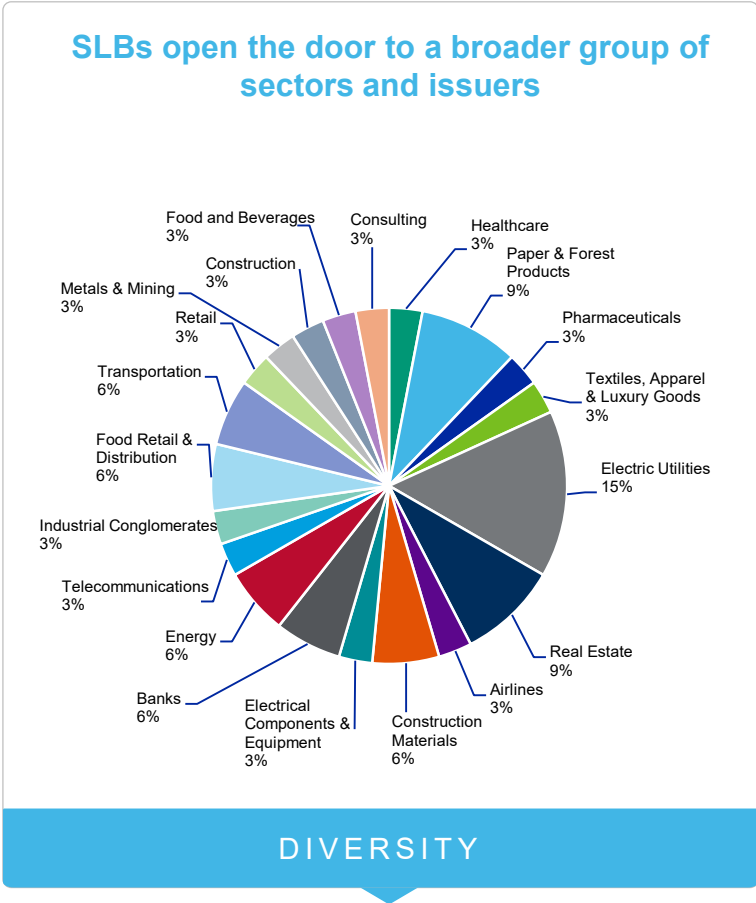
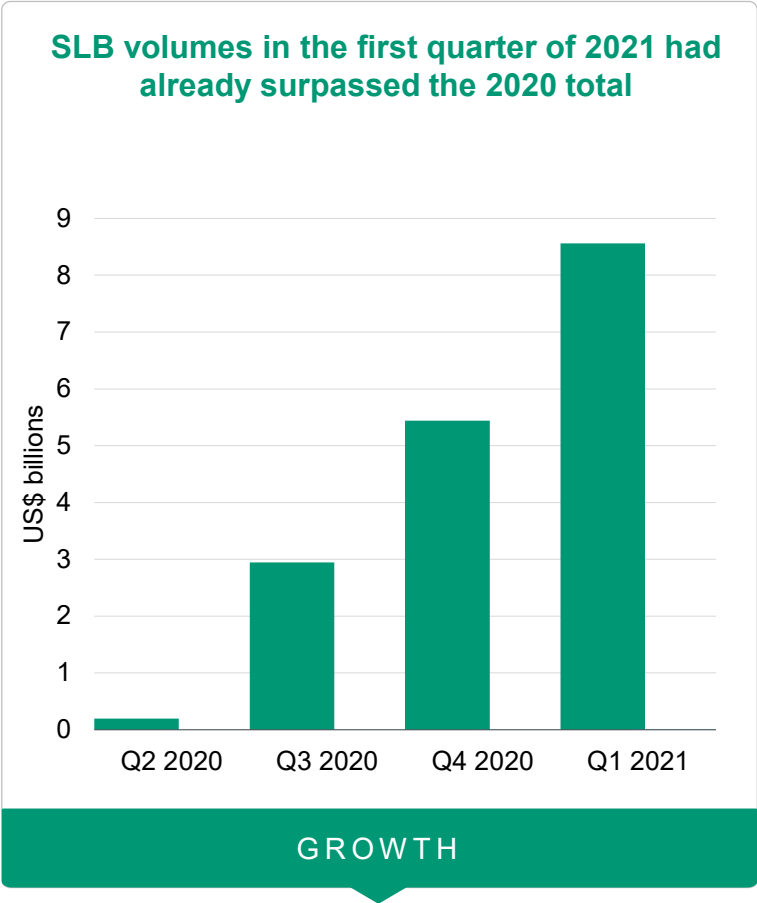
Global issuance of sustainable bonds (\$ billion)



Note: 2021 forecast as of the February 2021 Moody's Sustainable Finance update
Sources: Moody's Investors Service, Climate Bonds Initiative and Dealogic

Rise to prominence of sustainability-linked bonds

Provide flexibility on use of proceeds and offer dynamic vision of sustainability, requiring issuers to define and commit to one or several KPIs over a defined period



Emerging best practices in SLB Frameworks

Natura Cosméticos S.A. – largest-ever single issuance in Latin America



Transaction summary

Company: Natura Cosméticos S.A.¹

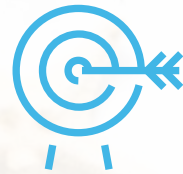
Sector: Cosmetics

Issuance date: May 4, 2021

Amount: USD1 billion

Maturity: 7 years

Coupon: 4.125%



KPIs & SPTs

KPI 1: GHG emissions intensity (Scope 1, 2 and 3, excluding the use phase)

SPT 1: Decrease GHG emissions intensity 13% by 2026 vs 2019 baseline to reach 2.76 tonnes of CO2e per tonne of product billed

KPI 2: Post-consumed recycled (PCR) plastic used in finished product plastics packaging (%)

SPT 2: Increase PCR plastic in product plastics packaging to 25% by 2026



Structural features

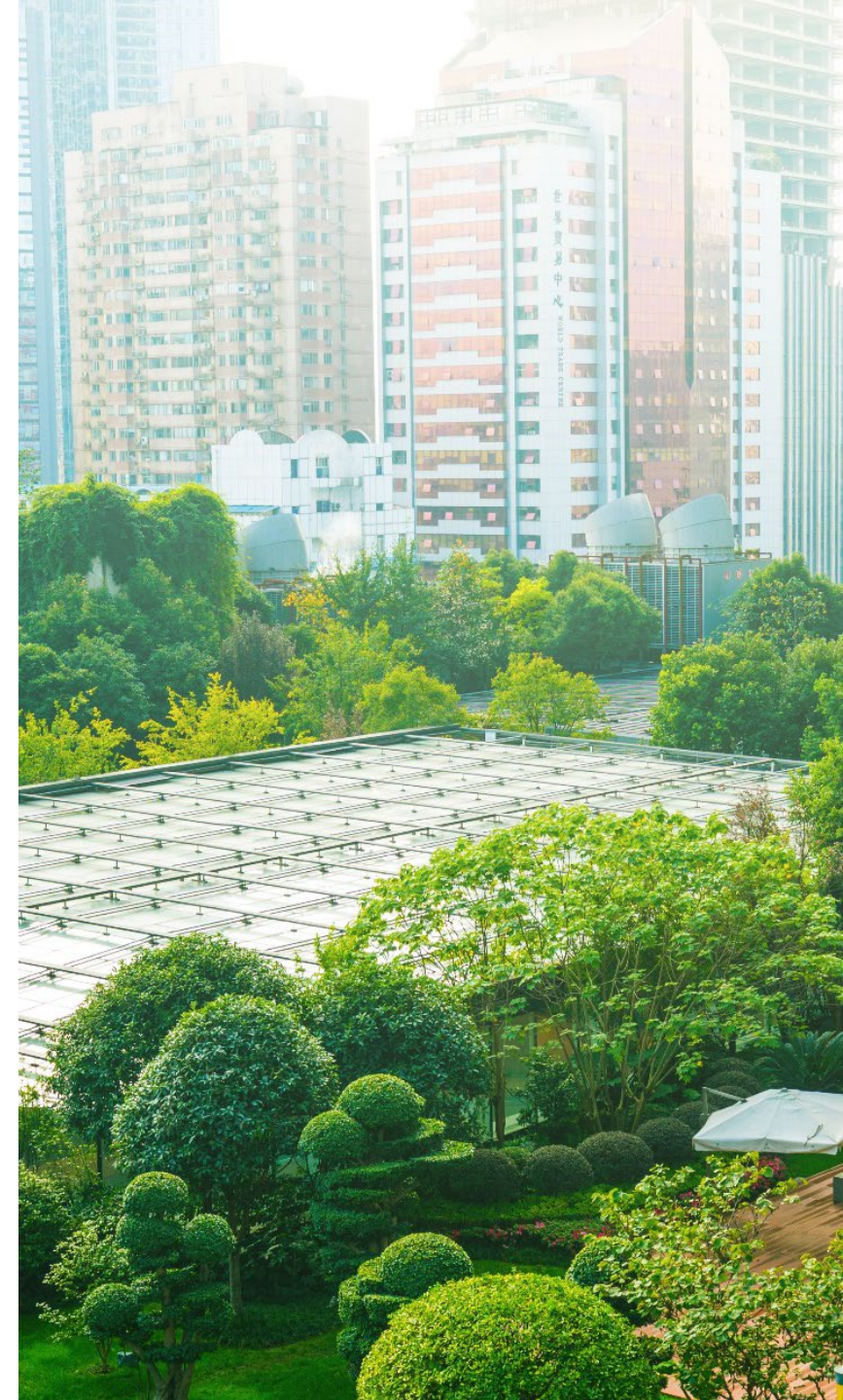
Interim coupon step-up.

Increase by 65bps as of November 2027

¹Wholly owned subsidiary of Nature & Co Holding, owner of Avon, Natura, The Body Shop and Aesop

Key takeaways

- » ESG investment ecosystem still a work in progress, but is changing rapidly
- » Harmonization of ESG data and disclosure will require a collective effort from all market players
- » Standardized data alone is not enough. New models, risk measurement techniques, and analytics needed to build systemic organizational resilience
- » Better sustainability data and performance measures will, in turn, feed innovation in sustainable finance






MOODY'S

Sustainable decisions



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